



Building theoretical sand castles: the case of customer brand engagement

David Gligor¹ · Siddik Bozkurt² · Emma Welch³

Revised: 31 October 2022 / Accepted: 28 April 2023 / Published online: 15 May 2023
© The Author(s), under exclusive licence to Springer Nature Limited 2023

Abstract

The goal of building a theory of customer brand engagement can be recognized in the sustained research efforts in this area. Three studies were conducted to highlight the significant negative implications of scale proliferation for theory building in the area of customer brand engagement. Each study employed multiple linear regression to investigate multiple distinct customer brand engagement scales. First, the discriminant validity of these scales was examined. Second, the studies examined the relationship between these customer brand engagement constructs and several constructs that previous studies had indicated as antecedents of customer brand engagement. Overall, the results have some worrisome theoretical implications. The measurement scales displayed adequate discriminant validity indicating that scholars have been using the same term (i.e., customer brand engagement) to label constructs that are, in fact, distinct. That is, the various customer brand engagement scales measure different concepts. Moreover, the relationships that these distinct constructs share with their proposed antecedents vary across constructs. In essence, the relationship between customer brand engagement and its antecedents depends on the scale used. The findings raise a red flag regarding the state of theory building within the marketing discipline. Specifically, the results should prompt future studies to investigate whether the discriminant validity issues revealed in this study for customer brand engagement research might exist within other areas of marketing as well.

Keywords Customer brand engagement · Brand engagement · Customer engagement · Scale proliferation · Theory development · Validity

Introduction

Building discipline-specific, rigorous theory has long been a key objective within the field of marketing (Alderson and Cox 1948). This priority is well-ingrained in all reputable marketing journals, such that an important yardstick for evaluating a manuscript's publication worth is represented by the novelty of the manuscript's theoretical contributions.

Manuscripts are expected to build on extant literature and link their findings to existing theories. Theory can be described as a “system of constructs...in which constructs are related to each other by propositions” (Bacharach 1989, p. 498).

Considering that “constructs are the building blocks of strong theory” (Suddaby 2010, p. 2010), it is imperative for constructs to be clearly defined and adequately measured (Suddaby 2010). When construct terms are used interchangeably and different measures exist for the same construct, the cohesiveness and rigor of the theory built are questionable. Despite the warranted criticism for such practice, “it is not unusual for new scales to be created in scholarly marketing research with little concern for their relationship with previous measures of the same construct and little justification provided for their development” (Bruner 2003, p. 362). Further, the reliability and validity of each construct in a model is another key component of theory building.

Considering the requirements described earlier, what happens to the rigor and validity of theory building when

✉ David Gligor
drgligoma@gmail.com

Siddik Bozkurt
sddkbzkrtr@gmail.com

Emma Welch
ewelch@bus.olemiss.edu

¹ University of North Texas, Denton, TX, USA

² Osmaniye Korkut Ata University, Osmaniye, Turkey

³ Department of Marketing, University of Mississippi, Oxford, MS, USA



multiple studies refer to the same construct, say *construct A*, yet develop different measures? For example, one study finds that *construct A* leads to *construct B*, another that *construct C* leads to *construct A*, while a third one builds on the theory developed in the first two studies and examines the impact of *construct C* on *Construct B* through *Construct A* (mediation). Based on the first two studies, it would seem that the third study is building on the first two studies and helping develop a rigorous theory. However, what if each of the three studies uses a different measure for *construct A*, and, in fact, these measures adequately discriminate (i.e., statistically, they are different constructs)? That is, the measures capture different constructs, meaning what is described as *construct A* in the first study is different from what is described as *construct A* in the second and third studies. If that were the case, the theoretical arguments made in the third study, along with the proposed theoretical contributions, have no solid foundation, and their validity is, at best, highly questionable. Unfortunately, this is not just a hypothetical scenario but the reality of a lot of the theories developed within our field. This manuscript uses the context of customer brand engagement (our *construct A*) to raise a red flag regarding this significant problem that threatens to hurt the credibility of academic marketing research to outside stakeholders. A significant gap in extant customer engagement literature is that scholars have developed measures that claim to measure the same construct (i.e., customer engagement), but those measures might be distinct from one another and thus constitute measures of different constructs. Another major gap is that scholars have interchangeably used terms such as customer brand engagement, customer engagement behavior, and customer engagement behavior intentions without empirically ascertaining if these constructs measure the same construct (as assumed) or distinct constructs. The current manuscript seeks to empirically address these gaps by examining whether marketing scholars are building rigorous, valid, and replicable theories, or theoretical sand castles.

The goal of building a theory of customer brand engagement (CBE) can be recognized in the sustained research efforts in this area (Algharabat et al. 2019). Three studies were conducted to highlight the significant negative implications of scale proliferation for theory building in the area of CBE. In the first study, three CBE scales that use slightly different labels (i.e., customer brand engagement (*CBE-1*), customer engagement behavior (*CBE-2*), and customer engagement behavior intentions (*CBE-3*)) were randomly selected. Importantly, while the labels of the scales used in Study 1 are slightly different, it is quite common (and problematic) for CBE studies to use these three different labels interchangeably. First, the discriminant validity of these three scales was examined. If discriminant validity does exist, then these three measurement scales measure distinct concepts. Second, we examined

the relationship between these three CBE constructs and five constructs that previous studies have indicated as antecedents of CBE (i.e., perceived brand interactivity, brand involvement, brand satisfaction, brand commitment, and brand loyalty). Because these various labels for CBE are used interchangeably in the literature, for extant CBE theory to be considered rigorous, the relationships between either one of these three CBE constructs and its antecedents should be the same (i.e., positive, negative, or insignificant). For example, if *CBE-1* shares a direct and positive relationship with brand loyalty, then *CBE-2* ought to share a direct and positive relationship with brand loyalty. If *CBE-1* and *CBE-2* are not found to share the same relationship with brand loyalty, the rigor, validity, and relevance of extant CBE theory would be questionable.

The second study tests three additional CBE scales and empirically explores their relationships to the five antecedents described earlier. While Study 1 compares and contrasts (within a nomological network of relationships) three distinct CBE scales that use different labels (because variations of the term *customer engagement* are used interchangeably), Study 2 compares and contrasts three CBE scales (i.e., *CBE-4*; *CBE-5*; *CBE-6*) that use the same label (i.e., customer engagement). First, similar to Study 1, the discriminant validity of these three scales was examined. If discriminant validity does exist, then these three measurement scales measure distinct concepts. This would be highly problematic as it would indicate that, although they share the same label (i.e., customer engagement), they are not the same construct. Second, the relationship between these three CBE constructs and the five antecedents examined in Study 1 was explored.

Finally, to offer further support for Study 2 findings, the third study tests two additional CBE scales, as well as their relationships with three distinct antecedents that are different from the previous two studies. Similar to what was done in Study 2, Study 3 compares and contrasts two CBE scales (i.e., *CBE-7*; *CBE-8*) that use the same label (i.e., brand engagement) by examining their discriminant validity as well as their relationships with the three new antecedents (all of which, are conceptually different). In sum, the studies compare a total of eight CBE scales. The findings present several noteworthy theoretical and managerial implications.

The rest of the manuscript is organized as follows. First, the manuscript provides the theoretical background for CBE and theoretically links the construct to the five antecedents considered in this study. Second, the manuscript presents the methodology and results for the three studies. Third, the manuscript presents an analysis of the findings and presents the ensuing theoretical and managerial implications. Finally, the manuscript concludes by highlighting the studies' limitations and offers opportunities for future research.



Theoretical background

While various perspectives exist, CBE has generally been conceptualized as behavioral or psychological (Fetscherin et al. 2019). It can be described as “activities engaged in by the customer that are not directly related to search, alternative evaluation, and decision-making involving brand choice” (Vivek et al. 2012, p. 128), such as liking a social media post put out by a brand thanking their employees for a job well done. Brodie et al. (2011) consider a brand to be the focal agent or object the consumer is interacting with. Multiple conceptualizations of the construct have emerged, and researchers have referred to the concept as customer engagement, consumer engagement, customer brand engagement, consumer brand engagement, or customer brand engagement behaviors, and scholars have often used the terms interchangeably within the same manuscript. Some scales operationalize CBE as a multi-dimensional construct (e.g., Hollebeek et al. 2014; Kumar and Pansari 2016; Xu et al. 2021), while others as unidimensional (Gligor and Bozkurt 2020).

Table 1 presents the definitions of the focal constructs used throughout the engagement literature. Each definition focuses on engagement with a brand outside of a purchase and is very similar to one another. Specifically, the definitions typically used for brand engagement and customer brand engagement have been adapted from the same original source (Hollebeek 2011), highlighting the fact that these terms share a common conceptual domain.

Table 2 provides a further review of some of the various contexts, antecedents, and consequences that have been associated with the focal construct in the engagement literature. As illustrated in this table, some of the most common contexts include those of social media, gamification, and service.

Next, the manuscript presents theoretical arguments linking CBE to the antecedents described earlier. These antecedents have been previously linked to CBE and have been selected for illustrative purposes. As such, the goal is not to provide extensive theoretical arguments for these links but rather to utilize the context of these relationships to uncover potential theory-building-related issues caused by the use of multiple CBE scales.

Customer brand engagement and brand interactivity

Research shows that when customers perceive brands to be interactive, they are more likely to engage with them (Gligor and Bozkurt 2020; Shao et al. 2015). Brand interactivity can be described as “the customer’s perception of the

Table 1 Overview of engagement definitions

Term	Author(s)	Definition	Rational for definition
Customer engagement	Kumar et al. (2010, p. 299)	CE’s value is defined according to four dimensions: customer purchasing behavior, customer referral behavior, customer influence behavior, and customer knowledge behavior	This definition was the precursor to a scale that is heavily used to measure customer engagement
Brand engagement	Dessart et al. (2019, p. 185)	BE is defined according to a consumer’s cognitive, emotional, and behavioural investment in specific brand interactions	This definition was utilized in Dessart et al. (2019) to describe BE. However, this definition was adopted from Hollebeek et al. (2014) to define customer brand engagement
Customer brand engagement	Hollebeek (2011, p. 656)	CBE is defined as the level of a customer’s cognitive, emotional, and behavioural investment in specific brand interactions	This definition was the precursor to a scale that is heavily used to measure customer brand engagement
Customer engagement behaviors	Van Doorn et al. (2010, p. 68)	CEB is defined as the customers’ behavioral manifestation toward a brand or firm, beyond purchase, resulting from motivational drivers	This definition is heavily cited for this specific construct (CEB) throughout the engagement literature



Table 2 Overview of relevant customer engagement literature

Focal construct	Publication	Context	Antecedents	Consequences
Customer Engagement	Guesalaga (2016)	Social media and personal selling	×	Individual user factors; situational factors; social media usage in sales
Customer Engagement	Harmeling et al. (2017)	Supermarket sponsored community event	Experimental engagement imitative; self-transformation	×
Customer Engagement	Jessen et al. (2020)	Virtual and Augmented Reality	Use of AR	Customer creativity
Customer Engagement	Kumar and Pansari (2016)	Employee and customer relationship	Employee engagement	Firm performance
Customer Engagement	Prentice et al. (2019)	Airline industry and service	Brand love; brand experience	×
Customer Engagement	Read et al. (2019)	Social media	Brand customer service; brand interactivity; brand intimacy	Perceived popularity; perceived likelihood of adding value
Customer Engagement	Rietveld et al. (2020)	Social media	Emotional appeal; informative appeal about the brand	×
Brand Engagement	Dessart et al. (2019)	Online brand communities	×	Loyalty
Brand Engagement	Flynn et al. (2016)	Retail shopping	Status consumption	Spending; shopping
Brand Engagement	Högberg et al. (2019)	Gamification	Continued engagement intention	×
Brand Engagement	Kumar and Nayak (2019)	Brand ownership	Brand psychological ownership; value congruity	Brand attachment; brand purchase intentions
Brand Engagement	Okazaki et al. (2021)	Social media	×	Compulsive social media use
Brand Engagement	Parker et al. (2018)	Brand extension and timing	Brand's first distant product introduction timing; final brand attitudes	×
Brand Engagement	Vilnai-Yavetz and Tifferet (2015)	Social media	Characteristics of individuals on focal brand's Facebook page	×
Brand Engagement	Xi and Hamari (2020)	Online brand communities	Gamification features	Brand equity (brand awareness and loyalty)
Customer Brand Engagement	Algharabat et al. (2018)	Non-profit and social media	Telepresence; social presence; consumer involvement	Word of mouth; willingness to donate
Customer Brand Engagement	Carvalho and Fernandes (2018)	Online brand communities	Customer involvement; participation; interactivity; flow experience	Customer commitment; trust; cumulative satisfaction; WOM referrals
Customer Brand Engagement	France et al. (2016)	Customer and firm relationship	Brand interactivity; brand quality; brand self-congruity; brand involvement	Brand value; brand loyalty
Customer Brand Engagement	Hussain et al. (2020)	Restaurant and service	Emotional brand attachment; customer satisfaction; overall co-creation experience	×
Customer Brand Engagement	Kumar and Nayak (2018)	Community relationships with brands	Customer brand identification	Loyalty intentions; customer brand engagement
Customer Brand Engagement	Nyadzayo et al. (2020)	Mobile phone	Brand trust; brand satisfaction; self-expressive brand	Brand evangelism; repurchase intention
Customer Brand Engagement	Solem and Pedersen (2016)	Social media and service	Motivational orientation (prevention and promotion orientation)	×



Table 2 (continued)

Focal construct	Publication	Context	Antecedents	Consequences
Customer Brand Engagement	Swani et al. (2021)	Social media	Use of corporate brand name in services SM message; customer-brand identification	×
Customer Engagement Behaviors	Beckers et al. (2018)	Firm events related to stocks	×	Abnormal stock return
Customer Engagement Behaviors	Bozkurt et al. (2020)	Explore how firms can achieve social innovation	Perceived social media interactivity	×
Customer Engagement Behaviors	Gong et al. (2014)	Cultural dimensions and social media	Power distance; uncertainty avoidance; individualism; masculinity; long-term orientation	×
Customer Engagement Behaviors	Hayes et al. (2020)	Social media	Customer-brand relationship strength; social presence of brand message; textual paralanguage	×
Customer Engagement Behaviors	Izogo and Mpinganjira (2020)	Social media	Inspired to; inspired by	×
Customer Engagement Behaviors	Li and Han (2021)	Online communities	Emotional attachment; goal attainment	×
Customer Engagement Behaviors	Roy et al. (2018)	Service and service quality	Service convenience; perceived quality; perceived fairness	×
Customer Engagement Behaviors	Verleye et al. (2014)	Service	Customer affect; customer role readiness	×

brand’s disposition and genuine desire for integration with the customer” (Gligor et al. 2019). Meaning, a brand that is interactive has been perceived by a consumer to show a genuine desire for connectedness and has taken steps to facilitate interaction with that consumer (France et al. 2016). Some examples of this include the online eyewear company Warby Parker offering augmented reality “try-ons” for their consumers to ease the purchasing process or Spotify offering extensive curated playlists based on the consumer’s previous daily listening habits (Valdellon 2021).

Engagement inherently involves behavioral interactions (Lawrence et al. 2013). Therefore, it is no surprise that interactivity is fundamental to the consumer-brand engagement concept (De Vries and Carlson 2014). Brand interactivity has been considered to initiate and facilitate CBE (France et al. 2016). Customers are more willing to engage in a relationship with brands when a two-way information exchange occurs (Shao et al. 2015), highlighting a positive relationship between these two constructs. Past empirical studies have also provided evidence linking brand interactivity to CBE (France et al. 2016; Gligor et al. 2019), specifically in a social media context (Samarah et al. 2022). Thus, the following is examined:

H1 Perceived brand interactivity has a positive impact on CBE.

Customer brand engagement and brand involvement

Brand involvement captures a customer’s level of interest in a brand as well as the personal relevance of the brand to the customer (Gomez et al. 2019). Since CBE has also been conceptualized as including elements of cognitive, emotional, and social elements, as well as the behavioral element already mentioned (Vivek et al. 2012), CBE has been considered a necessary antecedent to brand engagement as it triggers a psychological commitment to brands (Gligor and Bozkurt 2020); as a consumer becomes more involved with a brand, the consumer is likely to become more engaged with that brand through the emotional connection (positive relationship). Significant research has also been devoted to highlighting that, despite their similarities, CBE and brand involvement are conceptually distinct constructs (Gligor et al. 2019; Haverila et al. 2022).

In essence, CBE captures emotional, cognitive, and behavioral elements, while brand involvement is limited to a cognitive element (Hollebeek 2011; Xi and Hamari 2020). Several studies have highlighted the positive effect involvement has on CBE (Hollebeek et al. 2014), specifically within a new technology context such as social media (Samarah et al. 2022) or mobile phone service providers (Leckie et al.



2016). Considering the past studies empirically linking brand involvement to CBE, the following is hypothesized:

H2 Brand involvement has a positive impact on CBE.

Customer brand engagement and brand satisfaction

Satisfaction has long been a key construct within marketing research and has been applied to a variety of contexts (Fornell 1992). According to the disconfirmation paradigm, customers are satisfied when the perceived performance exceeds their satisfaction (positive disconfirmation) and dissatisfied when the perceived performance does not meet their expectations (negative disconfirmation) (Oliver 1980). Because of its relevance, brand satisfaction has been repeatedly recognized as an important performance indicator (Iglesias et al. 2019) and also heavily linked to CBE.

Brand satisfaction is one of the key drivers of CBE, wherein a consumer who is satisfied with a product or service is likely to engage with that same brand by providing feedback or talking about the brand on social media. This has been seen specifically in new technology products (such as smartphones), where previous studies suggest once users are satisfied with their particular brand of smartphone, they tend to express higher engagement toward that same brand (Khang et al. 2013). Past research has also offered empirical evidence linking the two constructs (Pansari and Kumar 2017; Kim and Wang 2019). Satisfaction's positive effect on CBE has been shown to be particularly strong within the context of new technology compared to other related constructs, such as brand trust (Nyadzayo et al. 2020). Thus, the following argument is investigated:

H3 Brand satisfaction has a positive impact on CBE.

Customer brand engagement and brand commitment

Brand commitment plays a central role in the success of brands (Das et al. 2019) and has been recognized as one of the key constructs within relationship-marketing research (Dwyer et al. 1987). It can be described as an attitude that captures the willingness to continue a relationship (Schivinski 2019). Different conceptualizations of the concept have emerged, but most consider brand commitment to be a unidimensional construct (Piehler et al. 2019) that is customer-based (Van Doorn et al. 2010).

Brand commitment stems from customers' psychological and emotional attachment to a brand, where a consumer who is highly and emotionally committed to a brand like Apple, will tend to become highly engaged with that same brand through the emotional component (Bozkurt et al. 2021). Similarly, high-equity brands such as Apple can also induce

strong brand commitment as well as brand attachment which has been shown to evoke engagement from consumers (Van Doorn et al. 2010). Several empirical studies suggested that brand commitment is a driver of CBE (Dessart 2017; Gligor et al. 2019). For example, Schau et al. (2009) found that the more committed consumers were to a brand, the more likely they were to engage in brandspecific initiatives such as connecting with other users in brandspecific communities; this example highlights a positive association between brand commitment and several different types of engagement behaviors. Based on previous literature, the following is proposed:

H4 Brand commitment has a positive impact on CBE.

Customer brand engagement and brand loyalty

Brand loyalty has been associated with a plethora of desirable performance outcomes (Lin et al. 2019). The concept has been examined in terms of both behavioral and attitudinal elements (Dick and Basu 1994). Thus, a comprehensive description would capture both approaches. Brand loyalty can be defined as a biased, behavioral response, manifested over time toward certain brand(s) out of a set of alternative brands. For example, a consumer who buys and loves a brand like Nike will also pursue other behaviors where their positive attitude toward Nike can manifest itself, such as through engaging with the brand on social media.

Extant literature identifies loyalty and engagement as playing a central role in service relationships in general (Brodie et al. 2011), as well as identifying brand loyalty specifically as a necessary ingredient when trying to examine recipes for CBE (Gligor et al. 2019). Conceptual research has consistently linked the two concepts together (Bowden 2009; Hollebeek 2011). Loyalty and engagement have also been linked empirically such as within the contexts of online brand communities on social networking sites (Chan et al. 2014) and functional or emotional consumer-brand relationships online (Fernandes and Moreira 2019). Thus, consistent with past studies, the following is explored:

H5 Brand loyalty has a positive impact on CBE.

Study 1

The purpose of this study is to test the proposed research hypotheses in three different models with a separate CBE scale. In this regard, an online survey was conducted to measure the constructs of interest. At the beginning of the survey, participants were told that they had to be a social media user and had to have interacted with a brand through social media. Then, participants were asked to "think about



a brand that you interact with using social media” and “keep these interactions in mind while answering the survey questions.” Then, participants were asked to name the brand they interact with and the social media platform where this interaction takes place. This was done to ensure that their concept of what a brand was also coincided with the earlier definition given by Brodie et al. (2011). The context of social media was chosen for several reasons. First, the interactive nature of social media creates the opportunity for brands/firms to enhance CBE (Gligor et al. 2019), which is the focal construct of this study. Second, CBE on social media has received considerable attention from researchers in recent years (e.g., Hollebeek et al. 2014; Carlson et al. 2018; Gligor et al. 2019) because of the aforementioned reason. Third, both Hollebeek et al.’s (2014) and Carlson et al.’s (2018) studies, where two of the engagement scales were adopted from, examined CBE in a social media context. For consistency with those studies, the research hypotheses were tested in a social media context in Study 1.

A total of 195 undergraduate students (105 males and 90 females, $M_{age}=23.35$) participated in this study in exchange for partial course credit. Types of brands participants interact with a range from Lulu Lemon to Adidas to Tide. Platforms where they interact varied and included Instagram (37.4%), Facebook (16.4%), Twitter (12.3%), and others (33.9%) (brands’ website, blogs, and other social media platforms (e.g., Pinterest, Snapchat)).

Measures

All scales were adopted from previous studies. Specifically, perceived brand interactivity was adopted from Gligor et al. (2019) and Labrecque (2014), brand involvement from France et al. (2016) and Gligor et al. (2019), brand satisfaction from Gligor et al. (2019) and Zboja and Voorhees (2006), brand commitment from Dessart (2017), and brand loyalty from France et al. (2016) and Gligor et al. (2019). Also, a second-order construct of CBE was adopted from Hollebeek et al. (2014), a second-order construct of CBE behaviors from Roy et al. (2018), and a second-order construct of CBE behavior intentions from Carlson et al. (2018). These variables were measured using a 7-point Likert type scale anchored by 1 (strongly disagree) and 7 (strongly agree). The reliabilities of these constructs exceeded the accepted threshold for Cronbach’s alpha (0.7). Also, the AVE for each construct exceeded the minimum recommended cutoff (0.50) (see Table 3 for the loadings).

In this study, a separate confirmatory factor analysis (CFA) was conducted for each model consisting of five predictor variables and one of CBE constructs. First, the model consisting of five predictor variables and the construct of CBE (CBE-1 hereafter) was tested. This engagement construct is a second-order construct, and its dimensions

are cognitive, affection, and activation. Second, the study assessed the model consisting of the same predictor variables and the construct of CBE behaviors (CBE-2 hereafter). This engagement construct is a second-order construct, and its dimensions are word-of-mouth (WOM), customer helping customers, and customer helping company. Lastly, the study evaluated the model comprising the same independent factors and the construct of CBE behavior intentions (CBE-3 hereafter), which is also a second-order construct, and its reflective dimensions are feedback intentions and collaboration intentions.

Results for the model with CBE-1

The measurement results for the model with CBE-1

A confirmatory factor analysis (CFA) was implemented in Stata 15.1 to assess additional psychometrics of this model measures. The CFA results indicated that the model had acceptable fit, as demonstrated in the fit indices: $\chi^2(378)=900.516$, $p < 0.000$, RMSEA = 0.084, CFI = 0.911, and TLI = 0.900. Convergent validity was assessed based on the average variance extracted (AVE hereafter) of each measure. Each measure’s AVE exceeded the accepted threshold (> 0.5), providing evidence of convergent validity (see Table 3 for the standardized factor loadings). Discriminant validity was evaluated based on the AVE approach. The CFA results showed that AVE for each pair of constructs was higher than their squared correlation, providing evidence of discriminant validity (Table 4).

Hypothesis testing results for the model with CBE-1

Multiple linear regression was employed to explore the relationship between CBE-1 and the proposed predictors. The results showed that perceived brand interactivity ($b=0.009$, $p=0.75$) and brand satisfaction ($b=0.033$, $p=0.63$) did not have a significant impact on CBE-1. Thus, H1 and H3 were not supported. As expected, however, brand involvement ($b=0.216$, $p < 0.001$), brand commitment ($b=0.240$, $p < 0.001$), and brand loyalty ($b=0.318$, $p < 0.001$) had a significant positive impact on CBE-1, providing support for H2, H4, and H5, respectively.



Table 3 Measurement properties

Constructs and items	Loading CBE-1/CBE-2/ CBE-3
<i>Perceived brand interactivity</i>	
The brand talks back to me if I post a message	0.93/0.93/0.93
The brand would respond to me quickly and efficiently	0.87/0.87/0.87
The brand would allow me to communicate directly with it	0.67/0.67/0.67
The brand listens to what I have to say	0.76/0.76/0.76
<i>Brand involvement</i>	
The brand means a lot to me	0.93/0.93/0.93
The brand is significant to me	0.94/0.94/0.95
For me personally, the brand is important	0.94/0.94/0.94
I am interested in the brand	0.66/0.66/0.67
I am involved with the brand	0.52/0.52/0.53
<i>Brand satisfaction</i>	
I am satisfied with my decision to purchase this brand's product/services	0.87/0.87/0.88
My choice to buy this brand's product/services was a wise one	0.89/0.89/0.89
I think that I did the right thing when I bought this brand's product/services	0.94/0.94/0.94
I am happy that I bought this brand's product/services	0.94/0.94/0.95
I truly enjoyed my purchase of this brand's product/service	0.95/0.95/0.95
<i>Brand commitment</i>	
I have grown to like this brand more than others offering the same product/service	0.81/0.81/0.81
I like the product/services offered by this brand	0.78/0.82/0.81
To me, this brand is the one whose product/services I enjoy using most	0.87/0.83/0.85
<i>Brand loyalty</i>	
I will recommend the brand to others	0.87/0.88/0.88
I will praise the brand to others	0.83/0.82/0.82
I will share information about the brand with friends and family	0.76/0.78/0.77
Customer brand engagement (CEB-1) (Hollebeek et al. 2014)	
<i>Cognitive processing</i>	
Using this brand gets me to think about the brand	0.81
I think about this brand a lot when I use it	0.82
Using this brand stimulates my interest to learn more about the brand	0.78
<i>Affection</i>	
I feel very positive when I use this brand	0.80
Using this brand makes me happy	0.90
I feel good when I use this brand	0.88
I am proud to use this brand	0.91
<i>Activation</i>	
I spend a lot of time using this brand, compared to other brands in the same category	0.80
Whenever I am using products/services belonging to the same brand category, I usually use this brand	0.94
This brand is one of the brands I usually use when I use products/services belonging to the same category	0.96
Customer engagement behaviors (CEB-2) (Roy et al. 2018)	
<i>Word of mouth</i>	
I say positive things about this brand to others	0.90
I recommend this brand to my peers	0.91
I encourage friends and relatives to purchase the products of this brand	0.84
<i>Customer helping customers</i>	
I teach other customers how to use the products/services of this brand correctly	0.79
I help other customers when they don't know how to use the products/services of this brand	0.93
I explain to other customers how to use the products/services of this brand correctly	0.98



Table 3 (continued)

Constructs and items	Loading CBE-1/CBE-2/ CBE-3
<i>Customer helping company</i>	
I provide information when surveyed by this brand	0.72
I would provide helpful feedback to customer service	0.91
I would inform this brand about the service provided by their employees	0.76
Customer engagement behavior intentions (CEB-3) (Carlson et al. 2018)	
<i>Feedback Intentions</i>	
When I experience a problem with the brand I intend to notify the brand	0.51
When I have a useful idea on how to improve the brand, I intend to communicate it via its social media platform(s)	0.93
I intend to provide constructive suggestions to the brand via its social media platform(s) on how to improve it	0.90
I'm willing to complete a survey/provide feedback on its social media platform(s). (dropped)	n/a
<i>Collaboration Intentions</i>	
I intend to share my ideas about the brand with other social media users	0.78
I intend to help other social media users with brand issues	0.93
I intend to get help from other social media users	0.80

Results for the model with CBE-2

The measurement results for the model with CBE-2

Confirmatory factor analysis (CFA) was implemented in Stata 15.1 to assess additional psychometrics of this model's constructs. The CFA results showed that the model had acceptable fit, as reflected in the fit indices: $\chi^2(350) = 756.054$, $p < 0.000$, RMSEA = 0.077, CFI = 0.925, and TLI = 0.913. Convergent validity was assessed based on the AVE of each measure. Each measure's AVE exceeded the accepted threshold (0.5), providing evidence of convergent validity (see Table 3 for the standardized factor loadings). Discriminant validity was evaluated based on the AVE approach. The CFA results showed that AVE for each pair of constructs was higher than their squared correlation, providing evidence for discriminant validity (Table 4).

Hypothesis testing results for the model with CBE-2

Multiple linear regression was utilized to investigate the relationship between CBE-2 and the predictor variables. The results revealed that there was a moderately significant positive relationship between perceived brand interactivity and CBE-2 ($b = 0.077$, $p = 0.06$), providing partial support for H1. The results also showed that brand involvement ($b = 0.190$, $p < 0.01$) and brand loyalty ($b = 0.445$, $p < 0.001$) had a positive impact on CBE-2. Thus, H2 and H5 were supported. Contrary to our expectation, however, brand satisfaction ($b = -0.035$, $p = 0.72$) and brand commitment ($b = -0.039$, $p = 0.66$) did not have a positive influence on CBE-2. Thus, H3 and H4 were not supported.

Results for the model with CBE-3

The measurement results for the model with CBE-3

A CFA was implemented on the model consisting of predictor variables and CBE-3. The CFA results showed that the model had acceptable fit, as presented in the fit indices: $\chi^2(278) = 646.091$, $p < 0.000$, RMSEA = 0.083, CFI = 0.921, and TLI = 0.908. The same AVE approaches were used to test convergent validity and discriminant validity. As can be seen in Tables 3 and Table 4, the results provided evidence for both convergent and discriminant validity.

Hypothesis testing results for the model with CBE-3

Multiple linear regression was employed to explore the relationship between CBE-3 and the proposed predictors. The results revealed that both perceived brand interactivity ($b = 0.297$, $p < 0.001$) and brand involvement ($b = 0.247$, $p < 0.02$) had a positive impact on CBE-3, providing support for H1 and H2. Contrary to our expectation, brand satisfaction had a significant negative impact on CBE-3 ($b = -0.421$, $p < 0.01$). Thus, H3 was not supported. The results also displayed that there was not a significant relationship between brand commitment and CBE-3 ($b = 0.158$, $p = 0.25$). Lastly, this study's findings revealed that brand loyalty did not have a positive impact on CBE-3 ($b = 0.164$, $p = 0.28$). As a result, while H1 and H2 were supported, H3, H4, and H5 were not supported.



Table 4 Correlation matrix and discriminant validity

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Perceived brand interactivity	4.50	1.42	0.66												
2. Brand Involvement	5.12	1.13	0.35	0.67											
3. Brand satisfaction	5.74	1.00	0.30	0.60	0.84										
4. Brand commitment	5.61	1.03	0.27	0.64	0.74	0.67									
5. Brand loyalty	5.72	1.06	0.29	0.65	0.81	0.77	0.68								
6. Cognitive	5.10	1.13	0.27	0.51	0.39	0.45	0.51	0.65							
7. Affective	5.54	1.01	0.27	0.66	0.71	0.72	0.80	0.63	0.76						
8. Activation	5.38	1.18	0.20	0.58	0.61	0.69	0.62	0.45	0.60	0.82					
9. WOM	5.63	1.03	0.23	0.59	0.73	0.69	0.79	0.51	0.75	0.62	0.78				
10. Customer helping customers	4.42	1.51	0.15	0.33	0.18	0.17	0.27	0.45	0.30	0.29	0.35	0.82			
11. Customer helping brand	5.09	1.19	0.37	0.36	0.34	0.36	0.45	0.50	0.51	0.35	0.39	0.43	0.64		
12. Feedback intentions	4.09	1.39	0.41	0.23	0.09	0.19	0.18	0.34	0.20	0.28	0.17	0.46	0.48	0.65	
13. Collaboration intention	4.24	1.41	0.28	0.33	0.10	0.20	0.19	0.41	0.28	0.26	0.22	0.65	0.49	0.64	0.70

The diagonal values (values in bold) refers to the AVE of each construct

Study 1 discussion

The results of this study showed that three CBE scales that use slightly different labels (i.e., customer brand engagement (CBE-1), customer engagement behavior (CBE-2), and customer engagement behavior intentions (CBE-3)) result in different relationships with constructs that previous studies have indicated to be antecedents of CBE. Perceived brand interactivity had a significant impact on CBE-2 and CBE-3, but not on CBE-1. While all three analyses revealed a significant relationship between brand involvement and CBE, none of them revealed a significant positive relationship between brand satisfaction and CBE. When it comes to brand commitment, the results revealed a significant relationship only with CBE-1. Lastly, brand loyalty had a positive impact on CBE according to CBE-1 and CBE-2, but not to CBE-3. Of these factors, only brand involvement had a positive impact on CBE across three analyses.

Study 2

In Study 1, the research hypotheses were examined in three different models with three separate CBE constructs in a social media context. Study 1 findings showed that each model yielded different results. One could argue that such differences occurred because those constructs have been labeled differently. That is, one could argue that the same results could not have been found if the authors had used the constructs labeled similarly. In addition, one could ask if results would differ if the models had been evaluated in an offline context rather than an online context. To eliminate alternative explanations of our findings and provide more evidence indicating that existing CBE constructs produce

different results, regardless of how they have been labeled, another online survey was conducted.

In this study, three different engagement scales that have been labeled the same were selected (CBE, in this case). To increase the generalizability of the first study findings, the research hypotheses were tested in an offline context. Participants were asked, “think about a brand which you have patronized in the past 3 months and consider your experience with this brand when answering the survey questions.” Then, participants were instructed to name the brand and describe their experience with that brand. To eliminate careless responses and increase data quality, some attention-check questions were included throughout the survey administration. A total of 239 undergraduate students (127 males and 112 females, $M_{age}=21.71$) participated in our study in the first place to receive partial course credit. A number of 24 careless respondents were removed from the survey, resulting in 215 usable observations (111 males and 104 females, $M_{age}=21.69$). The types of brands participants have patronized in the past three months ranged from United Airlines to Victoria’s Secret to Papa John’s.

Measures

The three CBE scales were adopted from Islam et al. (2019) and Hollebeek et al. (2014), Blasco-Arcas et al. (2016), and Kumar and Pansari (2016). For consistency with the first study, the same predictor variables were also utilized in this study. All constructs used 7-point Likert-type scales with endpoints of 1 (strongly disagree) and 7 (strongly agree). The reliabilities of these constructs surpassed the recommended cutoff for Cronbach’s alpha (0.7) (see Table 5 for the factor loadings).



As in Study 1, a separate CFA was run for each model consisting of focal predictors and one of the engagement variables. First, the study tested the model consisting of five predictors and the construct of CBE (CBE-4 hereafter) adapted from Islam et al. (2019) and Hollebeek et al. (2014). This engagement measure is a second-order measure, and its dimensions are cognitive, affection, and activation. Second, the study evaluated the same model with the CBE construct (CBE-5 hereafter) adapted from Blasco-Arcas et al. (2016). This construct is a first-order construct and consists of four items. Lastly, the study assessed the same model with the CBE construct (CBE-6 hereafter) adapted from Kumar and Pansari (2016), encompassing four reflective dimensions; namely customer purchases, customer referrals, customer influence, and customer knowledge.

Results for the model with CBE-4

The measurement results for the model with CBE-4

A CFA was conducted in Stata 15.1 to evaluate additional psychometrics of this model's constructs. The results displayed that the model had adequate fit within acceptable limits ($\chi^2(377) = 768.020$, $p < 0.000$, RMSEA = 0.069, CFI = 0.946, and TLI = 0.937). Also, the results showed that the AVE of each construct surpassed the acceptable threshold (> 0.5), displaying evidence of convergent validity. In addition, the CFA results indicated that the AVE of each pair of measures was greater than their squared correlation, indicating evidence of discriminant validity (Table 6).

Hypothesis testing results for the model with CBE-4

Multiple linear regression was employed to test the relationship between predictors and CBE-4. The results revealed that perceived brand interactivity ($b = 0.046$, $p = 0.20$) and brand satisfaction ($b = 0.067$, $p = 0.28$) did not have a significant effect on CBE-4. Thus, H1 and H3 were not supported. As expected, brand involvement ($b = 0.292$, $p < 0.001$), brand commitment ($b = 0.234$, $p < 0.01$), and brand loyalty ($b = 0.133$, $p = 0.02$) had a significant impact on CBE-4, providing support for H2, H4, and H5, respectively.

Results for CBE-5

The measurement results for the model with CBE-5

A confirmatory factor analysis (CFA) was run in Stata 15.1 to assess additional psychometrics of this model's constructs. The CFA results showed that the model had

adequate fit, as reflected in the fit indices: $\chi^2(237) = 608.074$, $p < 0.000$, RMSEA = 0.085, CFI = 0.936, and TLI = 0.926. Also, the results showed that the AVE of each construct exceeded the acceptable threshold (> 0.5), displaying evidence of convergent validity. In addition, the CFA results indicated that the AVE of each pair of measures was greater than their squared correlation, indicating evidence of discriminant validity (Table 6).

Hypothesis testing results for the model with CBE-5

Multiple linear regression was employed to test the research hypotheses. The results displayed that all hypotheses (except H3) were supported. More specifically, the results revealed that perceived brand interactivity ($b = 0.123$, $p = 0.03$), brand involvement ($b = 0.604$, $p < 0.001$), brand commitment ($b = 0.244$, $p = 0.02$), and brand loyalty ($b = 0.221$, $p = 0.01$) had a positive impact on CBE-5. Contrary to our expectation, however, brand satisfaction did not have a significant positive effect on CBE-5, but a negative one ($b = -0.321$, $p < 0.01$). Thus, all hypotheses (except H3) were supported.

Results for the model with CBE-6

The measurement results for the model with CBE-6

A CFA was run on the model consisting of the same predictor variables (except brand satisfaction) and CBE-6. The CFA results showed that the model had acceptable fit, as presented in the fit indices: $\chi^2(406) = 786.527$, $p < 0.000$, RMSEA = 0.066, CFI = 0.940, and TLI = 0.931. The study used the same AVE approaches to test convergent validity and discriminant validity. As can be seen in Table 5 and Table 6, the results provided evidence for both convergent and discriminant validity.

Hypothesis testing results for the model with CBE-3

The study used the same statistical analysis approach to test our research hypotheses. The results revealed that while perceived brand interactivity ($b = 0.224$, $p < 0.001$) and brand involvement ($b = 0.182$, $p < 0.01$) had a significant positive impact on CBE-6, brand commitment ($b = 0.048$, $p = 0.51$) and brand loyalty ($b = 0.079$, $p = 0.278$) did not have a significant positive effect on CBE-6. Thus, while H1 and H2 were supported, H4 and H5 were not.



Table 5 Measurement properties

Constructs and items	Loading (CBE-4/CBE-5/ CBE-6)
Perceived Brand Interactivity	
The brand talks back to me if I post a message	0.76/0.76/0.76
The brand would respond to me quickly and efficiently	0.89/0.89/0.89
The brand would allow me to communicate directly with it	0.74/0.74/0.74
The brand listens to what I have to say	0.77/0.77/0.78
Brand Involvement	
The brand means a lot to me	0.92/0.92/0.91
The brand is significant to me	0.88/0.87/0.88
For me personally, the brand is important	0.88/0.89/0.88
I am interested in the brand	0.80/0.80/0.80
I am involved with the brand	0.56/0.56/0.56
Brand Satisfaction	
I am satisfied with my decision to purchase this brand's product/services	0.95/0.95
My choice to buy this brand's product/services was a wise one	0.94/0.94
I think that I did the right thing when I bought this brand's product/services	0.93/0.94
I am happy that I bought this brand's product/services	0.97/0.97
I truly enjoyed my purchase of this brand's product/service	0.94/0.94
<i>Brand commitment</i>	
I have grown to like this brand more than others offering the same product/service	0.92/0.92/0.91
I like the product/services offered by this brand	0.90/0.90/0.89
To me, this brand is the one whose product/services I enjoy using most	0.88/0.88/0.89
<i>Brand loyalty</i>	
I will recommend the brand to others	0.96/0.96/0.96
I will praise the brand to others	0.88/0.88/0.88
I will share information about the brand with friends and family	0.62/0.62/0.63
Customer Engagement (CEB-4) (Islam et al. 2019; Hollebeek et al. 2014)	
<i>Cognitive processing</i>	
Using this brand gets me to think about the brand	0.74
I think about this brand a lot when I use it	0.77
Using this brand stimulates my interest to learn more about the brand	0.73
<i>Affection</i>	
I feel very positive when I use this brand	0.92
Using this brand makes me happy	0.92
I feel good when I use this brand	0.92
I am proud to use this brand	0.87
<i>Activation</i>	
I spend a lot of time using this brand, compared to other brands in the same category	0.87
Whenever I am using products/services belonging to the same brand category, I usually use this brand	0.94
This brand is one of the brands I usually use when I use products/services belonging to the same category	0.95
Customer engagement (CEB-5) (Blasco-Arcas et al. 2016)	
My interaction with this brand makes me feel valuable	0.70
I feel I have a special bond with this brand	0.92
I feel I have a close personal connection with this brand	0.91
I feel I have a special relationship with this brand	0.90
Customer engagement (CEB-6) (Kumar and Pansari 2016)	
<i>Customer purchases</i>	
I will continue buying the products/services of this brand in the near future	0.93
My purchase with this brand makes me content	0.94



Table 5 (continued)

Constructs and items	Loading (CBE-4/CBE-5/ CBE-6)
I get my money's worth when I purchase this brand	0.79
Owning the products/services of this brand makes me happy	0.87
<i>Customer referrals</i>	
Given that I use this brand, I refer my friends and relatives to this brand because of the monetary referral incentives	0.81
I promote the brand because of the monetary referral benefits provided by the brand	0.91
In addition to the value derived from the product, the monetary referral incentives also encourage me to refer this brand to my friends and relatives	0.95
I enjoy referring this brand to my friends and relatives because of monetary referral incentives	0.95
<i>Customer influence</i>	
I actively discuss this brand on any media	0.61
I love talking about my brand experience	0.77
I discuss the benefits that I get from this brand with others	0.79
I am part of this brand and mention it in my conversations	0.80
<i>Customer knowledge</i>	
I provide feedback about my experience with the brand to the firm	0.76
I provide suggestions for improving the performance of the brand	0.95
I provide suggestions/feedback about the new products/services of the brand	0.92
I provide feedback/suggestions for developing new products/services for this brand	0.91

Study 2 Discussion

The results showed that perceived brand interactivity had a significant impact on CBE-5 and CBE-6, but not CBE-4. While all three analyses revealed a significant positive impact of brand involvement on CBE, none of them revealed a significant positive impact of brand satisfaction on CBE. The results also indicated that both brand commitment and brand loyalty had a significant positive impact on CBE-4 and CBE-5, but not CBE-6. Of these focal predictors, only brand involvement had a positive impact on CBE regardless of which CBE scale we used. Taken together, these results indicate that despite the three different engagement scales being labeled the same, the relationships between the CBE constructs and the antecedents are not similar. This study also provided more generalizability since the research hypotheses were tested in an offline context.

Study 3

In Studies 1 and 2, we collected our data from undergraduate students. Also, in both studies, correlations among some antecedents were higher than what we expected and might impact the results. Thus, one could argue that similar results could not have been found if the authors had collected data from a generalizable sample. In addition, one could ask if the results would hold if the model had included different antecedents that were not as similar. Thus, another online survey

was conducted to eliminate alternative explanations of our findings and provide more support for our earlier findings.

In this study, two different brand engagement scales and three different potential antecedents were used. These antecedents were brand hate, brand citizenship behavior, and brand predictability. To the best of our knowledge, these constructs have not yet been used together in a brand engagement context. Since we have not found a theoretical reason for a high correlation among these variables, we specifically selected them as potential predictors of customer engagement.

In this study, the proposed relationships were tested in an offline context. First, participants were asked whether they had patronized a brand in the last three months. Second, those who said "yes" were instructed to name the brand they patronized. Then, they were asked, "please keep this brand which you have patronized in the past 3 months in mind and consider your experience with this brand when answering the survey questions." As we did in the previous two studies, we inserted attention-check questions into the survey to eliminate careless responses and increase data quality. Initially, we recruited 200 adult subjects from Amazon Mechanical Turk to participate in this study. After removing those who ignored the questions, we ended up with 167 subjects (118 males and 49 females, $M_{age}=36.59$). The type of brands that participants have patronized in the past three months ranged from BMW to Sonny to Apple.



Table 6 Correlation matrix and discriminant validity

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Perceived brand interactivity	4.56	1.46	0.63												
2. Brand involvement	4.99	1.36	0.52	0.67											
3. Brand satisfaction	5.68	1.58	0.52	0.70	0.90										
4. Brand commitment	5.54	1.50	0.50	0.74	0.88	0.81									
5. Brand loyalty	5.46	1.49	0.56	0.72	0.82	0.82	0.69								
6. Cognitive	4.65	1.24	0.34	0.39	0.23	0.31	0.34	0.56							
7. Affection	5.14	1.45	0.49	0.74	0.79	0.79	0.76	0.40	0.82						
8. Activation	5.32	1.60	0.42	0.69	0.72	0.75	0.69	0.27	0.72	0.85					
9. Customer brand engagement (CBE_5)	3.91	1.47	0.48	0.73	0.51	0.60	0.62	0.47	0.65	0.56	0.74				
10. Customer purchases	5.46	1.49	0.52	0.72	0.90	0.87	0.83	0.31	0.85	0.78	0.58	0.78			
11. Customer referrals	3.16	1.67	0.31	0.25	0.21	0.24	0.23	0.25	0.31	0.17	0.35	0.30	0.82		
12. Customer influence	3.50	1.44	0.40	0.44	0.25	0.32	0.37	0.48	0.40	0.30	0.49	0.31	0.41	0.56	
13. Customer knowledge	3.06	1.56	0.23	0.07	-0.13	-0.06	0.00	0.28	0.00	-0.04	0.21	-0.06	0.38	0.42	0.79

The diagonal values (values in bold) corresponds to the AVE of each construct

Measures

The two brand engagement scales (CBE-7 and CBE-8 hereafter) were adopted from Högberg et al. (2019) and Campbell et al. 2014 and were specifically chosen because the term “brand engagement” was consistently used throughout both papers, as well as being one of their focal measures in their surveys. Brand hate, brand citizenship behavior, and brand predictability variables were adapted from Hegner et al. (2017), Helm et al. (2016), and Lau and Lee (1999), respectively. All constructs used 7-point Likert-type scales with endpoints of 1 (strongly disagree) and 7 (strongly agree). The reliability of these constructs exceeded the recommended cutoff point for Cronbach Alpha (0.7) (see Table 7 for the standardized loadings).

As in Studies 1 and 2, a separate CFA was run for each model consisting of focal predictors and one of the engagement scales. First, the study tested the model consisting of three predictors and the construct of CBE-7 adapted from Högberg et al. (2019). Second, the study evaluated the same model with the CBE-8 adapted from Campbell et al. (2014). Both engagement scales are a first-order measure.

Results for the model with CBE-7

A CFA was conducted in Stata 15.1 to evaluate additional psychometrics of this model’s constructs. The results displayed that the model had adequate fit within acceptable limits ($\chi^2(146) = 309.531$, $p < 0.000$, RMSEA = 0.082, CFI = 0.922, and TLI = 0.908). Also, the results showed that the AVE of each construct surpassed the acceptable threshold (> 0.5), displaying evidence of convergent validity. In addition, the CFA results indicated that the AVE of each pair of measures was greater than their squared correlation, indicating evidence of discriminant validity (see Table 8).

Hypothesis testing results for the model with CBE-7

Multiple linear regression was employed to test the relationship between predictors and CBE-7. The results revealed that all predictors had a significant effect on CBE-7. More specifically, brand citizenship behavior ($b = 0.268$, $p < 0.001$) and brand predictability ($b = 0.639$, $p < 0.001$) had a positive impact on CBE-7, whereas brand hate ($b = -0.128$, $p < 0.01$) had a negative impact on CBE-7.



Results for CBE-8

The measurement results for the model with CBE-8

A confirmatory factor analysis (CFA) was run in Stata 15.1 to assess additional psychometrics of this model's constructs. The CFA results showed that the model had adequate fit, as reflected in the fit indices: $\chi^2(203)=440.336$ $p < 0.000$, RMSEA = 0.084, CFI = 0.911, and TLI = 0.899. Also, the results showed that the AVE of each construct exceeded the acceptable threshold (> 0.5), displaying evidence of convergent validity. In addition, the CFA results indicated that the AVE of each pair of measures was greater

than their squared correlation, indicating evidence of discriminant validity (see Table 8).

Hypothesis testing results for the model with CBE-8

Multiple linear regression was used to test the relationship between predictors and CBE-8. The results indicated that brand hate did not significantly affect CBE-8 ($b = 0.035$, $p = 0.444$). However, both brand citizenship behavior ($b = 0.678$, $p < 0.001$) and brand predictability ($b = 0.194$, $p < 0.01$) had a positive effect on CBE-8.

Table 7 Measurement properties

Constructs and items	Loadings CBE-7/ CBE-8
Brand hate (Hegner et al. 2017)	
I am disgusted by this brand	0.90/0.90
I do not tolerate this brand and its company	0.84/0.84
The world would be a better place without this brand	0.82/0.82
I am totally angry about this brand	0.87/0.87
This brand is awful	0.83/0.83
I hate this brand	0.86/0.86
Brand citizenship behavior (Helm et al. 2016)	
I recommend this brand to friends and family (dropped)	<i>Dropped</i>
I voluntarily take care of tasks that strengthen this brand, even if those tasks are beyond my responsibilities	0.83/0.79
To strengthen the brand, I voluntarily fulfill tasks which I think are important for this brand much better than I am required to	0.78/0.83
I voluntarily engage in strengthening this brand above and beyond what is expected of me, even if I am not directly rewarded for doing so	0.76/0.74
Brand predictability (Lau and Lee 1999)	
When I buy this brand, I know what exactly to expect	0.76/0.76
I can always anticipate correctly how this brand will perform	0.71/0.72
This brand is consistent in its quality	0.73/0.71
This brand performs consistently	0.75/0.75
This brand's performance tends to be quite stable. I can always be sure how it will perform the next time I buy it	0.69/0.68
I know how this brand is going to perform. This brand can always be counted on to perform as I expect	0.85/0.86
Brand engagement (CBE-7) (Högberg et al. 2019)	
I feel very positive when I shop at this brand	0.78
Being with this brand makes me happy	0.72
I feel good when using products from this brand	0.77
I feel proud to use products from this brand	0.65
Brand engagement (CBE-8) (Campbell et al. 2014)	
I like to talk about this brand that is advertised on social media networking sites	0.78
I am always interested in learning more about this brand that is present online	0.78
I would be interested in receiving communications from this brand via social networking sites	0.81
I am accepting of communication from this brand providing it seeks my permission	0.61
I am proud to have others know when I affiliate with this brand via social media networking sites	0.81
I like to browse through social networking related to this brand	0.83
Compared to other people, I closely follow news about this brand	0.84



Table 8 Correlation matrix and discriminant validity

	Mean	SD	1	2	3	4	5
1. Brand hate	2.95	1.83	0.73				
2. Brand citizenship behavior	4.22	1.60	0.37	0.62			
3. Brand predictability	5.56	1.08	- 0.45	0.05	0.56		
4. Brand engagement (CBE-7)	5.31	1.19	- 0.33	0.32	0.69	0.54	
5. Brand engagement (CBE-8)	4.63	1.43	0.26	0.78	0.17	0.48	0.61

The diagonal values (values in bold) corresponds to the AVE of each construct

Study 3 Discussion

The results showed that brand citizenship behavior and brand predictability had a significant impact on CBE-7 and CBE-8. However, brand hate had a significant effect on CBE-7, but not on CBE-8. These findings suggest that the brand engagement antecedents depend on the specific type of “brand engagement” scale used. For example, if you use the brand engagement scale adapted from Högberg et al. (2019), you can imply that brand hate predicts brand engagement. However, you cannot conclude the same if you utilize the brand engagement scale adapted from Campbell et al. (2014).

Overall discussion

Three studies were conducted to empirically examine whether scholars are building a rigorous, valid, and replicable theory, or theoretical sand castles. Study 1 results indicate that the three CBE scales (CBE-1, CBE-2, and CBE-3) display adequate discriminant validity (Table 4). That is, although these variants of CBE (i.e., customer brand engagement, customer engagement behaviors, and customer engagement behavior intentions) are used interchangeably and frequently referred to as *customer brand engagement*, they are, in fact, distinct constructs. Further, these constructs share different relationships with the antecedents examined in this study. For example, only brand involvement shares a direct and positive relationship with all three scales. Perceived brand interactivity has a positive impact on CBE-2 and CBE-3 but not on CBE-1, brand commitment has a positive impact on CBE-1, but not on CBE-2 and CBE-3, while brand loyalty has a positive impact on CBE-1 and CBE-2, but not on CBE-3.

Study 2 results show that the three CBE scales (CBE-4, CBE-5, and CBE-6) also display adequate discriminant validity. Interestingly, although these three scales utilize the same label (i.e., customer engagement), they are, in fact, distinct constructs (Table 6). In addition, these constructs share different relationships with the antecedents examined in this study. That is, only brand involvement shares a direct and positive relationship with all three CBE scales. Perceived

brand interactivity has a positive impact on CBE-5 and CBE-6 but not on CBE-4; brand commitment has a positive impact on CBE-4 and CBE-5 but not on CBE-6, while brand loyalty has a positive impact on CBE-4 and CBE-5, but not on CBE-6. Study 3 results were consistent with those found in Study 2. We found that while brand citizenship behavior and brand predictability had a significant impact on CBE-7 and CBE-8, brand hate had a significant effect on CBE-7 but not CBE-8. That is, the effect found was contingent on the scale utilized as different scales yielded different results.

Theoretical contributions

Overall, the results have several theoretical implications. The findings indicate that scholars have been using the same term (i.e., customer brand engagement) to label constructs that are, in fact, distinct. Moreover, the relationships that these distinct constructs share with their proposed antecedents vary across constructs; this is not surprising as these constructs, although they’re treated as the same construct, are, in fact, different. In essence, the relationship between CBE and its antecedents depends on the scale used. Different scales yield different results, casting doubt on the rigor and validity of extant theory development within this area. Various CBE studies have been building upon each other when, in fact, these studies are actually measuring different constructs.

Our findings have implications for extant literature. To illustrate, we found that although Ismail et al. and Blasco-Arcas et al. (2016) indicated to have studied the same construct labeled customer engagement, these constructs (CBE-4 and CBE-5 in our study) are, in fact, distinct from one another. Ismail et al. revealed that service quality has a positive impact on customer engagement and that customer engagement has a positive influence on brand experience and customer repatronage intent. Further, they argued that these relationships are stronger for women than men. Our results indicate that the relationships proposed by Ismail et al. might be limited to the customer engagement scale utilized by these authors. That is, it is not likely that these relationships would have found empirical support had these authors utilized the customer engagement scale introduced by Blasco-Arcas et al. (2016). Similarly, Blasco-Arcas



et al. (2016) found that C2C interactions-related cues and personalization-related cues positively influence customer engagement. In addition, they found that customer engagement has a positive impact on brand image. Our results show that these findings are customer engagement scale-specific, as these relationships are not likely to hold should one not use the scale proposed by Blasco-Arcas et al. (2016), but for example, the scale used by Islam et al. (2019). Further, it would not be theoretically sound for a subsequent customer engagement study to cite Blasco-Arcas et al. (2016) as part of its hypothesis building but utilize the Islam et al. (2019) scale to test its proposed hypothesis as the customer engagement constructs in the two studies are distinct constructs.

Combined, these above findings also have significant implications for the streams of literature on service quality, brand experience, customer repatronage intent, C2C interactions-related cues, personalization-related cues, and brand image as these constructs are only likely to hold their respective proposed relationships with customer engagement when certain customer engagement scales are used. That is, the proposed relationships between these constructs and customer engagement cannot be generalized to all types of customer engagement, but are rather specific to customer engagement operationalizations utilized in those respective studies.

Managerial contributions

For managers, our findings indicate that they should carefully examine the measurement items proposed by the various CBE studies because these studies are not all examining the same construct. That is, the findings from one study might not transfer to the next just because the authors are using the label *customer engagement*. A careful examination of the measurement items utilized to capture the construct labeled as *customer engagement* can reveal to managers whether the studies are measuring the same construct or not. If the measurement items are different, it is plausible that the constructs are distinct from one another.

In essence, managers should be aware that the relationships between customer engagement and other constructs are likely to be customer engagement scale-specific, as these relationships are not likely to hold should one not use the scale proposed in the respective study. To illustrate, a manager might read the Blasco-Arcas et al. (2016) study and, by reading their proposed measures for the construct, develop a certain understanding of what customer engagement is. Next, the manager might read the Ismail et al. study and conclude that customer engagement as conceptualized and operationalized by Blasco-Arcas et al. (2016), has a positive influence on brand experience and customer repatronage intent. However, such an assumption would be erroneous

because although both studies use the term customer engagement, the two constructs are different from one another. As such, managers should carefully consider the scales utilized in each study and be aware that (despite the common label of customer engagement) these findings are likely customer engagement scale-specific, and thus not assume that what one study refers to as customer engagement is the same as what another study refers to as customer engagement.

Future research and limitations

Our findings raise a red flag regarding the state of theory building within the marketing discipline. One limitation of our study is that it focused exclusively on the construct of CBE. Future studies should investigate whether the discriminant validity issues revealed in this study for CBE research might exist within other marketing areas as well. For example, dozens of measurement scales exist for the concept of market orientation. It is possible that these various scales might not all be measuring the same construct.

Our findings should also prompt further research within the area of CBE. Future research should attempt to explore the relationships between the various scales of CBE so rigorous theory can be built in this area. Perhaps, although both terms are sometimes commonly referred to as CBE and used interchangeably in the literature, CBE intentions (CBE-3) are, in fact, an antecedent to CBE behaviors (CBE-2). For measurement scales that use the common label of *customer engagement* (e.g., CBE-4, CBE-5, and CBE-6), future research should acknowledge that these are, in fact, distinct concepts and should attempt to establish their differences and propose adequate, distinct labels that truly capture their unique properties.

Importantly, when authors develop new measures for the same construct, they should employ due diligence. First, they should justify the need for new measures. Second, they should empirically examine the discriminant validity of the proposed new measurement scale in relationship with existing measurement scales that share the same label. If the newly proposed measurement scale displays adequate discriminant validity with the old/extant measurement scales, researchers should not use the same label for the new measurement scale. Finally, editors and reviewers, who are the gatekeepers of new theoretical developments, are encouraged to employ due diligence when new measures are proposed for existing constructs. Without more rigorous gatekeeping, marketing scholars will continue to build theoretical sand castles.



Declarations

Conflict of interest On behalf of all the authors, the corresponding author states that there is no conflict of interest.

References

- Alderson, W., and R. Cox. 1948. Towards a theory of marketing. *Journal of Marketing*. 13 (2): 137–152.
- Algharabat, R., N.P. Rana, A.A. Alalwan, A. Baabdullah, and A. Gupta. 2019. Investigating the antecedents of customer brand engagement and consumer-based brand equity in social media. *Journal of Retailing and Consumer Services*. 53: 1–13.
- Algharabat, R., N.P. Rana, Y.K. Dwivedi, A.A. Alalwan, and Z. Qasem. 2018. The effect of telepresence, social presence and involvement on consumer brand engagement: An empirical study of non-profit organizations. *Journal of Retailing and Consumer Services*. 40: 139–149.
- Bacharach, S.B. 1989. Organizational theories: Some criteria for evaluation. *Academy of Management Review*. 14 (4): 496–515.
- Beckers, S.F., J. Van Doorn, and P.C. Verhoef. 2018. Good, better, engaged? The effect of company-initiated customer engagement behavior on shareholder value. *Journal of the Academy of Marketing Science*. 46 (3): 366–383.
- Blasco-Arcas, L., B.I. Hernandez-Ortega, and J. Jimenez-Martinez. 2016. Engagement platforms: The role of emotions in fostering customer engagement and brand image in interactive media. *Journal of Service Theory and Practice*. 26 (5): 559–589.
- Bowden, J.L.H. 2009. The process of customer engagement: A conceptual framework. *Journal of Marketing Theory and Practice*. 17 (1): 63–74.
- Bozkurt, S., D.M. Gligor, and B.J. Babin. 2020. The role of perceived firm social media interactivity in facilitating customer engagement behaviors. *European Journal of Marketing* 55 (4): 995–1022.
- Bozkurt, S., D. Gligor, and N. Gligor. 2021. Investigating the impact of psychological customer engagement on customer engagement behaviors: the moderating role of customer commitment. *Journal of Marketing Analytics* 10: 408–424.
- Brodie, R.J., L.D. Hollebeek, B. Jurić, and A. Ilić. 2011. Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research* 14 (3): 252–271.
- Bruner, G.C. 2003. Combating scale proliferation. *Journal of Targeting, Measurement and Analysis for Marketing* 11 (4): 362–372.
- Campbell, C., C. Ferraro, and S. Sands. 2014. Segmenting consumer reactions to social network marketing. *European Journal of Marketing*. 48: 432–452.
- Carlson, J., M. Rahman, R. Voola, and N. De Vries. 2018. Customer engagement behaviours in social media: Capturing innovation opportunities. *Journal of Services Marketing*. 32 (1): 83–94.
- Carvalho, A., and T. Fernandes. 2018. Understanding customer brand engagement with virtual social communities: A comprehensive model of drivers, outcomes and moderators. *Journal of Marketing Theory and Practice*. 26 (1–2): 23–37.
- Chan, T.K., X. Zheng, C.M. Cheung, M.K. Lee, and Z.W. Lee. 2014. Antecedents and consequences of customer engagement in online brand communities. *Journal of Marketing Analytics*. 2 (2): 81–97.
- Das, G., J. Agarwal, N.K. Malhotra, and G. Varshneya. 2019. Does brand experience translate into brand commitment? A mediated-moderation model of brand passion and perceived brand ethicality. *Journal of Business Research*. 95: 479–490.
- De Vries, N.J., and J. Carlson. 2014. Examining the drivers and brand performance implications of customer engagement with brands in the social media environment. *Journal of Brand Management*. 21: 495–515.
- Dessart, L. 2017. Social media engagement: A model of antecedents and relational outcomes. *Journal of Marketing Management*. 33 (5–6): 375–399.
- Dessart, L., J. Aldás-Manzano, and C. Veloutsou. 2019. Unveiling heterogeneous engagement-based loyalty in brand communities. *European Journal of Marketing*. <https://doi.org/10.1108/ejm-11-2017-0818>.
- Dick, A.S., and K. Basu. 1994. Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*. 22 (2): 99–113.
- Dwyer, F.R., P.H. Schurr, and S. Oh. 1987. Developing buyer–seller relationships. *Journal of Marketing* 51 (2): 11–27.
- Fernandes, T., and M. Moreira. 2019. Consumer brand engagement, satisfaction and brand loyalty: A comparative study between functional and emotional brand relationships. *Journal of Product & Brand Management* 28 (2): 274–286.
- Fetscherin, M., F. Guzman, C. Veloutsou, and R.R. Cayolla. 2019. Latest research on brand relationships: Introduction to the special issue. *Journal of Product & Brand Management* 28 (2): 133–139.
- Flynn, L.R., R.E. Goldsmith, and W. Pollitte. 2016. Materialism, status consumption, and market involved consumers. *Psychology & Marketing* 33 (9): 761–776.
- Fornell, C. 1992. A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing* 56 (1): 6–21.
- France, C., B. Merrilees, and D. Miller. 2016. An integrated model of customer-brand engagement: Drivers and consequences. *Journal of Brand Management* 23 (2): 119–136.
- Gligor, D., and S. Bozkurt. 2020. FsQCA versus regression: The context of customer engagement. *Journal of Retailing and Consumer Services* 52: 1–12.
- Gligor, D., S. Bozkurt, and I. Russo. 2019. Achieving customer engagement with social media: A qualitative comparative analysis approach. *Journal of Business Research* 101: 59–69.
- Gomez, M., C. Lopez, and A. Molina. 2019. An integrated model of social media brand engagement. *Computers in Human Behavior*. 96: 196–206.
- Gong, W., Stump, R. L. and Li, Z. G. (2014) Global use and access of social networking web sites: a national culture perspective. *Journal of Research in Interactive Marketing*.
- Guesalaga, R. 2016. The use of social media in sales: Individual and organizational antecedents, and the role of customer engagement in social media. *Industrial Marketing Management*. 54: 71–79.
- Harmeling, C.M., J.W. Moffett, M.J. Arnold, and B.D. Carlson. 2017. Toward a theory of customer engagement marketing. *Journal of the Academy of Marketing Science* 45 (3): 312–335.
- Haverila, M., K. Haverila, C. McLaughlin, and M. Arora. 2022. Engagement, participation, and relationship quality in the context of co-creation in brand communities. *Journal of Marketing Analytics*. 10 (3): 232–249.
- Hayes, J.L., B.C. Britt, J. Applequist, A. Ramirez Jr., and J. Hill. 2020. Leveraging textual paralinguistic and consumer–brand relationships for more relatable online brand communication: A social presence approach. *Journal of Interactive Advertising*. 20 (1): 17–30.
- Hegner, Sabrina M., M. Fetscherin, and M. Van Delzen. 2017. Determinants and Outcomes of Brand Hate. *Journal of Product & Brand Management*. 26: 13–25.
- Helm, Sabrina V., U. Rank, and A. Mishra. 2016. Exploring the impact of employees’ self-concept, brand identification and brand pride on brand citizenship behaviors. *European Journal of Marketing*. 50: 58–77.



- Högberg, J., M.O. Ramberg, A. Gustafsson, and E. Wästlund. 2019. Creating brand engagement through in-store gamified customer experiences. *Journal of Retailing and Consumer Services*. 50: 122–130.
- Hollebeek, L. 2011. Exploring customer brand engagement: Definition and themes. *Journal of Strategic Marketing*. 19 (7): 555–573.
- Hollebeek, L.D., M.S. Glynn, and R.J. Brodie. 2014. Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*. 28 (2): 149–165.
- Hussain, K., F. Jing, M. Junaid, Q.U. Zaman, and H. Shi. 2020. The role of co-creation experience in engaging customers with service brands. *Journal of Product & Brand Management* 30 (1): 12–27.
- Iglesias, O., S. Markovic, and J. Rialp. 2019. How does sensory brand experience influence brand equity? Considering the roles of customer satisfaction, customer affective commitment, and employee empathy. *Journal of Business Research*. 96: 343–354.
- Islam, J.U., L.D. Hollebeek, Z. Rahman, I. Khan, and A. Rasool. 2019. Customer engagement in the service context: An empirical investigation of the construct, its antecedents and consequences. *Journal of Retailing and Consumer Services*. 50: 277–285.
- Izogo, E.E., and M. Mpiganjira. 2020. Behavioral consequences of customer inspiration: The role of social media inspirational content and cultural orientation. *Journal of Research in Interactive Marketing*. <https://doi.org/10.1108/JRIM-09-2019-0145>.
- Jessen, A., T. Hilken, M. Chylinski, D. Mahr, J. Heller, D.I. Keeling, and K. de Ruyter. 2020. The playground effect: How augmented reality drives creative customer engagement. *Journal of Business Research*. 116: 85–98.
- Khang, H., J.K. Kim, and Y. Kim. 2013. Self-traits and motivations as antecedents of digital media flow and addiction: The Internet, mobile phones, and video games. *Computers in Human Behavior* 29 (6): 2416–2424.
- Kim, H.G., and Z. Wang. 2019. Defining and measuring social customer-relationship management (CRM) capabilities. *Journal of Marketing Analytics*. 7 (1): 40–50.
- Kumar, J., and J.K. Nayak. 2018. Brand community relationships transitioning into brand relationships: Mediating and moderating mechanisms. *Journal of Retailing and Consumer Services*. 45: 64–73.
- Kumar, J., and J.K. Nayak. 2019. Brand engagement without brand ownership: A case of non-brand owner community members. *Journal of Product & Brand Management* 28 (2): 216–230.
- Kumar, V., L. Aksoy, B. Donkers, R. Venkatesan, T. Wiesel, and S. Tillmanns. 2010. Undervalued or overvalued customers: Capturing total customer engagement value. *Journal of Service Research*. 13 (3): 297–310.
- Kumar, V., and A. Pansari. 2016. Competitive advantage through engagement. *Journal of Marketing Research*. 53 (4): 497–514.
- Labrecque, L. 2014. Fostering consumer–brand relationships in social media environments: The role of parasocial interaction. *Journal of Interactive Marketing*. 28 (2): 134–148.
- Lau, G.T., and S.H. Lee. 1999. Consumers' trust in a brand and the link to brand loyalty. *Journal of Market-Focused Management*. 4 (4): 341–370.
- Lawrence, B., S. Fournier, and F. Brunel. 2013. When companies don't make the ad: A multimethod inquiry into the differential effectiveness of consumer-generated advertising. *Journal of Advertising*. 42 (4): 292–307.
- Leckie, C., M.W. Nyadzayo, and L.W. Johnson. 2016. Antecedents of consumer brand engagement and brand loyalty. *Journal of Marketing Management*. 32 (5–6): 558–578.
- Li, D., and X. Han. 2021. Assessing the influence of goal pursuit and emotional attachment on customer engagement behaviors. *Journal of Retailing and Consumer Services* 59: 102–121.
- Lin, C.W., K.Y. Wang, S.H. Chang, and J.A. Lin. 2019. Investigating the development of brand loyalty in brand communities from a positive psychology perspective. *Journal of Business Research*. 99: 446–455.
- Nyadzayo, M.W., C. Leckie, and L.W. Johnson. 2020. The impact of relational drivers on customer brand engagement and brand outcomes. *Journal of Brand Management*. 27 (5): 561–578.
- Okazaki, S., F. Schuberth, T. Tagashira, and V. Andrade. 2021. Sneaking the dark side of brand engagement into Instagram: The dual theory of passion. *Journal of Business Research*. 130: 493–505.
- Oliver, R.L. 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*. 17 (4): 460–469.
- Pansari, A., and V. Kumar. 2017. Customer engagement: The construct, antecedents, and consequences. *Journal of the Academy of Marketing Science*. 45 (3): 294–311.
- Parker, J.R., D.R. Lehmann, K.L. Keller, and M.G. Schleicher. 2018. Building a multi-category brand: When should distant brand extensions be introduced? *Journal of the Academy of Marketing Science*. 46 (2): 300–316.
- Piehler, R., M. Schade, and C. Burmann. 2019. Employees as a second audience: The effect of external communication on internal brand management outcomes. *Journal of Brand Management*. 26 (4): 445–460.
- Prentice, C., X. Wang, and S.M.C. Loureiro. 2019. The influence of brand experience and service quality on customer engagement. *Journal of Retailing and Consumer Services* 50: 50–59.
- Read, W., N. Robertson, L. McQuilken, and A.S. Ferdous. 2019. Consumer engagement on Twitter: perceptions of the brand matter. *European Journal of Marketing*. <https://doi.org/10.1108/EJM-10-2017-0772>.
- Rietveld, R., W. van Dolen, M. Mazloom, and M. Worrying. 2020. What you feel, is what you like influence of message appeals on customer engagement on Instagram. *Journal of Interactive Marketing*. 49: 20–53.
- Roy, S.K., V. Shekhar, W.M. Lassar, and T. Chen. 2018. Customer engagement behaviors: The role of service convenience, fairness and quality. *Journal of Retailing and Consumer Services*. 44: 293–304.
- Samarah, T., P. Bayram, H.Y. Aljuhmani, and H. Elrehail. 2022. The role of brand interactivity and involvement in driving social media consumer brand engagement and brand loyalty: The mediating effect of brand trust. *Journal of Research in Interactive Marketing*. 16 (4): 648–664.
- Schau, H.J., A.M. Muñoz Jr., and E.J. Arnould. 2009. How brand community practices create value. *Journal of Marketing*. 73 (5): 30–51.
- Schivinski, B. 2019. Eliciting brand-related social media engagement: A conditional inference tree framework. *Journal of Business Research*. 130: 594–602.
- Shao, W., R.G. Jones, and D. Grace. 2015. Brandscape: Contrasting corporate-generated versus consumer-generated media in the creation of brand meaning. *Marketing Intelligence & Planning*. 33 (3): 414–443.
- Solem, B.A.A., and P.E. Pedersen. 2016. The effects of regulatory fit on customer brand engagement: An experimental study of service brand activities in social media. *Journal of Marketing Management*. 32 (5–6): 445–468.
- Suddaby, R. 2010. Editor's comments: Construct clarity in theories of management and organization. *Academy of Management Review*. 35 (3): 346–357.
- Swani, K., G.R. Milne, and E.G. Miller. 2021. Social media services branding: The use of corporate brand names. *Journal of Business Research*. 125: 785–797.



- Valdellon, L. 2021. 8 clever customer engagement examples from top brands in 2021. CleverTap. <https://clevertap.com/blog/customer-engagement-examples/>. Accessed 20 April 2023.
- Van Doorn, J., K.N. Lemon, V. Mittal, S. Nass, D. Pick, P. Pirner, and P.C. Verhoef. 2010. Customer engagement behavior: Theoretical foundations and research directions. *Journal of Service Research*. 13 (3): 253–266.
- Verleye, K., P. Gemmel, and D. Rangarajan. 2014. Managing engagement behaviors in a network of customers and stakeholders: Evidence from the nursing home sector. *Journal of Service Research*. 17 (1): 68–84.
- Vilnai-Yavetz, I., and S. Tifferet. 2015. A picture is worth a thousand words: Segmenting consumers by facebook profile images. *Journal of Interactive Marketing*. 32: 53–69.
- Vivek, S.D., S.E. Beatty, and R.M. Morgan. 2012. Customer engagement: Exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*. 20 (2): 122–146.
- Xi, N., and J. Hamari. 2020. Does gamification affect brand engagement and equity? A study in online brand communities. *Journal of Business Research*. 109: 449–460.
- Xu, Z., C. Vail, A.S. Kohli, and S. Tajdini. 2021. Understanding changes in a brand's core positioning and customer engagement: A sentiment analysis of a brand-owned Facebook site. *Journal of Marketing Analytics*. 9 (1): 3–16.
- Zboja, J., and C. Voorhees. 2006. The impact of brand trust and satisfaction on retailer repurchase intentions. *Journal of Services Marketing*. 20 (6): 381–390.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.

Dr. David M. Gligor is a professor at Florida Gulf Coast University. He has published over 90 peer-reviewed academic articles and his work has appeared in journals such as *Journal of Operations Management*, *Strategic Management Journal*, *Journal of the Academy of Marketing Science*, *Journal of International Business Studies*, *Decision Sciences*, *Journal of Business Logistics*, and *Journal of Supply Chain Management*. Dr. Gligor has been recognized as the top 2% most cited scholar in the world within the field of Business and Management in 2021 and 2020.

Dr. Siddik Bozkurt is an associate professor at Osmaniye Korkut Ata University. He has published in journals such as *Journal of Business Research*, *Journal of Retailing and Consumer Services*, *European Journal of Marketing*, *Journal of Research in Interactive Marketing*, *Journal of Marketing Communications*, *Journal of Marketing Analytics*, *Journal of Business and Industrial Marketing*, and *Psychology and Marketing*, to name a few.

Ms. Emma Welch is a PhD student at the University of Mississippi. Her research has appeared in the *Journal of Marketing Communications*.

