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The impact of marketing activities on service brand equity: The mediating role of evoked experience

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The impact of marketing activities on service brand equity

The mediating role of evoked experience

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Abstract

Purpose – This study aims to propose and empirically test new improved customer-based brand equity (CBBE) creation framework, which advocates marketing activities create CBBE through customer experience (CE). The proposed framework is in contrast to extant literature suggesting marketing activities directly create CBBE.

Design/methodology/approach – Qualitative interviews with patients, followed by interaction with respondents using a structured questionnaire, were used to collect the data.

Findings – The results suggest that CE is the focal mediating variable for the relationship between marketing activities and CBBE. Out of 15 marketing activities, 8 positively impacted CBBE through CE and 2 negatively affected CBBE through CE. Among the remaining five, three had only a direct positive impact on CBBE and two neither directly nor indirectly impacted CBBE.

Research limitations/implications – The effects of only individual marketing activity, and not of the interaction among marketing activities, were assessed.

Practical implications – The study provides insights into the importance of CE in building CBBE for credence-dominant services (e.g. healthcare). This work will help managers in implementing experiential marketing by designing suitable activities for creating service CBBE.

Originality/value – The study outlines service CBBE creation through CE, offering specific insights for the healthcare market.

Keywords Brand equity, Marketing activities, Customer experience, Hospital service

Paper type Research paper

Introduction

Creating brand equity is an effective means by which to differentiate a firm's offering from competing brands' offering (Aaker, 1991; Yoo *et al.*, 2000). Research on brand equity reveals continued interest in it and its creation. One early and notable brand equity model, proposed by Aaker (1991), suggests awareness, association, perceived quality, loyalty and market behavior as brand equity measures. Keller (1993) defines customer-based brand equity (CBBE) primarily based on customer knowledge, and as being affected by a firm's marketing efforts. Extending earlier works, the CBBE creation framework proposed by Yoo *et al.* (2000) provides empirical evidence of firms' marketing activities affecting CBBE. Keller and Lehmann (2003) suggest a brand value chain in which marketing program investment influences CBBE. A recent framework related to CBBE (Stahl *et al.*, 2012) advocates that marketing actions through CBBE affect customer lifetime value.

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Research on brand equity (Aaker, 1991; Ailawadi *et al.*, 2003; Keller, 1993; Keller and Lehmann, 2003; Simon and Sullivan, 1993; Stahl *et al.*, 2012; Yoo *et al.*, 2000) suggests that marketing activities create brand equity. However, extant research does not address whether marketing activities directly create brand equity or any mechanism by which they do so. Research on experience (Berry *et al.*, 2006; Brakus *et al.*, 2009; Gentile *et al.*, 2007; Grewal *et al.*, 2009; Lemon and Verhoef, 2016) suggests that firms' touchpoints and activities also evoke customer experience (CE). Therefore, the present study aims to explore whether CE with the firm plays any role in CBBE creation. Specifically, the study's objectives are to identify and test the impact of different marketing activities on CBBE and examine the role of CE in CBBE creation.

The context of the study is hospital service, a credence and personal service that is provided by both privately (e.g. Mayo Clinic) and publicly (e.g. NYC Health + Hospitals) owned hospitals under different brand names. A McKinsey study suggests that customers value the same qualities in both healthcare and non-healthcare firms (Cordina *et al.*, 2015). However, they usually face high information asymmetry while consuming hospital services, necessitating the establishment of brand credibility and consistency (Erdem and Swait, 1998). CBBE signals the credibility of a product (Erdem and Swait, 1998), providing informational cues (Schmitt, 2012) and a promise of future satisfaction (Berry, 2000).

Earlier objective criteria, such as mortality and morbidity rates, have been used to assess hospital performance; however, with changing customer expectations, subjective customer-centric assessments such as quality (Dagger *et al.*, 2007), satisfaction (Ware *et al.*, 1983) and choice (Lee *et al.*, 2008) are also used to evaluate performance. Yet these performance indicators tend to focus on past-directed customer judgments rather than on future-directed customer behavior. In such situations, CBBE can holistically indicate hospital performance – that is, patronage behavior, willingness to pay premiums or word-of-mouth referral – by capturing both quality and preference (Baalbaki and Guzmán, 2016). In fact, a product with higher credence attribute, such as hospital service, gives greater importance to CBBE as a source of differential advantage (Bharadwaj *et al.*, 1993).

Hospital CBBE is also highlighted in the literature. The brand-specific component substantially describes the customer's choice of physician (Srinivasan, 1979), brand trust and satisfaction are elements of a physician's brand equity (Blackston, 1992), hospital brand equity can improve patronage behavior (Kim *et al.*, 2008) and good customer–brand relationship management builds a strong hospital brand (Kemp *et al.*, 2014).

The current study was conducted in India, an emerging market in which numerous hospital brands of both public and private ownership operate. Expenditure on Indian healthcare (which was 3.9 per cent of GDP in 2011) is lower than that in developed economies, such as the USA (17.7 per cent), the UK (9.4 per cent) and the global median (6.5 per cent). Per capita health expenditure in India ($146 in terms of purchasing power parity in 2011) is also lower than that in the USA ($8,467) and UK ($3,364), as well as the global median ($511) (World Health Organization, 2014). However, with growing health consciousness, increasing income, changing demographic profiles and higher insurance coverage, the Indian healthcare industry is undergoing rapid reform and presents good growth potential (CRISIL Research, 2015). The expected compounded annual growth rate of the Indian healthcare industry is 12 per cent over five years (2014-2015 to 2019-2020), from $60bn to $100bn (CRISIL Research, 2015), presenting a huge potential for new and existing players to build new hospitals.

Brand equity and experience

Brand equity and its antecedents

Reviewing earlier definitions of brand equity, Ailawadi *et al.* (2003, p. 1) define it as "marketing effects or outcomes that accrue to a product with its brand name compared with

those that would accrue if the same product did not have the brand name". Extant research has studied brand equity as impacted by marketing activities including age of brand, order of entry, current and past advertising share and patent and R&D share (Simon and Sullivan, 1993); price, store image, distribution intensity and advertising spend (Yoo *et al.*, 2000); promotion, quality and hedonic nature of the product (Ailawadi *et al.*, 2003) and advertising, new model launch, price promotion, price and market presence (Stahl *et al.*, 2012). Research consistently acknowledges brand equity as one of the most notable outcomes of marketing activities.

Experience and its antecedents

When people are exposed to information, experience will naturally get evoked. Customers consciously and unconsciously perceive experiences and organize them into sets of impressions (Berry *et al.*, 2006). Meyer and Schwager (2007, p. 118) define CE as "the internal and subjective response that customers have to any direct or indirect contact with a firm, covering every aspect of the firm's offering". Verhoef *et al.* (2009, p. 32) add that "the customer experience construct is more holistic in nature and includes a customer's cognitive, social and physical responses". It encompasses the customer's total experience at different stages of consumption.

Experience is a multidimensional construct with different conceptualizations, namely, fantasy, feeling and fun comprise consumption experience (Holbrook and Hirschman, 1982); entertainment, education, aestheticism and escape as four realms of experience (Pine and Gilmore, 1999); sense, feel, think, act and relate for CE (Schmitt, 1999); aesthetics, playfulness, service excellence and customer return on investment for experiential value (Mathwick *et al.*, 2001); and sensorial, emotional, cognitive, pragmatic, lifestyle and relational experience for CE (Gentile *et al.*, 2007). Brakus *et al.* (2009, p. 53) conceptualize brand experience "as subjective, internal consumer responses (sensations, feelings and cognitions) and behavioral responses evoked by brand-related stimuli". Reviewing earlier works on experience, Lemon and Verhoef (2016, p. 71) state "Customer experience is a multidimensional construct focusing on a customer's cognitive, emotional, behavioral, sensorial, and social responses to a firm's offerings during the customer's entire purchase journey".

Experience is the outcome of direct or indirect interaction with the firm's touchpoints (Lemon and Verhoef, 2016; Meyer and Schwager, 2007). When the firm's offerings are difficult to judge, customers act like detectives, processing and organizing clues embedded in the service setting to form their experience (Berry *et al.*, 2006). Firm-controlled marketing factors (e.g. promotion, price, delivery process, service employee, atmosphere and supply chain location) drive experience (Lemon and Verhoef, 2016; Grewal *et al.*, 2009; Verhoef *et al.*, 2009; Zomerdijk and Voss, 2010).

Effects of experience

The shift from features- and benefits-based marketing to experiential marketing, which is designed to engage customers by connecting them with the firm in a personal and memorable way, indicates a natural development that provides one of the best ways to overcome or avoid the commodity trap (Pine and Gilmore, 1999). Brands with a "wow" effect have a high share of the customer's mind. Moreover, if stimuli-evoked experiences lead to pleasant effects, customers want to repeat them. Such experiences influence customers' behavior, attitude and emotions (Berry *et al.*, 2006). This means that CE affects not only past-directed satisfaction, but also future-directed behaviors (Brakus *et al.*, 2009); the customer–brand relationship (Brakus *et al.*, 2009; Chang and Chieng, 2006) and the customer

mindset about brand and CBBE (Delgado-Ballester and Sabiote, 2015; Ding and Tseng, 2015; Dolbec and Chebat, 2013; Kumar *et al.*, 2013).

Conceptual framework

Theoretical basis of CBBE creation

This study develops an integrated theoretical framework to explain the role of CE in CBBE creation. The framework integrates learning theories with signaling theory, inference theory and affordances theory. All major learning theories (classical conditioning, instrumental conditioning and cognitive theory) embody the role of experience.

Classical conditioning and instrumental conditioning are both based on the stimulus–response paradigm. Extending the work of stimulus–response theory (Skinner, 1947), Mehrabian and Russell (1974) theorize the stimuli-organism-response (S-O-R) model. S-O-R states that environmental stimuli affect emotional states (pleasure, arousal and dominance), which, in turn, influence approach or avoidance behavior. Customer-perceived marketing activities of firms, through personal transformation, evoke and shape experience that eventually affects customers' behavior (or intention to behave) toward the focal firm. One way to measure intention to behave is CBBE. Principally, marketing activities are *stimuli* (environmental stimuli), CE is the *organism* (emotions, as well as cognitions) and CBBE is the *response* behavior (approach or avoidance). Thus, the proposed framework contrasts with current CBBE models by suggesting that marketing activities (stimuli) affect CBBE (response), through evoked experience (organism).

The cognitive theory of learning emphasizes that consumers learn via thinking and reasoning processes that are stimulated as they process information (cognitions). Specifically, information is processed based on the signaling theory, the inference theory and the affordances theory. Information asymmetry is high between service providers and customers. In such an asymmetric situation (hospital), marketers conduct different activities to give signals to the customer, relying on the signaling theory. The signaling theory is concerned with reducing information asymmetry between two parties (Spence, 2002). The inference theory further suggests that customers assess the unknown based on known cues (Huber and McCann, 1982). The affordances theory suggests that people perceive a physical artifact as a meaningful entity, and that such a perception conveys information to them (Gibson, 1979). What becomes an affordance depends on what people do, what they want and what is useful for them. Marketing activities provide information to stimulate cognitive activities and can evoke and shape CE, which can affect CBBE.

Qualitative findings on CBBE creation

To explore CBBE creation further, semi-structured in-depth interviews were conducted with 60 patients who had used hospital services within the 12 months preceding the study, or were using services in two Indian cities (National Capital Region and Lucknow). Each interview lasted 16-39 min. A few excerpts from the interviews are given below.

> A gap exists between hospital and patients. This gap can be bridged by service providers, including doctors. Doctors and hospital service providers create emotional experiences in me. Emotional experience is the most important thing in building good perceptions about the hospital.

> Treatment and physicians in the last hospital [. . .] made me nervous. In this hospital I find everything good. The behaviors of service providers are also fine. Nothing has to be told to anybody. Everybody does his job on his own. This gives me satisfaction. I have positive feelings and emotions about this hospital.

> In the hospital I do not have to worry about anything. This pleases me.

> The moment the doctor touched me to diagnose [my illness and suggest treatment], I felt better.
>
> Well-qualified doctors and medical equipment are here, so I came to this hospital.
>
> I am undergoing treatment for cancer in this hospital, [the] physician [. . .] always consoles me that I will become healthier soon. Hearing this instills confidence in me.
>
> High expertise of this hospital's personnel influences my confidence and overall experience with the hospital.
>
> I feel every hospital should run socially responsible programs; it gives me inner happiness while using services of this hospital because it conducts socially responsible programs.

The quotations above indicate how perceptions of the service provider-generated stimuli evoke experiences that influence customers' behavior.

CBBE creation framework

Integrating literature and theory with the qualitative findings, the service CBBE creation framework is presented in Figure 1.

Research hypotheses

Marketing activity and customer experience

Experience is an outcome of a firm's marketing activities (Grewal *et al.*, 2009; Verhoef *et al.*, 2009) and is shaped by firm-generated clues (Berry *et al.*, 2006). A firm's marketing activities are reflected by various marketing mix conceptualizations, including McCarthy's (1964) universal 4Ps (product, promotion, place and price); Booms and Bitner's (1981) 7Ps (product, place, promotion, price, people, physical evidence and process) for service firms; and English's (2000) 4Rs (relevance, response, relationships and results) for healthcare services. Despite the 4Rs conceptualization being meant for healthcare services, it lacks a specific operational definition and empirical support in the

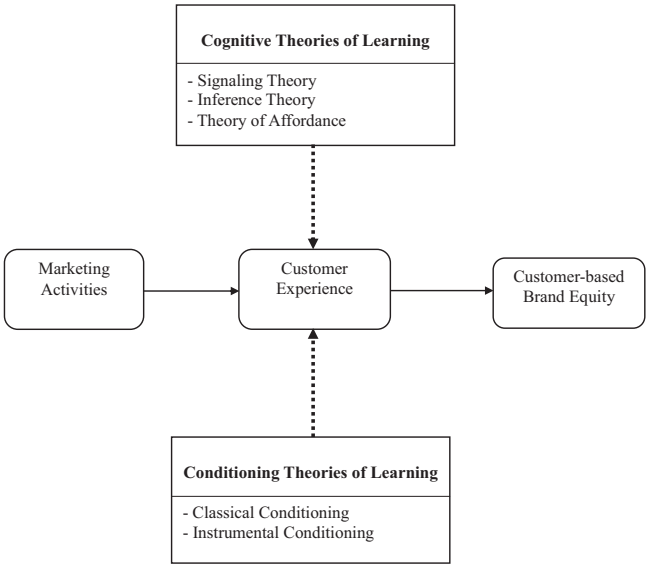


Figure 1.
CBBE creation framework

extant literature. To identify marketing activities, this study adopts the 7Ps marketing mix – along with the ethical dimension (social responsibility) – as the most exhaustive and unambiguous to capture hospitals' marketing activities. Physical environment (physical evidence), interpersonal care activity (people), technical process and administrative procedure (process), core service (product), service communication (promotion), service charge (price), access convenience (place) and social responsibility (ethical dimension) are nine broad domains of marketing activities.

Physical environment and CE: The physical environment of the service setting is the mechanical clue to experience (Berry *et al.*, 2006) and affects experience (Bitner, 1992). It comprises three factors – atmosphere, tangibles and infrastructure facility. Atmosphere refers to intangible background characteristics of the service environment and covers pleasantness, smell and temperature of the facility (Dagger *et al.*, 2007). Tangibles refer to the physical elements (e.g. design, function and layout) of the environment present at the forefront of awareness (Dagger *et al.*, 2007). Infrastructure facility includes service delivery facilities, such as the availability of life-support and up-to-date equipment and the designation of proper waiting spaces, and it affects customer satisfaction (Duggirala *et al.*, 2008). Customer perceptions of a firm's physical environment components can impact CE (Zomerdijk and Voss, 2010; Pullman and Gross, 2004). Hence:

H1. Better physical environment management dimensions – (a) atmosphere, (b) tangibles and (c) infrastructure facility – have a positive impact on CE.

People and CE: Service delivery actors (personnel) conduct dyadic relationship and interaction activities with customers, termed "interpersonal care activities" (Dagger *et al.*, 2007). Interpersonal care activities comprise three factors – interaction activity, relationship activity and physician's care. The interaction activity involves both manner (attitude and behavior) and communication (transfer of information and degree of interaction; Dagger *et al.*, 2007). The relationship activity refers to activity offered by personnel to nurture friendships with customers (Dagger *et al.*, 2007). Both the interaction activity and the relationship activity affect quality (Dagger *et al.*, 2007). Physicians are the most important actors in hospital services, and physician's care can be described as the subjective evaluation of care delivered, including politeness, extent of time spent and clinical diagnosis (Duggirala *et al.*, 2008). All three human factors can impact the experience-centric nature of the service. Hence:

H2. Interpersonal care activity dimensions – (a) interaction activity, (b) relationship activity and (c) physician's care – have a positive impact on CE.

Process and CE: Drawing from work on service quality, we conceptualize process as comprising technical process and administrative procedure. The technical process involves process expertise and safety measures. The process expertise reflects the service provider's ability to observe high standards of service delivery (Zifko-Baliga and Krampf, 1997) and affects perceived quality (Dagger *et al.*, 2007). It includes competence, skill, qualifications of service providers and care delivered to customers. Safety measures are significant for hospital services, as they relate to survival concerns and affect service quality and satisfaction (Duggirala *et al.*, 2008). These two functional clues regarding technical process can shape the CE (Berry *et al.*, 2006). Hence:

H3. The existence of technical process dimensions – (a) process expertise and (b) safety measures – has a positive impact on CE.

Administrative procedure is the second process component, and it covers the elements facilitating service production. A total of two factors of administrative procedure are

identified – timeliness of activity and operational activity (Dagger *et al.*, 2007). The timeliness of activity covers elements involved in scheduling to receive services, such as appointments, waiting time and ease of changing appointments (Dagger *et al.*, 2007). Operational activity facilitates core service production through general administration and management (Dagger *et al.*, 2007). Both affect quality perceptions. Hence:

H4. The presence of administrative procedure dimensions – (a) timeliness of activity and (b) operational activity – has a positive impact on CE.

Core service and CE: Service appropriateness, effectiveness and benefits to customers are parts of the core service that can affect quality (Lee *et al.*, 2000). An efficient and effective core service is likely to be an essential predictor of favorable CE. Hence:

H5. An efficient and effective core service has a positive impact on CE.

Service communication and CE: Proper communication, within ethical and legal constraints, is likely to result in informed customers. Indian regulations make it an offense for a physician, group of physicians, institution or organization to solicit customers, directly or indirectly (Medical Council of India, 2002). However, this does not limit a hospital from creating awareness and informing its target customers about its services and success stories. A hospital that informs its customers appropriately is likely to have more satisfied customers because they are more likely to make educated choices. Suitable communication is also likely to evoke favorable experience (Dennis *et al.*, 2014). Hence:

H6. Service communication has a positive impact on CE.

Service charge and CE: Although there has been debate on the price–perceived quality relationship (Zeithaml, 1988), keeping other information constant, price perception can affect perceived quality, perceived value and willingness to purchase (Dodds *et al.*, 1991). Specifically, in hospital services, empirical evidence suggests the influence of customers' price perception on quality (Grewal *et al.*, 2000) and choice (Lee *et al.*, 2008). Hence:

H7. High service charges have a positive impact on CE.

Place and CE: "Access convenience" refers to the customer's perceived time and effort expenditures needed to initiate service delivery (Berry *et al.*, 2002). Empirical evidence shows that access convenience influences hospital choice behavior (Lee *et al.*, 2008). Hence:

H8. Access convenience has a positive impact on CE.

Social responsibility and CE: The ethical dimension is the additional element in the marketing mix. "Social responsibility" refers to the hospital's contribution to society in terms of fair medical treatment at reasonable cost and maintaining privacy and confidentiality of patient information (Duggirala *et al.*, 2008). Customers feel good when they know their service provider is socially responsible. Hence:

H9. Social responsiveness demonstrated by a service provider has a positive impact on CE.

CE and CBBE

Experience involves information processing and inference making of clues generated by firms' marketing efforts. Experience with a firm has a bearing on firm's brand-related meanings derived by customers, such as association, brand personality, brand attitude and brand image (Berry, 2000; Chang and Chieng, 2006); brand loyalty (Brakus *et al.*, 2009;

Pullman and Gross, 2004); customer–brand relationship (Chang and Chieng, 2006); CBBE (Delgado-Ballester and Sabiote, 2015; Ding and Tseng, 2015; Kumar *et al.*, 2013); and word-of-mouth behavior for the firm (Ferguson *et al.*, 2010). Hence:

H10. CE has a positive impact on CBBE.

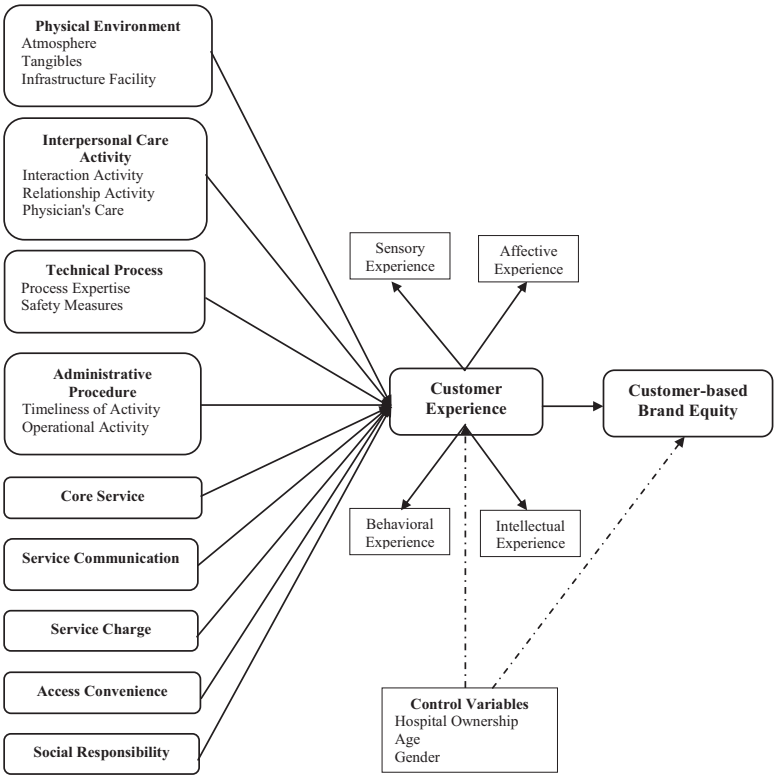
The hypothesized CBBE creation framework is presented in Figure 2.

Research methodology

Measurement of variables

The research instrument was developed by integrating literature with in-depth interviews. We measured all items of the survey instrument using five-point Likert scales with anchors "strongly disagree" to "strongly agree". We systematically alternated variable items in the instrument. Table I provides details of the measurement items.

Control variable. Age and gender may affect a variety of customer states (Homburg and Annette, 2001). Hospital ownership structure may also influence the customer's perception about a hospital (Mostafa, 2005). The study included three control variables: age (ratio scale), gender (nominal scale) and hospital ownership (nominal scale).



Note: Dotted lines indicate the influence of control variables on the endogenous constructs

Figure 2.
Hypothesized CBBE creation framework

Measurement items	Loading[a]	Mean	SD
Atmosphere (four items adopted from Dagger et al., 2007) (α = 0.761; CR = 0.766)[b]			
The environment at this hospital is pleasing	0.709	3.64	0.94
This hospital has an appealing environment	0.705	3.55	0.95
The temperature at this hospital is pleasant	0.651	3.58	0.87
This hospital smells pleasant	0.615	3.19	1.07
Tangibles (six items adopted from Dagger et al., 2007) (α = 0.809; CR = 0.808)			
I like the layout of this hospital	0.549	3.71	0.89
This hospital looks pleasant	0.740	3.48	0.99
I like the interior decoration of this hospital	0.707	3.42	0.95
The color scheme of this hospital is attractive	0.656	3.30	0.96
The lighting at this hospital is appropriate for this setting	0.546	3.73	0.85
The design of this hospital is patient friendly	0.643	3.56	0.85
Infrastructure facility (six items adopted from Duggirala et al., 2008) (α = 0.731; CR = 0.737)			
Facilities provided by this hospital management to my attendant are satisfactory	0.586	3.73	0.85
Required medicine is available in time at this hospital	0.579	3.71	1.01
There is availability of latest and modern medical equipment in proper working condition at this hospital	0.720	3.67	0.87
Hygienic food is available conveniently at this hospital	Dropped		
Life-support facilities to manage any sudden deterioration in health condition are available at this hospital	0.553	3.70	0.85
Good house-keeping facilities (e.g. pillows, bed sheet, buckets, mugs, etc.) are maintained at this hospital	0.553	3.43	0.98
Interaction activity (seven items adopted from Dagger et al., 2007) (α = 0.843; CR = 0.846)			
The personnel of this hospital always listen to what I have to say	0.657	3.65	0.96
I feel personnel of this hospital understand my needs	0.665	3.60	0.90
The personnel of this hospital are concerned about my well-being	0.654	3.64	0.84
I always get personalized attention from the personnel of this hospital	0.613	3.40	0.95
The personnel of this hospital explain things in a way that I can understand	0.654	3.69	0.82
The personnel of this hospital are willing to answer my questions	0.730	3.60	0.88
I believe the personnel of this hospital care about me	0.663	3.66	0.81
Relationship activity (three items adopted from Dagger et al., 2007) (α = 0.672; CR = 0.674)			
The personnel of this hospital and I sometimes kid around, laugh or joke with each other like close friends at this hospital	0.588	2.90	1.10
The personnel of this hospital and I talk about the things that are happening in our lives, and not just about my medical condition at this hospital	0.725	2.86	1.08

(*continued*)

Table I.
Descriptive and psychometric properties of operational measure

Measurement items	Loading[a]	Mean	SD
I have built a close relationship with some of the personnel of this hospital	0.600	3.05	1.06
Physician's care (six items adopted from Duggirala et al., 2008) (α = 0.767; CR = 0.768)			
Extent of time spent by the doctors with me, as and when I have needed their attention at this hospital is adequate	0.605	3.76	0.92
Doctors of this hospital are courteous and polite	0.611	4.00	0.80
Doctors of this hospital are attentive to my needs	0.658	3.71	0.80
Doctors of this hospital answer my questions and clearly explain the diagnosis and treatment outcome to me	0.658	3.81	0.85
Qualified doctors are available round the clock at this hospital	Dropped	-	-
The correct diagnosis of my health problem is made by the doctor(s) of this hospital	0.624	3.86	0.75
Process expertise (four items adopted from Dagger et al., 2007) (α = 0.750; CR = 0.746)			
The personnel of this hospital are well qualified	0.529	3.89	0.80
The personnel of this hospital carry out their tasks competently	0.724	3.73	0.84
I believe the personnel of this hospital are highly skilled at their jobs	0.630	3.75	0.80
I feel good about the quality of care given to me by this hospital	0.710	3.76	0.75
Safety measure (three items adopted from Duggirala et al., 2008) (α = 0.530; CR = 0.540)			
Adequate procedures of hygienic care (e.g. wearing gloves) are followed by this hospital	0.610	3.76	0.97
There is limited side effect of medicine prescribed or given to me by this hospital	Dropped		
This hospital adopts safety measures (e.g. use of sterilized instrument)	0.606	3.88	0.78
Timeliness of activity (two items adopted from Dagger et al., 2007 and 1 item developed for the study) (α = 0.654; CR = 0.655)			
This hospital keeps waiting time to a minimum	0.521	3.18	1.12
Generally, appointments at this hospital run on time	0.568	3.53	1.00
This hospital delivers service in time	0.769	3.69	0.87
Operational activity (five items adopted from Dagger et al., 2007) (α = 0.758; CR = 0.755)			
The records and documentation (e.g. billing) of this hospital are error free and accurate	0.575	3.76	0.84
This hospital coordinates well with other service providers (e.g. pathology)	0.578	3.65	0.84
I believe this hospital is well-managed	0.756	3.77	0.77
The registration procedures at this hospital are efficient and quick	0.637	3.73	0.77
The discharge procedures at this hospital are efficient and convenient	0.532	3.53	0.73

(*continued*)

Table I.

Measurement items	Loading[a]	Mean	SD
Core service (five items developed for the study) (α = 0.763; CR = 0.769)			
This hospital provides complete range of medical services	0.583	3.73	0.96
This hospital provides appropriate medical service to its patients	0.675	3.91	0.76
Medical service provided by this hospital is effective	0.696	3.78	0.83
Medical service provided by this hospital is beneficial	0.512	3.76	0.69
This hospital provides the latest medical service to its patients	0.686	3.73	0.82
Service communication (four items developed for the study) (α = 0.714; CR = 0.715)			
This hospital informs patients about the types of services offered by it through different sources	0.553	3.31	1.02
This hospital informs patients about its services that specifically aim at preventive healthcare	0.639	3.49	0.93
This hospital informs patients about services that are only available at this hospital through different sources	0.626	3.37	0.96
This hospital informs the community about the quality of its medical services through different sources	0.663	3.41	0.90
Service charges (three items adopted from Yoo et al., 2000) (α = 0.805; CR = 0.806)			
The treatment charge of this hospital is high	0.813	3.04	1.27
The treatment charge of this hospital is low	0.715	2.95	1.21
This hospital is expensive	0.756	3.02	1.26
Access convenience (three items adopted from Berry et al., 2002) (α = 0.716; CR = 0.718)			
It is easy to reach this hospital	0.633	3.93	0.93
It does not take much time to reach this hospital	0.728	3.66	0.94
I am able to get to this hospital's location quickly	0.669	3.75	0.93
Social responsibility (two items adopted from Duggirala et al., 2008 and two items developed for the study) (α = 0.647; CR = 0.650)			
This hospital provides fair medical treatment to its patients	0.589	3.82	0.78
Ethical principles are followed by this hospital while delivering medical care to patients	0.605	3.69	0.75
This hospital does not make any false claim to attract patients	Dropped		
This hospital creates justified expectation about its treatment	0.659	3.61	0.82
CBBE (four items adopted from Yoo et al., 2000) (α = 0.826; CR = 0.827)			
It makes sense to choose this hospital instead of any other hospitals, even if they are the same	0.692	3.59	0.93
Even if another hospital has the same facilities as this hospital, I would prefer to choose this hospital	0.770	3.50	0.96

(*continued*)

Table I.

Measurement items	Loading[a]	Mean	SD
If there is another hospital as good as this hospital, I prefer to choose this hospital	0.739	3.44	0.98
If another hospital is not different from this hospital in any way, it seems smarter to choose this hospital	0.748	3.62	0.90
Sensory experience (three items adopted from Brakus et al., 2009 and 1 item developed for the study) ($\alpha = 0.833$; CR = 0.831)			
This hospital forms a good impression on my senses	0.716	3.64	0.85
This hospital pleases my senses	0.782	3.49	0.90
The appearance of this hospital pleases me	0.695	3.58	0.86
This hospital affects my senses positively	0.777	3.53	0.85
Affective experience (three items adopted from Brakus et al., 2009 and 1 item developed for the study) ($\alpha = 0.832$; CR = 0.837)			
This hospital induces positive feelings and emotions within me	0.706	3.59	0.88
I have positive emotions about this hospital	0.754	3.56	0.87
This hospital puts me in a better mood	0.766	3.54	0.87
I am in better mood after being treated at this hospital	0.771	3.55	0.83
Behavioral experience (three items adopted from Brakus et al., 2009 and 1 item developed for the study) ($\alpha = 0.831$; CR = 0.834)			
I feel energetic after being treated at this hospital	0.702	3.61	0.82
I feel healthier after being treated at this hospital	0.748	3.70	0.78
I become more active after being treated at this hospital	0.753	3.60	0.82
Treatment at this hospital gives me enough energy to do what I want to do	0.781	3.55	0.86
Intellectual experience (three items adopted from Brakus et al., 2009) ($\alpha = 0.773$; CR = 0.783)			
I engage in positive thinking when I am treated at this hospital	0.665	3.68	0.80
This hospital stimulates positive thoughts within me	0.792	3.54	0.84
This hospital encourages me to think confidently	0.757	3.53	0.86

Notes: Loading:[a] standardized factor loading; [b]α = Cronbach's alpha and CR = composite reliability; Fit statistics: Measurement model of 15 marketing activities and CBBE: $\chi^2_{(1,959)} = 5378$; $\chi^2/df = 2.745$; CFI = 0.857; IFI = 0.859; RMSEA =0.046; Measurement model of customer experience: $\chi^2_{(84)} = 740$; $\chi^2/df = 8.806$; CFI = 0.922; IFI = 0.922; RMSEA =0.097

Table I.

Sampling and data collection. The population under study was urban Indian patients who had used hospital services in the 12 months preceding the survey, or were currently using the services. The study included hospitals from all three tier cities as per Government of India, 2008 (tier X – National Capital Region; Tier Y – Lucknow, Merrut and Patna; Tier Z – Dibrugarh and Darbanga). Every fifth customer (present in the hospital waiting area or admitted in rooms) of the chosen hospital who had used services in the 12 months preceding the survey or was currently using services was contacted regarding the structured questionnaire. Refusal or inability to participate in the study was not recorded. After removing missing data points, the exercise resulted in 839 usable responses.

The sample characteristics are as follows: gender (men: 65.6 per cent, women: 34.4 per cent), age (<21 years: 6.4 per cent, 21-30 years: 48.4 per cent, 31-40 years: 19.7 per cent, 41-50

years: 12.4 per cent, 51-60 years: 7.3 per cent, >60 years: 5.8 per cent), type of patient (inpatient: 41.5 per cent, outpatient: 56.4 per cent, no response: 2.1 per cent) and hospital type (private hospital: 61.4 per cent, government hospital: 38.6 per cent).

Reliability and validity. Before hypothesis testing, the model fit, reliability and validity (convergent and discriminant) of the measurement constructs were assessed. To examine the measurement model, we conducted confirmatory factor analysis (CFA) using AMOS. All study variables are first-order variables except CE, which is operationalized, consistent with the experience conceptualization of Brakus *et al.* (2009), as a one-factor higher-order construct with four sub-dimensions: sensory, affective, intellectual and behavioral experience. We assessed two separate measurement models – the first on marketing activities and CBBE, and the second on CE. CFA was conducted for the first measurement model with 16 factors, based on 70 items. All items except four (one from infrastructure facility, one from physician care, one from safety measures and one from social responsibility) were found to load higher than 0.5 (Table I). After deleting these four items, the recalculated fit statistics of the model were $\chi^2_{(1,959)} = 5{,}378$; $\chi^2/df = 2.745$; CFI = 0.857; IFI = 0.859 and RMSEA = 0.046. The model seemed satisfactory, especially for a model with such a large number of constructs. The fit statistics of the second measurement model on CE, based on 15 items [$\chi^2_{(84)} = 740$; $\chi^2/df = 8.806$; CFI = 0.922; IFI = 0.922 and RMSEA = 0.097], appeared acceptable, though the RMSEA was higher than the acceptable value.

Cronbach's alpha and composite reliability of the variables (except safety measures) were higher than 0.6 (Table I). To assess convergent validity, we looked at the item loadings and found that all were greater than 0.5. Discriminant validity for all variables was also established, as we found a significant increase in the χ^2 value for all constrained models (fixing the correlation between any two factors to 1.0) over the unconstrained model (Anderson and Gerbing, 1988).

Results

Testing the hypothesized CBBE creation model

The CBBE creation model (Figure 2) was tested using AMOS. We first explored whether the CE operationalization as a second-order construct with four sub-dimensions was better than using first-order four-factor experience constructs. We assessed this by comparing the fit statistics of two models – the first containing CE as a one-factor second-order construct with four sub-dimensions and the second containing four CE factors as four distinct constructs (Thomson *et al.*, 2005). The fit statistics of the proposed model with CE as a second-order construct were $\chi^2_{(74)} = 343.3$; $\chi^2/df = 4.639$; CFI = 0.979; IFI = 0.979 and RMSEA = 0.066; while those of the proposed model with four constructs of experience were $\chi^2_{(21)} = 1{,}454$; $\chi^2/df = 69.231$; CFI = 0.888; IFI = 0.890 and RMSEA = 0.285. This comparison confirmed the CE operationalization as a second-order one-factor construct with four sub-dimensions to be better than using four-factor constructs. We also found that all four sub-dimensions (sensory, affective, behavioral and intellectual) significantly indicated a second-order experience construct.

The fit statistics of the proposed model also indicated good fit: 9 of 16 hypothesized paths were significantly positive (in the hypothesized direction), 2 paths were found to be negatively significant and the remaining 5 paths were not significant. Table II reports the path results. The proposed model explains a substantial amount of outcome variance, as squared multiple correlations (SMC) reveal CE = 0.755 and CBBE = 0.511.

Tangibles, interaction activity, social responsibility, process expertise, physician's care, operational activity, service communication and relationship activity significantly impacted CE

Path	Standardized path coefficient Proposed model	Rival model
Atmosphere → Customer experience	0.043	
Tangibles → Customer experience	0.260***	
Infrastructure facility → Customer experience	0.059	
Interaction activity → Customer experience	0.207***	
Relationship activity → Customer experience	0.047*	
Physician's care → Customer experience	0.110***	
Process expertise → Customer experience	0.111***	
Safety measures → Customer experience	−0.084**	
Timeliness of activity → Customer experience	−0.023	
Operational activity → Customer experience	0.099**	
Core service → Customer experience	0.054	
Service communication → Customer experience	0.059*	
Access convenience → Customer experience	−0.063**	
Service charges → Customer experience	−0.028	
Social responsibility → Customer experience	0.147***	
Customer experience → CBBE	0.715***	0.462***
Atmosphere → CBBE	–[a]	−0.066
Tangibles → CBBE	0.186***[b]	−0.018
Infrastructure facility → CBBE	–[a]	0.095*
Interaction activity → CBBE	0.148***[b]	0.007
Relationship activity → CBBE	0.033*[b]	0.119***
Physician's care → CBBE	0.079***[b]	0.072
Process expertise → CBBE	0.079***[b]	0.110*
Safety measures → CBBE	−0.060**[b]	0.025
Timeliness of activity → CBBE	–[a]	0.105**
Operational activity → CBBE	0.071**[b]	−0.044
Core service → CBBE	–[a]	0.128**
Service communication → CBBE	0.042*[b]	−0.039
Access convenience → CBBE	−0.045*[b]	0.033
Service charges → CBBE	–[a]	−0.030
Social responsibility → CBBE	0.105***[b]	0.077
Control variable		
Age → Customer experience	−0.025	
Gender → Customer experience	0.032	
Hospital ownership → Customer experience	0.034	
Age → CBBE	−0.026	−0.022
Gender → CBBE	−0.084***	−0.063*
Hospital ownership → CBBE	−0.040	−0.048

Notes: [a]Independent variable → Mediator variable (customer experience) is not significant; [b]indirect effect through customer experience; *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$; Fit statistics of proposed model: $\chi^2_{(74)} = 343.3$; χ^2/df = 4.639; CFI = 0.979; IFI = 0.979; RMSEA = 0.066; PNFI = 0.285; Fit statistics of rival model: $\chi^2_{(77)} = 1278.1$; χ^2/df = 16.599; CFI = 0.906; IFI = 0.908; RMSEA = 0.136; PNFI = 0.275

Table II.
Path results of proposed model and rival model

positively (i.e. out of 15 marketing activities of the study, 8 significantly impacted CE in the hypothesized direction). However, 2 activities – safety measures and access convenience – were found to significantly influence CE negatively. The remaining five marketing activities – atmosphere, infrastructure facility, timeliness of activity, core service and service charges – were found not to significantly influence CE. The analysis also suggests that CE significantly impacted CBBE positively.

Effects on CBBE

To test for indirect effects of marketing activities (only those found to be significantly related to CE) on CBBE, we followed Sobel's (1982) test of mediation. Table II reports the indirect effects of marketing activities on CBBE, through CE. The results suggest that the indirect effects of these ten significant activities on CBBE were also significant, thus indicating a mediating role of CE for the relationship between these marketing activities and CBBE.

Furthermore, to estimate total (indirect and direct) effects of marketing activities on CBBE, we added direct paths from each activity to CBBE in the model and re-estimated the paths. The combined total (direct and indirect) standardized effects on CBBE of process expertise (0.138), core service (0.133), social responsibility (0.124), relationship activity (0.120), physician's care (0.107), infrastructure facility (0.104), interaction activity (0.088), tangibles (0.086), timeliness of activity (0.082), operational activity (0.003) and access convenience (0.003) were found to be positive. Those of service charges (−0.037), safety measures (−0.012), service communication (−0.010) and atmosphere (−0.004) were found to be negative on CBBE.

Comparison of proposed model with rival model

In addition to testing a proposed model, the comparison of its robustness with a rival model is desirable (Bagozzi and Yi, 1988). The proposed model here suggests CE as the mediating variable for the relationship between marketing activities and CBBE. However, current brand equity models (Keller and Lehmann, 2003; Stahl *et al.*, 2012; Yoo *et al.*, 2000) suggest that marketing activities directly impact CBBE. Additionally, research on experience (Berry, 2000; Chang and Chieng, 2006; Delgado-Ballester and Sabiote, 2015) suggests experience as a possible antecedent to CBBE. Combining both the current brand equity model and the effects of experience on CBBE, we developed a model in which both marketing activities and CE influence CBBE. This direct effect model (DEM) was positioned as a rival to the proposed model.

To investigate the robustness of the proposed model, we compared it with its rival using the model comparison guidelines suggested by James *et al.* (1982). The fit statistics of the proposed model were $\chi^2_{(74)} = 343.3$; $\chi^2/df = 4.639$; CFI = 0.979; IFI = 0.979; RMSEA = 0.066 and PNFI = 0.285. Those of the rival DEM were $\chi^2_{(74)} = 1270.2$; $\chi^2/df = 17.164$; CFI = 0.907; IFI = 0.908; RMSEA = 0.139 and PNFI = 0.264. The fit statistics of the proposed model were found to be better than the rival DEM. Further comparisons were conducted. An increase in the CFI of the proposed model over the rival DEM (increase of 8.19 per cent, from 0.906 to 0.979), a drop in the PNFI of the rival DEM with respect to the proposed model (decrease of 3.5 per cent, from 0.285 to 0.275), an increase in the percentage of significant paths of the proposed model with respect to the rival DEM (increase of 83 per cent, from 38 to 69 per cent significant paths) and the rival's lower SMC for CBBE (0.424) compared to the proposed model (0.511) established the proposed model to be better than the rival DEM. This also established CE as the key focal mediating variable in the proposed model.

Discussion

This study makes a distinctive contribution to the services marketing (particularly in healthcare) and service CBBE. It attempts to identify whether there is any role for CE in the CBBE creation process and, if so, what that role is, and whether CE is the focal key variable in CBBE creation. To do so, the study develops a new CBBE creation framework that contrasts with current CBBE models by suggesting that marketing activities (*stimuli*) impact CBBE (*response*), through evoked CE (*organism*). The improved CBBE creation framework is based on integrating learning theories (classical conditioning, instrumental

conditioning and cognitive theory) with the signaling theory, the inference theory and the affordances theory. Thus, we provide a strong theoretical foundation for our model.

The proposed model, with 16 hypothesized paths in the context of hospital service, was empirically tested and compared with a rival DEM. The findings established the robustness of the proposed CBBE model. We also found significant indirect effects of ten marketing activities on CBBE, through CE. This establishes CE as a key focal mediating variable in CBBE creation, in contrast with current literature, which suggests a direct effect of marketing activities on CBBE. This finding is consistent with the S-O-R theory of learning. The study contributes to service branding literature by formulating and testing an improved CBBE creation model.

Second, the study contributes to extant experiential marketing literature by providing a comprehensive empirical validation to the effects of different touchpoints or activities on evoked experience, as suggested by Lemon and Verhoef (2016). The study identifies 15 marketing activities and assesses their relative impact on CE and CBBE. We found a significant positive impact on CE of eight activities, namely, tangibles (0.260), interaction activity (0.207), social responsibility (0.147), process expertise (0.111), physician's care (0.110), operational activity (0.099), service communication (0.059) and relationship activity (0.047). However, we also found a negative significant impact on CE of two activities – safety measures and access convenience. The remaining five activities – atmosphere, infrastructure facility, timeliness of activity, core service and service charges – did not significantly influence CE. This finding (dissimilar impact of marketing activities) is coherent with the notion that not all touchpoints of the firm are of equivalent value (Meyer and Schwager, 2007).

Third, the results re-emphasize that experiences comprise a firm's economic offering (Pine and Gilmore, 1999), as the effect of CE on CBBE (0.715) was significantly high. The study corroborates recent findings (Delgado-Ballester and Sabiote, 2015; Ding and Tseng, 2015) on the linkage between evoked experience and CBBE. The study also provides empirical validity in support of Grewal *et al.*'s (2009) conceptualization of experience.

Additionally, we assessed the total effects of marketing activities on CBBE. We found positive total effects on CBBE of 11 activities, namely, process expertise, core service, social responsibility, relationship activity, physician's care, infrastructure facility, interaction activity, tangibles, timeliness of activity, operational activity and access convenience (in decreasing order). However, we found negligibly low negative total effects of four activities on CBBE, namely, service charges, safety measures, service communication and atmosphere. The result of different activities impacting CBBE variously enhances extant understanding of the impact of marketing activities on CBBE, and corroborates earlier works on CBBE (Stahl *et al.*, 2012; Yoo *et al.*, 2000)

However, the study also found a counterintuitive negative significant impact on CE of two activities – safety measures (−0.084) and access convenience (−0.063). This surprising finding calls for extensive study of these two variables. However, the post hoc discussion on safety measure suggests a possible reason for this finding among Indian customers, i.e., lack of awareness and education about safety and hygiene measures among Indian customers might explain the low appreciation of these activities, which could in turn render perception of these activities as unnecessary and avoidable, and the presence of these measures could unfavorably affect experience.

Access convenience refers to ease of reach, including both time and distance. If customers are able to reach the hospital quickly, this may create the notion that they are not being treated by a good but distant hospital, but rather by the nearest available hospital. This perception of not being treated by the best distant hospital may evoke a negative experience.

Among five non-significant activities on CE, two – atmosphere and service charges – were also found to have a non-significant direct impact on CBBE. Atmosphere describes how pleasing and appealing an environment is. It is often considered to enhance a service product. Indian hospital customers are likely to be more concerned about core and facilitating elements of service, rather than enhancing or augmented benefits. They may consider a pleasant atmosphere as a non-value-adding element, rather than a core or facilitating element of the service. This may explain why atmosphere influenced neither CE nor CBBE.

The price–perceived quality relationship is not general (Zeithaml, 1988), but depends on contextual cues (Grewal *et al.*, 2000). Some research (Brown, 1997) has found a negative linkage between perceived cost and behavioral intention toward a hospital. Price increases both the risk of an incorrect assessment and perceptions of service quality. This may explain why service charge did not affect CE or CBBE.

Among five non-significant marketing activities on CE, three – infrastructure facility, timeliness of activity and core service – were found to have a significant direct impact on CBBE. Limited information processing regarding these activities could explain this. The hospital's infrastructure facilities may be either too trivial to be given high importance (present in the foreground) or too complex to be comprehended properly by the customer (present in the background). The presence or absence of these facilities may not significantly evoke experience, but do affect customers' response behavior.

While delivering normal hospital services (except in emergency conditions), Indian customers are usually little likely to take serious note of service providers being late. However, timeliness can affect customers' response behavior and CBBE. Similarly, limited information processing of consistency, completeness, appropriateness and effectiveness of service can influence customers' response behavior (CBBE), without evoking significant experience.

Managerial implications

Full understanding of the interplay among marketing activities, experience and brand equity guides careful investment into marketing activities that can shape a firm's resources into capabilities. This study can guide managers in choosing high-performing activities, leading to judicious resource allocation and, in turn, enhancement of the firm's ability to attract additional marketing resources.

The finding regarding the non-uniform impact of marketing activities on CE and CBBE is especially important for the hospital industry, which is both labor and capital intensive. On the one hand, hospitals in developed economies continually face challenges related to containing and reducing persistently high healthcare costs (Deloitte Report, 2015); on the other, hospitals in emerging economies face chronic shortages of resources (both tangible and intangible). For example, hospital bed density in 2012 (beds per 10,000) was 7 in India, 29 in the UK and 27 globally (median) (World Health Organization, 2014), and the number of physicians and nurses per 10,000 totaled 7 and 17.1 (India), 27.9 and 88.3 (UK), and 12.8 and 28.4 (global median), respectively (World Health Organization, 2014). In this context (for both economies), improved resource utilization (efficiency and effectiveness) will evoke a positive experience among the target market. The current evolution of the US health system from volume- to value-based care is one such step to improve the efficiency and effectiveness of resources (Deloitte Report, 2015).

Out of the 15 marketing activities selected, 8 positively and 2 negatively impacted CBBE through CE. Among the remaining five, three had only a direct positive impact on CBBE, and two neither directly nor indirectly impacted CBBE. The results suggest that CE is the bridge between a firm's activities and CBBE. Managers must realize that, apart from curing disease, they are also selling an experience that is evoked by the firm's activities. They must

be cognizant that suitably designed tangibles, interaction activity, social responsibility, process expertise, physician's care, operational activity, service communication and relationship activity of the hospital evoke favorable experiences through personal transformation among customers. Such experiences help customers to choose and evaluate hospitals. This study can guide managers' proper implementation of experiential marketing by designing appropriate activities. Additionally, the result suggests that process expertise, core service, social responsibility, relationship activity, physician's care, infrastructure facility, interaction activity, tangibles and timeliness of activity have favorable impacts on CBBE (as obtained from the total effects of activity on CBBE).

The physical elements existing at the forefront of the service setting – that is, tangibles – enhance the favorable experience, leading to high CBBE. Because tangibles are considered necessary facilitating elements of a service offering, the presence of user-friendly tangibles facilitates smoother consumption of the service. The design, function or layout of the hospital environment can be made patient friendly with proper signs, symbols and artifacts. To evoke a favorable experience, managers can also provide proper lighting and color in interior decoration.

Hospital services are high-touch; that is, people-centric interpersonal care activities are given high importance. All three humanic clues (interaction activities, relationship activity and physician's care) evoke experiences, leading to CBBE. Personnel can improve interactions with customers by properly listening to and understanding customers' needs and offering clear explanations. Additionally, a short, friendly and pleasant conversation with a service provider can mitigate the pain of the problem, and such activities must be promoted. Hospitals can invest resources into training (both clinical and non-clinical) personnel to improve interaction with customers. Such training should enable personnel to be better skilled at listening to and understanding customer needs, and explaining things in an understandable way to provide personalized attention and care. As physicians are the prime actors in service delivery, additional emphasis needs to be placed on their approach and behavior. The study suggests that polite and courteous physicians, who are available around the clock and are attentive to patients' needs, evoke positive experiences among customers. Customers want physicians to spend ample time with them to understand their problem and achieve the correct diagnosis. To meet this challenge, hospitals can invest extra resources into training physicians to become sensitive to customers' needs. Hospitals can also promote personnel's willingness to answer customer queries through innovative practices (e.g. "most customer-friendly face of the month").

The process expertise of the service provider impacts CBBE (both directly and indirectly through CE), as it generates customer confidence. The presence of well-qualified, competent and skilled personnel gives psychological assurance to customers when consuming risky services such as hospital services, and hospitals must employ such physicians, nurses and other staff as their expertise is used as a functional clue regarding hard-to-judge service performance.

Properly synchronized operational and administrative activities evoke a favorable experience, thereby also impacting CBBE. Managers should facilitate efficient and convenient billing, discharge and other administrative activities, and communicate service facilities and success stories to customers. Such communication facilitates informed service consumption, generating higher confidence among customers about service providers.

As hospital service consumption is risky, customers value trustworthy and ethical hospitals more highly compared to other hospitals. A hospital that often conducts socially responsible activities evokes a favorable experience by sending fairness signals to customers. Such responsible brands have high CBBE (Baalbaki and Guzmán, 2016).

Hospitals must also provide fair medical treatment to customers by following ethical principles, without creating unjustified expectations about treatment.

This study suggests that the infrastructure facility, core service and timeliness of activity within the hospital impact CBBE directly, rather than through CE. Customers' response behavior is affected by infrastructure facilities (facilities provided to attendants, availability of the latest and most modern medical equipment, life-support facilities to manage any sudden deterioration and good housekeeping), core medical services (consistent, appropriate and complete services) and timeliness of activities. While delivering services, hospitals must also address these aspects.

Additionally, the study found that Indian customers do not seem assign adequate importance to safety measures. It is possible that this is because they do not understand the importance of such aspects. In light of this, hospitals must promote well-designed safety awareness campaigns (both internally and externally) to make consumers aware of safety-related measures, as these are linked to survival concern. Hospitals can also promote more customer-to-customer interactions on safety issues, both within and outside of the hospital.

Limitations and future research directions

This study investigated the individual impact of 15 marketing activities on CBBE in one particular area such as hospital services. The interaction effects of marketing activities on CE and CBBE were not explored; thus, future research could study the interaction effects of activities on CE and CBBE.

The study found a non-significant impact on CE and CBBE of two activities – atmosphere and service charges – and negative significant impact on CE of two – safety measures and access convenience. Future extensive research could explore the reasons for these findings. Furthermore, empirical replication and extension of this work in other contexts to provide greater confidence in the current study could be undertaken.

In addition to the 15 activities selected, other variables may affect CBBE, such as other activities of the hospital (e.g. health awareness programs), hospital characteristics (e.g. age, size and type, accreditation and alliances, research and development capability), other social and external touchpoints of the hospital (e.g. other customers, independent information sources; Lemon and Verhoef, 2016) and competing hospitals' marketing activities (Ailawadi *et al.*, 2003). Future studies may include these in the CBBE creation framework.

Experience is also dependent on expectations, which can be shaped by market conditions, competition and customers' personal situation (Lemon and Verhoef, 2016; Meyer and Schwager, 2007). Hence, experience may vary depending on market conditions (e.g. downturn, high/low growth) and customer characteristics. Future work may explore the moderating effects of these aspects on the relationship between marketing activities and CE.

This study is based on a self-reported and perception-based cross-sectional survey method. Future research could use a longitudinal study design, as customers instinctively compare each new experience, positive or otherwise, with their previous ones and judge it accordingly (Meyer and Schwager, 2007). In conclusion, our research advances the state-of-the-art literature and also suggests directions for future research. We hope it will inspire more work in this area.

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