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Abstract: Social media offer brands new opportunities to interact with their customers. This paper focuses on consumer brand engagement (CBE) and its social facet in the context of brand-hosted social media. It highlights that CBE (consumer–brand interactions encompassing cognitive, affective and behavioural dimensions) and brand-based consumer–consumer interactions (social brand engagement (SBE)) lead to brand loyalty intentions. Brand customers were surveyed about their favourite brands on Facebook. Results indicate that self–brand connections and SBE are two drivers of CBE, and that CBE is the key element in inducing brand loyalty. In addition, configural analysis shows that high brand loyalty can be achieved through several combinations of social and CBE with various levels of cognitive, affective and behavioural engagement.

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Summary statement of contribution

- Propose a revised definition of consumer brand engagement (CBE) through brand-hosted social media, including social aspects of engagement (SBE) grounded in the relational approach to brand.

- Drawing on the relational approach to brand, highlight that - for customers (instead of consumers) - each dimension of CBE plays a specific role in explaining the high levels of loyalty intention towards brand-hosted social media and that CBE has two complementary drivers (SBE and self–brand connections).

- Highlight the relevance of brand engagement on SMN in developing loyalty outside such networks.

- From a methodological point of view, contribute to exemplifying the complementarities between Partial Least Squares Structural Equation Modelling (PLS-SEM) and fuzzy-set Qualitative Comparative Analysis (fsQCA).

- Provide managers with strategic tools driving consumer engagement.

Introduction

Brand-hosted social media, such as brand pages on Facebook, offer brands new ways to connect with customers. Through these media, brands can provide information, customer service, special offers and entertainment (Breitsohl, Kunz, & Dowell, 2015), and can directly and instantaneously interact with their customers. This generates many brand benefits, such as superior sales growth and brand profitability, limited costs, co-creative experiences and collaborative processes with consumers, improved consumer–brand relationships, brand engagement, purchase behaviours and brand loyalty (Bowden, 2009; Dwivedi, 2015; Graffigna & Gambati, 2015; Hollebeek, 2011a, b; Hollebeek, Glynn, & Brodie, 2014; Leckie, Nyadzayo, & Johnson, 2016; Malthouse, Calder, Kim, & Vandenbosch, 2016; Vivek, Beatty, & Morgan, 2012).

One key lever of brand-hosted social media management is engagement, which is considered a priority by numerous practitioners (Hollebeek, 2011a) and academic researchers, as evidenced by the call for dedicated studies on how 'social media and other marketing activities create engagement' (MSI, 2014, p. 4) and by the recent special issues of the Journal of Service Research (2010), the Journal of Marketing Management (2016) and the Journal of Marketing Theory and Practice (2018). Over the ten last years, online consumer engagement has been the focus of an increasing amount of research (Harrigan, Evers, Miles, & Daly, 2018); however, further studies are still needed since the existing research has limited scope for generalisability (Hollebeek, Conduit & Brodie, 2016).

Past research has underlined the need to consider the social dimensions of consumer brand engagement (CBE) (e.g. Calder, Malthouse, & Schaedel, 2009; Vivek et al., 2012), i.e. the 'interaction, participation, dialogue, co-creation, and sharing of brand-related values and contents' (Gambetti, Graffina & Biraghi, 2012, p. 681). So far, only a few studies have explicitly considered consumer–consumer interactions, with notable exceptions being Brodie

et al. (2011), Dessart, Veloutsou and Morgan-Thomas (2015, 2016), Vivek et al. (2012) and Gambetti et al. (2012). However, along with interactions with a brand (Gambetti et al., 2012), consumer–consumer interactions greatly contribute to brand engagement. Dessart et al. (2016) advocated that engagement must be conceptualised from a multi-foci perspective; namely, with a focus on both brand and on brand community. Conceptualisations and empirical evidence regarding the social side of engagement are still needed to gain a deeper understanding of how consumer interactions, both with the brand and with other consumers on brand-hosted social media, contribute to their engagement experience (Kozinets, 2014).

Moreover, there is a scarcity of empirical research about the effect of engagement through brand-hosted social media on customers' brand loyalty. Little is known about the dialogue between customers and their brands through brand-hosted social media, and more needs to be done in terms of understanding how these interactions influence both brand-page engagement (Simon & Tossan, 2018) and 'non-virtual' brand outcomes such as brand evaluations, purchase intentions, brand loyalty and consumer–brand relationships (Beukeboom, Kerkhof, & de Vries, 2015; Hudson, Huang, Roth, & Madden, 2016). Nevertheless, as a social customer relationship management (CRM) tool, social media platforms enable companies to engage and build relationships with their customers, and to instil brand loyalty. Companies that use social CRM expand their interactions with their customers in less time and engage them more effectively than their competitors that utilise traditional CRM only (Vickers, 2015). At the same time, boosting interactions and building relationships on social media can be risky since brands are placed at the heart of personal relationships and consumers interact with brands in their private sphere (Fournier & Avery, 2011a).

Consequently, the current research addresses these gaps by focusing on the social facet of brand engagement in the context of brand-hosted social media and on its impact on customer brand loyalty intentions. It addresses the following questions: what is the nature of the relationship between CBE and its social side (called social brand engagement (Kozinets, 2014) through brand-hosted social media? What are the effects of CBE and SBE on customer brand loyalty intentions? Since brand-hosted social media are a place where individuals can express their social identity and reinforce their self-image (Hollenbeck & Kaikati, 2012), what impact can self–brand connections have on CBE?

The main purpose of this research is to develop and empirically test a conceptual model of how, through brand-hosted social media, SBE and self–brand connections influence CBE and loyalty behaviour intentions. Consistent with a social CRM strategy perspective, this model is grounded in the relational approach to brands with a focus on brand customers (i.e. those who own a product of the brand and/or have purchased a product of the brand), making it different to the majority of past research, which has typically targeted consumers.

Specifically, the first objective of this study is to fine-tune the conceptualisation of CBE by explicitly considering brand-based consumer–consumer interactions through brand-hosted social media (i.e. SBE), and to test empirically the causal influence of CBE and SBE on brand loyalty intentions. In addition, to go deeper in the understanding of how CBE and SBE interact with each other, we examine combinations of these different patterns of engagement that lead to high behavioural brand loyalty with a fuzzy-set Qualitative Comparative Analysis (fsQCA) approach. FsQCA enables the examination of holistic interplays between elements of a messy and non-linear nature (Fiss, 2007). This approach is highly adapted to our study since, within a customer engagement ecosystem, interactions between elements are non-linear and reactive (Maslowska, Malthouse, & Collinger, 2016).
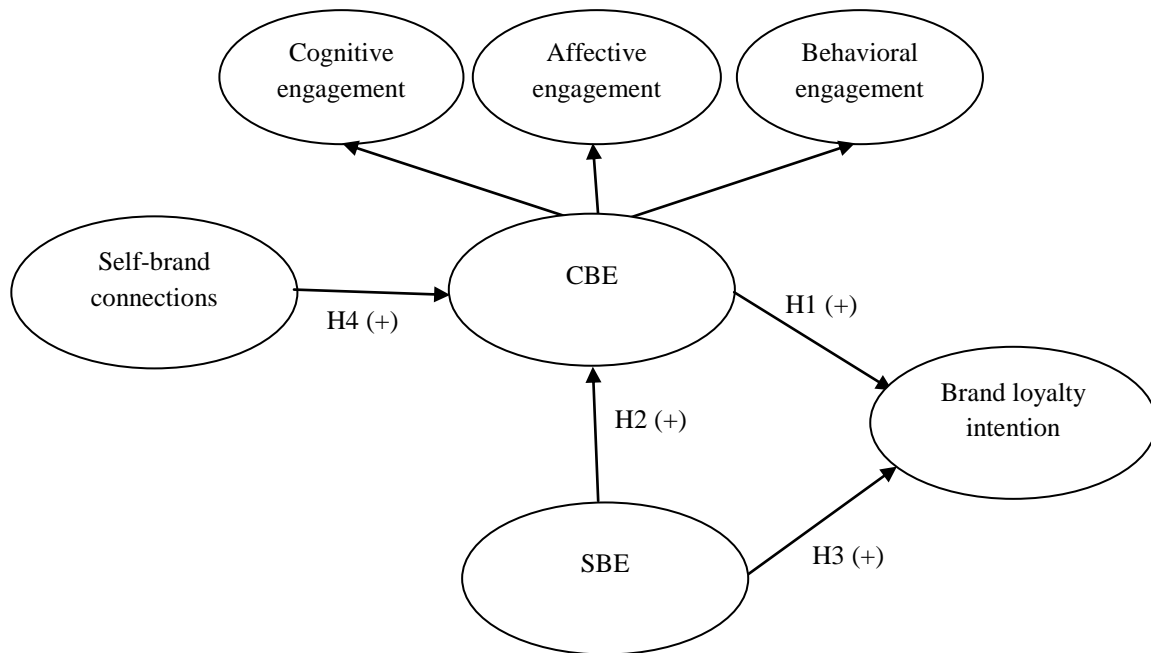
The second objective is to study the drivers of CBE on brand-hosted social media. To achieve this aim, we analyse the extent to which CBE is influenced by two relevant antecedents, both of which account for the social aspects of consumer–brand relationships: SBE and self–brand connections. The latter refers to the brand's ability to allow for consumer-identity construction on social media networks (SMNs), whereby consumers can express themselves in relation to the brand and with others (Escalas & Bettman, 2003; Hollenbeck & Kaikati, 2012). Since friends and other fans (the public) are present on the SMN, the brand page becomes a public scene where the brand (becoming a consumer's friend) allows the consumer (who is the actor) to express his/her identity (Hogan, 2010).

In the remaining sections, we present the research model portraying the relationships between CBE, its antecedents (SBE and self–brand connections) and its outcome (brand loyalty intentions). Then, we review the relevant literature and derive four hypotheses. We detail the research methodology and empirical results. Finally, we discuss the implications of the main results and outline directions for future research.

Theoretical framework, literature review and hypotheses

The research model presented in this study is centred on CBE. More precisely, it assumes that CBE dimensions have a direct effect on brand loyalty intentions (H1), that SBE influences CBE (H2) and brand loyalty intentions (H3), and that self–brand connections are a determinant of CBE (H4) (see Figure 1).

Figure 1. Research model

Cognitive engagement   Affective engagement   Behavioral engagement

Self-brand connections

H4 (+)

CBE

H1 (+)

H2 (+)

Brand loyalty intention

SBE

H3 (+)

This study is grounded in the relational approach to brands inscribed within the

exchange paradigm, which considers the brand as a genuinely active partner with which the

consumer maintains a loyal relationship based on cognitive, emotional and behavioural

processes (Blackston, 1992; Fournier, 1998). It posits that people relate to brands similarly to

how they relate to other people. In other words, consumers develop interpersonal relationships

with brands (Fournier, 1998; Fournier & Yao, 1997). The relationship metaphor is powerful

for managing consumer–brand relationships. Companies can build better relationships with

their customers by putting the 'relationship' back into the CRM, by getting to know who their

customers really are and what they need and value, and by being open to the different forms

of relationships that customers create with the brand (Fournier & Avery, 2011b). People form

different types of relationships with brands, based on the nature and the intensity of the

connections and interactions that exist between themselves and the brand. Social media

platforms enable brands to understand customers' needs, to communicate more effectively

and engage with customers, to create customised experiences and relationships, and

potentially to encourage their customers to become advocates for their product(s) (Malthouse, Haenlein, Skiera, Wege and Zhang, 2013). Also, they allow brands to create a system in which customers can interact with a brand the way they want to instead of how a brand wants to (Vickers, 2015). On brand-hosted social media, due to a higher proximity, interactions between customer and brand can be qualified as a dialogue, inducing emotions and attention. Such a relationship is similar to that which exists between human beings (Gambetti et al., 2012). Social media allow customers to become active participants in the relationships, to engage with the brands. Customer engagement can be low (e.g. liking a brand page on Facebook) or high (e.g. participating in co-creation and content generation), and is a central concept in managing relationships with customers in the social media area (Malthouse et al., 2013). As a consequence, anchoring this study in the relational approach to brands allows for the capturing of key constructs that explain the drivers for customers' loyalty intentions in the context of brand-hosted social media.

Consumer brand engagement and its effects on loyalty intentions

Consumer brand engagement through brand-hosted social media

Recently, CBE through SMNs has been subject to growing academic attention from researchers in marketing. Focusing on consumers, these studies have aimed to define and measure CBE in such situations whereby brands are explicitly the object of engagement. Based on relatively comprehensive literature reviews in marketing, as well as related fields including psychology, sociology and management, these works reflect three main conceptualisations of engagement: a psychological or motivational state (Mollen & Wilson 2010; Vivek et al., 2012); behavioural manifestations (Van Doorn et al., 2010) – a point shared by practitioners (Mollen & Wilson, 2010); and a combination of cognitive, affective

and behavioural dimensions (Brodie, Hollebeek, Ilic, & Juric 2011; Dwivedi, 2015; Hollebeek et al., 2014).

Despite conceptual discrepancies (Graffina & Gambetti, 2015) and a variety of contexts (services, virtual community, website, etc.), the latter three-dimensional approach is the most widely shared by researchers in marketing (for a synthesis, see Hollebeek et al., 2014; Leckie et al., 2016; Maslowska et al., 2016), since it is holistic, and accounts for consumers' perception of brands (utilitarian, hedonic and symbolic) and for all the facets of the interaction between consumers and brands (Dwivedi, 2015). In addition, this conceptualisation has two main advantages: it focuses on the notion of interaction that fits well with social media contexts, and it considers a behavioural dimension that is relevant for the understanding of brand engagement via SMNs. A consensual definition of CBE is: 'a consumer's positively valenced brand-related cognitive, emotional and behavioural activity during or related to focal consumer/brand interactions' (Hollebeek et al., 2014, p.154).

For these reasons, we adopt the three-dimensional approach in this study. Drawing on the relational approach to brands used in the relevant seminal literature on engagement, and in accordance with our theoretical framework, we define each dimension as follows. The cognitive dimension corresponds to a calculated (or instrumental) motivation (Allen & Meyer, 1990), reflecting the extent to which the brand can serve the consumer's self-interest. It refers to the consumer's interest in continuing the relationship with the brand on social media. The affective dimension corresponds to affective commitment (Allen & Meyer, 1990), comprising emotional bonds between a consumer and a brand. It is related to a hedonic motivation, closely linked to brand attachment (Lacoeuilhe, 2000; Thomson, MacInnis, & Park 2005). In a social media context, affective engagement expresses the emotional connection to the brand and the consumer's enjoyment when interacting with it. Finally, the behavioural dimension

encompasses consumers' participation in the activities initiated by or related to the brand on the SMN (Van Doorn et al., 2010; Vivek et al., 2012).

Consumer brand engagement through brand-hosted social media and its effects on brand loyalty intentions

Previous studies have shown that CBE impacts on brand loyalty and on brand loyalty behavioural intentions (Dwivedi, 2015; Harrigan et al., 2018; Hollebeek, 2011b; Hollebeek et al., 2014; Vivek et al., 2012). In addition, Hudson et al. (2016) showed that engaging customers via social media is associated with improved consumer–brand relationships. Indeed, engaged customers who have favourable beliefs about the brand-hosted social media are emotionally tied to the brand and perceive interactions with the brand as rewarding and fulfilling (Gambetti et al., 2015). Thus, they are more prone to maintaining and developing the relationship with the brand, and may be less likely to initiate or deepen a relationship with another brand in the same product category. Therefore, we assume that CBE favourably influences brand loyalty behavioural intentions. It is thus hypothesised:

H1: Consumer brand engagement through brand-hosted social media positively influences brand loyalty intentions.

Social brand engagement through brand-hosted social media

Towards a definition of social brand engagement

Surprisingly, consumer–consumer interactions seldom appear in explicit terms when defining or measuring consumer engagement through brand-hosted social media, whereas SMNs are regularly characterised by not only instantaneous consumer–brand interactions, but also consumer–consumer interactions (Hennig-Thurau et al., 2010; Stenger & Coutant, 2013). Consumer–consumer interactions surrounding the brand (namely, the social dimension of

brand engagement) need to be considered (Brodie et al. 2011; Vivek et al., 2012). With a view to filling this gap, and by acknowledging that consumers can engage concurrently with more than one actor (Algesheimer, Dholakia, & Herrmann, 2005), Dessart et al. (2016) broaden the scope of consumer engagement by explicitly considering brand and community and validated a measurement scale that applies to brand- and community-focus engagement. Their work is an important step towards a refined conceptualisation of engagement as a multi-faceted and multi-dimensional construct. However, it relies on the assumption that brand-hosted social media are communities.

The concept of brand community was first introduced by Muniz and O'Guinn (2001) to express how consumers and fans build structured sets of social relations and shared meanings around brands. They form social bonds around brands and these interactions create value. Since this seminal article was published, a number of studies have extended such a concept to online/digital contexts under the term of 'virtual communities'. Recently, the relevance of this concept in terms of social media has been debated. Indeed, on social media, such as Facebook, Twitter and on blogs, relationships between consumers are less structured and more fleeting and ephemeral (Arvidsson & Caliandro, 2016). With the predominance of social media and blogs, as well as the wide range of formats, focusing on non-communitarian types of consumer sociality becomes necessary (Kozinets, 2013). For this reason, in our research, we adopt SBE instead of community as the social dimension of CBE. This is in line with Kozinets (2014), who introduced and defined SBE as a 'meaningful connection, creation and communication between one consumer and one or more other consumers, using brand or brand-related language, images and meanings' […] 'With social brand engagement, the relationship widens from person-brand to person-person-brand' (p.10). Brand-hosted social media are a fertile ground for interactions between consumers through which they can exchange information (communication campaigns, games, etc.) and good deals (promotions,

coupons, etc.). It is also a place to share their brand-related experiences (feelings, sensations, (dis)pleasure, etc.) and their brand-related creations (photos, videos, drawings, etc.) (Hennig-Thurau et al., 2010). On brand-hosted social media, through interactions with others, consumers' relational knowledge about the brand is enhanced, and consumers can derive benefits from like-minded discussions with others who have the same opinion on a particular brand (Marbach, Lages & Nunan, 2016). These brand-based consumer–consumer interactions, driven by hedonic motivations, create emotional connections and 'fraternal' links (Stenger & Coutant, 2013) between consumers who don't know each other but who share certain similarities (Park & Kim, 2014). They enhance the perception of similarity between members in terms of attitudes and behaviours regarding their brand, which, in turn, increases their sense of belonging and identification with others (Lin, Fan & Chaud, 2014), thus inducing SBE (Kozinets, 2014).

Social brand engagement and consumer brand engagement

Since the concept of SBE is relatively new in literature, it is not clear whether SBE influences CBE or whether CBE influences SBE. It may be argued that CBE and SBE are interdependent processes. Indeed, consumers who are cognitively and affectively bonded to the brand-hosted social media and who participate in brand-related activities (namely, those who display strong CBE) should be more likely to interact with other members, i.e. have a high level of SBE. At the same time, through their brand-related interactions with others (Harrigan et al., 2018), consumers may participate more in brand-related activities (Kozinets, 2014). SBE may be both a cause and an indicator of the level of CBE. Brand-hosted social media are a place where fans can socialise with others or with brand representatives, and create group dynamics by 'liking', 'sharing', or 'commenting' on posts, which strengthens connections between fans and creates a sense of belonging to the brand-hosted social media. Tsai and Men (2013) found that these social relationships between consumers are an antecedent to consumer engagement

with brand pages on SMNs. In addition, our study focuses on brand customers, who are likely candidates to become interested in, firstly, the social links and, secondly, the brand relationship, since they already have actual interactions and direct experience with their brand. It is thus hypothesised:

H2: Social brand engagement through brand-hosted social media positively influences consumer brand engagement through brand-hosted social media.

Social brand engagement through brand-hosted social media and its effects on brand loyalty intentions

Previous studies have shown that CBE influences brand loyalty and brand loyalty behavioural intentions (Dwivedi, 2015; Hollebeek, 2011b; Hollebeek et al., 2014; Vivek et al., 2012). As stated before, engaged customers (cognitively, affectively and behaviourally) are more likely to maintain a relationship with a particular brand, and may be more reluctant to initiate a relationship with another brand. Similarly, customers who are socially engaged, i.e. those who have built strong and enriching brand-related links with other members on brand-hosted media (Hollebeek, 2011a), may be willing to maintain bonds and are thus more loyal to the brand. Consequently, we assume that SBE favourably impacts on brand loyalty behavioural intentions. It is thus hypothesised:

H3: Social brand engagement through brand-hosted social media positively influences brand loyalty intentions.

Self–brand connections and its effects on consumer brand engagement through brand-hosted social media

Self–brand connections correspond to identification with the brand, the congruence between the consumer's self-image and the brand's image, and the degree to which consumers

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integrate the brand into their own self-concept (Bagozzi & Dholakia, 2006; Escalas & Bettman, 2003). Past research shows that consumers tend to consider brands as an extension of the self and use the symbolic meaning of the brands to construct their self-identities and to express themselves. Perception about the self-constructive and self-expressive role of a brand can impact the extent to which a consumer engages with it. As such, consumers vary in their tendencies to include important brands as part of themselves; a variance that predicts brand preference, brand engagement and loyalty (Sprott, Czellar, & Spangenberg, 2009). In the consumer–brand relationships literature, self–brand connections are an antecedent to brand attachment (Lacoeuilhe, 2000), which is itself an antecedent to brand engagement. Leckie et al. (2016) also demonstrated the influence of self–brand connections on CBE.

Self–brand connections can be considered as a relationship-oriented factor playing a significant role in inducing consumer engagement. Indeed, consumers form their social identity via group affiliations and participation in SMNs. Their actions on the brand page — joining the page, liking, commenting on and sharing posts — are visible actions that function as a way of expressing social images and identities. They are freed from physical and material constraints and can thus display a real self (presentation of oneself), an ideal self (representation of oneself) or even a self-exhibition (Hogan, 2010) more easily than they could in the real world (Hollenbeck & Kaikati, 2012). They are more likely to participate when they feel that they are able to express their own self-concepts or personal values (Jahn & Kunz, 2012). Thus, self-concept value has a positive impact on CBE.

Moreover, the role of self–brand connections is expected to be stronger for brand customers. Compared to non-customers, having direct experience with a brand may lead to greater familiarity, stronger brand associations and cognitive structures (Alba & Hutchinson, 1987), resulting in a more positive brand affect. For customers, brands become deeply part of their self-concept, and therefore a lever for maintaining a positive-self-image (Belk, 1998;

Kleine, S.S., Kleine III, R.E, & Allen, 1995; Richins, 1994). As a consequence, we posit that the more a brand allows for identity construction (strong self–brand connections), the more the CBE through the brand-hosted social media increases. It is thus hypothesised:

H4: Self–brand connections through brand-hosted social media positively influence consumer brand engagement through brand-hosted social media.

Research methodology

Data collection

Among the SMNs, Facebook was chosen because of its popularity; 2.32 billion monthly active users worldwide and 1.52 billion daily active users on average for March 2019.[1] As of February 2019,[2] the average number of fans among the top 20 Facebook brands was around 5,400,000 (in the US) and 1,700,000 (in France). In France, for March 2019, the three Facebook brands with the largest audiences are Air France (7,426,875 fans), Artprice (3,947,868 fans) and Coca-Cola (3,289,185 fans)[3].

Consequently, to participate in the study, respondents needed to be: 1) Facebook users and fans of at least one brand page; 2) aged between 18 and 39. This age range represents the largest population of fans of brands on Facebook (64%)[4]. Indeed, Facebook users' statistics exhibit a marked overrepresentation of young adults[5]. This group of adult customers under 40 corresponds roughly to millennials (generation Y). Compared to the older generations

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[1] http://newsroom.fb.com/company-info/; accessed March 15, 2019.
[2] https://www.socialbakers.com/resources/reports/page-1-5/; accessed March 15, 2019.
[3] https://www.socialbakers.com/statistics/facebook/pages/total/france/brands/; accessed March 15, 2019.
[4] Study DDB Opinionway 2011 *Facebook : qui sont les fans des marques ?* Available at https://www.opinion-way.com/fr/sondage-d-opinion/sondages-publies/search-result.html?filter_search=facebook&layout=table&show_category=0; accessed March 15, 2019.
[5] Study "Social media usage: 2005–2015," Pew Research Center, available at http://www.pewinternet.org/2015/10/08/2015/Social-Networking-Usage-2005-2015/; accessed March 15, 2019.

(generation X and baby boomers), millennials are the most active social media users[6]. In addition, in research on customers brand engagement selecting Facebook as the SMN, adult customers under 40 often correspond to the largest part of the samples (e.g. Simon & Tossan, 2018; Dessart et al., 2016; Hodis et al., 2015). It's thus consistent and relevant to focus on adult customers under 40 in our study.

Purposely, the questionnaire focused only on the preferred brand of the respondents among all the liked brand pages. Not targeting specific brands enabled a greater coverage of brands and sectors present on Facebook (Dessart et al., 2016; Graffina & Gambatti, 2015) and eased results generalisation. Since the objective of this research was to analyse the influence of CBE on SMNs in terms of customers' brand loyalty intentions, we selected only brand customers (those who owned a product of the brand and/or had purchased at least one product of the brand over the last five years). The questionnaire was administered online through invitations posted on Facebook. The final sample was composed of 161 respondents; predominantly female[7] (62% women vs 38% men) and students (59%).The brands mentioned by respondents covered many areas (fast-moving consumer goods, ready-to-wear clothing, cosmetics, new technologies, etc.). 116 brands were cited; Oasis, Red Bull, Abercrombie & Fitch, Nike and Nutella being the most frequently mentioned brands.

Measurement scales

Existing and reliable scales were selected and adapted to the context of Facebook to measure the variables of this research (see Appendix A for the measurement items). All scales were 5-

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[6] Sources: Study "The millennial study"" Qualtrics and Accel, Dec. 18, 2016, and eMarketer available at: https://www.emarketer.com/Article/Spoiler-Alert-Millennials-Cant-Enough-of-Social-Media/1015995; accessed March 15, 2019.

[7] This result is consistent with the results of the DDB Opinionway 2011 study, according to which in France more than half of Facebook brand fans are women. It is also consistent with past research on this group age (for example, Loroz & Helgeson; Nusair et al., 2013). In addition, the overrepresentation of students is also consistent with past research, notwithstanding the one that focus exclusively on students as they are representative of this age group (Bilgihan, 2016).

points Likert scales (except for the behavioural dimension of CBE, which was measured with a 4-point scale). As mentioned previously, this current research uses a three-dimensional approach to conceptualise CBE. The cognitive dimension, reflecting the interest of the fan to continue their relationship with the brand on Facebook, was measured by the four items proposed by Morgan (1991). The emotional dimension, which corresponds to the level of the fan brand attachment and pleasure derived from the relationship, was measured by two items adapted from Lacoeuilhe (2000). The behavioural dimension was assessed by the frequency with which the respondent carried out five actions on the brand fan page (semantic scale). This dimension reflects the amount of energy and effort used by the fan to interact with the brand on Facebook, in line with Hollebeek et al. (2014) and Vivek et al. (2012). SBE was measured with five items inspired by Allen and Meyer (1990), showing the affection of a fan towards other fans, the pleasure derived from interaction with fans and the sense of belonging, in line with the definition of Kozinets (2014). The behavioural brand loyalty intentions were evaluated on the scale of Johnson, Herrmann and Huber (2006), taking into account the repurchase intentions of the brand (three items) and the positive word-of-mouth (two items), also used in the study of Raïes and Gavard-Perret (2011). Finally, the self–brand connections were operationalised using six items from Escalas and Bettman (2003, 2005), which captures the extent to which fans on Facebook incorporate the brand into their self-concept.

Methods and preliminary analyses

Based on its minimum requirements in terms of sample size, its suitability for handling higher-order latent constructs, and its robustness in terms of violating multivariate normality (Bagozzi & Yi, 1994), partial least squares structural equation modelling (PLS-SEM) was selected first to test empirically the proposed model using XLSTAT-PLSPM software. Second, a fuzzy-set Qualitative Comparative Analysis (fsQCA) (Ragin, 2006; Ragin,

2008a,b) was performed through fs/QCA 2.5 software to clarify the PLS-SEM results and to analyse more thoroughly combinations of the different patterns of engagement that lead to high behavioural brand loyalty. FsQCA follows the configuration theory paradigm, which enables the examination of holistic interplays between elements of a messy and non-linear nature (Fiss, 2007). FsQCA seeks patterns of elements that lead to a specific outcome rather than simply identifying correlations between independent and dependent variables. This approach is based on the assumption of asymmetric relationships between variables and can give information on configurations of sufficient or necessary antecedents. In this study, the patterns of predictors related to high brand loyalty intentions may be asymmetric (i.e. those associated with high loyalty could be different from those associated with low loyalty). Moreover, fsQCA offers an interesting new perspective, specifically in the CBE literature (see for example Raïes et al., 2011; de Villiers, 2015). The reliability and convergent validity of the measurement scales were first assessed, and the results were satisfactory; discriminant validity between constructs was also established (see Appendix B), as no AVE (average variance extracted) proved lower than any of the squared correlations between latent constructs (Fornell & Larcker, 1981).

Results

As previously mentioned, the proposed model was tested using PLS-SEM and then fsQCA, following Ali et al. (2016) and Valaei et al. (2017)..

*Structural equation modelling*

First, we examined the influence of CBE and SBE on behavioural brand loyalty intentions, as well as the influence of SBE on CBE. The structural model from the PLS analysis is summarized in Figure 2, in which the explained variance of endogenous variables (R^2) and the standardized path coefficients (β) are depicted. The structural model from the PLS analysis is

summarized in Figure 2, in which the explained variance of endogenous variables (R^2) and the standardized path coefficients (β) are depicted. The absolute Goodness of Fit (GoF) is 0.534 (greater than 0.36), close to the bootstrapped GoF (0.553), and the relative GoF is 0.787 (greater than 0.7), which reflects a very good adjustment (Wetzels, Oderkerken-Schroder & Van Oppen, 2009).

Results of the PLS-SEM analysis indicate that CBE positively impacts on brand loyalty intentions ($\beta = 0.413$; $t = 4.053$; $p < 0.05$). In other words, customers' interactions with a brand increase loyalty intentions towards the brand, thus supporting H1. These interactions are related to customers' cognitive, emotional and behavioural activities with the brand on its fan page. These findings are in line with Dwivedi (2015), Hollebeek (2011a), Hollebeek et al. (2014), Vivek et al. (2012). Moreover, SBE positively impacts CBE ($\beta = 0.488$; $t = 6.984$; $p < 0.05$). H2 is thus supported, meaning that strong consumer–consumer interactions surrounding the brand lead to strong consumer–brand interactions. These results highlight the central role of CBE in brand-hosted social media. To date, no empirical studies have been conducted to test this link. However, SBE has no direct impact on behavioural brand loyalty intentions ($\beta = -0.192$; $t = -1.885$; ns). H3 is therefore not supported, indicating that CBE may mediate the impact of SBE on brand loyalty intentions. Finally, self–brand connections positively influence CBE ($\beta = 0.304$; $t = 4.341$; $p < 0.05$), thus supporting H4. The structural model explains 51.5% of the variance in CBE ($R^2 = 0.515$), and 12% of that in brand loyalty intentions ($R^2 = 0.120$). All in all, the predictive power of the model is quite satisfactory with a rather high R^2 (0.505) according to Hair, Ringler & Sarstedt (2011).

Figure 2. PLS-SEM results: Self–brand connections, CBE, SBE and behavioural brand loyalty intentions
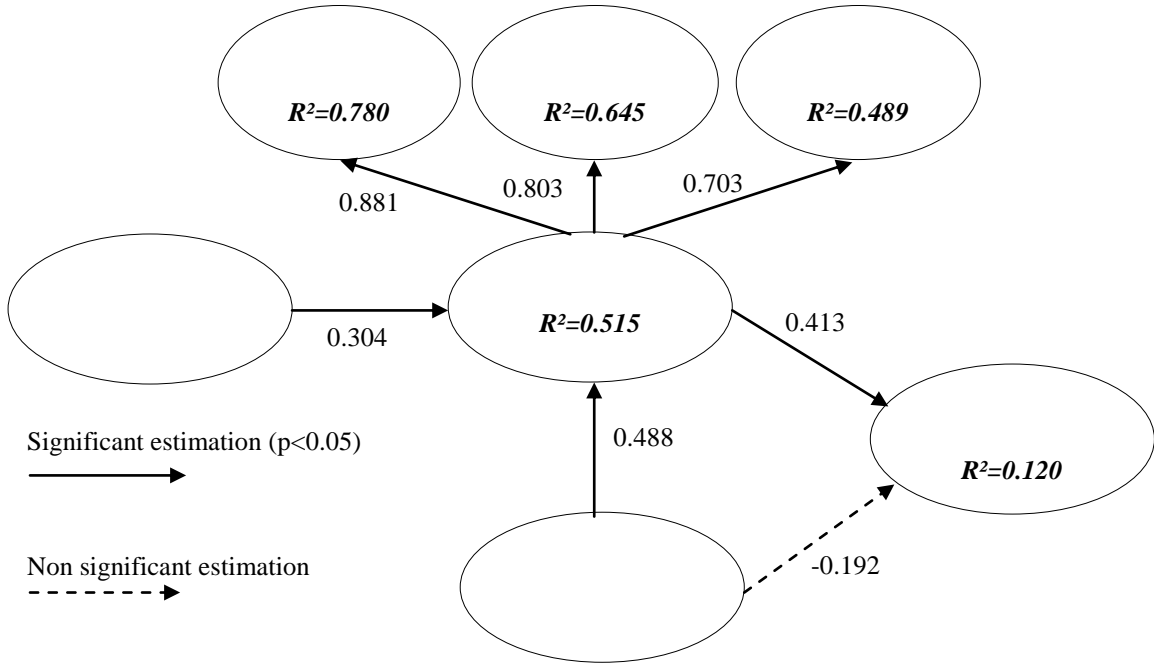
Fuzzy-set Qualitative Comparative Analysis

FsQCA was performed to refine the last finding and to analyse more thoroughly combinations of the different patterns of predictors that lead to high behavioural brand loyalty intentions. It is a complementary analysis to PLS-SEM since it facilitates the identification of several alternative causal recipes and shows how variables combine into configurations (Woodside, Ko & Huan, 2012; Gelhard, von Delft & Gudergan, 2016).

The first step of the fsQCA is the calibration procedure. We formed fuzzy sets of respondents, which represent both the outcome and the causal conditions by calibrating the degree of membership of sampled cases in each of the sets; fuzzy membership scores correspond to the varying degrees to which different cases belong to a set (Ragin, 2007). Dependent and independent variables were calibrated into fuzzy sets, with values ranging

from 0 (non-membership) to 1 (full membership). In this research, three anchors were used to calibrate each fuzzy set: the threshold of full membership in the sets of buyers who have strong cognitive brand engagement, affective brand engagement, behavioural brand engagement, SBE and behavioural brand loyalty intentions (fuzzy score = 0.95); the threshold for full non-membership (fuzzy score = 0.05); and the cross-over point (fuzzy score = 0.5) (Woodside, 2013). The threshold values and the cross-over point used in this research are presented in Table 1.

Table 1. Threshold values and cross-over point – Calibration method

	Cognitive brand engagement	Affective brand engagement	Behavioural brand engagement	Social brand engagement	Behavioural brand loyalty intentions
Threshold of full membership	500	20	768	2500	2500
Cross-over point	81	9	243	243	243
Threshold of full non-membership	2	2	2	2	2

The second step involves determining the configurations to include in the analysis. We set the frequency threshold for the minimum number of cases in a fuzzy subset to 10 and the cut-off level for consistency to 0.75, based on Ragin's recommendation. Then, truth tables were computed and an 'intermediate solution' was chosen to interpret the results (Ragin & Sonnett, 2004).

Patterns of brand engagement related to high behavioural brand loyalty intentions
Results of the fsQCA (see Table 2) indicate an intermediate solution with a global consistency of 0.903 *(solution consistency)* and a global coverage of 0.79 *(solution coverage)*. The outcomes for achieving high levels of behavioural brand loyalty intentions produced two solutions. The causal models are informative because their raw coverage is between 0.25 and

0.95 (Woodside, 2013). The first solution (Solution 1) indicates a case with two dimensions of CBE associated to SBE. Those who are not affectively engaged with the brand may present high brand loyalty intentions. For those customers, the presence of a low cognitive and behavioural brand engagement can be sufficient if these two types of engagement are combined with a low SBE. The second solution (Solution 2) shows the presence of the three dimensions of CBE without the presence of SBE. Thus, SBE is neither sufficient nor necessary for high brand loyalty intentions to occur. Indeed, when consumers are (strongly or weakly) engaged towards the brand on the three dimensions, SBE loses its impact on brand loyalty intentions. This finding reinforces the outcomes from the PLS-SEM, indicating that CBE mediates the impact of SBE on behavioural brand loyalty intentions. Moreover, when cognitive and affective brand engagements are high, low behavioural brand engagement is sufficient to achieve high brand loyalty intentions.. Finally, the relationship between dimensions of CBE, SBE and brand loyalty is not symmetric; the intermediate solution for an outcome of low brand loyalty intentions shows high solution coverage (0.964) but low solution consistency (0.295). Low brand loyal intentions are not consistently associated to any pattern of high or low brand engagement.

Table 2. Combinations of the dimensions of CBE and SBE relating to high brand loyalty intentions

Causal conditions *Frequency cut-off: 13.00 - Consistency cut-off: 0.903*	Raw coverage	Unique coverage	Consistency
SOLUTION 1. Low social brand engagement and *low* cognitive brand engagement and *low* behavioural brand engagement	0.574	0.298	0.888
SOLUTION 2. High cognitive brand engagement and *high* affective brand engagement and *low* behavioural brand engagement	0.492	0.215	0.974
Solution coverage: 0.790; solution consistency: 0.903			

Effect of self–brand connections

To assess the potential effect of self–brand connections on the combinations of predictors leading to intentions of high behavioural brand loyalty, we split the sample into two groups: individuals with low self–brand connections and individuals with strong self–brand connections.[8] In order to identify potential differences in the combinations of predictors leading to high behavioural brand loyalty intentions between these two groups, separate fsQCAs were performed on each. Self–brand connections appeared to influence the causal conditions that are sufficient for behavioural brand loyalty intentions (see Table 3). Indeed, for individuals with strong self–brand connections, only one solution is displayed (Solution 1). This group of individuals with strong behavioural brand loyalty intentions combines the three dimensions of CBE: low behavioural brand engagement, strong cognitive brand engagement and strong affective brand engagement. This means that strong brand loyalty intentions can be achieved without SBE. In the group of individuals with low self–brand connections, two possible combinations appear (Solution 1 and Solution 2). To achieve high brand loyalty intentions, both SBE and behavioural brand engagement are present, along with either cognitive brand engagement (Solution 1) or affective brand engagement (Solution 2). For them, contrarily to the group with strong self–brand connections, SBE is a key condition. Patterns of brand engagement leading to high brand loyalty intentions on brand-hosted social media vary with the degree to which brand customers integrate the brand into their self-concept through the Facebook brand page.

For each fsQCA, the relationship between independent and dependent variables is not symmetric since, in each case, the intermediate solution for an outcome of low behavioural

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[8] We created two subsamples based on the median (82 respondents have weak self–brand connections, 79 have strong self–brand connections).

brand loyalty intentions shows high solution coverage but low solution consistency. Low

behavioural brand loyalty intentions are not consistently associated to any pattern of

predictors.

Table 3. Combinations of CBE and SBE related to behavioural brand loyalty intentions of

individuals with strong vs low self–brand connections

IINDIVIDUALS WITH STRONG SELF–BRAND CONNECTIONS **Causal conditions** *Frequency cut-off: 20.00 - Consistency cut-off: 0.996*	Raw coverage	Unique coverage	Consistency
SOLUTION 1. Low behavioural brand engagement and *strong* cognitive brand engagement and *strong* affective brand engagement	0.624	0.624	0.983
Solution coverage: 0.624; solution consistency: 0.983			
IINDIVIDUALS WITH LOW SELF–BRAND CONNECTIONS **Causal conditions** *Frequency cut-off: 10.00 - Consistency cut-off: 0.876*	Raw coverage	Unique coverage	Consistency
SOLUTION 1. Low social brand engagement and *low* cognitive brand engagement and *low* behavioural brand engagement	0.735	0.311	0.852
SOLUTION 2. Low social brand engagement and *high* affective brand engagement and *low* behavioural brand engagement	0.504	0.079	0.915
Solution coverage: 0.815; solution consistency: 0.838			

Predictive validity of the findings

To test for the predictive validity, the sample was split into two equal subsamples through

random selection, a modelling subsample and a holdout sample (Ali, Kan & Sarstedt, 2016;

Woodside, 2016; Wu, Yeh, Huan & Woodside, 2014). The proportion of consumers with

strong and weak self–brand connections in the two subsamples was similar to the one in the

total sample. An fsQCA was performed for the modelling subsample using the same

consistency criteria as in the main analysis. Two solutions (Solution 1 and Solution 2) were

produced (see Appendix C) and these solutions were then tested on the data of the holdout

sample. Findings for the test of Solution 1 indicate a high consistency (0.933) with a good coverage (0.489). Highly consistent results appear for the test of Solution 2, as well as for the solutions based on the data of the holdout sample when using the data of the modelling subsample, which also indicate high predictive abilities.

Discussion

Empirical findings

The first objective of this study was to fine-tune the conceptualisation of CBE by explicitly considering brand-based consumer–consumer interactions through brand-hosted social media (i.e. SBE) and to empirically test the respective causal influence of these interactions on brand loyalty intentions. The relationship between the three constructs were analysed with two complementary methods: PLS-SEM and fsQCA. Results of the PLS-SEM indicated that, for adult customers under 40, CBE positively influences brand loyalty intentions. In addition to CBE, we integrated SBE to take into account consumer–consumer interactions as suggested by Kozinets (2014). Also, and as expected, results indicate that SBE positively influences CBE. However, no effects of SBE were observed on brand loyalty intentions, suggesting that CBE mediates the influence of SBE on brand loyalty intentions. Such results are in line with Dessart et al. (2016), who claim that 'consumer (community) engagement might be strong predictor of brand trust and affect, whereas brand engagement could have stronger ties with brand loyalty' (p.418). This study empirically demonstrates such a viewpoint for customers under 40 (instead of consumers). Results from the fsQCA indicate that strong brand loyalty intentions can be achieved via two combinations, and that engagement through brand-hosted social media has to be simultaneously of a cognitive (cognitive engagement), an affective (affective engagement *or* SBE that is mainly emotional) and a behavioural nature (behavioural engagement). Even if a low behavioural brand engagement is required in the two

combinations, it cannot on its own generate strong brand loyalty intentions. This analysis also confirms that the three dimensions of CBE mediate the effect of SBE on brand loyalty intentions in this research. As a consequence, we demonstrate that CBE through brand-hosted social media is a key variable to managing relationships between customers and their brands.

The second objective was to study the drivers of CBE on brand-hosted social media; namely, SBE and self–brand connections. Self–brand connections were shown to positively influence CBE, confirming on a sample of adult customers under 40, the assumption of Hollebeek et al. (2014) that self–brand connections and brand usage intent could be relevant as CBE antecedents within a context of consumer dynamics based on previous brand experience. In addition, the two separate fsQCAs showed that high brand loyalty intentions can be achieved without SBE when customers' self–brand connections are strong, whereas SBE is a necessary condition when self–brand connections are weak. Considered together, self–brand connections and SBE are two key drivers of consumer–brand relationships of CBE on brand-hosted social media

Theoretical implications

This research significantly contributes to existing consumer brand engagement literature, in a variety of ways. First, it contributes to the conceptualisation of CBE. We demonstrate through PLS-SEM that brand engagement – for adult customers under 40 – can be conceptualised as a combination of cognitive, affective and behavioural dimensions; as is the case for consumers (Brodie et al., 2011; Dwivedi, 2015; Hollebeek et al., 2014). Moreover, with the fsQCA, we outlined that each dimension of CBE plays a specific role in explaining high levels of loyalty intentions. The global definition of brand engagement also applies to customers (specifically adult customers under 40). It answers calls for more research on CBE in order to provide a global understanding of this concept (e.g., Brodie et al., 2011; Hollebeek et al., 2014). Also,

based on the observation that consumers enjoy interacting with others, we have explicitly taken into account the social side of brand engagement. Consequently, we have proposed a renewed definition of CBE through brand-hosted social media, which includes the social aspects of engagement in addition to the cognitive, affective and behavioural dimensions. If a number of authors have advocated the inclusion of a social dimension (Calder et al., 2009; Vivek et al., 2012; Kozinets, 2014), our study is the first to conceptualise and empirically test, on a sample of adult customers under 40, SBE as defined by Kozinets (2014). Our definition applies to a variety of contexts where people gather in non-communitarian forms of consumer sociality (Kozinets, 2010; Kozinets 2013).

Second, by examining the complex pattern of relationships between the three dimensions of CBE and SBE with an fsQCA, this research provides a deeper understanding of the non-linear and synergistic effects of predictors of brand loyalty intentions and makes a significant contribution to the literature on CBE. To our knowledge, this research is the first to identify combinations of patterns of brand engagement leading to high brand loyalty intentions on brand-hosted social media. This contribution is consistent with the concept of the *customer engagement ecosystem* proposed by Maslowska et al. (2016).

Third, this study is anchored in the relational approach to brand. This approach is highly recommended and beneficial in managing customer relationships in a social media context because if CRM programmes 'prevent customers from taking their business elsewhere, they are less effective at identifying the reasons to encourage them to stay' (Fournier & Avery, 2011b, p.64). This theoretical framework presents the opportunity to not only understand customers as people and to identify motivations behind maintaining a relationship with a brand, but also to consider different types of brand relationships that can generate value on social media platforms. More precisely, on a sample of adult customers under 40,, we identified several groups of customers (i.e. several types of relationships),

meaning a specific strategy adapted to each type of relationships can be defined and implemented to induce brand loyalty.

Fourth, from a methodological point of view, since the PLS-SEM and fsQCA yielded different results, this research also contributes to exemplifying their complementarities, following Ali, Kan & Sarstedt (2016) and Valaie, Rezaei & Ismail (2017).).

In this research, we have developed and empirically tested, on adult customers under 40, a comprehensive causal model of CBE, whereby CBE plays a central role and has two antecedents (SBE and self–brand connections) and one outcome (brand loyalty intentions). PLS-SEM and fsQCA revealed that the three dimensions of CBE mediate the impact of SBE and self–brand connections on brand loyalty intentions. These two specific drivers of CBE on brand-hosted social media directly derive from the relational approach to brands, and encompass social aspects of consumer–brand relationships (social identity and social interactions). Moreover, our research shows the complementarity of these two drivers: to achieve high brand loyalty intentions, SBE is needed if social identification to the brand is weak (weak self–brand connections). This outcome underlines that, for adult customers under 40, a minimal dose of 'sociality' is required on SMNs to induce brand loyalty. By doing so, we also respond to the call for empirical research into the drivers and outcomes of consumer engagement (Hollebeek et al., 2016) and we contribute to the ongoing debate about the issue of branding and relationship-building in digital environments (Fournier & Avery, 2011a; Laroche, Habibi, & Richard, 2012).

Managerial implications

In addition to the above theoretical contributions, this research has a number of managerial implications. First, this research conducted on brand adult customers under 40, highlights the relevance of brand engagement on SMNs to develop loyalty outside such networks. In other

words, hosted-brand social media are powerful places where brands can manage relationships with their customers and induce brand loyalty intentions. Managers hoping to use such findings to implement efficient strategies that generate loyalty intentions should consider the three dimensions of CBE (Dessart et al., 2016). Managers should not neglect efforts to generate strong cognitive and affective brand engagement through their brand pages. This recommendation contrasts with actual practices, where managers mainly focus on the development of behavioural brand engagement. For example, the engagement rate provided by Facebook is computed based only on the fan actions (number of likes, comments, shares and clicks). Consequently, to stimulate the cognitive and affective dimensions of CBE, managers should foster a real dialogue (Maslowska et al., 2016) with their customers and display content that brings functional benefits (give information, answer questions, display promotional offers, etc.) to demonstrate that the brand serves the consumers' self-interests (Gambatti et al., 2012), as well as experiential benefits via the elicitation of positive emotions (telling a story, inspiring dreams, etc.) to develop a strong affective bond with customers (Harrigan et al., 2018; Hollebeek et al., 2014). Therefore, this study questions managerial practices in which brand-related activities are the only indicator for brand engagement (Dessart et al., 2016), and underlines the need for integration of metrics that evaluate the three facets of CBE.

Second, by testing the key antecedents to and the outcome of CBE, this research seeks to provide managers with strategic tools that drive the engagement towards brands of adult customers under 40. Self–brand connections should be considered as a vector of social identity-building. The role of the community manager is therefore to foster the development of connections to the brand, and to create favourable conditions for generating a strong correspondence between the fan image and the brand image. To achieve this goal, community managers should promote the expression of stories (Hennig-Thurau et al., 2010) and entice

their adult customers under 40 to contribute to the brand's story. This would result in interconnected stories (Gensler, Völckner, Liu-Thompkins, & Wiertz, 2013), and thus provide a context conducive to the staging of each customer in relation to the brand attributes (Hogan, 2010). Promoting the production of content by the customers themselves (user-generated content), such as the sharing of performances, photos, personal videos and experiences, may help to strengthen social identity (Park & Kim, 2014). Community managers also need to activate SBE. In other words, they should make efforts to encourage interactions between customers of the brand to foster brand loyalty intentions. SBE practices can be initiated either by consumers or by brands, since SBE is built on connections and relationships. Kozinets (2014) recommends four strategies to leverage SBE based on both excitement and intimacy within the relationship: customer care (the use of social media monitoring to find and manage customer complaints), co-creation (the use of social media to gather ideas from customers and to co-create/collaborate with brands), communication (listening to the ongoing conversations between consumers about the brand) and sharing (of information, messages and images that can influence others to purchase and use the brand).

In addition, our findings indicate that, for adult customers under 40, the two drivers of CBE (self–brand connections and SBE) are complementary. Managers could measure the levels for a better adaptation of marketing actions on MSNs. To foster brand loyalty intentions, in the case of weak self–brand connections scores, it could be necessary to implement specific actions to obtain at least minimum levels of SBE and behavioural engagement. On the contrary, if self–brand connections are strong, efforts to develop SBE should not be paramount; instead, managers should take actions to achieve strong affective and cognitive brand engagement to boost brand loyalty intentions.

Limitations and areas for further research

Like any study, the several limitations of this study can present opportunities for further research. This study was conducted on a sample of brand customers under 40. . This limits the generalisability of the findings. Thus, more research is needed. It would be useful to replicate this research on other SMNs, such as Twitter, Pinterest and Instagram (Dessart et al., 2016), and with older and more representative fans (Dwivedi, 2015; Hollebeek et al., 2014). Furthermore, the objective of this research was to test the impact of CBE on loyalty intentions. Future work should attempt to examine the influence of CBE on actual brand loyalty.

Additional variables should be taken into account. Contrary to brand customers, non-customers may present different patterns of engagement on hosted-brand social media. It could be interesting to compare the various combinations that lead to high brand loyalty for customers and non-customers. In addition to the theoretical contributions, the results would prove useful for managers in design their digital strategies (i.e. strategies to foster customers brand loyalty vs strategies to attract new customers through the brand page).

Other drivers of consumer engagement with brand pages on SMNs may be included, such as social media dependency and parasocial interaction as a social relationship factor (Tsai & Men, 2013). Future research could also integrate antecedents that come from the customer engagement ecosystem, such as customer brand experience, shopping behaviours, brand consumption and brand-dialogue behaviours, and outcomes, such as ambassador behaviour, satisfaction and customer lifetime value (Maslowska et al., 2016).

It would be also relevant to examine, in this particular context, the role of the length of the customer–brand relationship. The research by Raïes et al. (2015), focusing on virtual brand-related communities, showed that newcomers with high brand loyalty differed in their patterns of commitment when compared to loyal longstanding members. Also, since CBE is a

dynamic and process-based concept (Bowden, 2009), in that its intensity evolves over time (Gambetti & al., 2012), a longitudinal study could be done to understand how CBE and SBE are built and evolve over time, driven by both brand actions and fans' actions (Hollebeek et al., 2014; Park & Kim 2014). A variety of combinations between brand and consumer, as well as between consumer and consumer, could be manipulated and valuated for their long-term effects.

The conceptualisation and measurement of CBE and SBE, as well as the relationship that exists between the two, deserves more attention. As engagement is context-specific (Calder, Malthouse & Maslowska, 2016; Dessart et al., 2016), this research should be replicated for specific brand types (utilitarian vs experiential), as well as for non-commercial brands, since the combination of drivers to loyalty (in particular, the role of SBE) might differ.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*. Oxford University Press. doi.org/10.2307/2489367

Arvidsson, A. & Caliandro, A. (2016). Brand public. *Journal of Consumer Research*, 42(5), 727–748. doi.org/10.1093/jcr/ucv053

Algesheimer, R., Dholakia, U. M., & Herrmann, A. (2005). The social influence of brand community: Evidence from European car clubs. *Journal of Marketing*, *69*(3), 19–34. doi.org/10.1509/jmkg.69.3.19.66363

Ali, M., Kan, K. A. S., & Sarstedt, M. (2016). Direct and configurational paths of absorptive

   capacity and organizational innovation to successful organizational performance.

   Journal of Business Research, *69*(11), 5317–5323.

   doi.org/10.1016/j.jbusres.2016.04.131

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective,

   continuance and normative commitment to the organization. *Journal of Occupational*

   Psychology, *63*(1), 1–18. doi.org/10.1111/j.2044-8325.1990.tb00506.x

Bagozzi, R. P., & Dholakia, U. M. (2006). Open source software user communities: A study

   of participation in Linux user groups. *Management Science*, *52*(7), 1099–1115.

   doi.org/10.1287/mnsc.1060.0545

Bagozzi, R. P., & Yi, Y. (1994). Advanced topics in structural equation models. *Advanced*

   Methods of Marketing Research, *151*. doi.org/10.1007/BF02723327

Blackston, M. (1992). Observations: building brand equity by managing the brand's

   relationships. *Journal of Advertising Research,* 32(3), 79–83. doi.org/10.2501/JAR-40-

   6-101-105

Belk, R. (1988). Possessions and the Extended Self. *Journal of Consumer Research*, *15*(2),

   139–168. doi.org/10.1086/209154

Beukeboom, C. J., Kerkhof, P., & de Vries, M. (2015). Does a virtual like cause actual

   liking? How following a brand's facebook updates enhances brand evaluations and

   purchase intention. *Journal of Interactive Marketing*, *32*, 26–36.

   doi.org/10.1016/j.intmar.2015.09.003

Bilgihan A. (2016). Gen Y customer loyalty in online shopping: an integrated model of trust,

   user experience and branding. *Computers in Human Behavio*r, *61*, 103–113. doi:

   10.1016/j.chb.2016.03.014

Bowden, J. L.-H. (2009). The process of customer engagement: A conceptual framework. *Journal of Marketing Theory and Practice*, *17*(1), 63–74. doi.org/10.2753/MTP1069-6679170105

Breitsohl, J., Kunz, W., & Dowell, D. (2015). Does the host match the content? A taxonomical update on online consumption communities. J*ournal of Marketing Management,* 31, 9(10), 1040–1064. doi: 10.1080/0267257X.2015.1036102

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement. *Journal of Service Research*, *14*(3), 252–271. doi.org/10.1177/1094670511411703

Calder, B. J., Malthouse, E. C., & Schaedel, U. (2009). An experimental study of the relationship between online engagement and advertising effectiveness. *Journal of Interactive Marketing*, *23*(4), 321–331. doi.org/10.1016/J.INTMAR.2009.07.002

Calder, B., Malthouse, E. C., & Maslowska, E. (2016). Brand marketing, big data and social innovation as future of research directions for engagement. *Journal of Marketing Management*, *32*, 579–585. doi: 10.1080/0267257X.2016.1144326

Coutant, A., & Stenger, T. (2013). Médias sociaux: clarification et cartographie pour une approche sociotechnique. *Décisions Marketing*, 70, 107–117. doi.org/10.7193/dm.070.107.117

Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: a social media perspective. *Journal of Product & Brand Management*, *24*(1), 28–42. doi.org/10.1108/JPBM-06-2014-0635

Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2016). Capturing consumer engagement: duality, dimensionality and measurement. *Journal of Marketing Management*, *32*(5–6), 399–426. doi.org/10.1080/0267257X.2015.1130738

Dwivedi, A. (2015). A higher-order model of consumer brand engagement and its impact on loyalty intentions. *Journal of Retailing and Consumer Services*, *24*, 100–109. doi.org/10.1016/j.jretconser.2015.02.007

Escalas, J. E., & Bettman, J. R. (2003). You are what they eat: The influence of reference groups on consumers' connections to brands. *Journal of Consumer Psychology*, *13*(3), 339–348. doi.org/10.1207/S15327663JCP1303_14

Escalas, J. E., & Bettman, J. R. (2005). Self-construal, reference groups, and brand meaning. *Journal of Consumer Research*, *32*(3), 378–389. doi.org/10.1086/497549

Fiss, P. C. (2007). A set-theoretic approach to organizational configurations. *Academy of Management Review*, *32*(4), 1180–1198. doi.org/10.5465/amr.2007.26586092

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39. doi.org/10.2307/3151312

Fournier, S. (1998). Consumers and their brands: Developing relationship theory on consumer research. *Journal of Consumer Research*, *24(*4), 343–373. doi.org/10.1086/209515

Fournier, S., & Avery, J. (2011a). The uninvited brand. *Business Horizons*, 54(3), 193-207. doi.org/10.1016/j.bushor.2011.01.001

Fournier, S., & Avery, J. (2011b). Putting the 'relationship' back into CRM. *MIT Sloan Management Review*, *52*(3), 63–72.

Fournier, S., & Yao, J. L. (1997). Reviving brand loyalty: A reconceptualization within the framework of consumer-brand relationships. *International Journal of Research in Marketing*, *14*(5), 451–472. doi.org/10.1016/S0167-8116(97)00021-9

Gambetti, R. C., Graffigna, G., & Biraghi, S. (2012). The grounded theory approach to consumer-brand engagement: the practitioner's standpoint. *International Journal of Market Research*, *54*(5), 659–687. doi.org/10.2501/IJMR-54-5-659-687

Gelhard, C., von Delft, S., & Gudergan, S. P. (2016). Heterogeneity in dynamic capability configurations: Equifinality and strategic performance. *Journal of Business Research*, *69*(11), 5272–5279. doi.org/10.1016/j.jbusres.2016.04.124.

Gensler, S., Völckner, F., Liu-Thompkins, Y., & Wiertz, C. (2013). Managing brands in the social media environment. *Journal of Interactive Marketing*, *27*(4), 242–256. doi.org/10.1016/j.intmar.2013.09.004

Graffigna, G., & Gambetti, R. C. (2015). Grounding Consumer-brand Engagement: A field-driven conceptualisation. *International Journal of Market Research*, *57*(4), 605–630. doi.org/10.2501/IJMR-2015-049

Hair, J. F., Ringle C. M., & Sarstedt M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–151. doi.org/10.2753/MTP1069-6679190202

Harrigan, P., Evers, U., Miles, M. P., & Daly, T. (2018). Customer engagement and the relationship between involvement, engagement, self-brand connection and brand usage intent. *Journal of Business Research*, *88*, 388–396. doi.org/10.1016/j.jbusres.2017.11.046

Hennig-Thurau, T., Malthouse, E. C., Friege, C., Gensler, S., Lobschat, L., Rangaswamy, A., & Skiera, B. (2010). The impact of new media on customer relationships. *Journal of Service Research*, *13*(3), 311–330. doi.org/10.1177/1094670510375460.

Hodis, M. A., Sriramachandramurthy, R., & Sashittal, H. C. (2015), Interact with me on my terms: a four segment Facebook engagement framework for marketers. *Journal of*

Marketing Management, 31(11/12), 1255-1284.

doi.org/10.1080/0267257X.2015.1012535

Hogan, B. (2010). The presentation of self in the age of social media: distinguishing

performances and exhibitions online. *Bulletin of Science, Technology & Society*, *30*(6),

377–386. doi.org/10.1177/0270467610385893.

Hollebeek, L. (2011a). Exploring customer brand engagement: definition and themes.

Journal of Strategic Marketing, *19*(7), 555–573.

doi.org/10.1080/0965254X.2011.599493

Hollebeek, L. D. (2011b). Demystifying customer brand engagement: Exploring the loyalty

nexus. *Journal of Marketing Management*, *27*(7–8), 785–807.

doi.org/10.1080/0267257X.2010.500132.

Hollebeek, L. D., Glynn, M., & Brodie, R. J. (2014). Consumer brand engagement in social

media: Conceptualization, scale development and validation. *Journal of Interactive*

Marketing, *28*(2), 149–165. doi.org/10.1016/j.intmar.2013.12.002

Hollebeek, L. D., Conduit, J., & Brodie, R. J. (2016). Strategic drivers, anticipated and

unanticipated outcomes of customer engagement. *Journal of Marketing Management*,

32(5-6), 393–398. doi: 10.1080/0267257X.2016.1144360

Hollenbeck, C. R., & Kaikati, A. M. (2012). Consumers' use of brands to reflect their actual

and ideal selves on Facebook. *International Journal of Research in Marketing*, *29*(4),

395–405. doi.org/10.1016/J.IJRESMAR.2012.06.002

Hudson, S., Huang, L., Roth, M. S., & Madden, T. J. (2016). The influence of social media

interactions on consumer–brand relationships: A three-country study of brand

perceptions and marketing behaviors. *International Journal of Research in Marketing*,

33(1), 27–41. doi.org/10.1016/J.IJRESMAR.2015.06.004

Jahn, B., & Kunz, W. (2012). How to transform consumers into fans of your brand. *Journal of Service Management*, *23*(3), 344–361. doi.org/10.1108/09564231211248444

Johnson, M. D., Herrmann, A., & Huber, F. (2006). The evolution of loyalty intentions. *Journal of Marketing*, *70*(2), 122–132. doi.org/10.1509/jmkg.70.2.122

Kleine, S. S., Kleine III, R. E., & Allen, C. T. (1995). How is a possession "Me" or "Not Me"? Characterizing types and an antecedent of material possession attachment. *Journal of Consumer Research*, *22*(3), 327. doi.org/10.1086/209454

Kozinets, R. V. (2013). Developing netnography. *Brand New Worlds, Marketing Research, Netnography, Qualitative Research Methods, Social Media Blog* (n.d.), accessed September 21, 2018. http://kozinets.net/archives/509.

Kozinets, R. V. (2014). Social brand engagement: A new idea. In *Marketing Intelligence Review*.

Lacœuilhe, J. (2000). *Le concept d'attachement: contribution à l'étude du rôle des facteurs affectifs dans la formation de la fidélité à la marque. http://www.theses.fr*. Paris 12. Retrieved from http://www.theses.fr/2000PA123002

Laroche, M., Habibi, M. R., Richard, M. O., & Sankaranarayanan, R. (2012). The effects of social media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty. *Computers in Human Behavior*, *28*(5), 1755–1767. doi.org/10.1016/j.chb.2012.04.016

Leckie, C., Nyadzayo, M. W., & Johnson, L. W. (2016). Antecedents of consumer brand engagement and brand loyalty. *Journal of Marketing Management*, *32*, 558–578. doi.org/10.1080/0267257X.2015.1131735

Lin, H., Fan, W., & Chau, P. (2014). Determinants of users' continuance of social networking sites: A self-regulation perspective. *Information Management*, *51*(5), 595–603. doi: 10.1016/j.im.2014.03.010.

Malthouse, E. C., Haenlein, M., Skiera B., Wege, E. & Zhang, M. (2013). Managing

customer relationships in the social media era: Introducing the social CRM house.

Journal of Interactive Marketing, *27*(4), 270-280. doi.org/10.1016/j.intmar.2013.09.008

Malthouse, E. C., Calder, B. J., Kim, S. J., & Vandenbosch, M. (2016). Evidence that user-

generated content that produces engagement increases purchase behaviours. *Journal of*

Marketing Management, *32*(5–6), 427–444. doi.org/10.1080/0267257X.2016.1148066

Marbach, J., Lages, C. R., & Nunan, D. (2016). Who are you and what do you value?

Investigating the role of personality traits and customer-perceived value in online

customer engagement. *Journal of Marketing Management*, *32*(5–6), 502–525.

doi.org/10.1080/0267257X.2015.1128472

Maslowska, E., Malthouse, E. C., & Collinger, T. (2016). The customer engagement

ecosystem. *Journal of Marketing Management*, *32*(5–6), 469–501.

doi.org/10.1080/0267257X.2015.1134628

Mollen, A., & Wilson, H. (2010). Engagement, telepresence, and interactivity in online

consumer experience: Reconciling scholastic and managerial perspectives. *Journal of*

Business Research, *63*(9–10), 919–925. doi.org/10.1016/j.jbusres.2009.05.014

Morgan R. M. (1991), *Relationship Commitment and Trust in Marketing*, Doctoral

Dissertation in Business Administration, Texas University.

MSI - Marketing Science Institute. (2014). In *2014-2016 Research Priorities*. Retrieved

from http://www.msi.org/research/index.cfm

Muniz A., & O'Guinn T. (2001). Brand community. *Journal of Consumer Research*, *27*(4),

412-432. doi: 10.1086/319618

Nusair, K.K., Bilgihan, A., & Okumus F. (2013). The role of online social network travel

websites in creating social interaction for Gen Y travelers. *International Journal of Tourism.*

Research, 15 (5), 458–472 doi.org/10.1016/j.tourman.2015.07.002

Park H. et Kim Y.-K. (2014). The role of social network websites in the consumer–brand relationship. *Journal of Retailing and Consumer Services*, *21*(4), 460–467. doi.org/10.1016/j.jretconser.2014.03.011

Ragin, Ch. C. (2006). Set relations in social research: Evaluating their consistency and coverage. *Political Analysis*, *14*(3), 291–310. http://dx.doi.org/10.1093/pan/mpj019.

Ragin, Ch. C. (2007). Qualitative comparative analysis using fuzzy sets (fsQCA). In B. Rihoux, & Ch. Ragin (Eds.), Configurational comparative analysis. Sage Publications. http://www.goethe-university-frankfurt.de/47930426/Ragin_2009.pdf

Ragin, Ch. C. (2008a). Redesigning social inquiry: Fuzzy sets and beyond. Chicago: Chicago University Press.

Ragin, C. C. (2008b). *Measurement versus calibration: A set-theoretic approach*. (J. M. Box-Steffensmeier, H. E. Brady, & D. Collier, Eds.) (Vol. 1). Oxford University Press. doi.org/10.1093/oxfordhb/9780199286546.003.0008

Ragin, C. C., & Sonnett, J. (2004). Between complexity and parsimony: Limited diversity, counterfactual cases and comparative analysis. In S. Kropp, & M. Minkenberg (Eds.), Vergleichen in der Politikwissenschaft. VS Verlag für Sozialwissenschaften: Wiesbaden.

Raies, K., & Gavard-Perret, M.-L. (2011). Brand loyalty intention among members of a virtual brand community: the dual role of commitment. *Recherche et Applications en Marketing*, *26*(3), 23–43. doi.org/10.1177/076737011102600302

Richins, M. L. (1994). Special possessions and the expression of material values. *Journal of Consumer Research*. Oxford University Press. doi.org/10.2307/2489690

Schmitt, A. K., Grawe, A., & Woodside, A. G. (2017). Illustrating the power of fsQCA in explaining paradoxical consumer environmental orientations. *Psychology & Marketing*, *34*(3), 323–334. doi.org/10.1002/mar.20991

Simon, F., & Tossan, V. (2018). Does brand-consumer social sharing matter? A relational

    framework of customer engagement to brand-hosted social media. *Journal of Business*

    Research, *85*, 175–184. doi.org/10.1016/j.jbusres.2017.12.050 doi:

    10.1177/076737011102600103

Sprott, D., Czellar, S., & Spangenberg, E. (2009). The importance of a general measure of

    brand engagement on market behavior: Development and validation of a scale. *Journal*

    of Marketing Research, *46*(1), 92–104. doi.org/10.1509/jmkr.46.1.92

Thomson, M., MacInnis, D. J., & Whan Park, C. (2005). The ties that bind: Measuring the

    strength of consumers' emotional attachments to brands. *Journal of Consumer*

    Psychology, *15*(1), 77–91. doi.org/10.1207/S15327663JCP1501_10

Tsai, W. S., & Men, L. R. (2013). Motivations and antecedents of consumer engagement

    with brand pages on social networking sites. *Journal of Interactive Advertising*, *13*(2),

    76–87. doi.org/10.1080/15252019.2013.826549.

Valaei, N., Rezaei, S., & Ismail, W. K. W. (2017). Examining learning strategies, creativity,

    and innovation at SMEs using fuzzy set Qualitative Comparative Analysis and PLS path

    modeling. *Journal of Business Research*, *70*(1), 224–233.

    doi.org/10.1016/j.jbusres.2016.08.016

van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C.

    (2010). Customer Engagement Behavior: Theoretical foundations and research

    directions. *Journal of Service Research*, *13*(3), 253–266.

    doi.org/10.1177/1094670510375599

Wetzels, M., Odekerken-Schröder, G. & Van Oppen, C. (2009). Using PLS Path Modeling

    for assessing hierarchical construct models: guidelines and empirical illustration. *MIS*

    Quarterly, 33(1), 177–195. doi.org/10.2307/20650284

Vickers, M. (2015). Is your CRM system social media friendly? *CRM Magazine*, 19(6), 7-7.

Vivek, S., Beatty, S., & Morgan, R. E. (2012). Customer engagement: Exploring relationships beyond purchase. *Journal of Marketing Theory and Practice*, *20*(2), 122–146. doi.org/10.2753/MTP1069

Woodside, A. G. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. *Journal of Business Research*, *66*(4), 463–472. doi.org/10.1016/j.jbusres.2012.12.021

Woodside, A. G. (2016). The good practices manifesto: Overcoming bad practices pervasive in current research in business. *Journal of Business Research*, *69*(2), 365–381. doi.org/10.1016/j.jbusres.2015.09.008

Woodside, A. G., Ko, E., & Huan, T. C. (2012). The new logic in building isomorphic theory of management decision realities. *Management Decision*, *50*(5), 765–777. doi.org/10.1108/00251741211227429

Wu, P. L., Yeh, S. S., Huan, T. C., & Woodside, A. G. (2014). Applying complexity theory to deepen service dominant logic: Configural analysis of customer experience-and-outcome assessments of professional services for personal transformations. *Journal of Business Research*, *67*(8), 1647–1670. 10.1016/j.jbusres.2014.03.012

Appendix A. Measurement scales

Construct	Source	Items
Cognitive brand engagement	Morgan (1991)	- Removing this brand from Facebook would bother me a lot - This brand represents exactly what I'm looking for on its fan page - It is in my interest to continue to follow this brand on its fan page - This brand deserves that I remain loyal to its fan page
Affective brand engagement	Lacoeuilhe (2000)	- Following this brand on its fan page brings me joy and pleasure - I am very attracted to this brand on its fan page
Behavioural brand engagement	Hollebeek et al. (2014) Vivek et al. (2012).	- I would recommend a friend to follow this brand on Facebook - I publish content from this brand's fan page on my wall - I comment on information published by this brand on its fan page - I post messages on the fan page of this brand - I participate in the competitions organised by this brand on its fan page
Social brand engagement	Allen & Meyer (1990)	- I feel like 'part of the family' of this brand on its fan page - I feel an attachment to other fans of this brand fan page - I have a strong sense of belonging when interacting with the fan page of this brand - For me, this brand and fan page mean a lot to me personally - I like interacting with other fans of this brand on its fan page
Behavioural brand loyalty intentions	Johnson, Herrmann & Huber (2006)	- I would probably recommend this brand to others - I sometimes give other people positive feedback about this brand - For my next purchase, I might buy (or redeem) a product of this brand

		- If I lost a product of this brand, I would certainly buy another
		- If I were entitled to any free product, I would choose a product from this brand
Self–brand connections	Escalas & Bettman (2003, 2005)	- Through its fan page, this brand reflects who I am quite well
		- I can identify with this brand through its fan page
		- I have a personal relationship with this brand through its fan page
		- The fan page of this brand is a way for me to express my personality
		- Through its fan page, this brand helps me to become the type of person I want to be
		- Through its fan page, this brand reflects the image I want to portray to other people

Appendix B. Reliability, convergent validity and discriminant validity

Reliability and convergent validity

Latent variable (order 1)	Convergent validity ρCV> 0.5	Reliability (Rhô)> 0.7	Latent variable (order 1)	Number of items	Reliability (Rhô) >0.7	Convergent validity ρCV> 0.5
Consumer brand engagement	0.640	0.841	Cognitive engagement	4	0.869	0.624
			Affective engagement	2	0.862	0.757
			Behavioural engagement	5	0.869	0.571
			Brand loyalty intentions	5	0.922	0.703
			Social brand engagement	5	0.902	0.647
			Self–brand connections	6	0.896	0.590

Discriminant validity

	1.	2.	3.	4.	5.	6.	Convergent validity (AVE) ρCV> 0.5
1. Self–brand connections	1						0.590
2. Social brand engagement	0.366*	1					0.647
3. Cognitive engagement	0.321	0.346	1				0.624
4. Affective engagement	0.280	0.267	0.495	1			0.757
5. Behavioural engagement	0.113	0.242	0.120	0.103	1		0.571
6. Brand loyalty intentions	0.053	0.007	0.127	0.072	0.001	1	0.703

*Variance shared between the two latent variables (square of their correlations).

Appendix C. Predictive validity of the findings

Combinations relating to high behavioural brand loyalty intentions for the modelling subsample and the holdout sample

Causal conditions *Frequency cut-off: 10.00 - Consistency cut-off: 0.893*	Raw coverage	Unique coverage	Consistency
SOLUTION 1. Low social brand engagement and *low* behavioural brand engagement and *low* cognitive brand engagement	0.553	0.254	0.867
SOLUTION 2. Low behavioural brand engagement *and high* cognitive brand engagement and *high* affective brand engagement	0.505	0.206	0.982
Solution coverage: 0.759; solution consistency: 0.892			
Test of Solution 1 from data in modelling subsample using data from holdout sample			