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# Customer Satisfaction and Hotel Brand Equity: A Structural Equation Modelling Study

Mohamed A. Nassar University of Alexandria, Alexandria, Egypt

In this paper, a structural equation modelling technique was used to examine the effect of brand equity on customer satisfaction in the Egyptian hotel industry. Brand equity was separated into four constructs (brand loyalty, perceived quality, brand awareness and brand associations), and each one was examined individually. A sample of hotel guests, who accommodated at four- and five-star branded hotels, in four tourism destinations in Egypt, was selected. A structured questionnaire that included established scales was then used to measure brand loyalty, perceived quality, brand awareness, brand associations and customer satisfaction. Data were collected from 280 usable questionnaires answered by hotel guests, and the relationships among the four variables of brand equity and customer satisfaction were examined using correlation analysis and structural equation modelling. The study found that brand loyalty, brand awareness and brand associations all had a significant positive effect on customer satisfaction. Perceived quality, however, did not have any effect. These findings suggest that customer satisfaction is a reasonable measure for the success of branding activities, and that branding managers should focus on brand loyalty, awareness and associations to raise their customers' satisfaction.

Keywords: brand equity, customer satisfaction, hotel industry, structural equation modelling, Egypt

#### Introduction

Over the last few decades, interest in the study of brands and the service sector was growing, including hospitality services (Motameni & Shahrokhi, 1998; Muller, 1998; Prasad & Dev, 2000; Gibson, 2003; W. G. Kim, Jin-Sun, & H. J. Kim, 2008; Nam, Ekinci, & Whyatt, 2011; Hsu, Oh, & Assaf, 2012; Huang & Cai, 2015; Šeric, Gil-Saura, & Mollá-Descals, 2016). Prasad and Dev (2000) noted that hotels use brands to differentiate themselves from their competitors. Studies have shown that a brand is a valuable, intangible asset in the hotel industry (Kayaman & Arasli, 2007; Nam et al., 2011; O'Neill, Dev, & Hiromi, 2013), and that brand value is worth more than face value (Motameni & Shahrokhi, 1998; Prasad & Dev, 2000). Forgacs (2003) observed that branded hotels outperformed their independent counterparts. This was also confirmed by H. Kim and W. G. Kim (2005), who established a positive relationship between the success of luxury hotels' brand equity and their financial performance. They also revealed that brand equity affects stock prices and therefore shareholder value. Hence, the hospitality industry has widely adopted strategies to enhance brand equity (Prasad & Dev, 2000; Forgacs, 2003; O'Neill et al., 2013; Huang & Cai, 2015).

Mohamed A. Nassar, Associate Professor, Hotel Studies Department, Faculty of Tourism and Hotels, University of Alexandria. Email: Mohamed\_nassar@alexu.edu.eg.

Understanding brand equity will help brand managers to remain ahead of their competitors and command a greater market share, while ensuring high profit margins (Ambler, Bhattacharya, Edell, Keller, Lemon, & Mittal, 2002; Kayaman & Arasli, 2007; O'Neill et al., 2013). It is therefore important to understand how brand value is conceived by customers and how it affects customer preferences (Tepeci, 1999; Back & Parks, 2003; Keller, 2016). Studying brand equity and its components from a customer's point of view is the most effective way of understanding branding and helping companies achieve market dominance (Barwise, 1993; Keller, 2003; Kayaman & Arasli, 2007; Konecnik & Gartner, 2007; Keller, 2016). The nature of a brand in the service industry has been interpreted as a promise by the firm to deliver certain standards to the customer (Berry, 2000; de Chernatony & Segal-Horn, 2001; Kayaman & Arasli, 2007). The purpose of this paper is to examine elements of brand equity and their influence on the customer satisfaction in the hospitality industry. According to Aaker (1991), there are five components of brand equity: brand loyalty, brand awareness, brand association, perceived quality, and other brand assets. Only four of these are directly associated with customer-based brand equity, and therefore suitable for use in the hospitality industry (H. Kim & W. G. Kim, 2005). The four dimensions are brand awareness, perceived quality, brand loyalty and brand association. Mackay (2001) and H. B. Kim, W. G. Kim, and An (2003) all agreed that previous researchers have seldom used customer-based brand equity, although this has changed in recent years. This paper investigates if the overall satisfaction of customers with a hotel brand is a function of the hotel's brand equity. Using quantitative research and structural equation modelling, this study aims to answer the following question: Is there a positive association between the four constructs of customer-based brand equity and overall customer satisfaction?

#### **Literature Review**

Proper branding is vital for the organizational success in the hospitality and tourism industry (O'Neill et al., 2013; Huang & Cai, 2015). Brand managers are usually responsible for establishing and maintaining a strong brand, and must find ways of measuring brand equity (Kayaman & Arasli, 2007; Nam et al., 2011; O'Neill et al., 2013). There are several benefits associated with successful branding which include raised profit margins, customer loyalty, even after a crisis, and a favourable response from clients when prices change (Kim et al., 2003; O'Neill et al., 2013; Huang & Cai, 2015). This makes the firm more resilient in a crisis (Keller, 2001). Davis (2007) and Kayaman and Arasli (2007) also noted that the brand serves to reduce perceived customer risk and simplifies customer choice. Other benefits include licensing opportunities (Keller, 2001) and a higher market value (O'Neill & Xiao, 2006). Ind, Fuller, and Trevail (2012) asserted that branding is a crucial marketing approach, pooling a broad spectrum of marketing functions. It is therefore necessary to research the components of brand equity, and study their collective and individual effects on the performance of firms, specifically on issues related to customer satisfaction in the hotel industry.

Branded hotels are now claiming a large market share, threatening the existence of independent hotels, and are spreading rapidly to many parts of the world and now dominate the room supply (Huang & Cai, 2015). Research has revealed that most travellers prefer to stay in a branded hotel rather than an independent one (Huang & Cai, 2015), most probably because there is a lower perceived risk in choosing internationally recognized hotels. Therefore, it is becoming increasingly important to build and manage strong brands. Competition has forced marketers and brand managers to focus more on this issue (Khan & Rahman, 2017).

Branding, as a concept, was not widely considered in hotel and tourism marketing. J. R. B. Ritchie and R. J. B. Ritchie (1998, p. 17) identified a brand as "a name, symbol, logo, word, mark or other graphic that both identifies and differentiates the destination". At that stage, branding was a relatively new concept in hotel and tourism marketing, and required more research to conceptualize its definition. Blain, Levy, and Ritchie (2005, p. 337) like other relevant studies (H. Kim & W. G. Kim, 2005; O'Neill & Xiao, 2006; Kayaman & Arasli, 2007; O'Neill & Mattila, 2010; Keller, 2016) agreed that branding is a "set of marketing activities that support the creation of a name, symbol, logo, word, mark or other graphic that readily identifies and differentiates a destination". The American Marketing Association (AMA, 2014) defines a brand as a name, sign, design term or symbol, or an amalgamation of these, that identifies the commodities of one or a group of sellers and differentiates their commodities from those of other sellers.

Brand equity is the power possessed by the brand, which manifests itself in customer recognition and choice (Kayaman & Arasli, 2007; O'Neill & Mattila, 2010; Khan & Rahman, 2017). Strong brand equity leads to higher profit margins and increases sales volume. Farquhar (1989) defined brand equity as the added value endowed by the brand name. Aaker (1991) defined it as the mixture of assets and liabilities attached to the brand, or the name and sign that add to the satisfaction derived from a commodity by the customer. Although there are a variety of definitions, most agree that brand equity is the additional value attached to a product as a result of its brand name (Anselmsson, Bondesson, & Johansson, 2014; Plumeyer, Kottemann, Böger, & Decker, 2017).

Aaker (1991; 1996) identified four dimensions of brand equity: brand awareness, perceived quality, brand loyalty, and brand image or associations and studied five chain restaurants in Korea to establish the relationship among these four dimensions, showing that brand awareness is the basis of brand equity. The formation of brand loyalty appears to be influenced by brand awareness, which in turn is affected by perceived quality and brand image. Brand awareness is vital for the establishment of brand loyalty, although perceived quality and brand image also contribute. The practices of quality assurance, regular promotion and process enhancement in the restaurant industry are therefore justified by these findings. Later research expanded Aaker's findings and established more about the dimensions.

### **Brand Awareness**

Aaker (1991, p. 91) described brand awareness as "the ability for a customer to recognize or recall that a brand is a member of a certain product category". Brand awareness determines brand choice and eventual loyalty (Schivinski & Dąbrowski, 2014). Aaker (1996) emphasized that people must first be aware of the existence of a brand to associate the brand with its memories. Brand awareness must therefore come before brand association (Washburn & Plank, 2002). Keller (2003) regarded brand awareness as the ability of the customer to remember and identify the brand, shown by knowledge of different brand conditions and being able to associate brand components with particular memories.

### **Perceived Quality**

Zeithaml (1988) defined perceived quality as the customer's judgment about a product's or service's overall excellence or superiority, or the customer's objective evaluation of the product. Anselmsson, Johansson, and Persson (2007), however, noted that high objective quality does not always result in brand equity. Zeithaml (1988) proposed that perceived brand equity included both extrinsic and intrinsic attributes. Intrinsic attributes are related to the product's outward or physical appearance. They are readily observable and may include shape, appearance, taste and colour. Extrinsic attributes are non-physical and include price, brand name, packaging, and product information, as well as the stamp of quality assurance (Bernués, Olaizola, & Corcoran, 2003).

### **Brand Loyalty**

Aaker (1991) and Forgacs (2003) defined brand loyalty as "the attachment that a customer has to a brand". It often translates directly to future sales. Olivier (1997) asserted that brand loyalty is the tendency of customers to prefer particular brands. Gremler and Brown (1996) described different levels of brand loyalty, including cognitive and behavioural. Keller (1998) described behavioural loyalty as constancy shown in a customer's behaviour, such as repeated purchases. Cognitive loyalty simply means that a particular brand is the first to turn up in the customers' minds. There is a high probability that the customer will always buy that brand (behavioural loyalty) as a result of it being their first choice (Keller, 1998). Chaudhuri and Holbrook (2001) and others (Forgacs, 2003; Kim et al., 2003; W. G. Kim & H. B. Kim, 2004) asserted that brand loyalty is directly related to price.

### **Brand Image or Brand Association**

Aaker (1991) defined brand image as "anything that is linked in memory to the brand". It forms a foundation for brand choice and eventual loyalty (Aaker, 1991). Brand association includes all thoughts related to the brand (Kotler & Keller, 2006). Other scholars have proposed different kinds of associations. For example, Chen (2001) proposed two types of association, organizational and product. Product-type associations include social image, perceived value, trustworthiness, differentiation/distinctiveness, and country of origin.

## **Brand Equity and the Hospitality Industry**

Brand building and brand equity have become very important issues for the hospitality industry since the 90s (Huang & Cai, 2015). Woods nd Muller (1994) put a greater emphasis on brand management than product management in the hospitality industry, particularly the restaurant industry. Muller (1998) identified three main activities that a service brand should focus on to establish brand equity and recognition in the market:

- (1) Establishment of an emblematic and reminiscent image;
- (2) Execution of services delivered;
- (3) Providing quality products.

Muller (1998) stated that these three activities enable companies to enhance consumer loyalty while charging premium prices. Davis (1995) reported that Starbucks, as a premium pricing company, had the ability to portray an image of authenticity, quality and consistency to its customers, allowing it to charge more for coffee than other retailers (Leiser, 2003). Cobb-Walgren, Ruble, and Donthu (1995) conducted a similar study, and found that brand name was fourth of the five features investigated. The findings of these studies imply that each of the four dimensions of brand equity has a profound effect on customer satisfaction, and hence on the performance of the firm. The fact that firms can charge premium prices because of their brand, even though they may be offering the same services as other independent firms, is an indication of the power of brand equity. In the last 20 years, a number of new brands have entered the hotel industry, possibly more than any other time in history. This perhaps had a negative impact on customers who struggle to distinguish between similar brands.

Hospitality brand managers have the task of measuring brand equity, which is vital to the survival of a firm. The hospitality industry has largely focused on customer-based brand equity. Aaker (1991) and Keller (1993) suggested that four dimensions of customer-based brand equity could be measured: brand loyalty, perceived quality, brand association and brand awareness. These can either be measured directly or indirectly.

Value-based techniques are also used to measure the financial elements of a firm's brand equity (Simon & Sullivan, 1993). The major issue in using this approach is separating the tangible and the intangible assets of the firm, and then further separating brand equity from other intangible assets. A more comprehensive approach is to use both consumer-based and financial-based brand equity. This approach is designed to bring together any "loose ends" that may be left if just one approach is used.

Brand management has become more important in the hotel industry and may be enhanced by adopting better strategies to differentiate among the brands. There has, however, been little research into brand equity in the hospitality sector (Kim et al., 2003; H. Kim & W. G. Kim, 2005; Kayaman & Arasli, 2007; Kim et al., 2008), and this study has aimed to fill this gap, at least in part.

## Methodology

This study was designed to explore the assumption that overall satisfaction of customers with a hotel brand is a function of the hotel's brand equity. This relationship can be described as follows:

 $Overall\ satisfaction = f(brand\ equity)$ 

where  $brand\ equity = brand\ loyalty + brand\ awareness + perceived\ quality + brand\ association.$ 

A quantitative research approach was used and data were gathered using a questionnaire survey.

## Population Sample and Data Gathering Technique

This research examined four- and five-star hotels in Egypt. The sample included six hotel brands in the Egyptian hospitality market, operating in four main tourist destinations: Cairo Metropolitan, Alexandria, Luxor and Sharm El-Sheikh. Hotel and marketing managers were approached and a structured questionnaire was distributed to a random sample of hotel guests from each of these brands. A total of 620 questionnaires were distributed and only 288 questionnaires were returned of which 280 were usable, giving a response rate of ~45%.

#### **Measures and Instrument**

Yoo and Donthu (2001) developed a multi-dimensional consumer-based brand equity scale drawn from the work of Aaker (1991) and Keller (1993). The authors originally suggested the use of four dimensions to measure brand equity: brand loyalty, brand awareness, perceived quality, and brand associations. Their results suggested that consumer-based brand equity should be measured across three dimensions only: brand loyalty, perceived quality, and brand awareness/associations.

The six-item scale for brand loyalty used in this study was adopted from measures developed by Aaker (1996), Y. Odin, N. Odin, and Vallette-Florence (2001) and Yoo and Donthu (2001). It used a seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Five brand awareness measures (e.g., top-of-mind brand, unaided brand recall, and brand recognition) were extracted from previous research (W. G. Kim & H. B. Kim, 2004; Schivinski & Dąbrowski, 2014). Perceived quality was measured using a five-item scale, with questions including: "Does this hotel brand offer services of very good quality?", "Does this hotel brand have better services than its competitors?", and "Are the services offered by this hotel brand worth the price?". These items measured overall quality rather than separate elements of quality (Prasad & Dev, 2000; Schivinski & Dąbrowski, 2014). Brand association was measured using five items, including "I feel sympathy for this hotel brand", "I have good memories of this hotel brand", and "I like this hotel brand". To measure overall customer satisfaction, the three-item scale developed by Dodds, Monroe, and Grewal (1991) was used.

The survey questionnaire contained three parts. The first part included items to measure the four dimensions of brand equity. The second measured overall satisfaction (independent variable) whereas the third contained demographic questions.

#### **Data Analysis**

Cronbach's alpha was used to measure reliability of each variable, with a cut-off level of 0.7 to retain the item. Confirmatory factor analysis was used to select and assess the final items for hypothesis testing. Structural equation modelling was used for the confirmatory factor analysis and path analysis. A two-step approach was followed. In the first stage, the measurement model was analysed to ensure sufficient reliability and validity of the constructs. In the second stage, the relationships between constructs were tested. Model fit criteria were then used for both the measurement and the structural model.

#### Results

### **Descriptive Statistics**

In total, 288 questionnaires returned, of which 280 were usable. The summary statistics are shown in Table 1 for the variables included in the final regression model. The means for all items tended to be between 5 and 6 (agree and strongly agree) with standard deviations between 1.00 and 1.30.

Table 1

Descriptive Statistics

Item	N	Mean	Std. deviation	
BL1	280	5.74	1.223	
BL2	280	5.61	1.072	
BL3	280	5.71	1.181	
BL4	280	5.64	1.143	
BL5	280	5.86	1.161	
BL6	280	5.84	1.224	
BA1	280	5.92	1.178	
BA2	280	5.89	1.165	
BA3	280	5.85	1.158	
BA4	280	5.89	1.174	
BA5	280	5.83	1.173	
PBQ1	280	5.56	1.125	
PBQ2	280	5.76	1.189	
PBQ3	280	5.77	1.266	
PBQ4	280	5.86	1.250	
PBQ5	280	5.81	1.287	
BAss1	280	5.88	1.216	
BAss2	280	5.98	1.302	
BAss3	280	5.90	1.254	
BAss4	280	5.71	1.234	
BAss5	280	5.63	1.141	
SAT1	280	5.73	1.202	
SAT2	280	5.60	1.089	
SAT3	280	5.718	1.2103	
Valid N (listwise)	280			

Note. BL = Brand loyalty; BA = Brand awareness; PBQ = Perceived brand quality; BAss = Brand association; SAT = Satisfaction.

**Brand loyalty.** Participants generally responded positively on brand loyalty. For example, approximately 11.4% of the respondents said that they somewhat agreed, 37.1% agreed and 31.8% strongly agreed that they regularly visited a hotel brand. Around 44.6% agreed that they would visit the same hotel brand again, and 35.7% said that this hotel brand would be their first choice. In total, 44.6% agreed that they were satisfied with their visit to the branded hotel. About 37.9% strongly agreed that they would recommend the hotel brand they visited, and 40.0% agreed that they would not switch to another hotel brand.

**Brand awareness.** The respondents were also generally positive about brand awareness. Around 40.7% strongly agreed that they were familiar with the hotel brand they visited, and 38.2% agreed that they knew at least one of the hotel brand's products. More than 70% agreed or strongly agreed that they easily recognized the hotel brand over others (36.1% agreed and 34.3% strongly agreed), and 35.7% agreed and 36.8% strongly agreed that they recognized the logo of the hotel brand. A total of 41.1% agreed and 31.8% strongly agreed that the hotel brand they had visited easily came to mind.

**Perceived brand quality.** Most respondents selected, agreed or strongly agreed in response to the statements on perceived brand quality. For example, 43.9% agreed that the hotel brand they visited provided greater services than other hotel brands, and 36.1% agreed and 31.4% strongly agreed that the quality of services was superior to others. A total of 65.7% either agreed or strongly agreed that the hotel brand at which they stayed had very good quality services. Around one third (36.4%) agreed and 37.9% strongly agreed that the hotel brand had reliable services, and 37.1% agreed and 36.8% strongly agreed that these services were worth the money.

**Brand associations.** Participants also tended to select agree and strongly agree in response to the brand association statements, but there was more variation in these answers than the previous ones. In total, 36.4% agreed, and 37.9% strongly agreed that they liked the hotel brand they visited. A total of 22.9% agreed and 50.4% strongly agreed that they had good memories of the hotel brand, and 30.4% agreed and 41.8% strongly agreed that this hotel brand had a good image. Around 33.9% agreed and 31.4% strongly agreed with the statement "I feel sympathy for this hotel brand". Finally, 45.0% agreed and 21.4% strongly agreed that their memories of the hotel brand would positively influence their future purchasing decisions.

**Satisfaction.** The respondents were more likely to choose agree than strongly agree in response to the satisfaction statements, where 43.6% agreed and 27.1% strongly agreed that the hotel brand provided good value for money. Approximately 55.0% agreed and 14.3% strongly agreed that they were generally satisfied with the hotel standard, and 32.5% agreed and 32.1% strongly agreed that they would inform other people of the positive aspects of the hotel brand they had visited.

#### Reliability and Validity

**Brand loyalty.** Cronbach's alpha for the brand loyalty items was 0.97, indicating that the relationships among these statements were highly consistent. The Pearson correlations between the statements confirm these findings, and generally exceeded 0.80 (p < 0.001). Regular visits and brand recommendations (BL1 and BL5) were highly positively correlated (r = 0.89, p < 0.001). This outcome suggests that individuals are more likely to recommend hotels that they visit frequently.

**Brand awareness.** Cronbach's alpha was 0.96 for the brand awareness items, which also shows high consistency. The Pearson correlations between the statements were positive, exceeding 0.75, and all p-values were lower than 0.001. Recognizing a brand's product and the brand itself over others (BA2 and BA3) were highly correlated (r = 0.90, p < 0.001). This suggests that those who prefer and recognize a specific brand will also be able to identify their preferred brand's product.

**Perceived brand quality.** For the perceived brand quality items, Cronbach's alpha was 0.97, showing significant consistency. All Pearson correlation coefficients between the statements exceeded 0.75 and all p-values were less than 0.001. The strongest correlation was between the perceptions of quality and reliable services (PBQ4 and PBQ5) (r = 0.97, p < 0.001). This suggests that someone who perceives a brand's services to be of good quality will be more likely to perceive the services to be reliable as well, and vice versa.

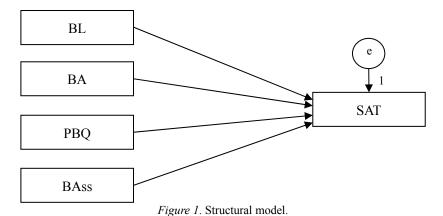
**Brand associations.** Cronbach's alpha for these items was 0.96, showing good internal consistency between statements. All Pearson correlation coefficients between the statements exceeded 0.75 (p < 0.001). The most notable correlation was between associating the brand with good memories and its image (BAss2 and BAss3) (r = 0.93, p < 0.001). This suggests that having good memories of a hotel brand tends to be correlated with associating the brand with a good image.

**Satisfaction.** Cronbach's alpha for the satisfaction items was 0.87, which is somewhat lower than those in the other statement groups, but still a high level of consistency. All p-values were below 0.001, but the correlation coefficients were weaker than the other groups. The lowest coefficient was between SAT1 and SAT3 (r = 0.63, p < 0.001), and the highest between SAT2 and SAT3 ("This hotel brand provides very good value for money" and "I would inform other people about positive things about this hotel brand") (r = 0.801, p < 0.001). This result implies how the hotel's prices influence an individual and whether it is likely that they recommend the brand to others or not.

**Cross-variable correlations.** For the overall correlations across these items, Cronbach's alpha was 0.99, indicating an extremely high level of internal consistency. All Pearson correlation coefficients exceeded 0.79, and no p-values exceed 0.001. The coefficient between brand loyalty and brand awareness was 0.89 (p < 0.001), showing that increased loyalty to a brand is linked to increased ability to recognize it. The estimate for the relationship between perceived brand quality and brand associations was 0.93 (p < 0.001), indicating that as quality of services increases, so does the positive associations with the hotel brand, although there is no indication whether this relationship is causal or in one particular direction. Finally, the result for satisfaction and brand associations was 0.87 (p < 0.001), demonstrating that an individual's overall satisfaction is linked to the positive associations made with the hotel.

## **Structural Equation Model**

The model proposes that satisfaction (SAT) is a function of brand equity, which itself is a function of brand loyalty (BL), brand awareness (BA), perceived brand quality (PBQ), and brand association (BAss). Figure 1 shows the relationship between these variables.



All regression estimates were positive, but not all were statistically significant (see Table 2). The estimated impact of brand loyalty on satisfaction was  $0.075 \pm 0.027$  (p = 0.005), the weakest of the statistically significant coefficients. The effect of brand awareness was  $0.225 \pm 0.027$  (p < 0.001). The variable with the strongest impact was brand associations ( $\beta = 0.559 \pm 0.026$ . p < 0.001).

Overall, the model is reliable, based on the adjusted  $R^2$  of 77.9%. The variance of the error is  $0.236 \pm 0.020$ , suggesting that estimation bias - if any exists - is minimal. This suggests that the overall satisfaction of customers with a hotel brand is positively related to the brand equity of the hotel. It may, however, not be related to the perceived quality of the brand, as this construct had a statistically insignificant estimate at p = 0.976.

Table 2
SEM Results

Regression	Estimate	SE	CR	P
Satisfaction ← brand loyalty	0.075	0.027	2.805	0.005
Satisfaction ← brand awareness	0.225	0.027	8.451	< 0.001
Satisfaction ← perceived brand quality	0.001	0.025	0.03	0.976
Satisfaction ← brand associations	0.559	0.026	21.841	< 0.001
Variance	Estimate	SE	CR	Р
Brand loyalty	1.185	0.1	11.811	< 0.001
Brand awareness	1.19	0.101	11.811	< 0.001
Perceived brand quality	1.337	0.113	11.811	< 0.001
Brand associations	1.293	0.109	11.811	< 0.001
Error term	0.236	0.02	11.811	< 0.001
Adjusted $R^2 = 77.9\%$				

### **Discussion**

The main purpose of this study was to examine how each component of brand equity affects customer satisfaction. The model developed for this study suggests that only three elements of brand equity (brand loyalty, brand associations and brand awareness) have a significant and positive impact on customer satisfaction. Perceived quality, however, did not have any effect.

Customer satisfaction is perceived as a crucial component in branding and as a major outcome of marketing activity. This study supports the findings of previous work, confirming that brand equity is a significant determinant of customer satisfaction and therefore repeated sales, positive word-of-mouth reviews and consumer loyalty (Anderson, Fornell, & Lehmann, 1994; Woods & Muller, 1994; Cobb-Walgren et al., 1995; Cronin, Brady, & Hult, 2000).

A large number of studies used the customer-based brand equity model, using the constructs of brand equity (Kamakura & Russell, 1993; Lassar, Mittal, & Sharma, 1995; Aaker, 1996; Aaker & Joachimshaler, 2000; Kim et al. 2003; H. Kim & W. G. Kim, 2005; McDaniel & Gates, 2005; Aaker, Kumar, Day, Lawley, & Stewart, 2007; Kayaman & Arasli, 2007; Schivinski & Dąbrowski, 2014), finding similarly significant relationships between them. Most of the studies that have assessed these issues in the hotel industry have found similar results, including this study. However, this study, although the sample is relatively small, adds significant contribution to the existing body of research related to brand equity in the hotel industry, particularly in the case of the Egyptian hotel sector. It used the structural equation modelling to suggest that satisfaction is a function of brand equity, which itself is a function of brand loyalty, brand awareness, perceived brand quality, and brand association.

### **Conclusion**

This study found that brand equity was a significant factor in satisfaction among branded hotel customers, in four touristic destinations in Egypt. The study findings suggest that the success of branding activity can be measured by assessing customer satisfaction, and that it also could be used to evaluate, monitor and develop products and service offerings along with evaluating the significance of the brands.

This study, alongside previous research, has made significant contributions to the study of brand equity and how it affects customer satisfaction and therefore a company's performance in the hotel industry. However, it is not without limitations that could be addressed in future research. For example, it is hoped that future research will create a more comprehensive measure of customer-based brand equity in many service industries. Researchers should also examine if there are more appropriate methods to measure brand equity and to collect data. This study relied on data collected through questionnaires and surveys, and some of the scales used may be erroneous or inaccurate (McDaniel & Gates, 2005; Aaker et al., 2007). There may also have been recall issues, because the respondents may not have been able to accurately report previous experiences with particular hotel brands. The other limitation that should be addressed by future research is to examine a larger sample, or perhaps use alternative data collection techniques, such as semi-structured interviews.

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**Appendix 1: Frequency Tables** 

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree somewhat	19	6.8	6.8	6.8
	Undecided	36	12.9	12.9	19.6
Valid	Agree somewhat	32	11.4	11.4	31.1
vanu	Agree	104	37.1	37.1	68.2
	Strongly agree	89	31.8	31.8	100.0
	Total	280	100.0	100.0	

# BL2

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree somewhat	16	5.7	5.7	5.7
	Undecided	27	9.7	9.7	15.4
37.11.1	Agree somewhat	60	21.4	21.4	36.8
Valid	Agree	125	44.6	44.6	81.4
	Strongly agree	52	18.6	18.6	100.0
	Total	280	100.0	100.0	

# BL3

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree somewhat	17	6.1	6.1	6.1
	Undecided	32	11.5	11.5	17.5
37-1: J	Agree somewhat	48	17.1	17.1	34.6
Valid	Agree	100	35.7	35.7	70.4
	Strongly agree	83	29.6	29.6	100.0
	Total	280	100.0	100.0	

## BL4

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree somewhat	15	5.4	5.4	5.4
	Undecided	42	15.0	15.0	20.4
Valid	Agree somewhat	35	12.5	12.5	32.9
vana	Agree	125	44.6	44.6	77.5
	Strongly agree	63	22.5	22.5	100.0
	Total	280	100.0	100.0	

## BL5

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree somewhat	11	3.9	3.9	3.9
	Undecided	32	11.4	11.4	15.4
Valid	Agree somewhat	49	17.5	17.5	32.9
vanu	Agree	82	29.3	29.3	62.1
	Strongly agree	106	37.9	37.9	100.0
	Total	280	100.0	100.0	

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	2	0.7	0.7	0.7
	Disagree somewhat	12	4.3	4.3	5.0
	Undecided	30	10.7	10.7	15.7
Valid	Agree somewhat	53	18.9	18.9	34.6
	Agree	71	25.4	25.4	60.0
	Strongly agree	112	40.0	40.0	100.0
	Total	280	100.0	100.0	

## BA1

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	2	0.7	0.7	0.7
	Disagree somewhat	10	3.6	3.6	4.3
	Undecided	27	9.6	9.6	13.9
Valid	Agree somewhat	45	16.1	16.1	30.0
	Agree	82	29.3	29.3	59.3
	Strongly agree	114	40.7	40.7	100.0
	Total	280	100.0	100.0	

## BA2

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	1	0.4	0.4	0.4
	Disagree somewhat	10	3.6	3.6	3.9
	Undecided	32	11.4	11.4	15.4
Valid	Agree somewhat	41	14.6	14.6	30.0
	Agree	89	31.8	31.8	61.8
	Strongly agree	107	38.2	38.2	100.0
	Total	280	100.0	100.0	

## BA3

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	2	0.7	0.7	0.7
	Disagree somewhat	11	3.9	3.9	4.6
	Undecided	28	10.0	10.0	14.6
Valid	Agree somewhat	42	15.0	15.0	29.6
	Agree	101	36.1	36.1	65.7
	Strongly agree	96	34.3	34.3	100.0
	Total	280	100.0	100.0	

## BA4

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	2	0.7	0.7	0.7
	Disagree somewhat	14	5.0	5.0	5.7
	Undecided	22	7.9	7.9	13.6
Valid	Agree somewhat	39	13.9	13.9	27.5
	Agree	100	35.7	35.7	63.2
	Strongly agree	103	36.8	36.8	100.0
	Total	280	100.0	100.0	

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		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	2	0.7	0.7	0.7
	Disagree somewhat	16	5.7	5.7	6.4
	Undecided	23	8.2	8.2	14.6
Valid	Agree somewhat	35	12.5	12.5	27.1
	Agree	115	41.1	41.1	68.2
	Strongly agree	89	31.8	31.8	100.0
	Total	280	100.0	100.0	

# PBQ1

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	2	0.7	0.7	0.7
	Disagree somewhat	18	6.5	6.5	7.1
	Undecided	25	8.9	8.9	16.1
Valid	Agree somewhat	61	21.8	21.8	37.9
	Agree	123	43.9	43.9	81.8
	Strongly agree	51	18.2	18.2	100.0
	Total	280	100.0	100.0	

# PBQ2

		Frequency	Percent	Valid percent	Cumulative percent
,	Disagree	2	0.7	0.7	0.7
	Disagree somewhat	15	5.4	5.4	6.1
	Undecided	27	9.6	9.6	15.7
Valid	Agree somewhat	47	16.8	16.8	32.5
	Agree	101	36.1	36.1	68.6
	Strongly agree	88	31.4	31.4	100.0
	Total	280	100.0	100.0	

# PBQ3

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	2	0.7	0.7	0.7
	Disagree somewhat	19	6.8	6.8	7.5
	Undecided	27	9.7	9.7	17.1
Valid	Agree somewhat	48	17.1	17.1	34.3
	Agree	81	28.9	28.9	63.2
	Strongly agree	103	36.8	36.8	100.0
	Total	280	100.0	100.0	

# PBQ4

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	2	0.7	0.7	0.7
	Disagree somewhat	15	5.4	5.4	6.1
	Undecided	38	13.6	13.6	19.6
Valid	Agree somewhat	17	6.1	6.1	25.7
	Agree	102	36.4	36.4	62.1
	Strongly agree	106	37.9	37.9	100.0
	Total	280	100.0	100.0	

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	2	0.7	0.7	0.7
	Disagree somewhat	19	6.8	6.8	7.5
	Undecided	38	13.6	13.6	21.1
Valid	Agree somewhat	14	5.0	5.0	26.1
	Agree	104	37.1	37.1	63.2
	Strongly agree	103	36.8	36.8	100.0
	Total	280	100.0	100.0	

## BAss1

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree somewhat	16	5.7	5.7	5.7
	Undecided	37	13.2	13.2	18.9
Valid	Agree somewhat	19	6.8	6.8	25.7
vanu	Agree	102	36.4	36.4	62.1
	Strongly agree	106	37.9	37.9	100.0
	Total	280	100.0	100.0	

## BAss2

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree somewhat	19	6.8	6.8	6.8
	Undecided	35	12.4	12.4	19.3
Valid	Agree somewhat	21	7.5	7.5	26.8
vand	Agree	64	22.9	22.9	49.6
	Strongly agree	141	50.4	50.4	100.0
	Total	280	100.0	100.0	

### BAss3

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	3	1.1	1.1	1.1
	Disagree somewhat	15	5.4	5.4	6.4
	Undecided	27	9.5	9.5	16.1
Valid	Agree somewhat	33	11.8	11.8	27.9
	Agree	85	30.4	30.4	58.2
	Strongly agree	117	41.8	41.8	100.0
	Total	280	100.0	100.0	

## BAss4

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	3	1.1	1.1	1.1
	Disagree somewhat	16	5.7	5.7	6.8
	Undecided	30	10.8	10.8	17.5
Valid	Agree somewhat	48	17.1	17.1	34.6
	Agree	95	33.9	33.9	68.6
	Strongly agree	88	31.4	31.4	100.0
	Total	280	100.0	100.0	

## BAss5

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree somewhat	20	7.1	7.1	7.1
	Undecided	29	10.4	10.4	17.5
Valid	Agree somewhat	45	16.1	16.1	33.6
vana	Agree	126	45.0	45.0	78.6
	Strongly agree	60	21.4	21.4	100.0
	Total	280	100.0	100.0	

# SAT1

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree	3	1.1	1.1	1.1
	Disagree somewhat	20	7.1	7.1	8.2
	Undecided	20	7.2	7.2	15.4
Valid	Agree somewhat	39	13.9	13.9	29.3
	Agree	122	43.6	43.6	72.9
	Strongly agree	76	27.1	27.1	100.0
	Total	280	100.0	100.0	

## SAT2

		Frequency	Percent	Valid percent	Cumulative percent
	Strongly disagree	1	0.4	0.4	0.4
	Disagree	2	0.7	0.7	1.1
	Disagree somewhat	15	5.4	5.4	6.4
17-1: J	Undecided	25	8.8	8.8	15.4
Valid	Agree somewhat	43	15.4	15.4	30.7
	Agree	154	55.0	55.0	85.7
	Strongly agree	40	14.3	14.3	100.0
	Total	280	100.0	100.0	

## SAT3

		Frequency	Percent	Valid percent	Cumulative percent
	Disagree somewhat	16	5.7	5.7	5.7
	Undecided	38	13.6	13.6	19.3
₹7 <sub>2</sub> 1: J	Agree somewhat	45	16.1	16.1	35.4
Valid	Agree	91	32.5	32.5	67.9
	Strongly agree	90	32.1	32.1	100.0
	Total	280	100.0	100.0	

### Gender

		Frequency	Percent	Valid percent	Cumulative percent
'	Female	142	50.7	50.7	50.7
Valid	Male	138	49.3	49.3	100
	Total	280	100.0	100.0	

# CUSTOMER SATISFACTION AND HOTEL BRAND EQUITY

Age

		Frequency	Percent	Valid percent	Cumulative percent
	18	4	1.4	1.4	1.4
	19	4	1.4	1.4	2.9
	20	9	3.2	3.2	6.1
	21	10	3.6	3.6	9.6
	22	14	5.0	5.0	14.6
	23	11	3.9	3.9	18.6
	24	13	4.6	4.6	23.2
	25	6	2.1	2.1	25.4
	26	1	0.4	0.4	25.7
	27	4	1.4	1.4	27.1
	28	1	0.4	0.4	27.5
	29	18	6.4	6.4	33.9
	30	7	2.5	2.5	36.4
	31	2	0.7	0.7	37.1
	32	10	3.6	3.6	40.7
	33	31	11.1	11.1	51.8
	34	26	9.3	9.3	61.1
	35	4	1.4	1.4	62.5
	36	6	2.1	2.1	64.6
	37	3	1.1	1.1	65.7
	38	2	0.7	0.7	66.4
<b>V</b> alid	39	7	2.5	2.5	68.9
	40	6	2.1	2.1	71.1
	41	2	0.7	0.7	71.8
	42	10	3.6	3.6	75.4
	43	20	7.1	7.1	82.5
	44	7	2.5	2.5	85.0
	45	10	3.6	3.6	88.6
	46	2	0.7	0.7	89.3
	47	3	1.1	1.1	90.4
	49	4	1.4	1.4	91.8
	50	1	0.4	0.4	92.1
	51	5	1.8	1.8	93.9
	52	2	0.7	0.7	94.6
	54	2	0.7	0.7	95.4
	55	6	2.1	2.1	97.5
	56	1	0.4	0.4	97.9
	57	1	0.4	0.4	98.2
	58	1	0.4	0.4	98.6
	60	1	0.4	0.4	98.9
	62	1	0.4	0.4	99.3
	63	2	0.7	0.7	100.0
	Total	280	100.0	100.0	

## Education

		Frequency	Percent	Valid percent	Cumulative percent
	High school diploma	12	4.3	4.3	4.3
	Technical school or college	42	15.0	15.0	19.3
Valid	Bachelor	208	74.3	74.3	93.6
	Graduate	18	6.4	6.4	100.0
	Total	280	100.0	100.0	