

Do Facebook Likes Lead to Shares or Sales? Exploring the Empirical Links between Social Media Content, Brand Equity, Purchase Intention, and Engagement

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Abstract

Prior studies report organizations' increasing fiscal investments in social media marketing communications reflecting anticipated benefits for bottomline improvements. Yet, few studies have looked at the empirical link between messaging dimensions, brand equity, consumer engagement and associated purchase intentions. Through a four-week long, between-group longitudinal experiment, we assess the relationships between these factors, and produce the following contributions: (i) developed and empirically supported our proposed monitoring metric, Brand Social Media Engagement Index; (ii) observed that brand equity is a full, direct mediator between engaging brand content and both purchase intention and brand social media engagement intention; and (iii) demonstrated the positive effect of engaging brand content on consumer brand equity, thereby establishing the value behind brand social media marketing communications to consumers.

1. Introduction

Prior studies report on organizations' increasing fiscal investments in social media marketing communications, reflecting the anticipated benefits for an organization's bottomline [1, 2]. However, while an expected and impactful trend, few studies have attempted to solidify the value proposition of brand social media marketing communications. When one considers the increasingly growing role of social media as a communication tool to reach, engage, and interact with target markets, it becomes imperative to be able to show the value behind investing employee time in such activities [3]. Hence, this study aims to answer the following research question:

RQ: What is the value proposition of social media to brand marketing communications?

With one in four people using a social network as of 2013, social media can produce a huge audience for brands [4; 5]. Consumers interact with Facebook posts on a daily, sometimes hourly, basis making social media an ideal platform for brands to foster close relationships with their consumers. For example, KLM Royal Dutch Airlines has used their Facebook Page not just to respond to customer questions and complaints, but also to create opportunities for user-generated content by inviting their fan base to share their own photos from KLM branded airplanes, a tactic that has contributed to their status as the "most Socially Devoted brand on Facebook" [6].

While traditional marketing initiatives and the benefits thereof for boosting brand image and purchase intention have been studied extensively, the virtual relationship between brand and consumer has yet to receive thorough inquiry in an attempt to link social media communications with actual purchases. From an organizational standpoint, it becomes crucial to demonstrate that there is a financial benefit to social media marketing in order to justify the increased marketing spending in this digital domain [3]. [7] showed that public relations professionals believed that social media marketing is effective for maintaining brand reputation, awareness, search rankings, and web traffic, but that increasing the number of social media platforms a company is using does nothing to help user satisfaction with their current consumer-brand relationship; thus, leading to and reinforcing the importance of answering the question does social media offer a brand monetary value [3].

Traditional offline marketing theories may not be appropriate for studying online word of mouth communications due to the *friend* role a brand takes on in digital and social media [8]. In particular, as social media provide a platform to bring like-minded consumers together to exchange ideas and opinions about their favorite brands, the otherwise simple

relationship between brand and consumer becomes more multifaceted in this social space.

Previous empirical research—based largely on content analyses—has suggested that through increased interactions with a brand on social media, consumers do not merely build a relationship with the company but also with other consumers who are connected with that brand on social media [9]. Suddenly, it is not just the initial consumer who “likes” something but a sense of community—the interactions with a group of people who share a similar interest in the brand—that may result in increased positive attitudes toward the brand [1, 2014].

Moving beyond descriptive analyses, this study sets out to expose the empirical link between social media engagement—i.e., Liking, Commenting, or Sharing—with a brand’s messages on social media and brand equity, purchase intention, as well as future engagement intention, a newly introduced construct, with the brand on social media; doing so advances the field in understanding whether brand building through improved brand attitude via social media communications generates value for the brand [3]. Using an experimental design drawing on brand Facebook Page posts characterized by significantly different engagement levels (classified as either *high* or *low*), and pre/post surveys with 1177 unique responses, this study validates that highly engaging social media messages (here, Facebook Page posts) indeed have a significant positive effect ($p < .001$) on brand equity, and in turn significantly impact both consumers’ purchase intention towards the products or services offered by the brand as well as consumers’ intention for future interaction with the brand on social media.

Based on these findings, this paper offers the following contributions. First, this study is the first to empirically test the relationship between social media-based brand engagement and purchase intention and therewith to expose whether or not investments by companies in social media marketing communications are associated with a potential return on investment. Second, this study proposes a new construct in *Engagement Intention* that aims to measure an important behavioral outcome in the context of building brand equity and loyalty in the social space. Third, this study is the first to draw on actual brand Facebook Page Posts that are classified according to their messaging content and objectively evaluated in terms of their impact (i.e. the evoked level of Likes, Comments, and/or Shares) before exposing the impact they may have on consumers’ perceptions and behavioral intentions towards the brand.

The remainder of this paper is organized as follows. First, we offer a review of the theoretical constructs that compose the conceptual foundation of this study. Then, we discuss the research design of this study, including the experimental manipulation, participants, instrument validation, as well as data collection and data analyses. Subsequently, we present the findings of our study and discuss important implications for theory, future research, practice, and social media communications design.

2. Literature Review

When interactivity is incorporated into social media posts, control of the content is given to the consumer who in turn is able to pay attention to the brand responsiveness of the content as well as other consumers in that community [4]. Social media provides the ideal platform for brands to build social experience and symbolic value for the consumer, thereby potentially contributing to an improved brand image in the consumer’s mind, thus enhancing the consumer’s attitude toward the brand, or brand attitude.

The extent to which a social media message is engaging—i.e., resulting in consumer engagement in the form of Likes, Comments, or Shares—can affect brand image in two ways. First, an engaging message can facilitate the formation of positive brand attitude through the manipulation of textual and/or visual persuasion cues. For instance, a brand can manipulate content themes (e.g., for a messaging typology, see [1]) as well as the richness of a message (e.g. by including a URL, photo, or video) that increase the level of engagement associated with the message. Second, an engaging message can positively affect brand equity by triggering a positive feeling state. Hereto, a brand can manipulate the appeal used in a message (transformational as opposed to informational) to elicit stronger emotional experiences and in turn more positive brand attitudes thus enhancing brand equity [10].

Consumers are able to provide a persuasive effect over other consumers 22 times stronger than marketers [11]. Brands provide a space for consumers to engage in thought provoking conversations and inspire resonant stories within this trusted community of the individual’s social network [12, 4]. Consumption within this community is based on the consumer’s need for problem solving, information search, feedback, and evaluation of series offered in an environment where real-time accessibility and exchange of these types of information is considered the social norm [4]. By looking at social media posts that have previously

attracted high engagement, we can capitalize on the social interaction of, essentially, strangers within this brand community and gauge if consumers do in fact place a higher value on these posted based on their community support to accompany the initial marketer contributions [4; 11]. From here, we seek to establish a connection with consumer brand equity.

2.1. Brand Equity, Attitude, and Image

Brand equity is regarded by organizations as the incremental utility or value added by the brand name, which contributes to the company's long-term profitability [13]. For consumers, the perspective of interest within this study, brand equity refers to the added attractiveness a brand name confers on a product or service [14]. Brand equity can therefore be discussed in relation to the investor, the manufacturer, the retailer, or the consumer, and one must consider the perspective to be used for analysis [15]. Furthermore, it is composed of two related concepts: brand image and brand attitude. Hence, any attempts to measure brand equity must recognize this multidimensional nature [16,14], and the abovementioned two dimensions will be defined next.

Drawn from both the tangible and intangible associations a consumer makes between a cluster of attributes and the brand name, *brand image* is defined as the consumer's perception of a specific brand [14; 16]. Few marketing studies have examined the connections between brand image and brand equity, and how they in-turn drive a consumer's purchase intention; even fewer studies have explored these relationships in the social media realm, thus increasing the value of this study [16].

The second dimension of brand equity, i.e. brand attitude, is a consumer's internal evaluation of a brand [14]. In essence, that evaluation becomes a function of salient beliefs about the brand, those from memory and considered by the consumer in a given situation [16]. Brand attitude is one of the most widely examined constructs in consumer behavior and an important concept in marketing research for the past twenty years. By better understanding the underlying causal dynamics of attitude formation and image interpretation, organizational managers are equipped with greater clarity that can inform successive, and likely more effective, marketing communications [17].

Brand equity provides the insulation needed to protect brands from competitors [15]. High equity has been associated with consumer satisfaction, brand preference, premium price, and high profit values [14]. Definitions have ranged from Keller's 1993

definition that brand equity is the effect of brand knowledge on consumer response to brand marketing to simply, the customer's perceived value [13]. For this study, we will use [14]'s definition of brand equity as the added attractiveness a brand name confers on a product or service (see Table 1). We therefore propose the following hypothesis to provide additional insight into the link between social media communications and brand equity:

H1: The higher the elicited engagement level of a brand's post, the more positive the brand equity

2.2. Purchase Intent

Abundant evidence exists in the consumer research literature that the more positive the brand attitude, the higher the consumers' purchase intention [14]. Purchase intention here refers to the behavioral inclination of consumers to plan to purchase a certain product or service in the future [18]. Positive purchase intention, in turn, is viewed as an important antecedent to actual purchase action [19].

However, asking purchase intent questions has been shown to prime purchase processing decisions in favorable ways toward the brand. In a 1993 study by [20], purchasing rates increased by 84 percent for armature personal computer shoppers just by measuring their purchase intent. A 1996 study by [21] found that simply asking intent questions caused purchase rates to increase for brands that already had high market shares. Consumers in the late states of the decision-making process are more likely to have already formed attitudes and purchase intention thus prompting retrieval of preexisting cognitions toward the brand when asked about purchase intent [21].

Brand attitudes are a precursor for customer activities such as recommending the brand to others as well as making repeat purchases [22]. This is consistent with brand equity being an asset to the business and thus leading to more positive future-term financial performances [14; 3] through incremental sales. Therefore, we propose the following hypothesis:

H2: The more positive the brand equity, the greater the consumer's brand purchase intention

2.3. Social Media Engagement Intention

Consumers do not forward or participate in the curation of social media content unless there is something for them to build on their own profile or strengthen their personal brand image [5]. In addition to the link between brand equity and purchase intention, we propose that brand equity will positively affect consumers' intentions to engage

with a brand’s social touch points. Such engagement may take the form of Liking, Commenting, or Sharing a brand’s profile (e.g., Facebook Page) or message (e.g. Facebook Page Post). In essence, if a brand creates engaging content resulting in positive impressions about and attitudes toward the brand, we anticipate that consumers will be more likely to continue visiting the brands’ social media platforms and continue to interact with posts generated by the brand.

Building engagement intention requires a shift from marketer led brand messaging to include the consumer in the messaging creation strategy and establishing a co-creation of meaning [4]. Using the symbolic aspect of brands and communities built by social media, consumers are able to build their social identities and increase their self-confidence from other consumer “Likes” and interactions with their posts [4]. Such interaction increases brand tangibility and could result in repeat consumption of the brand as well as interaction with the social media community established by the brand [4]. Still, we lack an understanding of both approaches to measurement and assessments of whether or not social media message consumption actually increases purchase intention and/or further social media-based engagement intention. Thus, we propose the following hypothesis:

H3: The more positive the brand equity, the greater the brand social media engagement intention

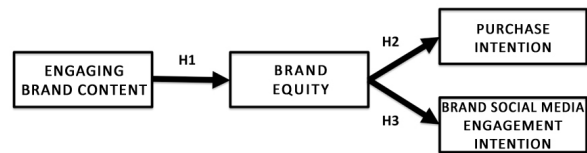
Construct	Definition	Reference
Brand Equity	The added attractiveness to the customer that a brand name confers on a product or service.	[14]
Brand Image	The consumer’s perception of a specific brand	[14]
Brand Attitude	The consumer’s internal evaluation of a brand	[14]
Purchase Intention	The degree to which a consumer considers purchasing a product.	[18]
Brand Social Media Engagement Intention	The degree to which a consumer considers engaging with a brand’s social media touch point.	Defined and developed for this study

Table 1. Constructs and Definitions

3. Proposed Theoretical Model

Based on the above discussion of the four constructs comprising this study—namely engaging brand messaging on Facebook Pages; brand equity; purchase intention; and brand social media engagement intention—as well as the associated three hypotheses, Figure 1 summarizes the proposed research model that will be tested in this experimental study.

Figure 1. Proposed Research Model



4. Methodology

4.1. Manipulation

To explore the effect of consumer engagement with brand Facebook Page posts on brand equity, purchase intention, and intentions to engage with a brand’s social media presence, actual posts were selected from three brands, namely Delta Airlines, Walmart, and McDonald’s, to allow for the most diverse category selection possible. These brands were chosen for three reasons. First, they are among the top 110 Fortune companies ranked by gross revenue, enjoy strong brand equity, and maintain a considerable social media presence. Second, these brands represent different levels of purchase-decision involvement, as follows: low involvement as found for McDonald’s and other fast-moving consumer goods (FMCGs), mixed involvement as is the case with Wal-Mart and other Big Box Retailers, and, high purchase-decision involvement found in Delta Airlines and other expensive and greater risk-bearing goods and services. Third, the purchase cycle was one additional consideration in our case selection process resulting in a selection of brands representing both consumables and durables. Purchase cycle—consumables versus durables—is a key factor in brand messaging when considering purchase-decision frequency and the need for tailored messaging.

Selection of actual Facebook Page posts by the above three brands was then performed by referring to the messaging typology proposed by [1] and controlling for the content of posts. Four content categories—Brand Awareness, Product Awareness, (Product) Promotional, and Engagement—were identified as being most closely aligned with the four

stages of the Buying Behavior Model: Consider, Search, Choose, and Buy [1]. For each of these categories, two brand Facebook Page posts were selected that were significantly different in the level of elicited engagement, so as to serve as the manipulation in either the low or high engagement condition. All identifiable metrics – including the number of Likes, Comments, and Shares actually elicited - and dates associated each brand Facebook Page post were removed prior to including them in this experiment.

To calculate the level of elicited engagement, we summed the raw number of Likes, Comments, or Shares associated with each post to determine an absolute engagement score for an individual brand Facebook Page post. Hence, eight actual brand posts were selected from each official Facebook Page of Delta Airlines, Walmart, and McDonald’s (n=24), four that elicited a low level and four that elicited a high level of engagement. These eight posts were deliberately selected not only on the basis of their engagement scores, but also to ensure internal consistency with respect to all characteristics of the post except engagement, namely the post’s *content category* and *subcategory* as well as *media type* (e.g. does the post include text only or a URL, photo, or embedded video).

To illustrate, if a highly engaging *Brand Awareness* (subcategory: *Operations*) Facebook Page post from Delta Airlines that included a photo was selected, another post with the exact same message characteristics (content = Brand Awareness; Operations; richness = photo) was selected that displayed a low engagement score. As a manipulation check, we performed a one-tailed t-test analysis of the 24 brand posts (12 in the low engagement condition vs. 12 in the high engagement condition) to determine if the brand Facebook Page posts in the two conditions were indeed significantly different in the extent to which they generated engagement with the post in the form of Likes, Comments, and/or Shares. The result (p=0.038) offers support for the significantly different levels of engagement evoked between the low and high engagement conditions.

4.2. Participants

Participants were recruited from a large Midwestern institution and asked to complete a baseline survey to establish demographics, social media usage in terms of purposeful interaction, such as Liking, Commenting, or Sharing a brand Facebook Page post, as well as previous brand Facebook Page visits. In addition, baseline perceptions were assessed for brand image, attitude, and purchase intention..

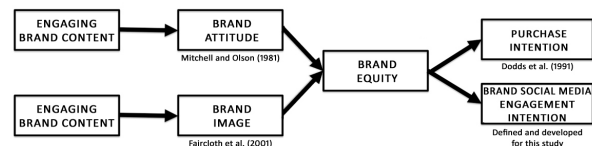
From there, participants were randomly assigned into either the low or high level of Facebook Page post engagement group. For the next four weeks, participants took part in short experimental sessions in a computer lab, where they were exposed to Facebook Page posts from McDonalds, Walmart, and Delta Airlines, corresponding to the engagement level appropriate for the treatment group they were randomly assigned to. The rank-order in which brand Facebook Page posts were presented was randomized to avoid response biases. After each brand exposure, they were asked to respond to a set of survey questions for each Facebook Page post in regards to their brand perceptions (i.e. image and attitude), purchase intention, and future engagement intention with brand social media.

4.3. Instrument Validation

The questionnaire used in this study consists of scales measuring the constructs from the research model, as summarized in Table 2. One formative construct was used, namely brand equity, while both of the reflective constructs in the research model, i.e. purchase intention and brand social media engagement intention, had significant factor loadings greater than 0.5 to ensure construct validity [23] and were further validated by adequate item-to-total correlations at above the 0.35 threshold as suggested by [24].

Previously validated scales for brand attitude and brand image were used to measure the second order construct of brand equity (see Figure 2). Brand attitude was adapted from the scale used by [17]. This scale captures respondents’ perceptions about a brand along seven-point scales anchored between two semantic differential adjective pairs, namely “Bad/Good” and “Extremely Dislike/Extremely Like.” With respect to the construct of brand image, it was adapted from the scale used by [16]. This scale captures respondents’ perceptions about a brand along seven-point scales anchored between five semantic differential adjective pairs, namely “Colorless/Colorful,” “Dominating/Submissive,” “Excitable/Calm,” “Thrifty/Indulgent,” and “Modest/Vain.”

Figure 2. Proposed Second Order Construct for Brand Equity, Construct Scales



The purchase intention construct was adapted from [18] and measured along seven-point scales anchored between three semantic differential adjective pairs, namely “Unlikely/Likely,” “Improbable/Probable,” and “Impossible/Possible.”

Brand social media engagement intention was defined in this study by considering the entire set of a user’s potential interaction behavior with a brand Facebook Page post, and creating a corresponding scale item, for a total of five items. These items were measured along seven-point Likert scales anchored as “Highly Unlikely,” “Unlikely,” “Somewhat Unlikely,” “Neither Likely Nor Unlikely,” “Somewhat Likely,” “Likely,” and “Highly Likely.”

During the questionnaire, each construct’s items were randomized to prevent systemic response bias. Tests for nonresponse and common method biases were not significant, revealing that no such biases existed. The factor loadings for all items were above .847 (and thus above the .7 cut-off for convergent reliability) used in this study are summarized in Table 2.

Construct	Latent Mean	Cronbach Alpha (α)	Composite Reliability	Convergent Validity (AVE)	Discriminant Validity (\sqrt{AVE})
Brand Equity	0.431	Formative	Formative	Formative	Formative
Purchase Intention	0.616	0.913	0.945	0.851	0.922
Brand Social Media Engagement Intention	1.954	0.923	0.941	0.763	0.873

Table 2. Construct Statistics

The quality of measures was tested with the partial least squares (PLS) approach to structural equation modeling via SmartPLS 2.0. The results of the tests for convergent validity [25] discriminant validity [25, 26], construct means, and Cronbach’s α can be found in Table 3, which shows that all constructs had adequate Cronbach’s α (i.e. > 0.80), reliability (i.e. above 0.7 threshold according to [27]), and convergent validity (i.e. AVE above the 0.5 benchmark according to [26]).

As shown in Table 3, discriminant validity was supported by confirming that the square root of the variance shared between a construct and its items was greater than the correlations between the construct and any other construct in the model [26].

Construct	Brand Equity	Purchase Intention	Brand Social Media Engagement Intention
Brand Equity	n/a (formative)		
Purchase Intention	0.615	1.00	
Brand Social Media Engagement Intention	0.430	0.231	1.00

* Diagonal values are the square root of the AVE

Table 3. Latent Variable Correlations

Finally, as brand equity is a formative construct, validity of these constructs cannot be assessed through an inspection of convergent validity, discriminant validity, and cross-loadings, but rather should be assessed by evaluating the Variance Inflation Factors (VIFs). Using SPSS, the VIF of Brand Attitude and Brand Image was computed and revealed an “excellent value” of 1.660 for both, this is below the acceptable threshold of 3.3 [28] and well below the commonly acceptable value of 10 [28].

5. Results

Using the variance-based PLS method, we then tested the research model shown in Figure 1. PLS allowed us to specify the relationships between the various endogenous and exogenous constructs in the model (structural model), as well as with their underlying items (measurement model). Thus, data analysis provided support for both how well the items measured each construct, and how well the hypothesized relationships between constructs supported the theory.

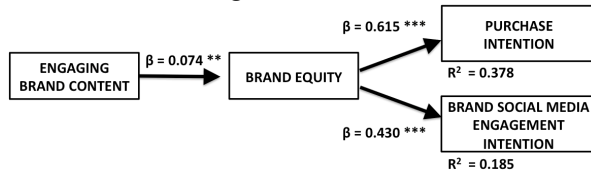
The bootstrapping re-sampling method with 1,177 cases and 2,000 re-samples were used for structural model estimation. Based on the results of the model estimation, all of the hypotheses were supported (see Table 4). The results of the structural model estimations, including R^2 values, are presented in Figure 3.

Hyp.	From	To	Path Coeff.	t-Value	Status
1	Engaging Brand Content	Brand Equity	0.074	2.539* *	Supported
2	Brand Equity	Purchase Intention	0.615	33.024 ***	Supported
3	Brand Equity	Brand Social Media Engagement Intention	0.430	21.874 ***	Supported

* significant at p = .05 ** significant at p = .01 *** significant at p = .001

Table 4. Hypothesis Testing

Figure 3. PLS Model



5.1 Post-Hoc Analyses of Experimental Manipulation

To conclude if the effect on brand equity is indeed due to the experimental treatment—i.e., the manipulation of the level of engagement—we conducted a t-test comparing brand equity assessments in the pre-experiment (i.e., baseline) survey versus the post-experiment survey as well as between the low and high treatment conditions (i.e., those exposed to low engaging versus high engaging messages). B

For the comparison of brand equity scores between pre- and post-tests, we found that there was a significant difference for participants in the high engagement condition ($p = .000$), but not for those in the low engagement condition ($p = .054$), thus lending support for the fact that it is not just continued exposure to messages, but rather continued exposure to engaging messages that has a positive effect on brand equity.

Furthermore, a one-way ANOVA for all three dependent variables in the model showed that participant in the high engaging treatment group displayed significantly higher levels of brand equity ($F=4.787$; $0 = .03$), purchase intention ($F = 3.988$, $p = .05$), and future brand social media engagement intention ($F=3.923$; $p = .05$) than those in the low engaging treatment group. This further validates that the more engaging a brand's social media content, the more positive a person's attitudes toward the brand in terms of overall brand image and equity, purchase

intention, and intention to engage with future social media content produced by the brand.

5.2 Post-Hoc Test: Purchase Intention, Brand Social Media Engagement Intention Effects

Following the validation of the proposed model, we wanted to further explore if any effects occurred between the purchase intention variable and the brand social media engagement variable. While no literature pointed to either of these effects being a possibility due to the introduction of Brand Social Media Engagement Intention as a construct in this paper, one could reason that an effect is possible. A consumer could be trying to reinforce their purchase decision by commenting on it in social media or, the reverse direction, social media interaction could spawn purchase intent. Alas, neither effect was shown as significant. When considering Purchase Intention's effect on Brand Social Media Engagement Intention, this effect was found to be not significant ($p=0.110$). Conversely, Brand Social Media Engagement Intention's effect on Purchase Intention was not found to be significant ($p=0.191$). Hence, we are to conclude that one 'intention' (i.e. purchase vs. engagement) does not drive the other.

6. Discussion

The current industry emphasis on qualifying the value proposition of social media activities and quantifying the return on investment in such activities provided the impetus for this study. Brands are increasingly relying on the use of metrics, such as the number of Facebook Page fans, to evaluate the success of brand communications on this space. The first aim of this study set out to empirically test the relationship between social media-based brand engagement and purchase intention while establishing engagement metrics. To the best of our knowledge, this paper is the first attempt at offering empirical evidence of this relationship and the mediating role of brand equity. As reported in the Results section above, support was obtained for the positive effect of a brand's Facebook Page post engagement level on brand equity, as well as on the latter's dimensions of brand image and brand attitude.

Second, and building on prior research, our findings offer support for the positive effect of brand equity on purchase intentions. Third, this study proposes a new construct in *brand social media engagement intention* that measures an important behavioral outcome—continued intention to engage with the brand on social media through Liking,

Commenting, and/or Sharing—in the context of building greater brand equity and loyalty. There was strong support for the positive effect of brand equity on consumers' intentions to engage with a brand on social media.

In addition, an interesting finding emerges from the results reported earlier. First, we observe that the direct effect of brand equity on purchase intention is approximately twice as strong as that on brand social media engagement intention. Put simply, the greater equity a brand enjoys in the consumer's mind, the (~twice) more likely outcome is a future purchase than a subsequent interaction with the brand's social media content in the future. This can be explained by revisiting the definition of each construct and when one considers the alignment between equity and the target behavior: purchasing from the brand is highly aligned with the "added attractiveness to the customer that a brand name confers on a product or service", while the latter is only a subset of the numerous considerations a social media user entertains and in particular the extent to which the brand social media content in itself is likely to contribute to the consumer's personal brand upon Liking, Commenting, and/or Sharing the Page post and the outcomes that follow from his association with both the brand and the post content. This conclusion is further supported by the high level of variance explained ($R^2=37.8\%$) in purchase intention ($R^2=37.8\%$) contrasted with the lower yet significant level of variance explained in brand social media engagement intention ($R^2=18.5\%$). Hence, brand Community Managers would be wise to design and disseminate content that is not only aligned with the marketing communication objectives but is also crafted in a manner that will motivate the consumer's interaction with it – whether that is because of its visual, aesthetic, or otherwise hedonic appeal or its informational, practical or otherwise utilitarian value proposition.

Additional explanation of possible variance for the constructs can be attributed to environmental factors outside of the focus of this study. We concentrated on proactive, brand-initiated communications for this study. It is important to note that brand Facebook Page posts selected for the engaging brand content stimulus condition of this study were manually identified to ensure the elicited engagement was positive in nature, thus essentially sanitizing the data against negative responses. Should a participant have a preexisting negative attitude toward a brand, this was not accommodated for. We used a t-test to check for brand equity improvement over the course of the four-week long study and being exposed to engaging brand content but we did

not eliminate any participants based on an initially low brand attitude or brand image scores.

This study has made significant strides in advancing our understanding of social media in the context of social media-based marketing communications and contributes both to theory and practice. With respect to theory, three main contributions are put forth. First, we have extended our understanding of purchase intention antecedents by identifying an important factor in brand social media messaging engagement. This antecedent may be considered as the digital behavioral manifestation of a consumer's positive attitudes and associations with a brand. Second, by proposing a new construct—brand social media engagement intention—this study further identifies an important digital proxy for brand equity and loyalty. Third, by drawing on actual brand Facebook Page Posts that were classified according to their messaging content, message richness, message appeal, and objectively evaluated in terms of their impact (i.e. the evoked level of Likes, Comments, and/or Shares), this study sheds further light on the theoretical mechanisms through which the level of engagement associated with a post affects brand attitude, namely both through the manipulation of visual and textual content as well as through the instigation of positive feelings emerging from the message's transformational appeal. With respect to practice, as aforementioned, this study helps to empirically validate the link between social media engagement, brand attitude, and in turn purchase intent. Social media marketing is not just a platform; it is an area of communication on a deeper level with a brand's audience [5]. With the amount of social network users expected to almost double from 1.7 billion people in 2013 to 2.55 billion people in 2017, it is with due cause that firms learn the ins and outs of their effects of using this type of communication with their consumers [4; 17; 16].

Although attempts to monetize Facebook Likes and other forms of social media engagement are still myopic in our view, this paper does show that social media messages can have a positive effect on consumers' brand attitude and in turn on their intention to purchase products or services offered by the brand. However, the most interesting practical implication is that it is not continuous exposure to social media messages, but rather the exposure overall to strong, engaging messages that has a positive effect on brand attitude and in turn purchase intent. This became evident from the fact that respondents in the low engagement condition did not display a significant change in brand attitude following continued exposure to brand messages,

whereas respondents in the high engagement condition displayed significantly more positive brand attitudes following their repeated exposure to engaging brand messages. Finally, another important practical implication is that brand attitude not only affects consumers' intention to purchase from the brand, but also their intention for continued engagement with the brand, thus potentially resulting in a virtuous cycle of positive consumer engagement, brand attitude development, purchase intention, and ultimately brand loyalty.

6.1 Challenges and Future Research

The main limitation of the current study was the use of a student sample. Hence, future research aiming to replicate the findings of this study should use a national random sample to further validate the relation between social media engagement and brand attitude.

Another limitation of this study is the inclusion of only a limited set of brand-related variables. Although intended to enhance the parsimony of the current study, future studies could replicate a similar experiment, but include additional constructs, such as brand preference and brand loyalty [14].

Although experiments are useful in establishing the causal link between social media engagement, brand equity, and in turn purchase intention, they are also inherently limited due to their artificial nature. Furthermore, although purchase intention is a significant and strong predictor of actual purchase behaviors, such behaviors cannot be measured in an experimental study. Hence, future studies should aim to further assess the correlation between social media engagement and purchase behaviors, for instance, through the longitudinal regression of social media engagement metrics and transactional data associated with a brand.

7. Acknowledgement

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