Developing a Behavior-Based Measure of Online Brand-Engagement

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ABSTRACT

Based on a literature review and qualitative investigation, we define online brand engagement as the extent of conscious performance of brand-related, public, online behaviors beyond purchase and consumption. The authors develop a 10-item online brand engagement scale with three dimensions: interaction, creation, and sharing. Results demonstrate scale reliability and validity.
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INTRODUCTION

The past decade has been witness to an explosion of social media activity on the part of both consumers and brands. Consumers are shifting their attention away from passive consumption of traditional media and spending increased time on interactive social media such as Facebook and Twitter (Nielsen, 2012). This shift has changed how marketers gain consumer attention, with a new focus on building and engaging online communities. As recognition of this shift, the authors review, evaluate and reconcile different conceptualizations of online brand engagement and develop a scale to assess it. While traditional electronic media has relied on paid interruption to gain attention, duplicating such efforts in an online environment has proven difficult. Online, consumers are can easily avoid unwanted advertising. Moreover, many social networking sites operate on an opt-in basis, allowing consumers more control to determine with whom they connect. In response, marketers have worked hard to cultivate groups of online followers or fans who have opted-in to interacting with the company’s brands. These followers are important for two reasons. First, they represent an audience unto themselves for brand interaction. Second, followers are a tool for viral sharing of brand-related content. Social networking sites are based on interconnections between consumers. As a result, each follower on a social networking site represents a means for connecting through to additional consumers. When a consumer engages with a particular brand (e.g., by liking, commenting, or sharing the content), the content is generally shared further to the same consumer’s connections on the social networking site. This engagement-driven effect is termed amplification and refers to brand-related content spreading beyond a brand’s immediate set of followers. Amplification has been shown to increase the audience of a particular brand’s content by as much as 81 times the
number of direct followers of a brand (Lipsman et al., 2012). Engagement can therefore significantly extend brand reach online.

Given the importance of brand engagement to the spread of brand-related content online, it would be expected that a common meaning of the term would have emerged and the development of a rich set of theoretical and experimental work would be underway. Unfortunately this is not the case. Practitioner use of the term continues to grow (Levy, 2013; Posner, 2013), with jobs titles such as “Chief Brand Engagement Officer” emerging (New York Times, 2008), advertising agencies specialize in it, and leading social network sites such as Facebook, Twitter, and LinkedIn all report engagement as a metric. Yet, academic progress has been largely limited to discussions of its conceptualization.

BRAND ENGAGEMENT CONCEPTUALIZATIONS IN MARKETING

The marketing literature is rich with brand-related constructs such as brand relationship, brand loyalty, brand attachment, and brand personality. With the exception of brand loyalty and word-of-mouth, few constructs explicitly encompass brand-related behaviors carried out by consumers. Yet, consumers are now able to publicly interact directly with a brand, increasingly discuss and evaluate brands, and create public personal connections with a brand absent any form of purchase. The brand engagement construct has potential to encapsulate these new brand-related expressions.

While research exploring brand engagement is in relative infancy, important efforts have been made to conceptualize and define the construct, though no consensus has emerged. These efforts can be loosely categorized into two groups which we term behavioral and psychological. Behavioral conceptualizations define brand engagement entirely in terms of brand-related
consumer actions. MSI (2010, pg. 4) offers the most precise definition, describing engagement as a “customer’s behavioral manifestation toward a brand or firm beyond purchase”. This definition noticeably omits behaviors directed toward other consumers. Other researchers have provided broader behavioral definitions, defining customer engagement as “active interactions of a customer with a firm, with prospects and with other customers, whether they are transactional or nontransactional in nature” (Kumar et al., 2010, pg. 297). Another definition, offered by van Doorn et al (2010, pg. 254) defines brand engagement as “behavioral manifestations that have a brand or firm focus, beyond purchase, resulting from motivational drivers”, implying that engagement can be positive or negative, and “may be targeted to much broader network actors including other current and potential customers, suppliers, the general public, regulators, and firm employees” (van Doorn et al., 2010, pg. 254).

Psychological conceptualizations view brand engagement as encompassing more than behaviors. Some research defines engagement in a service context as a “psychological process” that occurs as loyalty is created (Bowden, 2009, pg. 65). In a website context, online engagement has been described in relational terms as “a cognitive and affective commitment to an active relationship with the brand” (Mollen and Wilson, 2010, pg. 923) while others take a different approach and describe engagement as “a collection of experiences” (Calder, Malthouse, and Schaedel, 2009, pg. 322). Broader conceptualizations view engagement as “the intensity of an individual’s participation in and connection with an organization’s offerings and/or organizational activities” (Vivek, Beatty, and Morgan, 2012, pg. 133) or a form of ‘psychological state’ or ‘state of mind’ (Hollebeek, 2011; Brodie, Hollebeek, Juric, and Ilic, 2011; Brodie, Ilc, Juric, and Hollebeek, 2011). While differences are marked across the psychological definitions, some agreement exists on its dimensionality. Several conceptual
papers consider engagement to have cognitive, emotional, and behavioral dimensions (Hollebeek, 2011; Brodie, Hollebeek, Juric, and Ilic, 2011; Brodie, Ilic, Juric, and Hollebeek, 2011; Vivek, Beatty, and Morgan, 2012).

While it is apparent researchers are making efforts to better define and conceptualize brand engagement, agreement has yet to emerge. Given the growing importance of brand engagement, the conflicting understanding of the engagement concept within marketing and the importance of a clear definition prior to constructing a valid measurement scale, we designed our first study to clarify brand engagement’s definition and dimensionality in an online context.

STUDY 1: CONSUMERS’ AND EXPERTS’ CONCEPTIONS OF ONLINE BRAND ENGAGEMENT

We approached our first study with two objectives: firstly establishing whether a behavioral, psychological or both conceptualizations should be adopted, and secondly, uncovering the dimensions inherent to our adopted definition. These aims lead to a qualitative approach being adopted (Glaser and Strauss, 1967). Both young adults and marketing academics were employed in a four-stage qualitative investigation. While online brand engagement is not confined to a particular age group, younger consumers are those most likely to be active on social networks and engage with brands online (Duggan and Brenner, 2013). Insights from both consumers and academics, in conjunction with the literature on brand engagement, formed the data for our first study. With construct conceptualization best practices in mind (MacKenzie, Podsakoff, and Podsakoff, 2011), we triangulated between all three sources of data, employing a recursive study design to continually refine our understanding.
In the first stage, a sample of 23 senior undergraduate students each answered a series of open-ended questions before being lead in a group discussion. Results of this stage – and all others – were coded. In the second stage, eight academics were provided with information on relevant literature, our working definition and clarifications, and several questions. Their feedback offered important insights, with a more precise conceptualization emerging. In the third stage, our sample consisted of 19 marketing master’s students specifically employed for their ability to understand the more nuanced questions asked at this stage with their insights used for further refinement. During the fourth stage, ten academics were provided with the more refined conceptualization of engagement and associated questions.

Analysis of data generated during the multi-stage qualitative investigation supported a behavioral conceptualization of brand engagement, with little data supporting a more psychological or relational view of the concept. Consumers who participated easily expressed numerous examples of behavioral ways in which they engaged with or about brands online. Academics echoed these views and suggested that the behavioral element of online brand engagement helped to differentiate it from other brand-related constructs.

Support for emotions and cognitions as components of brand engagement was not found. Consumers and academics alike considered affect as a possible antecedent to engagement rather than part of brand engagement itself. Research exploring the role of activating emotions as a motivator of sharing activity lends support to this finding (Berger and Milkman, 2012; Teixera, 2012; Teixera, Wedel, and Pieters, 2012). Academics also expressed concern that should brand engagement include an emotional dimension, it might blur with existing constructs such as brand relationship (Fournier, 1998) or brand love (Carroll and Ahuvia, 2006). For cognitions, consumer and academic support was again not evident. Findings from consumers suggested that
thoughts and opinions helped to determine what content a consumer might create or react to, but they did not view cognitions as part of engagement online itself. Academics also raised the concern that a three-dimensional cognitive, emotional, and behavioral conceptualization of engagement was quite similar to existing understanding of attitudes (Azjen, 2005).

Integrating the results of our multi-stage qualitative investigation, we define online brand engagement as the extent to which a consumer consciously engages in brand-related, public, online behaviors beyond purchase and consumption. Results of the qualitative analysis also lead us to dimensionalize online brand engagement into two types of behavior: interaction and creation. Interaction refers to online brand-related public communications directed at any party, be it fellow consumers or the brand itself. Creation refers to the generation of online brand-related content visible to others. Online brand engagement is therefore conceptualized as the enactment of online brand-related behaviors.

While conceptually similar to word-of-mouth, online brand engagement encompasses a much wider set of brand-related behaviors, contexts, and intents and thus can be seen as subsuming word-of-mouth. Word-of-mouth is defined as consumer-to-consumer product-related utterances that are “personally motivated, spontaneous, ephemeral, and informal in structure” (Stern, 1994, p. 7). Online brand engagement includes behaviors directed towards a brand, those of an asynchronous nature, brand-related actions unrelated to consumption or evaluation, behaviors that are consciously constructed. Examples include suggestions and ideas, feedback, questions, complaints, and congratulations.

STUDY 2: ITEM GENERATION AND SELECTION
Having refined a conceptualization of our construct and its dimensions, we turned to generating measurement items. To generate items to fully represent the online brand engagement construct we relied on a variety of sources (Churchill, 1979; Nunally and Bernstein, 1994; MacKenzie, Podsakoff, and Podsakodd, 2011). Findings from the investigation and analysis conducted in Study 1 provided a rich source of data to consider. Examples from participants along with delineations and considerations offered by academic experts aided the researchers in classifying a wide array of online engagement behaviors. This classification both facilitated generation of items as well as provided a useful rubric against which to confirm if developed items captured the full domain of online brand engagement behaviors.

In addition to deduction from our theoretical definition and earlier data, we re-explored the existing literature on brand engagement as well as conducted further literature reviews related to its dimensions of interaction and creation. For interaction we reviewed research on brand relationships and brand communities (Fournier, 1998; McAlexander, Schouten, and Koenig, 2002; Muniz and O’Guinn, 2001; Algesheimer, Dholakia and Herrmann, 2005), brand engagement interactions (Patterson, Paul, Ting Yu, and Ko de Ruyter, 2006), social media interactions (Hoffman and Fodor, 2010; Fournier and Avery, 2011; Campbell, Pitt, Parent, and Berthon, 2011; Lipsman, Mudd, Rich, and Bruich, 2012), along with research on word-of-mouth (Libai et al., 2010; Berger, 2013). For creation we reviewed literature on consumer-generated content (Berthon, Pitt, and Campbell, 2008; Muniz and Schau, 2011; Ertimur and Gilly, 2012), and digital self-extension (Belk, 2013).

From these sources we developed 41 total items (31 items measuring interaction and ten items measuring creation). To further assess initial items, thirteen academics rated the content validity of each item relative to our conceptualization of online brand engagement (following the
procedure of Sprott, Czellar, and Spangenberg, 2009). Results and feedback were used to delete and modify items as well as generate further items measuring creation. This resulted in a revised set of 39 items measuring interaction (25 items) and creation (14 items).

Further, given that we conceptualize online brand engagement as the enactment of behaviors, we operationalize measurement of the construct by assessing two aspects of each scale item: the frequency with which each behavior is performed and the degree of effort that each behavior entails. Online brand engagement is thus assessed by the multiplication of frequency and effort of a series of behaviors. Measurement in this fashion yields a measure weighted to account for behaviors that are frequent but require less effort – such as liking a post – as well as infrequent, but more effortful behaviors such as creating a video.

STUDY 3: ITEM REDUCTION AND SCALE DIMENSIONALITY

The goal of Study 3 was to reduce the number of scale items and confirm their dimensionality. A sample (N=191) of consumers read a description of online brand engagement, considered products they had purchased, and were asked to write the brand that they engage the most with online. Each participant’s chosen brand was then piped into the wording of each item. Participants responded to each of the 39 items twice using a 100-point sliding scale, first indicating their frequency of performing the behavior (‘never’ to ‘very frequently’) and then later indicating their effort in performing the behavior (‘takes little time to do’ to ‘takes lots of time to do’). Results were multiplied for use in analysis. Factor analysis using Varimax rotation revealed a four-factor solution with eigenvalues above 1 (explained variance = 76%), however analysis of the scree plot indicated only two factors were significant (explained variance = 70%). All items had loadings of 0.4 or higher on at least one factor. Examination of the first two factors yielded
one dimension related to interaction items and a second dimension related to creation items comparable to what was found in the qualitative research. A factor analysis restricting the number of factors to two and suppressing loadings below 0.7 revealed a solution with 22 items related to interaction loading on the first factor and 7 items relating to creation loading on the second factor. Elimination of items due to cross-loadings and semantic similarity further reduced the number of items to 20 items (14 interaction, 6 creation).

In order to further reduce the number of items, administration of the same procedure to a second sample (N = 330) was conducted using the 20 remaining items. While factor analysis using Varimax rotation indicated a two-factor solution with eigenvalues above 1 (explained variance = 65%), the scree plot for this sample indicated three significant factors (explained variance = 70%). Moving from a two-factor to a three-factor solution did not qualitatively change the pattern of item loadings, but separated items that had earlier loaded on a single, second factor to instead load onto two distinct factors. The number of items included was further reduced by employing a loading criterion of 0.7. This resulted in six items loaded onto the first factor, termed interaction, three items loaded onto the second factor, which we still termed creation, and two items pertaining to the sharing of photos and videos, that we termed sharing, loaded onto the third factor. To aid in further reducing the numbers of items, two academics assessed the 11 items on semantic similarity, removing an interaction item. Thus, the data revealed that the creation activities of producing and creating online content was sufficiently discriminable from the specific behaviors of sharing photos and videos to warrant a separate, specific factor.

STUDY 4: CONFIRMING SCALE DIMENSIONALITY
In Study 4 we examined the dimensionality and stability of the scale. We adopted the methodology employed in Study 3 to collect data from a new sample of consumers (N = 516). An exploratory factor analysis extracted three factors (explained variance = 81%) and yielded loadings shown in Table 1. Cronbach’s alphas for all factors were satisfactory (interaction = 0.94, creation = 0.88, and sharing = 0.72). We also ran a confirmatory factory analysis (Figure 1) for a three-factor model ($\chi^2 = 132.27$, $df = 32$, $p < .01$, $CMIN/df = 4.13$). Given the chi-square test’s sensitivity to large sample sizes, we looked to additional fit statistics to assess the model (Bryne, 2001). Suggested cutoff values of 0.95 were met for NFI (0.97), CFI (0.98), and GFI (0.95) (Hu and Bentler, 1999). RMSEA of 0.08 and SRMR of 0.03 also both indicated good model fit.

STUDY 5: ASSESSING DISCRIMINANT, NOMOLOGICAL, AND CONVERGENT VALIDITY

The purpose of Study 5 was to assess the extent to which our online brand engagement construct demonstrated discriminant, nomological, and convergent validity. Due to the wide number of constructs we sought to explore in relation to online brand engagement, two data samples of consumers were used. In the first sample (N = 361), the 10-item online brand engagement scale was assessed in relation to a mixture of constructs. Constructs in the first sample expected to exhibit discriminant validity included Product Category Involvement (Mittal, 1995), Hypothetical Word-of-Mouth (Gelbrich, 2011), and Intention to Recommend (Cheema and Kaikati, 2010). Constructs in the first sample expected to exhibit nomological validity included Brand Involvement (Mittal, 1995), Brand Engagement in Self-Concept (Sprott et al., 2009), Market Mavenism (Feick and Price, 1987; Gauri et al., 2008), Brand Experience (Brakus
et al., 2009), and Brand Self-Connection (Park et al., 2010). In addition, to assess convergent validity in the first sample we also included a single-item measure of online brand engagement.

In the second sample (N = 385), discriminant validity was tested against Attitude Toward Word-of-Mouth Online (Khare et al., 2011), Satisfaction with a Brand Relationship (Adjei et al., 2010), Attitude Toward the Brand (cf. Petty, Cacioppo, & Schumann 1983), and Brand Personality Appeal (Freling et al., 2011). Nomological validity was explored with Commitment to the Brand (Yoo et al., 2000; Moreau et al., 2011), Signaling-Driven Involvement with the Brand (Park and Roedder John, 2010), Commitment to the Relationship with a brand (Adjei et al., 2010), and Word-of-Mouth Communication tendencies (Harrison-Walker, 2001). To assess convergent validity in our second sample, we again included a single measure of online brand engagement but assessed it with two items: one asking frequency and one asking degree of effort involved.

Results from the two samples supported the hypothesized relationships. Correlations between our 10-item measure of online brand engagement and constructs expected to demonstrate discriminant validity ranged from non-significant to 0.19 (Attitude Toward Word-of-Mouth Online $r = 0.05, p = 0.33$; Hypothetical Word-of-Mouth $r = 0.09, p = 0.10$; Satisfaction with a Brand Relationship $r = 0.10, p = 0.06$; Attitude Toward the Brand $r = 0.14, p < 0.01$; Brand Personality Appeal $r = 0.17, p < 0.01$; Intention to Recommend $r = 0.17, p < 0.01$; Product Category Involvement $r = 0.19, p < 0.01$). Correlation with constructs expected to demonstrate nomological validity ranged from 0.27 to 0.46 (Commitment to the Brand $r = 0.27, p < 0.01$; Brand Involvement $r = 0.30, p < 0.01$; Market Mavenism $r = 0.32, p < 0.01$; Signaling-Driven Involvement with the Brand $r = 0.34, p < 0.01$; Brand Experience $r = 0.35, p < 0.01$; Commitment to the Relationship with a brand $r = 0.42, p < 0.01$; Word-of-Mouth
Communication tendencies $r = 0.43, p < 0.01$; Brand Engagement in Self-Concept $r = 0.44, p < 0.01$; Brand-Self Connection $r = 0.46, p < 0.01$). The strongest correlations with our 10-item online brand engagement scale were found with the two single-measure forms of online brand engagement. Both the single-item measure and the two-item single measure (frequency multiplied with degree of effort) exhibited a 0.55 correlation ($p < 0.01$).

CONCLUSION

Our work makes several contributions. First, we resolve debate over the conceptualization of online brand engagement and clearly situate it within the behavioral realm. Second, through a multi-stage qualitative investigation we develop a grounded definition and dimensionalization of the construct. Finally, we develop and validate a scale to measure online brand engagement at a brand-specific level. This scale opens up research opportunities for academics and practitioners alike to explore the antecedents and consequences of online brand engagement.
REFERENCES


Table 1: Exploratory Factor Analysis Results

<table>
<thead>
<tr>
<th>Item</th>
<th>Interaction</th>
<th>Factor Creation</th>
<th>Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>I talk about <em>brand</em> online*</td>
<td>0.89</td>
<td>0.19</td>
<td>0.17</td>
</tr>
<tr>
<td>I participate when others talk online about <em>brand</em></td>
<td>0.89</td>
<td>0.22</td>
<td>0.16</td>
</tr>
<tr>
<td>I comment if I see something online about <em>brand</em></td>
<td>0.86</td>
<td>0.25</td>
<td>0.12</td>
</tr>
<tr>
<td>I comment on <em>brand</em>-related content online*</td>
<td>0.82</td>
<td>0.18</td>
<td>0.27</td>
</tr>
<tr>
<td>I express my knowledge of <em>brand</em> online*</td>
<td>0.81</td>
<td>0.22</td>
<td>0.21</td>
</tr>
<tr>
<td>I produce web content about <em>brand</em></td>
<td>0.20</td>
<td>0.87</td>
<td>0.11</td>
</tr>
<tr>
<td>I create online content concerning <em>brand</em></td>
<td>0.24</td>
<td>0.84</td>
<td>0.30</td>
</tr>
<tr>
<td>I create things about <em>brand</em> online*</td>
<td>0.27</td>
<td>0.78</td>
<td>0.34</td>
</tr>
<tr>
<td>I share my videos about <em>brand</em> online*</td>
<td>0.17</td>
<td>0.26</td>
<td>0.87</td>
</tr>
<tr>
<td>I share my photos about <em>brand</em> online*</td>
<td>0.38</td>
<td>0.33</td>
<td>0.69</td>
</tr>
</tbody>
</table>

Notes: *Denotes a multiplied composite of items measuring frequency and degree of effort. Loadings are from a factor analysis using Varimax rotation. Bolded values indicate the factor on which an item most strongly loads.
Figure 1: Confirmatory Factor Analysis Results

- I talk about brand online
- I participate when others talk online about brand
- I comment if I see something online about brand
- I comment on brand-related content online
- I express my knowledge of brand online
- I produce web content about brand
- I create online content concerning brand
- I create things about brand online
- I share my videos about brand online
- I share my photos about brand online

* $p < 0.01$

Notes: All coefficient values are standardized. Dashed lines represent correlations. Variables represent a multiplied composite of items measuring frequency and degree of effort.
AUTHOR COMMITMENTS

The authors state that this work is original.

If accepted, the first agrees to attend the full workshop and present the work.

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