



Testing the cross-brand and cross-market validity of a consumer-based brand equity (CBBE) model for destination brands



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HIGHLIGHTS

- Tests the structure of a consumer-based brand equity (CBBE) model.
- Tests if the same CBBE model is valid for different destination brands.
- Tests if the same CBBE model is valid for different market segments.
- Identifies differences in model structure for different destination brands and markets.
- Recommends conceptual and methodological remedies for a robust CBBE model.

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ABSTRACT

Different studies on consumer/customer-based brand equity (CBBE), have revealed varying pictures of components and divergent relationships. The current study analyzed a large dataset with path analysis to test: 1) the validity of a general CBBE model (familiarity, image, quality, brand value, consumer value, and loyalty); 2) the validity of a customer model (+satisfaction) using data for a single destination brand; 3) the cross-brand validity of the general model for five U.S. destination brands; and 4) the cross-market validity of both models for different segments based on nationality, gender, and past visitation. The results revealed that familiarity and image were the two most prominent components explaining loyalty in both models, although both consumer value and brand value also had some mediating effects on loyalty. The model was variant for different destinations, variant for different nationalities, partially variant for different genders, and invariant for visitors and non-visitors of one destination brand.

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1. Introduction

As an important factor affecting the financial equity and stability of brands, perceptual equity from consumer and customer perspectives, known as consumer- or customer-based brand equity (CBBE), has received ample attention in many different fields. The groundwork for CBBE was set in the early 90s by Aaker (1991, 1992, 1996) and Keller (1993, 2003), who suggested several components and measures that have been adopted, modified, tested, and re-tested for over two decades. In fact, the most commonly-used CBBE components – awareness/familiarity, associations/image, quality, value, satisfaction, and loyalty – have long been investigated as separate and distinct constructs due to their critical roles in the success of products, brands, firms, and destinations. Perhaps

because Aaker's (1992, 1996) CBBE framework included more of these well-known components (i.e., awareness, associations, quality, loyalty), the majority of researchers, including those in the tourism and hospitality field, have followed his CBBE model with some level of modification, depending on the product context (e.g., Boo, Busser, & Baloglu, 2009; Kashif, Samsi, & Sarifuddin, 2015; Lee & Back, 2008; Vinh & Nga, 2015; Washburn & Plank, 2002; Yoo & Donthu, 1997, 2001). Although a large body of literature has investigated the components and structure of CBBE in different contexts, a consensus has not yet been reached regarding either its components or their relationships. Different scale items have been used to measure various CBBE components with contrasting relational structures, which in turn have not been validated for different brands and market segments.

In order to connect the meanings related to CBBE that have been identified in different studies, the current study conducted multiple tests of a CBBE model (adapted from Tasci, 2016a) that included

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four original components designed by Aaker (1992, 1996): familiarity (awareness), image (associations), perceived quality, and brand loyalty. Three additional components ramified from Aaker's original measures were also included: satisfaction, consumer value (perceived value), and brand value (perceived price premium). Although other factors can be added to the customer model, only satisfaction was included in the current study for scientific parsimony. Multiple tests were designed to check: 1) the validity of a general consumer-based brand equity model applicable to both actual and potential customers, including components of familiarity, image, consumer value, brand value, and loyalty, as described by seven hypotheses (H_{1-7}) in Fig. 1; 2) the validity of a customer-based brand equity model including the general CBBE components and satisfaction, as described by nine hypotheses (H_{1-9}) in Fig. 2; 3) the cross-brand validity of the general consumer-based brand equity model for different destination brands (H_{10}); and 4) the cross-market validity of the general consumer model (comparing visitors–non-visitors, males–females, U.S.–other nationalities) and the customer model (comparing males–females; H_{11-14}). Due to the lack of sufficient respondents from other nationalities, cross-market validity of the customer model could not be tested for different nationalities.

The study was conducted in the destination brand context, using five of the most popular tourist destination cities in the United States – New York (NY) City, Miami, Orlando, Las Vegas, and Tampa – along with each respondent's favorite city. These destinations were selected since they are globally popular tourism destinations with different tourism offerings. The National Travel and Tourism Office's (2016) visitation statistics reveal that in 2015, NY City was the first, Miami was the second, Orlando was the fourth, Las Vegas was the sixth, and Tampa was the twentieth most-commonly visited US cities by international visitors. NY City is a major inbound tourism hub in the east, with a metropolitan culture and diverse types of tourism products. Miami is another metropolitan city in the south, with a dominant Hispanic culture and sea-sand-sun products. Las Vegas is a gaming destination located in the West. Orlando, considered the capital city of theme parks, is located in the south, two hours from its close competitor, Tampa, which is also known for its theme parks, as well as sea-sand-sun destinations. Well-known in their tourism product categories, these destination brands have the potential to have a strong CBBE, which may help in acquiring solid results to support accepting or rejecting

the validity of the proposed CBBE model. Orlando and Tampa, in particular, were included in order to test the validity of the CBBE model for brands of similar products. Finding two identical destination brands is impossible, yet Orlando and Tampa in Florida may have the closest similarity in tourism offerings. The results will help solidify the theory concerning the components and structure of CBBE as an important market metric for assessment of the success of destination brands.

The CBBE literature in general refers to both consumers and customers when discussing CBBE components. The main difference between consumer-based brand equity and customer-based brand equity lies in the group of respondents upon whose perspective the brand is measured; the consumer model is all inclusive, whereas the customer model is exclusively from the perspective of actual customers. Hence, even though a general consumer model can capture the perspectives of actual customers, a customer model with user-pertinent variables such as satisfaction cannot be used to measure perspectives of general consumers, which also includes non-customers. The current study uses both terms, since it is testing a consumer model for both consumers and customers, and a customer model for customers only (for Orlando only). The review of literature below, thus, refers to literature discussing CBBE from both consumers' and customers' perspectives.

2. Literature review

2.1. CBBE components

The basis for CBBE theory was set by the seminal works of Aaker (1991, 1992, 1996) and Keller (1993, 2003). Aaker (1992) stated that “strong brand equity is based on awareness, association, perceived quality and brand loyalty” (p. 58), while Keller (1993) similarly stated that it “occurs when the consumer is familiar with the brand and holds some favorable, strong, and unique brand associations in memory” (p. 1). Keller (1993, 2003) formulated CBBE as a general brand knowledge composed of awareness and image, whereas Aaker (1991, 1992) included five core components in his conceptualization of CBBE and later operationalized these components by producing a Brand Equity Ten Scale (Aaker, 1996).

Aaker's (1991, 1992) CBBE dimensions included brand awareness, brand associations, perceived quality, brand loyalty, and other proprietary brand assets. Since proprietary brand assets are firm-

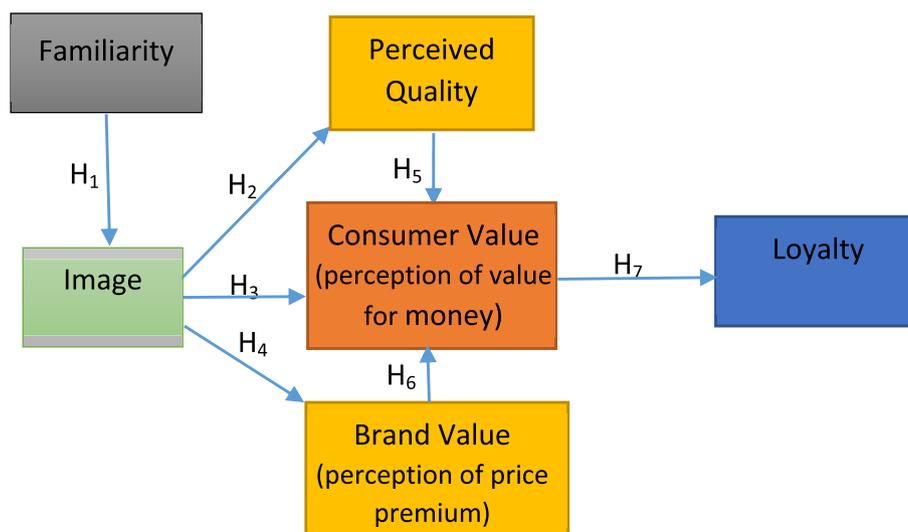


Fig. 1. Initial CBBE model proposed to be tested for general consumers (H_{1-7}) (adapted from Tasci, 2016a).

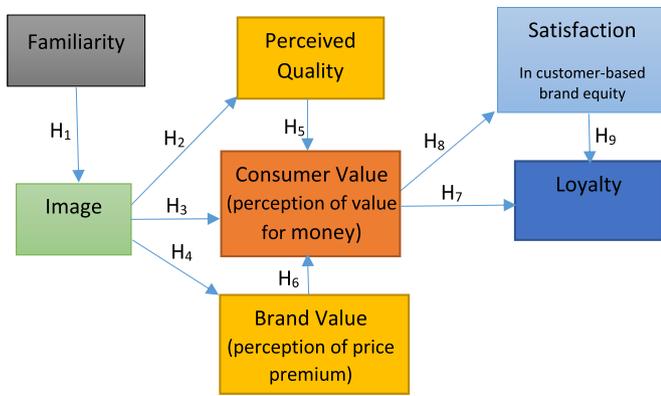


Fig. 2. Initial CBBE model proposed for customers (H₁₋₉) (adapted from Tasci, 2016a).

related, only consumer-related components have been adopted by subsequent researchers, resulting in a four-dimensional CBBE including awareness, associations, quality, and loyalty. Aaker (1996) also provided his Brand Equity Ten Scale as a starting point for researchers, with the anticipation that some level of deviation would occur in its adoption for different product contexts.

Many researchers have adopted Aaker's (1996) and Keller's (1993) original CBBE frameworks with some modifications. Most studies have followed Aaker's CBBE framework; however, different study contexts require removing some components or adding new concepts, such as sustainability (Baalbaki, 2012), attachment (Lassar, Mittal, & Sharma, 1995), and uniqueness (Netemeyer et al., 2004). Aaker's original components also included two concepts, consumer value/perceived value and brand value (perceived price premium), that were later separated as distinct components by other researchers (e.g., Krishnan & Hartline, 2001; Lassar et al., 1995; Netemeyer et al., 2004). With the new additions, the current literature concerning CBBE consists of over 25 components, which are measured by scale items ranging between one and 22 (Table 1). Although the new components added by different researchers have introduced additional understanding to the concept of CBBE, including all these components in one study is neither feasible nor desirable.

Overall, Aaker's (1996) framework has been applied in conceptual and empirical research in many different product contexts, including tourism and hospitality (Table 1). Acknowledging the important role of these components in the success of tourism and hospitality brands, several studies have tested the applicability of these components for hotels (e.g., Kim, Kim, & An, 2003), restaurants (Kim & Kim, 2004), events (Lee & Back, 2008, 2010), and destinations (Boo et al., 2009).

2.2. Relationship structure among CBBE components

The initial CBBE conceptualizations did not portray a specific structure among individual components. Keller's (2003) model presumed a pyramid of CBBE components, with brand salience as the base supporting brand performance and imagery, which then defined brand judgements and consumer feelings, all of which defined the ultimate component on top, consumer-brand resonance. This model, however, is not clear in terms of the direction of the relations among multiple components. Aaker's (1996) model did not presume any specific relationships among CBBE components, only implying that awareness affects all other components through its influence on perceptions and attitudes.

Researchers following Aaker's CBBE framework have revealed

many different relations among the CBBE components that they investigated. The included components, the items measuring components, and the directional relations among components are different in every study. For example, Yoo and Donthu (1997, 2001) and Yoo, Donthu, and Lee (2000) conceptualized a CBBE model that included perceived quality and loyalty, in addition to a combination of brand awareness/associations as one component. Their model also included store image as an indicator of perceived quality, in addition to other marketing mix elements (price, distribution intensity, advertising spending, and price deals) with direct and indirect influences on CBBE components. When Washburn and Plank (2002) tested Yoo and Donthu's (1997) scale, they identified an issue with treating awareness and associations as one component, and recommended separating them as distinct components.

One of the observable differences among different CBBE studies is the role of the loyalty component. Loyalty is included as a component of CBBE in some studies (e.g., Boo et al., 2009; Kashif et al., 2015; Lee & Back, 2008; Vinh & Nga, 2015; Washburn & Plank, 2002; Yoo & Donthu, 1997, 2001), but treated as an outcome of CBBE in other studies (e.g., Lin et al., 2015; Netemeyer et al., 2004). For example, Lin et al. (2015) included quality, awareness, and image, in addition to a different component, uniqueness, as the components of CBBE, all of which were operationalized to influence customer repurchase intention, or loyalty.

Similarly, Netemeyer et al. (2004) conceptualized a CBBE model containing core or primary components and related brand associations, both of which were designed to influence brand response or loyalty variables. Core components included perceived quality, perceived value for cost, brand uniqueness, and willingness to pay a price premium, as the mediator of the influence of other core components on purchase intention and purchase behavior. Related brand associations included awareness, familiarity, popularity, organizational associations, and brand-image consistency, all of which were also designed to influence purchase intention and purchase behavior. Repeated measurement of these components by four empirical studies resulted in reducing perceived quality and perceived value into one component. This combined quality/value component and the uniqueness component predicted loyalty through the mediator component of CBBE, namely the willingness to pay a price premium.

Boo et al.'s (2009) CBBE model in the destination brand context included awareness, image, quality, value, and loyalty. Due to the high correlation between quality and image components, Boo et al. combined these separate components into a unique component of destination brand experience. Influenced by awareness, this new component influenced consumer value, which then influenced loyalty. These researchers also tested invariance of the model for two city destinations, Las Vegas and Atlantic City, and revealed that their model was variant in measurement model structure, but invariant in the structural model. This study is the only one that has attempted to test the validity of a CBBE model across different destination brands.

Vinh and Nga's (2015) CBBE model included awareness influencing image, quality, and loyalty, while image also influenced quality, and both image and quality influenced loyalty. Pike, Bianchi, Kerr, and Patti's (2010) CBBE model had a similar structure, with the exception that awareness was replaced with brand salience. Kashif et al. (2015) included both image and associations as separate components that, along with awareness, influenced loyalty, and all components formed a general CBBE in their model.

In a sports context, Gordon (2010) did not include loyalty in his CBBE model, in which awareness influenced associations, which in turn influenced brand superiority and brand affect, both of which then defined brand resonance. Juxtaposing both the Aaker and Keller models, Wang, Wei, and Yu's (2008) CBBE model included

Table 1
Different consumer/customer-based brand equity (CBBE) components and the number of scale items used by researchers.

Author(s)	Product(s)	Population	Awareness	Familiarity	Associations	Image	Perceived Quality	Loyalty	Consumer Value	Brand Value	Brand performance	Attachment	Saliency
Aaker (1991, 1992)	Brands in general	Conceptual	X		X		X	X					
Keller (1993, 2003)	Brands in general	Conceptual	X			X							
Lassar et al. (1995)	TVs and watches	Consumers				4			3		4		3
Aaker (1996)	Brands in general	Conceptual	4		8		3	4					
Yoo and Donthu (1997)	Athletic shoes, camera film, and TV	American, Korean consumers	3		3		6	3					
Krishnan and Hartline (2001)	8 brands of goods and services	American, and Korean consumers		1			2		1	1			
Kim et al. (2003)	Luxury hotels	Students in the US	1			14	11	6					
Netemeyer et al. (2004)	Product brands	Korean travelers at an airport					8		4				
Kim and Kim (2004)	Luxury hotels and chain restaurants	Consumers in the US	3			14	11	6					
Kim and Kim (2005)	Car and TV brands	Korean travelers at an airport	3			14	10	6					
Pappu, Quester, and Cooksey (2005)	Car and TV brands	Customers	1		5		5	2					
Konecnik and Gartner (2007)	Destination-Slovenia	Customers	5			15	9	6					
Kayaman and Arasli (2007)	Hotels	German and Croatian consumers				8	22	4					
Gartner, Tasci, and So (2007)	Destination-Macau	Visitors		X		15	9	7	4				
Buil, de Chernatony, and Martinez (2008)	Product brands	Visitors	5		4		4	3	3				
Kim, Kim, Kim, Kim, and Kang (2008)	Hospitals	Consumers in the UK and Spain	3					4					
Lee and Back (2008)	Event- CHRIE conference	Customers in Korea	2		14			3	3				
Lee and Back (2010) validated	Event- CHRIE conference	Attendees	2		14			3	3				
Boo et al. (2009)	Destination-Las Vegas & Atlantic City	Validated	4			4	4	4	5				
Pike, Bianchi, Kerr, and Patti (2010)	Destination-Australia	Past visitors	4			4	4	4					5
Denizci-Guillet and Tasci (2010)	Disney- McDonald's alliance	Chilean consumers				4	4	4					
Gordon (2010) based on Keller's (2003) brand equity pyramid	1 sports team brand and 1 athletic footwear brand	Multinational consumers	4	1		1	2	4	1	1			
Hornig, Liu, Chou, and Tsai (2012)	Destination-Taiwan	Consumers in the US	5		8								
Baalbaki (2012)	3 phone brands	1 sports team brand and 1 athletic footwear brand	3			12	9	3					
Lin, Huang, and Lin (2015)	Hotel brands	Foreign visitors	3				9						
Tasci and Denizci-Guillet (2016)	Hotel-restaurant and hotel-retail cobrands	Consumers and students					9						
		Customers	3			3	3						
		Multinational consumers		1		1	2	4	1	1			

awareness, quality, repurchase intention (loyalty), and other components, including corporation ability association, brand resonance, brand extensibility, and price flexibility. Their study revealed that brand awareness influences quality perception, which then influences brand resonance, and brand resonance influences repurchase intention. Kayaman and Arasli's (2007) model differed in terms of the role of loyalty, which influenced image, instead of the commonly-accepted reverse relationship. These researchers included SERVQUAL dimensions in the perceived quality, tangibility, reliability, and empathy dimensions affecting image, and in the tangibility and responsiveness dimensions affecting loyalty, which affected image.

Wang and Finn (2013) differentiated CBBE components as current and future, in order to distinguish between causes and effects of CBBE. In this conceptualization, loyalty possessed past and future dimensions, with past loyalty being a component of CBBE and future loyalty being the outcome, along with future price premium. In addition to past loyalty, other components of CBBE included current awareness, current associations, current perceived quality, current perceived value, uniqueness, and emotions.

As can be deduced from the above summary of the literature, CBBE has a diverse profile as pictured by different researchers. Following the majority of assumptions and findings related to the value construct and how it relates to CBBE, Tasci (2016a) suggested a CBBE model in which CBBE starts with awareness and ends with loyalty, which is determined by the complex relationships among image, perceived quality, consumer value, and brand value. Adapting this model, the current study proposes that consumer familiarity leads to image, which provides an understanding of quality, consumer value, and brand value, all of which influence loyalty. The model also suggests an additional explanatory function of satisfaction when measuring from the perspective of actual customers, where satisfaction is influenced by consumer value and satisfaction then influences loyalty. This model therefore includes Aaker's (1996) original components and the two new components derived from his original components. The following section discusses the CBBE components included in the current study and delineates the proposed hypotheses for interrelations among these components. Also, the theoretical basis along with proposed hypotheses is discussed for CBBE model validity for different

Trust/ Trustworthiness	Satisfaction	Credibility	Relationship commitment	Uniqueness	Superiority	Affect	Resonance	Preference	Social influence	Sustainability	Leadership	Emotions	Personality	Organizational associations
3														
1	1													
			4											
													3	3
6	4		6											
3	3													
					5	6	11							
					6	6	13							
									4	4	4	3		
			3											

Notes: The numbers reflect the number of dimensions retained after purification of scales. X is placed for conceptual studies and studies where the number of dimensions is not clarified.

destination brands and market segments.

2.3. Awareness/familiarity

Brand awareness is “the ability of a potential buyer to recognize or recall that a brand is a member of a certain product category” (Aaker, 1991, p. 61). Both Aaker (1991, 1992, 1996) and Keller (1993) identified brand awareness as the defining factor of the other components of CBBE. As can be seen from Table 1, Most researchers include brand awareness with single or multiple scale items and test its influence on one or more of the other components (e.g., Buil et al., 2008; Gordon, 2010; Kim & Kim, 2004; 2005; Lin et al., 2015; Pappu et al., 2005). Familiarity is another concept that is used either instead of awareness, or in the definition or measurement of awareness.

Familiarity, defined as a consumer's level of knowledge and experience, has long been studied as an influential factor in consumer behavior research (Alba & Hutchinson, 1987; Bettman & Park, 1980; Johnson & Russo, 1984; Park & Lessig, 1981; Punj & Staelin, 1983; Zaichkowsky, 1985). Knowledge and experience

accumulated from different information sources are expected to provide different types of familiarity: informational familiarity from promotional, educational, or media sources, and experiential familiarity from first-hand experience (Baloglu, 2001; Prentice, 2004; Sharifpour, Walters, Ritchie, & Winter 2014). Familiarity is expected to reduce the cost of uncertainty and thus assure security (Burch, 1969; Tasci & Knutson, 2004; Tasci & Boylu, 2010), which implies familiarity's potential influence on both brand value and consumer value. This relationship has not received scientific attention, although familiarity's potential influence on destination image and subsequent behavior concerning the destination has been well documented (e.g., Baloglu, 2001; Kim & Richardson, 2003; MacKay & Fesenmaier, 1997; Milman & Pizam, 1995; Prentice, 2004; Prentice & Andersen, 2000; Sonmez & Graefe, 1998).

By nature, awareness is a more static concept and familiarity is more dynamic. Awareness is more of a yes/no type state, whereas familiarity is a continuum state on a scale. For well-known brands, such as popular destinations, familiarity may be more functional than awareness in capturing the variance in different levels of

knowledge and experience, as well as in capturing different sources of information causing familiarity. For this reason, the current study used familiarity as an overall knowledge and experience with the destination, rather than awareness, as the anchor CBBE component. Although familiarity may influence all other components, the most obvious relationship, namely between familiarity and image, is hypothesized in the current study in order to avoid the issue of a saturated model in path modeling:

H1. Familiarity has a positive influence on image.

2.4. Image/associations

Brand associations are “anything linked to the memory of a brand” (Aaker, 1991, p. 109). Both Aaker (1996) and Keller (1993) identified brand association as a component of CBBE; however, Keller (1993) discussed specific types (attributes, benefits, and attitudes), strength, favorability, and uniqueness of brand associations under the title of “image.” Most researchers include an associations component; however, some also use image in their terminology (e.g., Boo et al., 2009; Kim & Kim, 2004, 2005; Kim et al., 2003; Lassar et al., 1995; Tasci, 2016a,b,c; Tasci & Denizci-Guillet, 2011, 2016, Table 1). Image has been studied since the 50s in the general product context (Gardner & Levy, 1955; Newman, 1957) and since the 70s in the destination context (e.g., Crompton, 1979; Goodrich, 1977; Hunt, 1975; Tasci & Gartner, 2007; Tasci, Gartner, & Cavusgil, 2007).

Whereas familiarity influences image, image influences perceptions of quality (Vinh & Nga, 2015); price and value (Boo et al., 2009); satisfaction, either directly or indirectly through other factors (Veasna, Wu, & Huang, 2013); and loyalty, either directly or indirectly through satisfaction (Chen & Phou, 2013; Kashif et al., 2015; Pike et al., 2010). Destination image was included in the current study since it has a better developed theory than does association, in the destination context. In order to avoid model saturation, the current study hypothesized that image, as an overall image perception of the destination, influences quality, brand value (price premium), and consumer value:

H2. Image has a positive influence on perceived quality.

H3. Image has a positive influence on perception of price premiums.

H4. Image has a positive influence on perceived value for money.

2.5. Perceived quality

Perceived quality is “the consumer's judgment about a product's overall excellence or superiority” (Aaker, 1991, p. 85). Aaker (1996) included perceived quality as a distinct component of CBBE in his Brand Equity Ten Scale, whereas Keller (1993) included perceived quality as a dimension of brand associations. Perceived quality is a widely-accepted component of CBBE, despite the fact that its dimensions are measured with different types and numbers of items due to differences in the natures of products (Table 1). In fact, perceived quality has also been a well-studied concept since the 70s (Grönroos, 1984; Olson & Jacoby, 1972; Parasuraman, Zeithaml, & Berry, 1985, 1988; Sasser, Olsen, & Wyckoff, 1978). Perceived quality is also studied as a component of perceived value. Some researchers assume that consumer value is a function of perceived quality and price, with good quality at a good price assumed to lead to consumer value (Bojanic, 1996; Grewal, Monroe, & Krishnan, 1998; Zeithaml, 1988). Quality has also been included as a dimension of destination image in some studies (Tasci & Gartner, 2007;

Tasci et al., 2007).

Some studies have failed to establish the validity of quality as a distinct component of CBBE. For example, Netemeyer et al. (2004) reduced perceived quality and perceived value into one component, quality/value. Similarly, Boo et al. (2009) combined quality and image components into a unique component of destination brand experience, due to their high correlation. Conversely, several studies have confirmed the influence of quality on consumer value (e.g., Dodds, Monroe, & Grewal, 1991; Gallarza & Saura, 2006; Kuo, Wu, & Deng, 2009; Oh, 1999; Petrick, 2004; Petrick & Backman, 2002; Wakefield & Barnes, 1996; Zeithaml, 1988). The current study therefore hypothesized that quality, as an overall quality perception, influences perceived value or consumer value:

H5. Perceived quality has a positive influence on consumer value.

2.6. Brand value/perceived price premium

Since Aaker's willingness to pay price premium confuses CBBE components with financial-based indicators, Tasci (2016b,c) eliminated “willingness to pay price premium” from loyalty and reformulated price premium perception as a dimension of “brand value” without involving consumers' willingness to pay. This component, when measured as a consumer perception of the price premium of a brand, still concerns consumers' reactions to a brand and can therefore be a component of CBBE. As discussed above, perceived price and quality are assumed to be predictors of consumer value (Bojanic, 1996; Grewal et al., 1998; Zeithaml, 1988); therefore, the current study hypothesized that brand value, as perceived price premium, influences perceived value or consumer value:

H6. Brand value (perceived price premium) has a positive influence on consumer value.

2.7. Consumer value/perceived value

Consumer value or perceived value was included as a distinct component of CBBE by neither Aaker (1996) nor Keller (1993). In fact, Aaker (1996) questioned its validity as a CBBE component: “A substantial issue regarding the value dimension is whether it really represents a different construct from perceived quality. After all value can be considered, at least in some contexts, as perceived quality divided by price” (p. 111). In his Brand Equity Ten Scales, Aaker (1996), therefore, included two items of perceived value as dimensions of the association component. Similarly, other researchers have also included consumer value items (e.g., “value for money”, “reasonable price”) as dimensions of image (e.g., Kim & Kim, 2004, 2005), perceived quality (e.g., Konecnik & Gartner, 2007; Yuwo, Ford, & Purwanegara, 2013; Zanfardini, Tamagni, & Gutasuskas, 2011), and brand performance (e.g., Prasad & Dev, 2000). A few researchers, however, have distinguished consumer value as a component of CBBE (e.g., Boo et al., 2009; Buil et al., 2008; Lassar et al., 1995; Lee & Back, 2008, 2010; Netemeyer et al., 2004; Tasci, 2016a,b,c; Tasci & Denizci-Guillet, 2011, 2016). In fact, consumer value is one of the most well-studied concepts of the 20th century (e.g., Hirschman & Holbrook, 1982; Monroe, 1979; Monroe & Chapman, 1987; Perry, 1926; Sewall, 1901; Thaler, 1985; Zeithaml, 1988); therefore, it makes better sense to include it as a separate component, rather than as a dimension of another component of CBBE.

As discussed above, consumer value is known to be a function of both quality and price; thus, perceived quality and perceived price premium are expected to influence consumer value. In return, consumer value is known to influence loyalty (e.g., Chen & Chen,

2010; Hu, Kandampully, & Juwaheer, 2009; Kuo et al., 2009; Sanchez, Callarisa, Rodriguez, & Moliner, 2006). Consumer value's significant influence on satisfaction has also been revealed in the literature (e.g., Cronin, Brady, & Hult, 2000; Kuo et al., 2009; Lee, Yoon, & Lee, 2007; McDougall & Levesque, 2000; Oh, 1999; Sanchez et al., 2006), with its effect on satisfaction and loyalty also having been reported in the destination context (e.g., Hutchinson, Lai, & Wang, 2009; Lee et al., 2007). The current study therefore hypothesized that consumer value, as an overall perception of value for money, influences loyalty in the general consumer model and satisfaction in the customer model:

H7. Consumer value has a positive influence on consumer loyalty.

H8. Consumer value has a positive influence on satisfaction.

2.8. Customer satisfaction

Satisfaction, typically defined as the extent of a product or brand meeting customer's expectations, needs and wants, is known to be a key factor for brand success (Andreasen, 1984; Bitner & Hubbert, 1994; Oliver, 1980). Aaker (1996) included satisfaction as a dimension of the loyalty component in his CBBE framework. Satisfaction, however, is a distinct concept studied in academic literature since the 1950s (Anderson, 1973). In addition, satisfaction pertains to customers, but not to potential consumers, and thus cannot be included in the general consumer-based brand equity models. In other words, satisfaction is an exclusively customer-based brand equity component.

Researchers have established a direct impact of customer satisfaction on loyalty (Bearden & Teel, 1983; Nam, Ekinici, & Whyatt, 2011; Lee & Back, 2010; Oliver, 1980). For example, Nam et al. (2011), while studying hotel and restaurant consumers, revealed partial mediation of customer satisfaction on the effects of staff behavior, ideal self-congruence, and brand identification in relation to brand loyalty. Lee and Back (2010) also identified the influence of satisfaction's indirect influence on loyalty through brand trust. The current study therefore hypothesized that satisfaction, as an overall judgement of their state on a continuum of dissatisfied-satisfied regarding a destination, influences loyalty in the customer model:

H9. Satisfaction has a positive influence on customer loyalty.

2.9. Consumer loyalty/brand loyalty

Loyalty is “the attachment that a customer has to a brand” (Aaker, 1991, p. 39). In fact, loyalty is one of the most well-studied concepts of the 20th century due to its critical role in success of brands and firms (Brown, 1952; Dick & Basu, 1994; Jacoby, 1969; Jacoby & Kyner, 1973; McConnell, 1968; Oppermann, 1998; Reichheld & Sasser, 1990; Shoemaker & Bowen, 2003; Tasci, 2016d; Tucker, 1964; Yoon & Uysal, 2005). Although Keller (1993) did not include loyalty as a distinct component of CBBE, Aaker (1991) included it with dimensions of “satisfaction” and “willingness to pay price premium”. Most researchers have followed Aaker's model and included loyalty as a dimension of CBBE.

Nonetheless, Aaker's (1996) conceptualization of loyalty with “satisfaction” and “willingness to pay price premium” poses some challenges. Besides, satisfaction being a distinct construct, “willingness to pay price premium” renders the risk of confusing CBBE with the financial-based brand equity, since price premium is also a financial equity indicator. The current study, therefore, included loyalty with an attitudinal indicator, likelihood to visit, and hypothesized that loyalty is influenced by consumer value in the

general consumer model (H₇) and by satisfaction in the customer model (H₉).

2.10. Cross-brand differences

Aaker (1996) realized that CBBE may differ with brand, and therefore recommended adapting CBBE measures when applying them to different brand contexts. Boo et al.'s (2009) CBBE model in the destination brand context revealed variance in measurement model structure for Las Vegas and Atlantic City, even though the model was invariant in the structural model. No two destinations are alike; with different tourism products and services, coupled with various marketing strategies, every destination is unique in relation to the strength of each CBBE component. Thus, although the paths of relationships may be similar, the strengths of relationships are hypothesized to vary across different destination brands:

H10. Consumer-based brand equity model structure varies for different destinations.

2.11. Cross-market differences

Aaker (1996) realized that CBBE may also differ in relation to market, and therefore recommended adapting CBBE measures when applying them to different markets. Although many different variables can be included in market segmentation, the three most relevant variables – previous visit, nationality, and gender – were included in testing the cross-market validity of the CBBE model in this study. First, prior visit is reported to provide a more differentiated and realistic image in destination image research (Ahmed, 1991; Chon, 1991; Richards, 2001; Rittichainuwat, Qu, & Brown, 2001). An actual visit provides experiential familiarity, which may then influence the other CBBE components.

Second, destination image research also reveals the significant influence of several segmentation variables, including gender (Chen & Kerstetter, 1999; MacKay & Fesenmaier, 1997), nationality (Chen & Kerstetter, 1999; Joppe, Martin, & Waalen, 2001; MacKay & Fesenmaier, 2000), culture (MacKay & Fesenmaier, 2000), and distance (Alhemoud & Armstrong, 1996). Nationality, which also implies both culture and distance to a destination, may be an important factor in defining destination familiarity and thereby all other components of a destination's CBBE.

Third, gender is known to be one of the most important determinants of the information-processing strategies of consumers (Rodgers & Harris, 2003); males and females are known to differ in the types of information they pay attention to, their elaboration of the information, and their judgements (Wolin & Korgaonkar, 2003). More specifically, females are reported to be more visually-oriented (Holbrook, 1986), relying on a broader variety of information from multiple sources that they process in a more interpretive way without their own opinions or judgments, with greater and more detailed elaboration (Krugman, 1966; Meyers-Levy, 1988, 1989; Meyers-Levy & Sternthal, 1991) and a more intuitive processing with imagery-laced interpretations (Hass, 1979). Such differences in information search and processing have also been identified in the tourism context. Okazaki and Hirose (2009) identified that “females are more likely to engage in deeper information processing by searching all available media for the target information” for travel purposes (p. 802). Kim, Lehto, and Morrison (2007) also identified similar differences in attention to, search for, and deeper processing of travel information by females. With differences in processing information concerning a destination, females and males may also have different levels of elaboration and hence destination familiarity, as well as different levels for all other

components of CBBE.

In light of the past literature on differences based on past visit, nationality and gender, a destination's CBBE is expected to vary across different market segments in the current study. Although the paths of relationships may be similar, the strengths of relationships among components are expected to differ for visitors and non-visitors, as well as for different nationalities and genders:

H11. General consumer model structure differs between visitors and non-visitors of Orlando.

H12. General consumer model structure varies by nationality (U.S. vs. others).

H13. General consumer model structure varies by gender (males vs. females).

H14. Customer model structure varies by gender in the visitor segment of Orlando (males vs. females).

3. Methodology

A cross-sectional survey study was applied to achieve the objectives of this study. A survey was conducted to collect data concerning the perceptual equity of multiple city-level tourist destination brands, including NY City, Miami, Orlando, Las Vegas, Tampa, and also each respondent's favorite city in the United States. CBBE variables included overall familiarity, overall image perception, perceived/consumer value (or value for money), perceived quality, brand value (perceived price premium), and consumer/brand loyalty (likelihood to visit within the next 12 months). All CBBE components were measured using a single-item 10-point scale for all destinations; single items were used in order to avoid respondent fatigue while repeating the same measures for multiple destinations on the same sample, and 10-point was preferred in order to gain wider data variance. The existence of previous visits was included for only one destination brand, Orlando, in order to test the validity of the CBBE model with the satisfaction component for customers. Sociodemographic questions included age, gender, level of education, marital status, race/ethnicity, and income level.

The survey was designed on Qualtrics and conducted with a random sample of voluntary online respondents registered on Amazon's Mechanical Turk (MTurk). Since no type of initial contact with respondents is possible on this platform, applying any specific sampling technique was not possible. The only control applied to the sample was requesting the participation of only those respondents with 80% reliability in their past performance. When the survey was published, any respondent with 80% reliability rate could access and complete the survey; therefore, the process was closely aligned with simple random sampling. Although MTurk samples are known to be dominated by younger and more educated individuals, the results of MTurk samples have been reported to be very similar to those acquired using other online sample platforms, as well as traditional samples acquired face-to-face, by telephone, or by mail (Bartneck, Duenser, Moltchanova, & Zawieska, 2015; Buhrmester, Kwang, & Gosling, 2011; Clifford, Jewell, & Waggoner, 2015, pp. 1–9; Heen, Lieberman, & Mieth, 2014; Simons & Chabris, 2012). International respondents were also included, in order to allow CBBE model comparison based on nationality. Despite the fact that a limited number of international respondents from certain nationalities exist on the MTurk platform, findings related to CBBE model comparison on this platform should give a rough indication of the differences and similarities in the general sample. By targeting a large sample, it was aimed that the sample would resemble the general population as closely as possible.

A total of 2475 surveys were collected; however, cases with

missing values for different variables revealed varying sample sizes for different analyses. General CBBE model analyses included 2318 cases, whereas the CBBE model for customers (i.e., past visitors of Orlando) included 282 respondents, who also answered the 10-point scale satisfaction question. Thus, Orlando visitors were included first in the analysis of the general CBBE model inclusive of visitors and non-visitors, and second in the customer model with satisfaction, exclusively with visitors.

The data were analyzed using SPSS Version 24 in order to check data quality, central tendencies, and correlations. Path analytic techniques from the AMOS package of SPSS were used to test the CBBE model with observed variables (10-point single-item scales), by following the commonly-accepted path model specifications (e.g., Gaskin, 2016; Pedhazur, 1982). The validity of the model was assessed using the most commonly-accepted model fit indices. First, absolute fit indices determining how well a theorized model fits the data without comparison to any baseline model were used to assess the goodness of fit; these included the Chi-square test, relative chi-square (χ^2/df), the root mean square error of approximation (RMSEA), PCLOSE test or probability (p-value) of close fit, the goodness-of-fit statistic (GFI), the adjusted goodness-of-fit statistic (AGFI), the root mean square residual (RMR), and the standardized root mean square residual (SRMR) (Arbuckle, 2007, pp. 594–601; Barrett, 2007; Bentler & Bonnet, 1980; Byrne, 1998; Hooper, Coughlan, & Mullen, 2008; Hu & Bentler, 1999; Jöreskog & Sörbom, 1993; Kline, 2005; McDonald & Ho, 2002; Steiger, 2007; Tabachnick & Fidell, 2007; Wheaton, Muthen, Alwin, & Summers, 1977).

Second, incremental or comparative fit indices were also used to assess the goodness of fit, by determining how well a theorized model fits the data compared to a baseline model; these included the normed-fit index (NFI); the non-normed fit index (NNFI), also known as the Tucker-Lewis index (TLI); and the comparative fit index (CFI) (Bentler, 1990; Bentler & Bonnet, 1980; Byrne, 1998; Fan, Thompson, & Wang, 1999; Hooper et al., 2008; Hu & Bentler, 1999; Kline, 2005; McDonald & Ho, 2002; Mulaik et al., 1989; Tabachnick & Fidell, 2007). Finally, Hoelter's critical N was also used to determine the adequacy of the sample size for yielding an adequate model fit for a χ^2 test (Hoelter, 1983).

4. Results

4.1. Sample characteristics

The profile of respondents was reflective of typical online platform sample profiles. Respondents were nearly a 50/50 split between males and females; college and university graduates made up slightly more than half (54.5%) of respondents (Table 2). Additionally, 44% of respondents were single and 37.3% were married. The majority of respondents (74.7%) belonged to the white/Caucasian race group, and approximately half of respondents made below \$35K in a year. Visitors to Orlando made up 57.8% of the overall respondents, although only 282 answered the 10-point satisfaction scale about their previous visits to Orlando. US residents made up 95% of respondents.

4.2. Data quality for path modeling

Before proceeding to path analysis, the quality of scale data was assessed (Table 3). The mean ratings for different CBBE components ranged between 5.25 (consumer value) and 7.96 (brand value) for NY City, between 5.64 (familiarity) and 6.87 (brand value) for Orlando, between 5.07 (familiarity) and 7.24 (brand value) for Las Vegas, between 3.91 (familiarity) and 5.67 (consumer value) for Tampa, between 4.22 (familiarity) and 6.65 (brand value) for

Miami, and between 7.06 (brand value) and 9.04 (loyalty) for the respondent's favorite city in the U.S. A bivariate correlation analysis revealed all significant correlations at 0.01 levels. The highest correlation was between image and quality, which nearly reached the threshold of 0.85 (Kline, 2005), especially in the Orlando context. Based on these indicators, it was concluded that there was sufficient structure in the data to conduct a path analysis to identify meaningful structures.

4.3. Consumer-based brand equity model

The initial model test results revealed unacceptable fit to the data ($\chi^2 = 1570.463$, $df = 8$, $p = 0.000$, $\chi^2/df = 196.308$, $GFI = 0.856$, $AGFI = 0.622$, $CFI = 0.707$, $NFI = 0.706$, $NNFI [TLI] = 0.450$, $RMSEA = 0.290$, $PCLOSE = 0.000$, $HOELTER = 30 [0.01]$). Although regression weights for each path were all significant at $p < 0.001$, the link between image and quality was close to the threshold of 0.85 (Kline, 2005), as was also revealed in the inter-item correlations. The model was therefore modified, first by theory trimming, then by theory adding. To start, the potential disturbance from the high correlation of image and quality was eliminated. Quality was eliminated and image was retained, since destination image research traditionally involves quality as a dimension of image. Additionally, direct links from familiarity and image to other components were added to test the stronger explanatory power of these components on the rest of the CBBE components. Specifying these additional paths improved the model fit and added more explanation to the theory, despite the fact that it reduced the degrees of freedom to two (Fig. 3 and Table 4). Model trimming and re-specifications revealed an acceptable model fit ($\chi^2 = 4.289$, $df = 2$, $p = 0.117$, $\chi^2/df = 2.145$, $GFI = 0.999$, $AGFI = 0.994$, $CFI = 0.999$, $NFI = 0.999$, $NNFI [TLI] = 0.996$, $RMSEA = 0.022$, $PCLOSE = 0.936$, $HOELTER = 4976 [0.01]$). All hypotheses developed for the general model (H_{1-7}) at the onset of the study were supported, with the exceptions of H_2 and H_5 , which were deleted by elimination of the quality component (Fig. 3). Additional re-specifications also revealed three new paths (New_1 , New_2 , and New_3): familiarity \rightarrow consumer value, familiarity \rightarrow loyalty, and image \rightarrow loyalty. The amount of variance in the dependent variable (loyalty) that was explained by the consumer-based brand equity model was 47%. Only three components had direct positive effects on loyalty, their total effects being 0.496 for familiarity, 0.536 for image, and 0.111 for consumer value (Table 4).

As each of these components increased, loyalty increased as well; however, familiarity ($P_{new2} = 0.21$) and image ($P_{new3} = 0.50$) explained loyalty far more than did consumer value ($P_7 = 0.11$). Consumer value positively mediated the relationships of familiarity \rightarrow loyalty and image \rightarrow loyalty. Brand value also positively mediated the relationship between image and consumer value, with a total effect of 0.012 on loyalty.

4.4. Customer-based brand equity model

The general CBBE model (Fig. 3) was reconfigured by adding satisfaction, and then tested using data from respondents who visited Orlando and thus answered the satisfaction question as well ($n = 282$). Further re-specifications were necessary to fit the model to the data (Fig. 4, Table 5). Model re-specifications revealed an acceptable model fit ($\chi^2 = 11.259$, $df = 5$, $p = 0.046$, $\chi^2/df = 2.252$, $GFI = 0.987$, $AGFI = 0.945$, $CFI = 0.988$, $NFI = 0.979$, $NNFI [TLI] = 0.964$, $RMSEA = 0.067$, $PCLOSE = 0.247$, $HOELTER = 377 [0.01]$).

Five ($H_{1,3,4,7,9}$) of the original nine hypotheses related to the customer CBBE (H_{1-9}) were supported by these results (Fig. 4). The path of brand value \rightarrow consumer value was shifted to satisfaction in

the customer-based brand equity model with actual visitors. Consumer value's influence on satisfaction was not supported by these results. Additional re-specifications also revealed two additional new paths (New_4 and New_5): image \rightarrow satisfaction and brand value \rightarrow satisfaction.

The customer-based brand equity model explained 48% of variance in the dependent variable, loyalty. Four components had a direct positive effect on loyalty, their total effects being 0.454 for familiarity, 0.542 for image, 0.139 for consumer value, and 0.207 for satisfaction. As each of these components increased, loyalty also increased; however, familiarity ($P_{new2} = 0.17$) and image ($P_{new3} = 0.36$) explained loyalty far more than did consumer value ($P_7 = 0.14$) or satisfaction ($P_9 = 0.21$). Consumer value positively mediated the relationship between both familiarity \rightarrow loyalty and image \rightarrow loyalty. Brand value also positively mediated the relationship between image and satisfaction, with a total effect of 0.027 on loyalty.

4.5. Cross-brand validity of the general consumer-based brand equity model

Next, the consumer model was tested for cross-brand validity by comparing the model across different destination brands. In other words, an invariance test was conducted to see if model structure was actually equivalent across different values for multiple destinations. The invariance test for different destination brands resulted in a similarly good model fit when analyzing a freely-estimated model across six destination brands ($CFI = 0.998$, $SRMR = 0.0097$, $RMSEA = 0.014$). The model comparison test, however, revealed a significant p-value, implying that different destination brands may have different model structures. An inspection of path regression weights revealed that all paths were significant for all brands,

Table 2
Sociodemographic characteristics of respondents.

Sociodemographic Characteristics		N = 2298–2418
Age (X)		33.6
Gender (%)		
Male		49.1
Female		50.3
Do not wish to identify		0.5
Highest level of education (%)		
High School		20.8
Vocational School/Associate		10.9
College/University		54.5
Master's or PhD		13.4
Other		0.4
Marital status (%)		
Single		44.0
Married		37.3
Divorced		5.3
Other		13.4
Race/ethnicity (%)		
White/Caucasian		74.7
African American		6.6
Hispanic		4.0
Asian		12.1
Other		2.5
Annual Income level (%)		
Under 15,000		18.7
15,000–24,999		17.3
25,000–34,999		14.9
35,000–49,999		16.8
50,000–74,999		17.9
75,000 and up		14.5
Nationality		
USA Residents (%)		95.0
Other country residents (%)		5.0

Table 3
Descriptives, reliability, correlations, and structural indicators of consumer/customer-based brand equity (CBBE) measures for different destinations.

		N	Min.	Max.	Mean	SD	Inter-Item Correlations								
							F	I	BV	CV	Q	L	S		
New York Listwise N = 2277	Familiarity (F)	2318	1	10	5.96	2.977	1								
	Image (I)	2318	1	10	6.84	2.356	0.514**	1							
	Brand Value (BV)	2318	1	10	7.96	2.432	0.193**	0.314**	1						
	Consumer Value (CV)	2318	1	10	5.25	2.677	0.298**	0.422**	0.237**	1					
	Quality (Q)	2318	1	10	7.04	2.583	0.434**	0.747**	0.310**	0.427**	1				
	Loyalty (L)	2318	1	10	6.90	3.060	0.497**	0.649**	0.235**	0.382**	0.698**	1			
Orlando Listwise N = 2281	Familiarity	2318	1	10	5.64	2.634	1								
	Image	2318	1	10	6.72	2.138	0.497**	1							
	Brand Value	2318	1	10	6.87	1.997	0.235**	0.432**	1						
	Consumer Value	2318	1	10	6.09	2.163	0.379**	0.559**	0.300**	1					
	Quality	2318	1	10	6.57	2.376	0.461**	0.798**	0.433**	0.582**	1				
	Loyalty	2318	1	10	6.38	2.923	0.525**	0.649**	0.305**	0.507**	0.701**	1			
Satisfaction (S)	282	3	10	8.22	1.524	0.305**	0.574**	0.322**	0.390**	0.596**	0.516**	1			
Las Vegas Listwise N = 2282	Familiarity	2318	1	10	5.07	3.087	1								
	Image	2318	1	10	6.22	2.490	0.429**	1							
	Brand Value	2318	1	10	7.24	2.295	0.108**	0.299**	1						
	Consumer Value	2318	1	10	5.71	2.535	0.355**	0.468**	0.170**	1					
	Quality	2318	1	10	6.31	2.692	0.370**	0.738**	0.279**	0.501**	1				
	Loyalty	2318	1	10	6.10	3.044	0.467**	0.614**	0.188**	0.437**	0.659**	1			
Tampa Listwise N = 2286	Familiarity	2318	1	10	3.91	2.792	1								
	Image	2318	1	10	5.22	2.264	0.492**	1							
	Brand Value	2318	1	10	5.44	2.124	0.280**	0.533**	1						
	Consumer Value	2318	1	10	5.67	2.124	0.329**	0.511**	0.425**	1					
	Quality	2318	1	10	5.02	2.430	0.436**	0.737**	0.555**	0.558**	1				
	Loyalty	2318	1	10	4.32	2.885	0.551**	0.614**	0.421**	0.457**	0.696**	1			
Miami Listwise N = 2281	Familiarity	2318	1	10	4.22	2.848	1								
	Image	2318	1	10	5.82	2.418	0.458**	1							
	Brand Value	2318	1	10	6.65	2.264	0.240**	0.450**	1						
	Consumer Value	2318	1	10	5.42	2.171	0.354**	0.513**	0.363**	1					
	Quality	2318	1	10	5.79	2.551	0.390**	0.728**	0.457**	0.539**	1				
	Loyalty	2318	1	10	4.95	2.932	0.497**	0.617**	0.345**	0.480**	0.679**	1			
Favorite city in the US Listwise N = 2268	Familiarity	2318	1	10	8.74	1.854	1								
	Image	2318	1	10	8.58	1.693	0.392**	1							
	Brand Value	2318	1	10	7.06	2.186	0.142**	0.331**	1						
	Consumer Value	2318	1	10	7.19	2.122	0.223**	0.302**	0.163**	1					
	Quality	2318	1	10	8.59	1.749	0.293**	0.630**	0.324**	0.295**	1				
	Loyalty	2318	1	10	9.04	1.662	0.450**	0.428**	0.162**	0.256**	0.437**	1			
	Valid N (listwise)	2318													

F: Please indicate your familiarity with the following cities by moving the slider on the 10-point familiarity scale below. (1 = very unfamiliar, 10 = very familiar).
 I: Please indicate the overall image of the following cities for you by moving the slider on the 10-point scale below. (1 = very poor, 10 = excellent).
 BV: Please indicate your perception of premium prices in products and services in the following cities by moving the slider on the 10-point scale below. (1 = very low, 10 = very high).
 CV: Please indicate your perception of value for money in the following cities by moving the slider on the 10-point scale below. (1 = very low, 10 = very high).
 Q: Please indicate the overall quality of the following cities by moving the slider on the 10-point scale below. (1 = very low, 10 = very high).
 L: Please indicate your likelihood to visit the following cities for vacation purposes within the next 12 months by moving the slider on the 10-point scale below. (1 = very unlikely, 10 = very likely).

implying the same model structure but with different standardized estimates. In order to observe the variation in individual paths for different brands, each path was estimated by singling it out to be assumed equal for different brands while all other paths were run freely. Each test revealed statistically significant results, indicating differences in each path for different destination brands, thus supporting H₁₀. Table 6 displays the standardized regression weights for different destination brands.

4.6. Cross-market validity of the general consumer-based brand equity model

The general consumer model was tested for cross-market validity. A multi-group moderation with chi-squared difference test was conducted in order to check if the model structure was equivalent across different groups of respondents. In other words, an invariance test was conducted to see if model structure was actually equivalent across different values of multi-group

moderators, such as sociodemographic characteristics, using three of the most frequently-used segmentation variables: gender, nationality, and past visits (for Orlando only).

When the general CBBE model was compared between visitors and non-visitors of Orlando, the invariance check resulted in a similarly good model fit when analyzing a freely-estimated model across visitor and non-visitor groups (CFI = 1.000, SRMR = 0.0100, RMSEA = 0.000). In addition, the model comparison test revealed an insignificant p-value, implying that the model structure was robust for respondents regardless of their destination visit experience, thus rejecting H₁₁. When the validity of the model structure was compared between the 2 groups, U.S. residents and other nationality, a good model fit was acquired when analyzing a freely-estimated model across the two groups tested for different destinations (e.g., NY City CFI = 0.998, SRMR = 0.0095, RMSEA = 0.022). Individual paths for different destinations revealed varying significances for U.S. residents and other nationalities, thus supporting H₁₂.

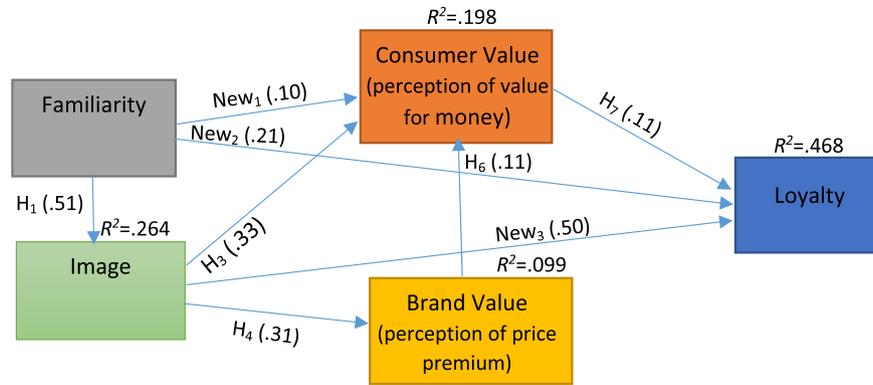


Fig. 3. Modified CBBE model for general consumers, or Consumer-Based Brand Equity.

Table 4

General consumer-based brand equity model test results reflecting the consumer model shown in Fig. 3 (N = 2318).

Dependent variables	Independent variables	Standardized coefficients	Standard errors	p	Model fit	Recommended model fit values
Direct effects					Absolute fit indices	
Image	Familiarity	0.514	0.014	0.000	$\chi^2 = 4.289$	NA
Brand Value	Image	0.314	0.020	0.000	$p = 0.117$	≥ 0.05
Consumer Value	Familiarity	0.105	0.019	0.000	$\chi^2/df = 2.145$	≤ 5
Loyalty	Image	0.333	0.026	0.000	RMSEA = 0.022	≤ 0.08
	Brand Value	0.112	0.022	0.000	PCLOSE = 0.936	≥ 0.05
	Familiarity	0.209	0.018	0.000	GFI = 0.999	≥ 0.90
	Image	0.495	0.024	0.000	AGFI = 0.994	≥ 0.80
	Consumer Value	0.111	0.019	0.000	RMR = 0.071	the lower, the better
					SRMR = 0.0097	≤ 0.08
Indirect effects					Incremental fit indices	
Brand Value	Familiarity	0.162	0.010	0.006	NFI = 0.999	≥ 0.90
Consumer Value	Familiarity	0.189	0.012	0.021	NNFI (TLI) = 0.996	≥ 0.90
Loyalty	Image	0.035	0.006	0.007	CFI = 0.999	≥ 0.90
	Familiarity	0.287	0.012	0.025	Sample size adequacy	
	Image	0.041	0.006	0.039	HOELTER = 4976 (p = 0.01)	>200
	Brand Value	0.012	0.003	0.010		
Total Effects						
Image	Familiarity	0.514	0.015	0.011		
Brand Value	Familiarity	0.162	0.010	0.006		
	Image	0.314	0.016	0.009		
Consumer Value	Familiarity	0.294	0.019	0.018		
	Image	0.369	0.019	0.025		
	Brand Value	0.112	0.019	0.015		
Loyalty	Familiarity	0.496	0.017	0.006		
	Image	0.536	0.015	0.034		
	Brand Value	0.012	0.003	0.010		
	Consumer Value	0.111	0.016	0.039		

The model was also compared between different genders, which revealed a good model fit when analyzing a freely-estimated model across the two genders tested for different destinations (e.g., for NY City, CFI = 0.998, SRMR = 0.0156, RMSEA = 0.028). For NY City, the path of brand value → consumer value was not significant for males. For the favorite city, although all paths were significant for both genders, the path weight of image → brand value was substantially larger for males than for females. For Miami, although all paths were significant for both genders, there were slight differences in path weights between genders. Interestingly, both genders were similar in the CBBE model structure for Orlando, Las Vegas, and Tampa, which resulted in partial support for H₁₃.

4.7. Cross-brand validity of the customer-based brand equity model (for Orlando only)

For the customer-based brand equity model, only gender was used to test for cross-market validity due to a low number of respondents from other nationalities. Comparison of males and

females for Orlando's customer-based brand equity with satisfaction revealed a good model fit when analyzing a freely-estimated model across the two genders tested for the Orlando brand (CFI = 0.990, SRMR = 0.0352, RMSEA = 0.044). Nested model comparisons revealed no significant differences between males and females, thus rejecting H₁₄.

5. Discussion and implications

This study aimed to test the validity of a CBBE model (adapted from Tasci, 2016a) for destination brands by applying a path analysis to data gathered from a large online sample using single-item 10-point scales to measure CBBE components for five popular U.S. cities, NY City, Miami, Orlando, Las Vegas, and Tampa, in addition to each respondent's favorite city. The general CBBE (for consumers, including visitors and non-visitors) included familiarity, image, quality, consumer value (or perceived value), brand value (or perceived price premium), and loyalty. These six components were also included in the CBBE for customers, with the addition of

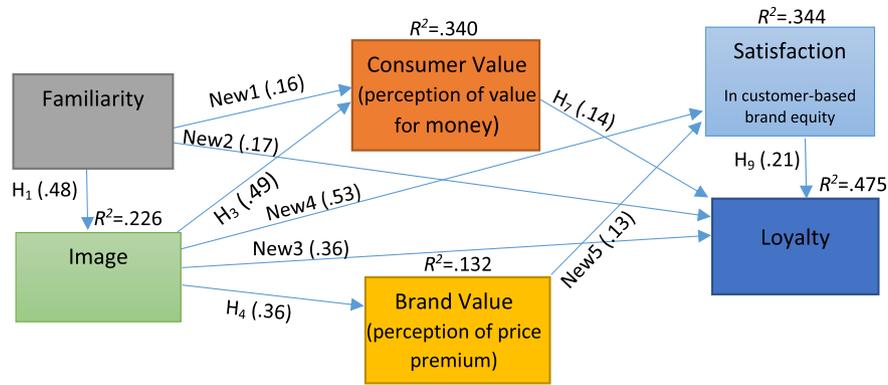


Fig. 4. Modified CBBE model for customers of Orlando, or Customer-Based Brand Equity.

Table 5

Results of customer-based brand equity model test including satisfaction for visitors of Orlando reflecting the customer model in Fig. 4 (n = 282).

Dependent variables	Independent variables	Standardized coefficients	Standard errors	p	Model Fit	Recommended model fit values
Direct effects					Absolute fit indices	
Image	Familiarity	0.475	0.048	0.000	$\chi^2 = 11.259$	NA
Brand Value	Image	0.363	0.051	0.000	$p = 0.046$	≥ 0.05
Consumer Value	Familiarity	0.164	0.052	0.003	$\chi^2/df = 2.252$	≤ 5
	Image	0.487	0.057	0.000	RMSEA = 0.067	≤ 0.08
Satisfaction	Image	0.526	0.039		PCLOSE = 0.247	≥ 0.05
	Brand Value	0.131	0.042	0.011	GFI = 0.987	≥ 0.90
Loyalty	Familiarity	0.173	0.060	0.000	AGFI = 0.945	≥ 0.80
	Image	0.356	0.083	0.000	RMR = 0.164	the lower, the better
	Consumer Value	0.139	0.068	0.009	SRMR = 0.0365	≤ 0.08
	Satisfaction	0.207	0.093		Incremental fit indices	
Indirect effects					NFI = 0.979	≥ 0.90
Brand Value	Familiarity	0.173	0.032	0.014	NNFI (TLI) = 0.964	≥ 0.90
Consumer Value	Familiarity	0.231	0.032	0.007	CFI = 0.988	≥ 0.90
Satisfaction	Familiarity	0.273	0.034	0.016	Sample size adequacy	
	Image	0.048	0.020	0.022	HOELTER = 377 (p = 0.01)	>200
Loyalty	Familiarity	0.280	0.037	0.007		
	Image	0.186	0.041	0.003		
	Brand Value	0.027	0.013	0.016		
Total Effects						
Image	Familiarity	0.475	0.047	0.019		
Brand Value	Familiarity	0.173	0.032	0.014		
	Image	0.363	0.051	0.018		
Consumer Value	Familiarity	0.395	0.052	0.011		
	Image	0.487	0.049	0.012		
Satisfaction	Familiarity	0.273	0.034	0.016		
	Image	0.574	0.038	0.010		
	Brand Value	0.131	0.053	0.039		
Loyalty	Familiarity	0.454	0.046	0.018		
	Image	0.542	0.046	0.007		
	Brand Value	0.027	0.013	0.016		
	Consumer Value	0.139	0.051	0.020		
	Satisfaction	0.207	0.052	0.009		

satisfaction, tested by respondents who visited one of the destination brands, Orlando. In addition to the validity of the consumer- and customer-based brand equity models, the cross-brand validity of the consumer model for different cities, and the cross-market validity of the consumer model (for visitors–non-visitors, males–females, U.S.–other nationalities) and the customer model (for males–females) were also tested.

5.1. General CBBE structure

The test of the initial model revealed unacceptable fit to the data. After removing the quality component due to its high correlation with image and re-specifying the model with additional paths between components, the model fit improved to an

acceptable level. The results of this new model supported only five of the original seven (H₁₋₇) hypotheses defined at the onset of the study. In other words, the results indicated that familiarity has a positive influence on image, image has a positive influence on perception of price premiums and perceived value for money, perceived price premium has a positive influence on consumer value, and consumer value has a positive influence on consumer loyalty. In addition to these anticipated relationships, new relationships also emerged: familiarity influences consumer value and loyalty, and image influences loyalty. These relationships explained only approximately half of loyalty, indicating that there are additional factors that potentially explain the other half of loyalty.

5.2. Customer CBBE structure

When the same model was reconfigured by adding satisfaction for customers of Orlando, five of the original nine hypotheses (H_{1-9}) were supported. In other words, these results showed that familiarity has a positive influence on image, image has a positive influence on both consumer value and brand value, consumer value has a positive influence on consumer loyalty, and satisfaction has a positive influence on consumer loyalty. The link between brand value and consumer value was shifted to satisfaction, and consumer value's influence on satisfaction was not supported by these results. Additional new paths between image and satisfaction, and between brand value and satisfaction, increased the number of new relationships that were not hypothesized at the onset of the study to five within customer-based brand equity. These relationships, with the addition of satisfaction, increased the power of the model only 1% in explaining loyalty. Similar to the general CBBE model, the customer CBBE model explained only approximately half of loyalty, indicating that there remain additional factors that potentially explain the other half of loyalty.

5.3. Cross-brand and cross-market validity of CBBE models

Although the same paths among CBBE components were revealed for all destinations, the path strengths varied for different destinations. This implies a lack of full support for the cross-brand validity of the model in the general structure of relationships; however, results showed that this general CBBE model was invariant for visitors and non-visitors of Orlando, the destination brand for which past visitation was also measured. The model structure, however, was variant among U.S. residents and other nationalities; some paths were insignificant, whereas others were much stronger for the other nationalities. Invariance check results were mixed in relation to gender; males and females were similar in the consumer CBBE model structure for Orlando, Las Vegas, and Tampa, whereas model structure revealed different path results for males and females for other destinations. Customer CBBE model structure for Orlando was also invariant according to gender. This may be different for other destination brands and therefore requires further testing.

5.4. Theoretical implications

Similar to studies by Boo et al. (2009) and Netemeyer et al. (2004), the current study also revealed the validity issue of quality as a distinct component. The first line of defense is to accept this result as normal, since past studies included quality as a dimension of destination image (Tasci & Gartner, 2007; Tasci et al., 2007) and consumer value (Bojanic, 1996; Grewal et al., 1998; Zeithaml, 1988).

Because quality is accepted as a distinct construct in a large body of literature, future research must pay attention in order to semantically differentiate quality measures from those of image and consumer value, with the aim of reducing the risk of losing quality's distinctiveness against other components.

Familiarity and image had the highest explanatory power on loyalty. This is in line with both Aaker's (1991, 1992, 1996) and Keller's (1993) premonition that awareness or familiarity is a distinct component of CBBE as a launchpad for building the other components of brand equity. Aaker (1996) contended that awareness can affect attitudes and perceptions, instill confidence in a brand, and even drive brand choice and loyalty (1996, p. 114). The role of familiarity in helping with information processing, reducing uncertainty and risk, and inducing positive feelings is also reported in the literature (e.g., Burch, 1969; Tasci & Knutson, 2004; Tasci & Boylu, 2010). Similar propositions and results have been revealed concerning image in destination image research. Image is known to influence many consumer behavior variables prior to, during, and after a visit to a destination, including perceptions of price levels, value for money, and loyalty (Tasci & Gartner, 2007). The prevalence of image has also been revealed in destination CBBE (e.g., Boo et al., 2009; Konecnik & Gartner, 2007). The positive relationship between brand value and satisfaction for actual customers is also in line with the proposition that consumers will pay price premiums for brands with strong consumer-based equity (Aaker, 1996; Baalbaki, 2012; Christodoulides & de Chernatony, 2010; Lassar et al., 1995).

This study's results concerning consumer value's effect on satisfaction and loyalty are somewhat in line with the findings revealed in the literature. Interestingly, the study results did not support consumer value's direct positive effect on satisfaction, which is in contrast to a large body of literature confirming otherwise (e.g., Cronin et al., 2000; Kuo et al., 2009; Lee et al., 2007; McDougall & Levesque, 2000; Oh, 1999; Sanchez et al., 2006). Considering the fact that consumer value is typically conceptualized as a tradeoff between quality and price, brand value's influence reported above may be considered as reflective of the price component of consumer value.

As expected, the study results did support consumer value's direct positive influence on loyalty, which is in line with past literature that has identified consumer value's influence on loyalty, either directly or indirectly through satisfaction (e.g., Chen & Chen, 2010; Hu et al., 2009; Hutchinson et al., 2009; Lee et al., 2007; Kuo et al., 2009; Sanchez et al., 2006).

Cross-brand validity results were different from those of Boo et al. (2009), whose study findings for Las Vegas and Atlantic City revealed some variance in the measurement model, but invariance in the structural model between the two destinations. Although the current study did not include latent variables, the differences were revealed in the strengths of the paths despite the fact that all paths were significant across the six destinations.

Findings concerning the cross-market validity of the consumer model for visitors and non-visitors were in opposition to the destination image literature that has revealed significant differences between these groups (Ahmed, 1991; Chon, 1991; Richards, 2001; Rittichainuwat et al., 2001). The differences revealed between U.S. residents and other nationalities are in line with destination image research that has revealed significant differences based on nationality, culture, and distance (Alhemoud & Armstrong, 1996; Chen & Kerstetter, 1999; Joppe et al., 2001; MacKay & Fesenmaier, 2000). Partial support for gender influence in the general model and rejection of gender influence in the customer model are also not in line with previous findings of destination image research (Chen & Kerstetter, 1999; Kim et al., 2007; MacKay & Fesenmaier, 1997) and information processing

Table 6
Results of multi-group comparisons for cross-brand validity of the CBBE model.

Paths	Standardized regression weights					
	NY	Orlando	LV	Tampa	Miami	Favorite City
fam → image	0.514	0.497	0.429	0.492	0.458	0.392
image → BV	0.314	0.432	0.299	0.533	0.450	0.331
fam → CV	0.105	0.133	0.190	0.097	0.143	0.122
image → CV	0.333	0.463	0.375	0.351	0.376	0.231
BV → CV	0.112	0.069	0.038	0.211	0.160	0.069
CV → loyal	0.111	0.174	0.148	0.161	0.182	0.103
image → loyal	0.495	0.430	0.449	0.378	0.411	0.271
fam → loyal	0.209	0.246	0.222	0.312	0.244	0.321

Model fit indices: $\chi^2 = 47.008$, $p = 0.000$, $\chi^2/df = 3.917$, RMR = 0.070, SRMR = 0.0097, GFI = 0.999, AGFI = 0.990, NFI = 0.997, TLI = 0.990, CFI = 0.998, RMSEA = 0.014, PCLOSE = 1.000, HOELTER = 7759 ($p = 0.01$).

research (Hass, 1979; Holbrook, 1986; Krugman, 1966; Meyers-Levy, 1989, 1988; Meyers-Levy & Sternthal, 1991; Okazaki & Hirose, 2009; Wolin & Korgaonkar, 2003). Overall, however, these results support Aaker's (1996) postulation that CBBE will differ depending on brands and markets.

5.5. Managerial implications

The results indicate that destination marketing organizations (DMOs) must focus on increasing consumers' levels of familiarity, as well as improving their image of the destination, while continuously assessing and monitoring consumer value and brand value. For some destinations, focusing on image improvement, even if at premium prices, may be a more productive strategy for attracting previous visitors, whereas focusing on affordability may be more effective for attracting new visitors. User-friendly websites and social media sites can be used to attract and inform consumers. This effort must revolve around a unified concept, however, rather than existing as a haphazard marketing campaign, in order to help consumers retain as much information as they can by wiring a meaningful network of knowledge linked through relevance in their memory. Haphazard marketing campaigns may generate some level of awareness about a destination, but they fail to instill connected links among these bits of information related to the destination. This is a common issue for most destinations that lack a brand concept and instead conduct occasional marketing campaigns.

Although the invariance checks revealed different strengths of paths between CBBE components for different destinations, the results showed the same paths; thus, the same relationship paths are likely to apply to destinations similar to the study destinations. Since the CBBE model structure was variant based on nationality, this variable should be used in segmentation while assessing the CBBE of a destination. Some variance based on gender makes it necessary to use this variable in segmentation for CBBE assessment as well. Overall, study results for the general CBBE at least allow DMOs to use the same CBBE model structure in formulating their marketing strategies for their domestic markets.

5.6. Methodological limitations and future research suggestions

Study limitations call for several future research suggestions. First, a posteriori trimming was applied to the CBBE model developed based on past research. Although a posteriori trimming may be considered to be “data defining the theory”, the theoretical groundwork for CBBE already assumes situational modifications to the CBBE framework based on product and market differences. In the context of popular U.S. city destination brands, the CBBE model revealed in this study may be applicable, but requires further testing in future studies.

Second, high correlations between quality and image resulted in quality being eliminated from the model while image, which traditionally involves quality as a dimension in many destination image studies, was retained. Quality, however, is one of the commonly-accepted original CBBE components, and hence it is one of the potential explanatory variables for loyalty. Future studies should therefore include this component by sufficiently differentiating it from image with a semantically sound questionnaire design. In this study, all questions were streamlined with the same sentence structure and differentiated amongst using the names of the concepts (see the note in Table 3). Questions may reveal a higher conceptual integrity if they are asked by semantically differentiating the concepts with more details. For example, instead of asking “please indicate the overall image of NY City”, the question could be specified further as “please indicate the attractiveness

of the overall picture that comes to your mind when you think of NY City”. Similarly, for quality, instead of asking “please indicate the overall quality of NY City”, the question could be specified further as “please indicate the quality level of tourist products, such as hotels and attractions, in NY City in comparison to your expectations of such products”. Such questions with more detailed wording may improve the reliability and identity integrity of CBBE components, thus revealing results that are more sound in future studies.

Third, model re-specifications reduced the degrees of freedom to two, which may be rendered as a sacrifice of power for the confidence and interpretability of the model (Bentler & Bonnet, 1980). Path models with observed variables (or single-item measures) are known to have small df, however, due to a limited number of variables, in comparison to structural equation modeling, which uses latent variables with multiple indicators (Kenny, Kaniskan, & McCoach, 2015). Researchers suggest caution when relying on RMSEA to assess the model fit for models with small df, since this is considered problematic except for very large sample sizes (Kenny et al., 2015; MacCallum, Browne, & Sugawara, 1996). Model tests with two df, however, have been reported in the literature; Fishbein and Ajzen's (1975) famous model of the theory of reasoned action is one of them. Even one df has been reported (Curran, 2000; Heath, Neale, Hewitt, Eaves, & Fulker, 1989; Llabre, Spitzer, Siegel, Saab, & Schneiderman, 2004; Segrin et al., 2005). Although the current study used a relatively large sample, future studies should test the model by including latent variables in order to eliminate any issues associated with small degrees of freedom.

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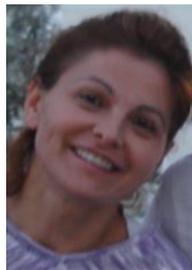
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