

Assessing the Impact of Consumers' Brand-Related Facebook Activities on
Brand Attitude and Consumer Happiness

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“You can't connect the dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect in your future. This approach has never let me down, and it has made all the difference in my life.”—Steve Jobs

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Abstract

This study focused on examining the impact of consumers' active brand-related Facebook activities (e.g., posting on walls, participating in promotions) on consumer-brand relationships and on consumer well-being. The first research objective was to assess the impact of active participation in brand-related Facebook activities on marketing outcomes (e.g., brand attitude, purchase intention, word-of-mouth). The second research objective was to assess the impact of such participation on consumer well-being. Finally, the last objective was to test self-determination theory in the context of consumer-brand relationships.

To fulfill these research objectives, a preliminary survey and three experimental studies were conducted. The preliminary survey was designed to have participants categorize Facebook activities into passive (e.g., reading) or active (e.g., writing comments) activities, to modify an existing scale to measure the degree to which an individual humanizes a brand, and to explore the overall relationship of variables of interest (Facebook participation, consumer-brand relationship, customer-based brand equity, well-being, and tendency to humanize brands) in preparation for the main experiment. For this phase of the research 203 participants were recruited using Amazon Mechanical Turk (MTurk). The results showed that consumer-brand relationship was predicted by Facebook participation and well-being, particularly, positive affect.

The main experiment was designed to examine direct causal relationships between active (vs. passive) participation in brand activities on Facebook and brand attitude, purchase intention, willingness-to-pay, and word-of-mouth. Participants ($n = 73$) were recruited via MTurk. A between-subject experiment was conducted with a fictitious

fashion brand, Emma. Active (vs. passive) Facebook participation resulted in positive brand attitude. Autonomy support mediated the relationship between active participation in brand activities on Facebook and brand attitude. As compared to those who participated in passive activities, participants who participated in active activities reported experiencing positive emotions.

A supplementary experiment was designed to examine the effect of active (vs. passive) Facebook participation on autonomy support and brand attitude after controlling for positive affect. Participants ($n = 74$) were again recruited from MTurk. Participants were presented with negative information related to the brand (e.g., brand crisis). Even after positive affect was controlled, active participation in brand activities on Facebook resulted in autonomy support and autonomy support predicted brand attitude.

A second supplementary study was designed to determine the boundary condition of active participation in brand activities on Facebook. Participants ($n = 73$) were recruited from MTurk. When it was not clear to the participants why they had to write comments concerning the brand (i.e., no specific request for help from the brand), the effect of active Facebook participation disappeared.

In sum, the present research showed that consumers' active participation relative to brands on social media influenced marketing outcomes such as brand attitude. In addition, there were both direct consumer benefits (e.g., well-being) as well as retailer benefits from the consumer-brand relationships enhanced by consumers' active participation in brand activities. The research also identified an underlying mechanism (autonomy support) that caused the positive effect between consumers' active participation in brand activities and both brand attitude and consumer well-being. This

finding supported and expanded the applicability of self-determination theory to understanding consumer-brand relationships.

As social media including Facebook continues to trend upward, it is dramatically changing how businesses introduce, advertise, and promote their products as well as interact with their consumers. In addition, social media's impact on consumer's quality of life as well as a business is gaining attention from both researchers and policy makers. Thus, the outcomes of this study have useful implications for both consumers and brand managers. For example, brand managers might want to develop and use social media in marketing events that increase consumers' autonomy support for the brand. Consumers might want to actively and sincerely participate in social media marketing to increase their own happiness.

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CHAPTER 1

INTRODUCTION

This chapter begins with a general background on the use of social media for brand marketing and for building consumer-brand relationships. The sections following address the problem statement of the research, the purpose of this study, and the significance of the research.

Background

Social media refers to “the interaction of people and also to creating, sharing, exchanging, and commenting contents in virtual communities and networks” (Ahlqvist, Bäck, Heinonen, & Halonen, 2010, p. 4). It enables “the creation and exchange of user generated content” (Kaplan & Haenlein, 2010, p. 61). As types of social media have grown and increasingly individuals are joining sites and using social media to communicate with each other, the creation and exchange of information and content on social media is no less important than face-to-face interaction.

Among all social media types, Facebook has the highest number of users and most active users. The Wall Street Journal’s estimates are that over one billion users actively use Facebook monthly (2012). Facebook is a social networking site. Social networking sites are “applications that enable users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending emails and instant messages between each other” (Kaplan & Haenlein, 2010, p. 63). These personal profiles include diverse types of information including photos, videos, audio files, and blogs. On Facebook, users can continuously (i.e., often daily) view changes to the status of their friends, send messages to family members, and share photos

with others. In response to posted content, users can share their opinions by indicating whether they like content by clicking “like” buttons and/or writing comments in response to content expressing their own feelings and thoughts. They can also share content posted by others with their other friends by clicking “share” buttons and linking an original post by someone else to their “walls.” These “like” and “share” buttons make it possible to spread any content or event to the world faster than ever before in human history.

As a result of what users can do and the extremely high number of users, Facebook creates an opportunity for active communication not only among friends and family members but also among strangers. When individuals communicate with strangers, the interaction can lead to new friendships and social connections. This ability to communicate with known and unknown others leads to building virtual communities of individuals with similar interests. Thus, individuals can make new friends and social connections in ways not possible prior to the development of social media. For example, celebrities have Facebook sites where they share details of their daily lives with their fans. The fans follow (i.e., simultaneously update the status of their person of interest) their favorite celebrities building a relationship with them as well as with other fans (also referred to as followers) developing a virtual network of individuals with shared interests. This same process can occur repeatedly with a range of social organizations including retailers (e.g., Gap), manufacturers (e.g., Harley Davidson), or consumers (e.g., Consumer Watchdog).

Facebook consists of not only many people sharing information about their personal lives but also contains approximately 15 million organizations that represent brands and share brand information (Facebook, 2013). A brand is “a name, term, sign,

symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors” (Kotler, 1991, p. 442). Now each brand is an active user of Facebook that shares its information to other users and reacts to other users comments. Thus, brand management via Facebook includes efforts to create content that generates brand awareness by attracting attention to the brand, creates brand knowledge, and encourages users to share their brand knowledge within their social networks (Trattner & Kappe, 2013). For example, brand managers post promotions (e.g., discounts, free samples, coupons), information (e.g., data on current and future products), and entertainment (e.g., videos) to attract people to their brand pages (i.e., generate traffic). In addition, brand managers answer customers’ questions in real time and try to influence customers’ decision making so that it would lead to actual purchase (see Figure 1). As a result, brand managers expect that their efforts will result in positive electronic word-of-mouth (eWOM) that ultimately contributes to maintaining or even increasing customer-based brand equity (Keller, 1993).

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625 people like this. Top Comments

Write a comment...

Meredith Wang That's a pretty amazing shirt
Like · Reply · 1 · 6 hours ago

N Nordstrom Isn't it adorable, Meredith? To take a closer peek, follow this link: <http://bit.ly/1sroQrd>. - Patricia

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Figure 1. An example of social media marketing of brands using Facebook (e.g., Nordstrom)

Brand equity has been defined “in terms of the marketing effects uniquely attributable to the brand—for example, when certain outcomes result from the marketing of a product or service because of its brand name that would not occur if the same product or service did not have that name” (Keller, 1993, p. 1). There are four components of brand equity. They are brand awareness, brand association, brand loyalty, and perceived quality (Aaker, 1991; Keller, 1993). A brand has equity when it is recognizable by consumers and they are able to recall it or memorable (brand awareness). Also, a brand has equity when the brand creates positive attitudes and feelings within consumers (brand association). If consumers view a brand as having equity, they may become brand loyal. Brand loyalty includes seeing oneself “in an enduring relationship” with a brand (brand loyalty). Finally, perceived quality can be measured by the quality offered by the product or brand, level of differentiation relative to its competing brands, price, availability in different sales channels, and the number of line or brand extensions (perceived quality).

There are several types of brand equity. Among these types, customer-based brand equity was the focus of the current project as the primary research objective was to examine components of consumer-brand relationships on Facebook and the effects of these relationships on consumer’s perceived brand equity rather than on the brand’s financial gain or shareholder’s gain. Customer-based brand equity refers to “the differential effect of brand knowledge on consumer response to the marketing of the brand” (Keller, 1993, p. 2). Brand knowledge is conceptualized in terms of two components: brand awareness and brand image. Customer-based brand equity occurs when a consumer is familiar with the brand (i.e., has brand awareness) and holds some

favorable, strong, and unique brand associations in memory (i.e., has an image of the brand). According to this definition, “a brand is said to have positive customer-based brand equity if consumers react more favorably to the product, price, promotion, or distribution of the brand than they do to the same marketing mix element when it is attributed to a fictitiously named or unnamed version of the product or service” (Keller, 1993, p 8.). Thus, brands with positive customer-based brand equity will generate enhanced revenues, lower costs, and greater profits compared to other brands.

Problem Statement

It is true that companies are increasingly utilizing social media marketing to increase their customer-based brand equity. Accordingly, how to assess social media return on investment (ROI) has become a crucial issue. However, the assessment of social media ROI remains controversial. According to a survey conducted by Duke University’s Fuqua School of Business (2013), almost half (49%) of 410 Chief Marketing Officers (CMOs) reported that they are not able to quantify whether social media has made a difference for their companies. Thirty-six percent of respondents said they had a good sense of qualitative but not quantitative results and only 15% said they have seen a proven quantitative impact. Little is known about which specific factor of social media contributes to which marketing outcomes and how. Many companies simply do what other companies are doing without designing specific social media marketing strategies. However, the inability to assess ROI has not stopped companies from using social media to market their brands. According to the same survey, CMOs were predicted to increase their share of social media spending from 6.6% to 15.8% by 2018.

One way to understand the impact of social media marketing on brand equity is to study consumer-brand relationships. Previous research has established positive associations between strong consumer-brand relationships and multiple marketing outcomes including brand attitude, WOM, and purchase intention (Aaker, 1991; Ahluwalia & Kaikati, 2010; Dick & Basu, 1994; Keller, 1993; Thomson, MacInnis, & Park, 2005). But left unknown is whether a consumer-brand relationship framework is applicable to the interaction between consumers and brands in the social media setting. Furthermore, as consumers' activities on social media and virtual brand communities are growing rapidly, the role of consumer engagement (e.g., active Facebook participation) in consumer-brand relationships is gaining attention from many researchers (e.g., Brodie, Ilic, & Hollebeek, 2011) as well as brand managers. For example, in addition to brand management efforts, consumers voluntarily establish virtual brand communities and share information about the brands with other consumers. Thus, this research was planned to address the gap in knowledge concerning the impact of social media marketing on brand equity from the perspective of consumer-brand relationships.

Purpose of the Study

My research purposes were threefold: (1) to assess the impact of consumer-brand relationships established and maintained through active Facebook participation on marketing outcomes such as brand attitude and purchase intention, (2) to assess the impact of active interaction with brands (e.g., posting on walls, participating in promotions, spreading word-of-mouth) through Facebook on non-brand related outcomes, specifically, on consumer well-being (e.g., consumer happiness), and (3) to

assess whether self-determination theory (Deci & Ryan, 2000; Ryan & Deci, 2000) can be used to explain any consumer-brand relationships that are evident.

Significance of the Study

Studying consumer behavior on Facebook was important for several reasons. First, the current study contributed to understanding the role of consumers in social media marketing. For example, traditionally marketing communications were solely controlled by business. Brand managers created and established a certain brand image through consistent and controlled advertisements and messages with limited input or feedback from consumers. However, with social media consumers' respond to brands in unexpected and unanticipated ways and thus, participate in creating and establishing brand images (Mangold & Faulds, 2009), that is, they co-create brand meaning (Allen, Fournier, & Miller, 2008). Consumers' contributions can result in meanings linked to brands that are very different from what the company initially planned or expected. For example, consumers' activities on social media such as Facebook can build (e.g., generate positive word of mouth activities) or dilute brand meaning (e.g., generate negative word of mouth). These consumer activities can bolster or harm brand image and there is little the business can do about it. Thus, findings from the current research have theoretical and practical implications for the consumer-brand relationship approach, as consumer's contributions to consumer-brand relationships have grown incomparably bigger than even before when traditional marketing was prevalent.

Second, the current research tested one underlying explanation for a positive association between social media marketing and customer-based brand equity using self-determination theory. Specifically, it examined aspects of social media participation that

may contribute to brand equity. Although brand managers are participating in social media marketing for their brands, they do not know which aspect of consumer participation specifically leads to their marketing outcomes. The current research begins to answer this question.

Third, as outcomes the firm's gain by using social media are important, the impact of participating in social media on users also gains importance. Specifically, whether the use of social media makes the user's life better, worse, or has no effect at all is important to researchers and policy makers (e.g., Bargh & McKenna, 2004; DiMaggio, Hargittai, Neuman, & Robinson, 2001). Thus, the current research began an initial investigation into the social impact of Facebook activity on life quality.

The expected outcomes of the present research have useful implications for consumers. First, when people spend time on Facebook, they might not want to passively browse and scroll through newsfeeds. Instead, they might want to actively engage in and respond to the content that is available. This interaction can result in people feeling connected to their "friends," friends that include both real and virtual people (i.e., brands) perhaps resulting in enhancing their happiness.

Second, engaging in active brand-related activities and content using Facebook may result in consumers experiencing a "lift" without purchasing. Or put another way, engaging in brand related activities using Facebook may be another form of retail therapy. Retail therapy is a means to temporarily alleviate negative moods through shopping and purchasing (Atalay & Meloy, 2011; Kang & Johnson, 2011). Consumers engaging with brands using social media may be sustainable because it may decrease

actual consumption while still providing some of the benefits consumers get from interacting with brands.

Furthermore, the findings of the study have useful implications to brand managers. As social media use is rising, brand managers might want to develop engaging and experiential advertisements and promotions. For example, they might want to encourage their consumers to click “like” and “share” buttons to spread promotional messages and images. At the same time, brand managers might want to be aware of their consumers’ activities, for example, if friends reply to their friends’ postings. In that way, brands might be able to build social bonding. In addition, these activities foster the development of brand community (McAlexander et al., 2002; Muniz & O’Guinn, 2001; Schau et al., 2009) and latent positive outcomes including building and maintaining brand equity (Aaker, 1991; Keller, 1993).

Definition of Terms

There are a variety of concepts used in this research. Following is a listing of the key concepts and their definitions.

Anthropomorphism: Attributing mind, intentions, effortful thinking, emotional states, and behavioral features to nonhuman objects (Epley, Waytz, & Cacioppo 2007).

Autonomy support: One relational partner acknowledging the others’ perspective, providing choice, encouraging self-initiation, and being responsive to the other (Deci, La Guardia, Moller, Scheiner, & Ryan, 2006).

Brand attitude: Consumers’ overall evaluation of a brand (Wilkie, 1986).

Consumer-brand relationship: Viewing a brand as a relationship partner (Fournier, 1998).

Consumer engagement: The intensity of an individual's participation and connection with the organization's offerings and activities initiated by either the customer or the organization (Vivek, Beatty, & Morgan, 2012)

Customer-based brand equity: Differential effect that brand knowledge has on the consumer or customer response to the marketing of that brand (Keller, 1993).

Emotional attachment: A relationship-based construct that reflects the emotional bond connecting an individual with a specific target object (Bowlby, 1979).

Life satisfaction: A global assessment of a person's quality of life according to his/her chosen criteria (Diener, Emmons, Larson, & Griffin, 1985)

Loneliness: A situation when a person's network of social relationships is smaller or less satisfying than the person desires (Peplau, Russell, & Heim, 1979).

Self-brand connections: Associations between individuals' self-concept and brand meanings (Escalas & Bettman, 2005).

Self-determination theory: A general theory of motivation that systematically explicates the dynamic of human need, motivation, goal-oriented behavior, and well-being. Autonomy, competence, and relatedness are basic psychological needs nurture psychological growth, integrity, and well-being (Deci & Ryan, 2000; Ryan & Deci, 2000).

Subjective well-being: A person's cognitive and affective evaluations of his or her life. These evaluations include emotional reactions to events as well as cognitive judgments of satisfaction and fulfillment. Thus, subjective well-being is a broad concept that includes experiencing pleasant emotions, low levels of negative moods, and high life satisfaction (Diener, Lucas, & Oishi, 2002).

Tendency to humanize brands: An anthropomorphized representation of a brand.

Examples include Mr. Peanut, Tony the Tiger, and the Michelin Man. (Aggarwal & McGill, 2007).

CHAPTER 2

LITERATURE REVIEW

The chapter begins by introducing research findings documenting the importance and outcomes of strong consumer brand relationships. Second, a discussion of self-determination theory is presented to examine its applicability to consumer-brand relationships. Next, Facebook is presented as a context to test the applicability of self-determination theory to consumer-brand relationships. Tendency to humanize brands is also discussed as a supplementary outcome of consumers' Facebook participation. Finally, the research hypotheses are presented.

Theoretical Background

Consumer-brand Relationships

Several researchers have found that people form relationships with brands in a manner similar to how they form connections with other people (e.g., Aggarwal, 2004; Fournier, 1998; Swaminathan, Stilley, & Ahluwalia, 2009; Thomson, 2006). This relational approach to brands has been partly attributed to the idea that consumers may think of brands in a way similar to how they think about living beings. Fournier (1998) conducted a qualitative study of the analogy and validated that indeed people are able to consider brands as “relationship partners” and form relationships with them as they do with other people. Through three in-depth case studies, she showed that there are many different kinds of relationships between consumers and brands and the extent of these relationships can vary from casual to committed relationships. For example, participants described their relationship with Coke Classic and Ivory soap as “best friends” and their

relationship with Gatorade as “a committed partnership” but their relationship with a trial size shampoo was described as a “fling.”

Factors in building consumer-brand relationships. Fournier (1998) conceptualized six-faceted brand relationship quality constructs from her qualitative research: self-connection, love and passion, interdependence, commitment, intimacy, and brand partner quality (see Table 1). Relative to her original conceptualization, subsequent researchers found the first two factors were key important to building consumer-brand relationships: “self-brand connection” (e.g., Aaker, 1999; Belk, 1988; Escalas & Bettman, 2005; Sirgy, 1982) and “love and passion” (e.g., Carroll & Ahuvia, 2006; Fedorikhin, Park, & Thomson, 2008; Holbrook & O’Shaughnessy, 1984; Thomson et al., 2005; Yim, Tse, & Chan, 2008).

Self-brand connection refers to the fit between a consumer and a brand. It implies closeness, similarity, or overlap between a consumer and a brand. When the goal or value of a brand matches with that of a consumer (e.g., Sirgy, 1982), it creates similarity that results in feeling a closeness and intimacy to the brand (Aaker, 1999). For example, an individual who considers himself/herself as tough and strong will be likely to see a self-brand connection between himself or herself and Nike, a brand that is marketed as having a “rugged” personality.

Consumers who experience self-connections to brands will use brands to communicate important aspects of their actual or desired identities (Escalas & Bettman, 2005) and to signal important preferred attributes to others (Belk, 1988). For example, these consumers may choose specific brands to enable them to show their fit or belongingness within a specific social class as is the case when consumers purchase

luxury brands to signal their status or ideal self to others (Berger & Ward, 2010; Han, Nunes, & Dreze, 2010).

Finally, a self-brand connection can be created when the value(s) a brand symbolizes matches with important values of consumers. For example, The Body Shop is known for placing a priority on offering products that are eco-friendly. If a consumer believes it is important to be eco-friendly and to purchase eco-friendly products, there can be a self-brand connection between this brand and that consumer.

Table 1

A Six-faceted Brand Relationship Quality Construct (Fournier, 1998)

Facet	Description
Self-connection	Degree to which the brand delivers on important identity concerns, tasks, or themes, thereby expressing a significant aspect of self
Love and Passion	Rich affective grounding reminiscent of concepts of love in the interpersonal domain
Interdependence	Frequent brand interactions, increased scope and diversity of brand-related activities, and heightened intensity of individual interaction events
Commitment	The intention to behave in a manner supportive of relationship longevity
Intimacy	Elaborate knowledge structures develop around strongly held brands, with richer layers of meaning reflecting deeper level of intimacy and more durable relationship bonds
Brand Partner Quality	Overall relationship satisfaction and strength

Second, love and passion or emotional attachment between a consumer and a brand is created by frequent positive interaction with a brand (e.g., Carroll & Ahuvia, 2006; Fedorikhin, Park, & Thomson, 2008; Thomson et al., 2005). To achieve emotional attachments with customers, brands develop ways to provide customized, responsive, and regular interaction with their valued customers. This regular interaction with customers could play an important role in a consumer's life by fulfilling emotional needs, contributing to building attachments, and tying positive emotions to the brand (Fournier, 1988). The arousal and strong emotion evoked during communication between brands and consumers (e.g., advertising, experience with its service personnel) can transfer over to the brand (Holbrook & O'Shaughnessy, 1984; Yim, Tse, & Chan, 2008) strengthening emotional bonds.

In addition to the first two factors that were initially suggested by Fournier as key to building brand-customer relationships, brands that are "human-like" facilitate relationship formation with consumers. Human-like brands are established by different methods including infusing certain human characteristics to the brand (Aaker, 1999), linking celebrities with specific and well-known personal traits to the brand (Escalas & Bettman, 2009), and developing human brands (e.g., Thomson, 2006). A human brand is a brand that is so strongly identified with a human that the customer views the brand as human. The classic example of a human brand is the development of the persona of Betty Crocker by General Mills. The persona was developed to give a humanized response to consumer questions. The name Betty was selected because it was viewed as a cheery, all-American name. Crocker came from the last name of one of the company's directors. In the name of Betty Crocker, cookbooks were developed and cooking tips were dispensed.

At one point in time, Betty was voted the second most popular woman in the US. Indeed, humanizing a brand can benefit both the self-connection and love and passion aspects of a consumer-brand relationship.

Outcomes of consumer-brand relationships. Strong and affect-laden consumer-brand relationships create various positive outcomes for brands (e.g., Aaker, 1991; Ahluwalia & Kaikati, 2010; Dick & Basu, 1994; Keller, 1993; Thomson, MacInnis, & Park, 2005). When consumers are attached to a brand, they no longer engage in regular information processing concerning the brand (Chaiken, Giner-Sorolla, & Chen, 1996). Rather, consumers often demonstrate defensive processing relative to these brands. For example, when people are assessing an object, usually they put more weight on negative information than positive information because of the diagnosticity of negative information (Herr, Kardes, & Kim, 1991). This unequal weighing is called a negativity effect. However, when it comes to the brands that people are attached to, consumers no longer show a negativity effect (Ahluwalia, 2002). Instead, they resist new negative information and isolate it from their assessment of the brand.

Furthermore, people generalize positive information to other attributes of the brand. That is, positive information concerning the brand spills over onto other irrelevant attributes (i.e., spillover effect) but negative information does not. As a result, consumers who are attached to brands are resistant to any product-harm crisis, that is, an event that in other situations would be significantly damaging to brand equity (e.g., British Petroleum (BP)'s oil spill, Toyota's recalls). Also, if the brand does suffer from any product-harm crisis, consumers that are attached to brands easily recover from such events (Klein & Ahluwalia, 2005), thus, retaining loyalty to the brand.

In addition, a strong consumer-brand relationship affects how consumers perceive and process information concerning other rival brands. When there is a strong customer-brand relationship, consumers are resistant to and pay less attention to positive information about competing brands.

Previous researchers have investigated specific outcomes linked to strong consumer-brand relationships. These outcomes include favorable brand attitudes, purchase intentions, and engaging in positive WOM concerning the brand. All of these contribute to brand equity (Aaker, 1991; Keller, 1993). The following section discusses each of outcomes in detail.

Brand attitude. Brand attitude refers to consumers' overall evaluation of a brand (Wilkie, 1986). Brand attitude forms the basis for consumer behaviors such as brand choice (Keller, 1997). Aaker and Jacobson (2001) aimed to assess the extent to which positive brand attitude had value relevance (i.e., helps predict future earnings and firm value) in high-technology markets. They collected data over-time (from 1988 to 1996) about nine firms in the computer industry (e.g., Apple, Compaq, Dell, Hewlett-Packard, IBM, Microsoft). By analyzing the impact of consumer brand attitude on financial performance, they found that brand attitude was associated with stock return and predicted future-term financial performance (e.g., return on equity). In addition, they found major new product attributes (e.g., iMac, ThinkPad), product problems, or changes in top management were drivers of brand attitude in high-technology markets. Thus, the authors concluded that investment in building brand attitude for high-technology firms paid off in terms of financial performance and increased firm value.

Purchase intention. While purchase intention does not equate to actual purchase behavior, it has been demonstrated that measures of purchase intention do possess predictive usefulness (Jamieson & Bass, 1989). For example, Cobb-Walgren, Ruble, and Donthu (1995) examined consequences of brand equity, specifically, consumer preferences and purchase intentions. For comparative purposes, the authors tested two sets of brands, one from a service category characterized by fairly high financial and functional risk (hotels), and one from a generally lower risk product category (household cleansers). Based on Consumer Reports ratings, they selected two brands from each set that were objectively similar but had invested significantly different levels into advertising spending over the past ten years. American MBA students and undergraduate students participated in the research. Across both categories of hotel and household cleansers, the brand with a high advertising budget yielded a high level of brand equity. Also, the brand with high equity in each category generated significantly greater preferences and purchase intentions than brands with low equity levels.

In subsequent research Laroche, Kim, and Zhou (1996) examined the relationships among brand familiarity, confidence in brand evaluations, brand attitudes, and purchase intention. Participants were middle-aged Canadians. Brand familiarity influenced participant's confidence in brand evaluation and it affected purchase intentions relative to the brand. In addition, brand familiarity also affected participants' attitude toward and intention to purchase the brand. In other words, the relationship between brand familiarity and intention to buy the brand was mediated by both participants' confidence in their brand evaluation and their brand attitude.

In associated research Erdem and Swait (2004) examined the role of brand credibility (trustworthiness and expertise) on brand purchase. American college students participated in the research. It was trustworthiness, rather than expertise, that affected participants' choices and brand consideration.

Word-of-mouth (WOM). As discussed earlier, related to emotional intensity, Carroll and Ahuvia (2006) tested hypotheses involving brand love and potential antecedents and outcomes of brand love. The results of their survey of 334 adult consumers showed that brand love mediated the relationship between the two antecedent variables (hedonic product, self-expressive brand) and two outcome variables (brand loyalty, positive WOM). Consumers who loved their brands were loyal to them and willing to spread positive WOM concerning them.

In subsequent research Trusov, Bucklin, and Pauwels (2009) compared WOM marketing with traditional marketing to assess which is more effective in growing the number of new members for an Internet social networking site. Outbound WOM, traditional marketing (i.e., advertising) and new signups were collected for data analysis. Although there was no difference between WOM marketing and traditional marketing in the short run, in the long run outbound WOM referrals impacted new signups significantly longer than traditional marketing efforts did. Furthermore, considering the substantial difference between the cost of WOM and advertising, the authors recommended using WOM to generate new members for the social networking firms.

WOM on social networking sites or electronic WOM (eWOM) has also been the focus of some researchers. Chu and Kim (2011) studied how social relationship factors related to eWOM transmitted via online social websites. They collected data from 400

undergraduate students. Their results showed that tie strength, trust, normative and informational influence were positively associated with users' overall eWOM behavior while homophily (i.e., the tendency of individuals to associate with similar others) was negatively associated with eWOM.

Application of consumer-brand relationships to social media. A brand's Facebook page can be an example of brand community. Since brand community is known to enhance all four components of brand equity (i.e., brand awareness, brand association, brand loyalty, perceived quality) (Aaker, 1991; Keller, 1993), similar outcomes of consumer-brand relationships were anticipated when these relationships were developed or maintained through activities on Facebook. In addition, brand community contributes to value creation (Schau, Muniz, & Arnould, 2009).

Specifically, as social media including Facebook has developed into an important means of brand management, researchers have examined the impact of brands' Facebook activities on their equity. For example, Kim and Ko (2012) using luxury fashion brands studied the relationship between social media marketing and customer equity. They collected data from participants in South Korea and asked them about social media marketing activities, value equity, relationship equity, and brand equity (i.e., brand awareness, perceived value, brand personality, brand association, perceived uniqueness). Customer lifetime value of Louis Vuitton was used as a proxy for customer equity. Social media marketing activities of luxury fashion brands increased purchase intention and customer equity. These relationships were mediated by value equity, relationship equity, and brand equity. Furthermore, positive word-of-mouth via social media significantly enhanced brand equity.

In subsequent research, Ansari-Dunkes and van Enkevort (2013) studied the influence of consumer's brand-related activities on brand equity. They collected data from 101 European Facebook users between the ages of 18 and 35 and asked them about consumer brand-related activities and brand equity. The more frequent the users' interaction with the brands, the more positive the effect on a brand's functional and hedonic brand image and brand attitude (i.e., brand equity).

In sum, building and maintaining strong and affect-laden consumer-brand relationships is important as these relationships often result in brand loyalty, positive brand attitude, and increased market share for a brand. Brand management activities on Facebook appear to result in distinct benefits related to building and strengthening consumer-brand relationships. Therefore, the current research was designed to further investigate relationships between brand activities designed to build and maintain consumer-brand relationships using Facebook and consumer-based brand equity.

Self-determination Theory

The framework for this research was self-determination theory (Deci & Ryan, 2000). Starting as a theory of motivation, self-determination theory has been widely used to study interpersonal relationships. Researchers (e.g., La Guardia & Patrick, 2008; Ryan, 1995) have consistently showed that fulfilling psychological needs of autonomy, competence, and relatedness in relationships results in optimal relationship satisfaction, functioning, and well-being. When applying the self-determination theory to consumer-brand relationships, it was assumed that similar outcomes should result.

Development of the theory. Edward Deci and Richard Ryan (2000) developed self-determination theory to address people's inherent tendency for growth and

fulfillment of their innate psychological needs. Their early work compared intrinsic and extrinsic motivations. These categories of motivation were developed based on the degree to which they have been internalized (Ryan, 1995). Internalized motivations are classified as intrinsic (vs. extrinsic motivations). For example, people are often motivated to act in response to external rewards such as money, prizes, praise, and public recognition (i.e., extrinsic motivation). In contrast to an emphasis on external motivation, self-determination theory focuses on internal sources of motivation such as a need to gain knowledge or independence (i.e., intrinsic motivation).

Deci and Ryan (2000) in their theory identified three basic psychological needs: autonomy, competence, and relatedness. They argued that the conditions supporting individuals' experience of autonomy, competence, and relatedness would promote intrinsic but not extrinsic motivations of individuals. Consequent outcomes would include individuals' enhanced performance, persistence, and creativity. Furthermore, individuals' psychological well-being as well as optimal functioning was predicated on autonomy, competence, and relatedness. On the other hand, the researchers proposed when any of these three psychological needs was not fulfilled, the cost would be detrimental impacts on psychological well-being. Later in the development of the theory, the theory was used to look at cross-developmental (e.g., childhood, adolescent) and cross-cultural settings (e.g., East Asians) for further validation and refinement. As a result, three basic needs—autonomy, competence, and relatedness—were demonstrated to be universal aspects of human functioning across ages and cultures.

“Relationship” has been one of the diverse applications of self-determination research. Researchers making application of self-determination theory have repeatedly

found that satisfaction of all of three innate psychological needs—autonomy, competence, and relatedness—yielded self-motivation, performance, and well-being (Ryan & Deci, 2000; Deci & Ryan, 2000). In this framework, autonomy refers to self-rule, self-initiation, volition, and willing endorsement of one’s behavior (Deci, 1975). Competence refers to the propensity to experience challenge and mastery in one’s activity (White, 1959). Relatedness (or the need to belong) refers to the tendency to be oriented toward forming strong and stable interpersonal bonds (Baumeister & Leary, 1995). Applied to interpersonal relationships, the theory proposes that individuals’ psychological needs are fulfilled (need fulfillment) and their functioning and well-being is optimal “when supportive partners actively attempt to understand the person’s interests, preferences, and perspectives (autonomy), provide clear, consistent, and reasonable expectation and structure (competence), get involved with, show interest in, direct energy toward the person, and convey that the person is significant and cared for noncontingently (relatedness)” (La Guardia & Patrick, 2008, p. 202).

Among the three needs, autonomy has received substantial attention from researchers interested in interpersonal relationship research (e.g., La Guardia & Patrick, 2008). Autonomy is related to the earlier discussion of intrinsic motivation (vs. extrinsic motivation). Intrinsic motivation is based on the satisfaction received from behaving for its own sake rather than for financial gain, appearance, popularity, or fame. Autonomy support provided by one relational partner enhances intrinsic motivation, the quality of performance, and the psychological health of the other (Ryan & Deci, 2000). Autonomy support refers to one relational partner acknowledging the others’ perspective, providing choice, encouraging self-initiation, and being responsive to the other (Deci, La Guardia,

Moller, Scheiner, & Ryan, 2006). In addition, giving autonomy support yielded the same or even stronger relational and psychological benefits as receiving autonomy support (Deci et al., 2006). That is, the giver of autonomy support also experienced the same or higher relationship satisfaction and happiness.

As consumers' voluntary activities with brands on social media are increasing, understanding the role of autonomy support in consumer-brand relationships is important to understanding how consumers' benefit from brand-consumer relationships. The following section provides a review of related research addressing the outcomes of autonomy support.

Outcomes of autonomy support. Deci and his colleagues (2006) examined autonomy support within close friendships conducting a series of research projects. For study 1, they collected data from 98 undergraduate close-friends dyads in return for extra credit in a course. Participants completed a questionnaire containing measures of friendship autonomy support, basic psychological need satisfaction, emotional reliance, relationship-specific attachment security, dyadic adjustment scale, and inclusion of other in the self. They used Griffin and Gonzales (1995) methods to analyze their dyadic data to separate individual-level relations from dyad-level relations. A person's perceived autonomy support from a close friend predicted that person's experiences of need satisfaction (autonomy, competence, relatedness in relationship), emotional reliance, attachment security, dyadic adjustments, and inclusion of friends in the self. Also, the mutuality in perceived autonomy support within close-friendship dyads was also important because if one partner were high in autonomy support, the other partner also tended to be.

Study 2 tested whether autonomy support would also predict 1) psychological well-being and 2) the experience and expression of emotions. Most importantly, it tested whether a person's giving autonomy support to a friend was positively related to the person's need satisfaction, relationship quality, and well-being after controlling for the autonomy support the person received from the friend. With 124 close-friend dyads, the researchers measured autonomy support provided to the friend, psychological well-being, vitality when with the friend, relationship satisfaction, and experience and expression of positive and negative emotions (PANAS). The results showed that autonomy support received was related to vitality with the friend, overall relationship satisfaction, well-being, the experience of positive affect and less negative affect, and the expression to the friend of both types of affect. Providing autonomy support to a friend predicted the givers' experience of relationship quality. Interestingly, giving autonomy support to one's friend was also associated with positive relational functioning as well as greater overall well-being. That is, giving support had its own unique effect on a person above the benefit(s) attained from receiving support from his or her friend (see Figure 2).

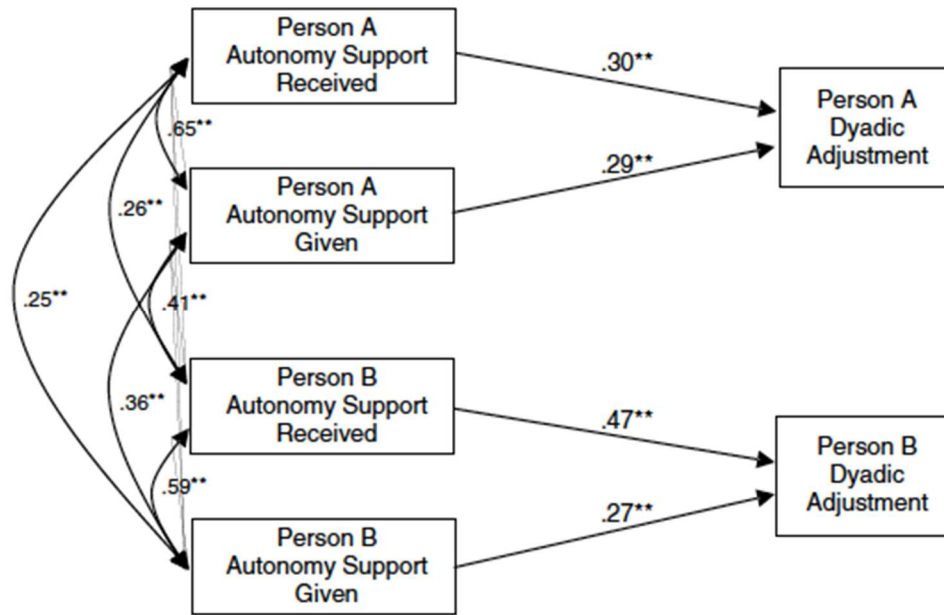


Figure 2. The structural equation model showing how the perceptions of each partner in a dyad “receiving autonomy support from” and “giving autonomy support to” his or her close friend relates to each partner’s experience of dyadic adjustment (Deci et al., 2006)

In addition, Patrick, Knee, Canavello, and Lonsbary (2007) examined need satisfaction within romantic relationships. They assessed the extent to which romantic partners provided need support for each other and the extent to which the giving and receiving of support each contributed to relational quality. Sixty-six ethnically diverse couples completed questionnaire packets of need fulfillment, relationship quality, perceived conflict, and responses to conflict in a Latin square design. Analysis of interaction between actor and partner showed that the more need supportive people were of their partners (giving), the less they perceived conflict and the less they were defensive within any conflict as well as the more satisfied and committed they were to the relationship. Furthermore, the more that their partners were supportive of them

(receiving), the less they perceived conflict and were defensive within any conflict as well as the more satisfied they were in the relationship (see Figure 3).

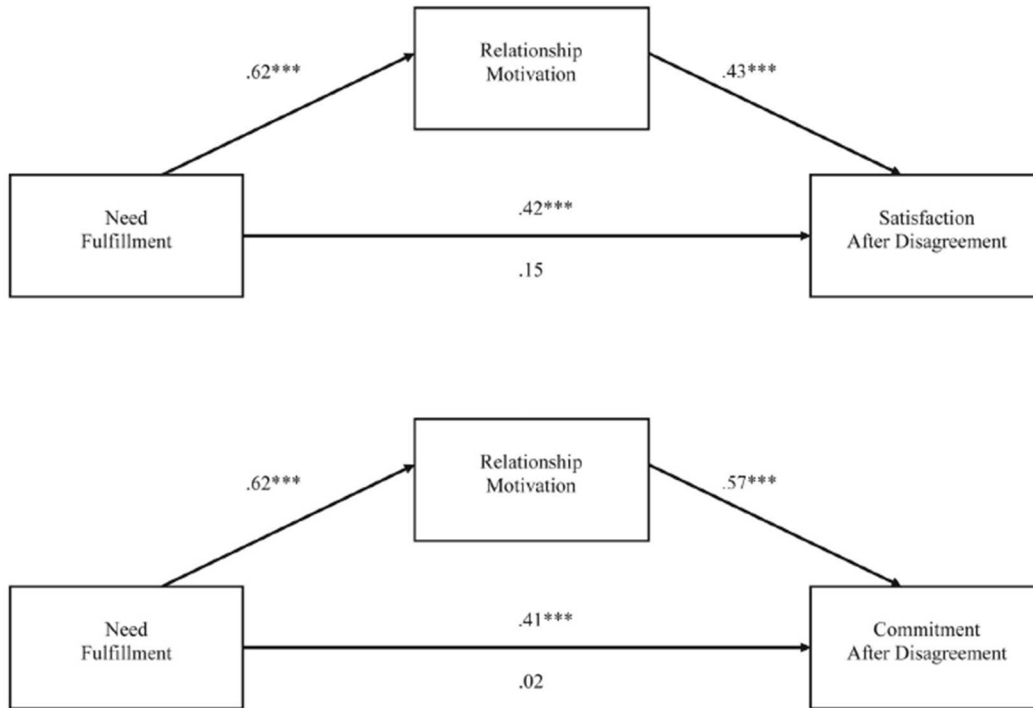


Figure 3. Mediation model for need fulfillment predicting post-disagreement satisfaction and commitment (Patrick, Knee, Canevello, & Lonsbary, 2007)

Finally, the importance of autonomy support appears to be similar across cultural contexts and in different relationship domains. For example, Jang, Reeve, Ryan, and Kim (2009) examined teacher-student relationships, student’s learning experience, and well-being using self-determination theory. With Korean high school students, they conducted a longitudinal study. Two hundred nine participants completed a questionnaire assessing autonomy support versus external teacher control, psychological needs (autonomy, competence, relatedness), positive educational outcomes (achievement, engagement),

intrinsic motivation, and proneness to negative affect. Because it was a longitudinal study, participants completed the same questionnaire three times: before a semester, in the middle of that semester, and at the end of a semester. With structural equation modeling, their research showed that teacher's autonomy support (vs. external control) enhanced (vs. diminished) the satisfaction of psychological needs of students (autonomy, competence, relatedness) resulting in both positive academic (achievement, engagement) and well-being outcomes (intrinsic motivation, proneness to negative affect). Thus, in a collectivistic setting, autonomy support retained its ability to facilitate internalization, need satisfaction, and wellness.

In sum, autonomy support has been investigated with various close relationships including reciprocal relationships such as friends and romantic partners and nonreciprocal partnerships such as physician-patient, parent-child, teacher-student, manager-worker, and other pro-social relationships. Results from these research studies have been consistent (La Guardia & Patrick, 2008) and suggest that in close relationships, feeling a sense of autonomy is essential for a high-quality relationship. Results also suggest that experiencing mutuality of autonomy support is related to relational and personal well-being (Deci et al., 2006). Finally, the importance of autonomy support has also been demonstrated within a collectivistic culture (Jang et al., 2009).

Application of the Self-determination Theory to Consumer-Brand Relationships via Facebook

According to an assumption of consumer-brand relationship (Fournier, 1998), that is, that consumers consider brands as relationship partners, it is plausible that consumers' autonomy support for brands may contribute to their relationship quality with brands and

to their well-being. Facebook provides an ideal setting to test the applicability of interpersonal relationship theory (i.e., self-determination theory) to consumer-brand relationships because consumers are able to interact with their favorite brands in a manner that is similar to how they interact with their human friends. In addition, by providing comments via Facebook pages, consumers can give autonomy support to brands as they might to their friends. Thus, it was expected that applying self-determination theory to investigate consumer-brand relationships in the context of Facebook would document that consumers experience similar relational and psychological benefits (i.e., relationship quality, well-being) from consumer-brand relationships as they do from interpersonal relationships.

Active vs. passive participation. Different from other marketing channels that provide one-way communication from brands to consumers, social media including Facebook provides the possibility of two-way communication between consumers and brands. As a result, “consumer engagement” in a virtual brand community has been investigated with the rise of social media. A virtual brand community refers to “a specialized, non-geographically bound, online community, based on social communications and relationships among a brand’s consumers” (De Valck, Van Bruggen, & Wierenga, 2009, p. 185). A Facebook brand page is a kind of virtual brand community. Although extensively used, consumer engagement is still an evolving concept. Consumer engagement in a virtual brand community involves specific interactive experiences between consumers and the brand, and/or other members of the community. “Consumer engagement is a context-dependent, psychological state characterized by fluctuating intensity levels that occur within dynamic, iterative engagement processes. It is a

multidimensional concept comprising cognitive, emotional, and/or behavioral dimensions, and plays a central role in the process of relational exchange where other relational concepts are engagement antecedents and/or consequences in iterative engagement processes within the brand community” (Brodie, Ilic, Juric, & Hollebeek, 2013, p. 107, see Figures 4 and 5). Consumer engagement is often referred to as consumer/customer “participation” and “involvement” but shown to be different from these related concepts (Mollen & Wilson, 2010).

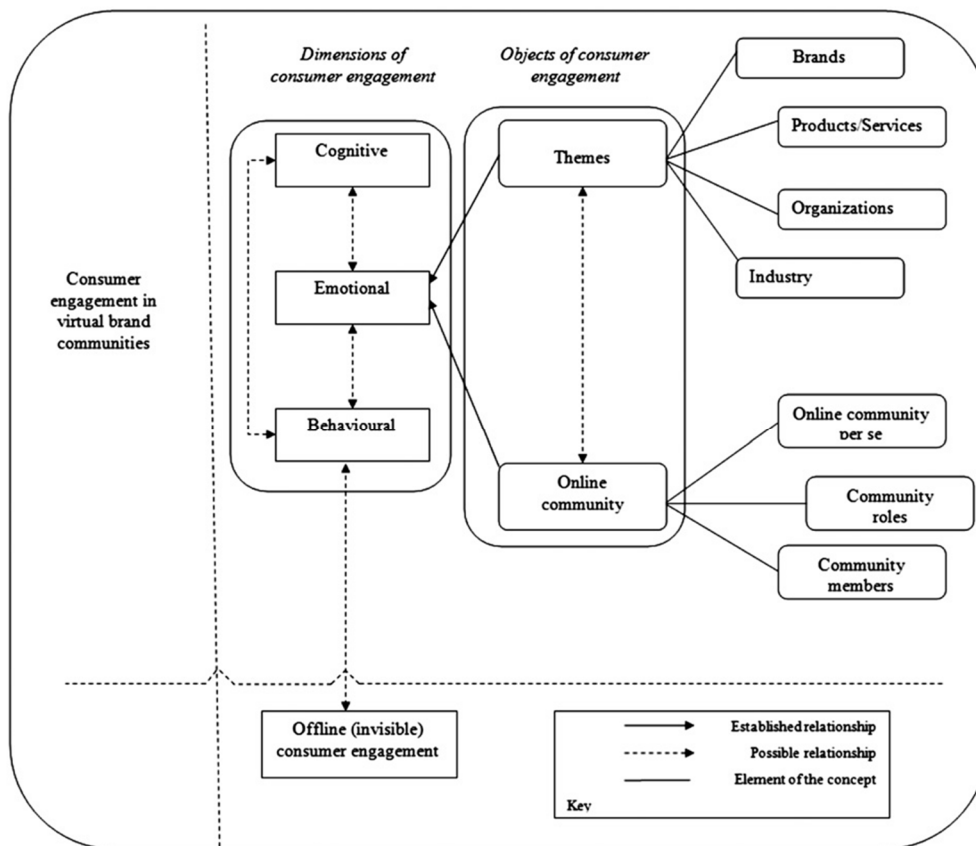


Figure 4. Consumer engagement and objects in a virtual brand community (Brodie, Ilic, Juric, & Hollebeek, 2013)

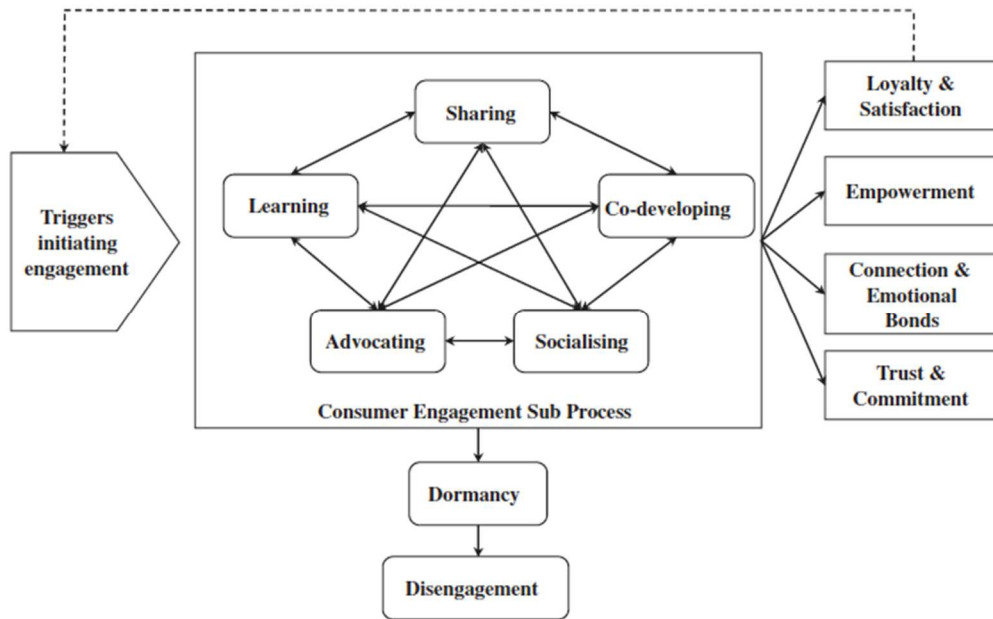


Figure 5. Consumer engagement process in a virtual brand community (Brodie, Ilic, Juric, & Hollebeek, 2013)

Since consumer engagement is a comprehensive concept, some researchers have tried to develop categories of consumer engagement on social media (e.g., Muntinga, Moorman, & Smit, 2011; Wise, Alhabash, & Park, 2010). For example, Muntinga et al. (2011) presented a typology of consumer’s online brand related activities and classified the activities into three categories: consumption, contribution, and creation. Earlier, Wise and his colleagues (2010) categorized Facebook activities into two groups: passive social browsing (e.g., reading newsfeeds) and extractive social searching (e.g., reading friends’ profiles). The concept of consumption (Muntinga et al., 2011) is similar to that of passive browsing (Wise et al., 2010) and the concept of contribution and creation (Muntinga et al., 2011) is similar to that of extractive social searching (Wise et al., 2010). For this project, the binary typology was adopted to contrast and magnify the different impacts of passive and active Facebook participation on brands and consumers.

First, “active participation” occurs when consumers participate in active activities on a Facebook brand page by writing comments, asking questions, getting answers, or uploading brand-related photos and videos. These behaviors resemble an interpersonal relationship. Consumers’ participation in a brand’s Facebook page can be seen as autonomy support from the brand’s point of view because consumers are often acknowledging the brand’s perspective and being responsive to the brand. For example, consumers can provide feedback to brands upon the brand’s request.

On the other hand, “passive participation” occurs when consumers are participating in passive activities on Facebook by reading and scrolling down the brand newsfeed. These behaviors may not form a similar relationship with brands, as this type of activity resembles the traditional one-way communication from brand to consumer rather than the two-way communication important to building relationships. Thus, it is expected that when consumers are participating in active (vs. passive) activities relative to brand Facebook pages, they have opportunities to and do provide autonomy support for brands and as a consequence, formulate consumer-brand relationships and experience positive affect.

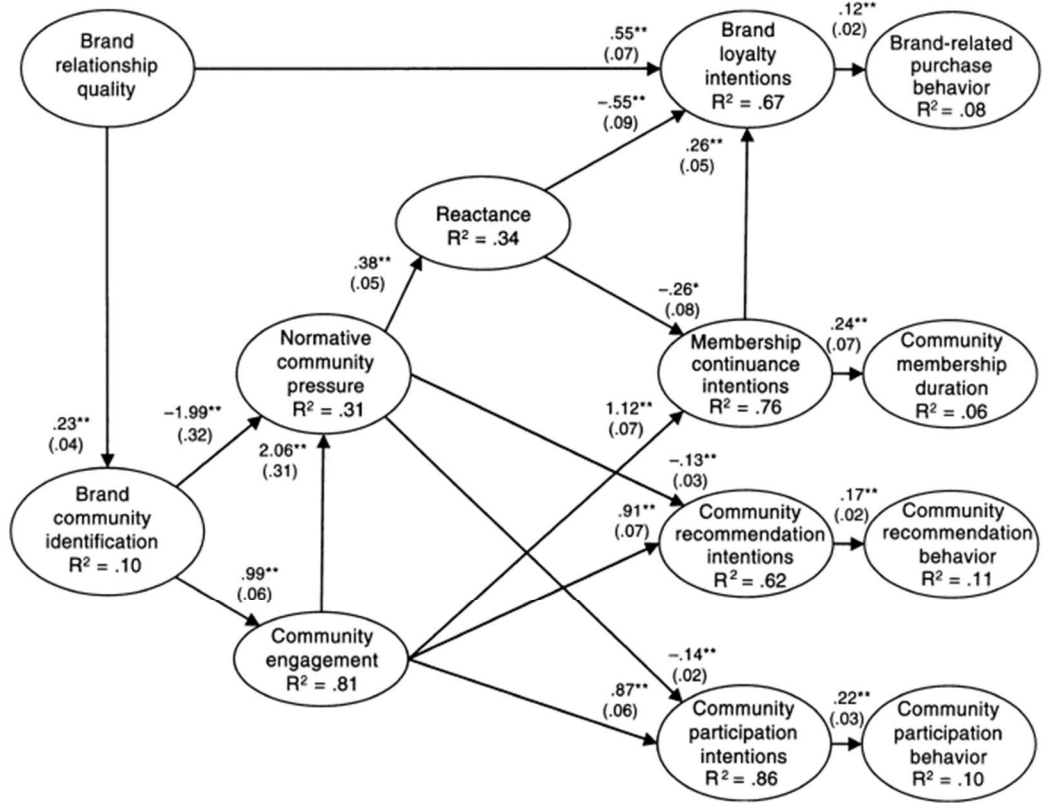
Extant research findings also support the idea that active participation in brand activities via Facebook may build strong consumer-brand relationships. Consumers’ active participation in social media and virtual brand communities has consistently resulted in stronger and more positive impacts on marketing outcomes than their passive participation. Specifically, consumers who become fans of brand fan pages were more open to receiving information about the brand (Bagozzi & Dholakia, 2006), visited the brand’s stores, generated positive WOM, and were emotionally attached to the brands

(Dholakia & Durham, 2010). Also, consumers' brand community commitment had positive effects on brand loyalty (Jang, Olfman, Ko, Koh, & Kim, 2008; Kim, Choi, Qualls, & Han, 2008), brand recommendation (Fournier & Lee, 2009), brand attachment (Zhou, Zhang, Su, & Zhou, 2012), and actual purchases (Algesheimer, Dholakia, & Herrmann, 2005).

Marketing outcomes of active participation in social media. Previous researchers (e.g., Algesheimer, Dholakia, & Herrman, 2005; Kim & Ko, 2012; Laroche, Habibi, & Richard, 2013) have investigated the overall success of marketing activities on social media. A positive relationship between brands' social media marketing and marketing outcomes has been documented. For example, luxury brands committed to social media marketing demonstrated positive effects on customer equity (Kim & Ko, 2012) and brand communities established on social media had positive effects on brand trust and brand loyalty (Laroche, Habibi, & Richard, 2013).

Laroche and her colleagues (2013) tested how brand communities based on social media influence brand loyalty. They conducted a survey with 441 participants who were members of any social media platform (Facebook, MySpace, and Twitter). Analyses of the data using structural equation modeling revealed positive relationships between brand communities established on social media and brand loyalty. Brand trust mediated the relationship between the customers' enhanced relationships in brand community and their brand loyalty. Finally, brand trust was explained by relationships formed in the community: customer-product relationship, customer-brand relationship, customer-company relationship, and customer-other customer relationship.

Earlier, Algesheimer and her colleagues (2005) examined the impact of customer's relationships within a brand community on their intentions and behaviors. They conducted in-depth interviews from individuals participating in European car clubs to develop their measurements. Five hundred twenty-nine car club members, who were mostly male and German with a mean age of 32 years, completed the questionnaire that included measures of community identification, community engagement, normative community pressure, reactance, membership continuance intentions, community recommendation intentions/behavior, community participation intentions/behavior, community membership behavior, brand relationship quality, brand recommendation intentions, brand-related purchase behavior, and brand knowledge. Using structural equation modeling analysis, the results showed that the customers' relationships with the brand community indeed predicted brand-related purchase behavior as well as brand loyalty intentions (see Figure 6).



* $p < .01$.
 ** $p < .001$.
 Notes: Unstandardized coefficients and standard errors are in parentheses; insignificant paths are omitted for ease of exposition.

Figure 6. Estimated model of brand community on customers' intentions and behaviors (Algesheimer, Dholakia, & Herrman, 2005)

Researchers have tried to identify mechanisms that explain relationships between social media marketing and its outcomes. As consumer engagement is emerging as a significant concept in the consumer behavior literature (e.g., Nambisan & Baron, 2007), understanding the different impacts of a consumer's active participation (vs. passive participation) on marketing outcomes can contribute to identifying mechanisms that explain relationships between social media marketing and its impact on consumers.

Well-being outcomes of active participation. As people spend more time on social media than ever before, researchers (e.g., Ellison, Steinfield, & Lampe, 2007;

Valenzuela, Park, & Kee, 2009; Valkenburg, Peter, & Schouten, 2006; Wise, Alhabash, & Park, 2010) have been interested in documenting the impact of using social media on users' quality of life. Specifically, there have been several studies concerning type of social media activity (active vs. passive) and its impact on users' well-being.

Participation in Facebook has been shown to be related to life satisfaction.

Valenzuela and his colleagues (2009) collected data from 2,603 college students across Texas using a web survey to examine whether Facebook was related to social capital (i.e., life satisfaction, social trust, civic engagement, political participation). Participants were asked to report their life satisfaction (Diener et al., 1985), social trust, civic and political participation, intensity of Facebook use (Ellison et al., 2007), intensity of Facebook Groups use, and socio demographics. Intensity of Facebook use was a scale asking about the number of "friends," amount of time spent on Facebook during a typical day, and emotional attachment to the site. Intensity of Facebook Groups use asked how often participants read and posted messages and posted new discussion topics on the profiles of the online groups they had joined on Facebook as well as how much time they spent with online groups. The intensity of Facebook use was positively associated with life satisfaction. Specifically, the index of life satisfaction was higher for those with high scores on intensity of Facebook use when compared to those with low scores on intensity value.

Similarly, people who actively participate in Facebook appear to be more likely to experience connectedness and happiness (Valkenburg et al., 2006) than individuals who do not. Valkenburg and her colleagues investigated the consequences of friend networking sites for adolescents' self-esteem and well-being. They collected data from

881 Dutch adolescents who were participating on friend networking sites. They measured use of friend networking site (frequency, intensity), frequency of reactions to profiles, tone of reactions to profiles, relationships established through friend networking site (friendship, romantic relationship), social self-esteem (physical appearance self-esteem, close friendship self-esteem, romantic attractiveness self-esteem), and well-being (life satisfaction). Related to the use of friend networking sites, well-being was positively correlated with frequency of reactions to profiles and tone of reactions to profiles. However, whether adolescents used or did not use the networking site did not explain their well-being. Rather, it was how often others reacted to adolescent's comments or photos (e.g., number of visitors) and how positive their reactions were (e.g., I love it!) that contributed to adolescent's life satisfaction.

In related research, Ellison and her colleagues (2007) examined the relationship between use of Facebook and the formation and maintenance of social capital. They collected data from 286 Michigan State University undergraduates using a questionnaire that assessed their intensity of Facebook usage (i.e., the number of Facebook "friends" and the amount of time spent on Facebook on a typical day), Facebook usage (i.e., elements in profile, perceptions of who has viewed profiles), uses of Facebook (i.e., to meet new people, to connect with existing offline contact), self-esteem, life satisfaction, and social capital (i.e., bridging social capital, bonding social capital, maintained social capital). Students who were low in life satisfaction benefited more from using Facebook as compared to students who reported high life satisfaction. Students who had low life satisfaction used Facebook intensely and, as a result, gained friends online and that may have boosted their life satisfaction.

In subsequent research, Wise and his colleagues (2010) conceptualized the purpose of Facebook activities into two groups: passive social browsing (e.g., reading newsfeeds) and extractive social searching (e.g., reading friends' profiles) and examined whether this conceptualization was adequate and whether it moderated physiological indicators of emotion. They collected data from 36 participants and measured their physiological responses during their on-screen Facebook activity. Participants experienced more pleasantness during social searching than during social browsing. Specifically, Face EMG (electromyography: a technique measuring face muscle activity) data from college students showed that participating on extractive activities (e.g., acquiring specific information about friends by visiting a friend's profile page and communicating with friends by writing on friend's wall) created more pleasantness than did passive activities (e.g., seeking general information about friends in a collective manner by reading newsfeed page).

In sum, relationships between the use of Facebook and happiness appear to rely more on what kind of activities users are engaging in rather than simply whether they are using Facebook or not. It appears that it is active participation on Facebook that generates positive emotion and connectedness with friends and contributes to happiness and life satisfaction.

Conceptual Framework

Based on the review of theoretical background of 1) consumer-brand relationships and 2) self-determination theory, the following model was developed to test the applicability of self-determination theory to the interaction of consumers and brands on Facebook (see Figure 7).

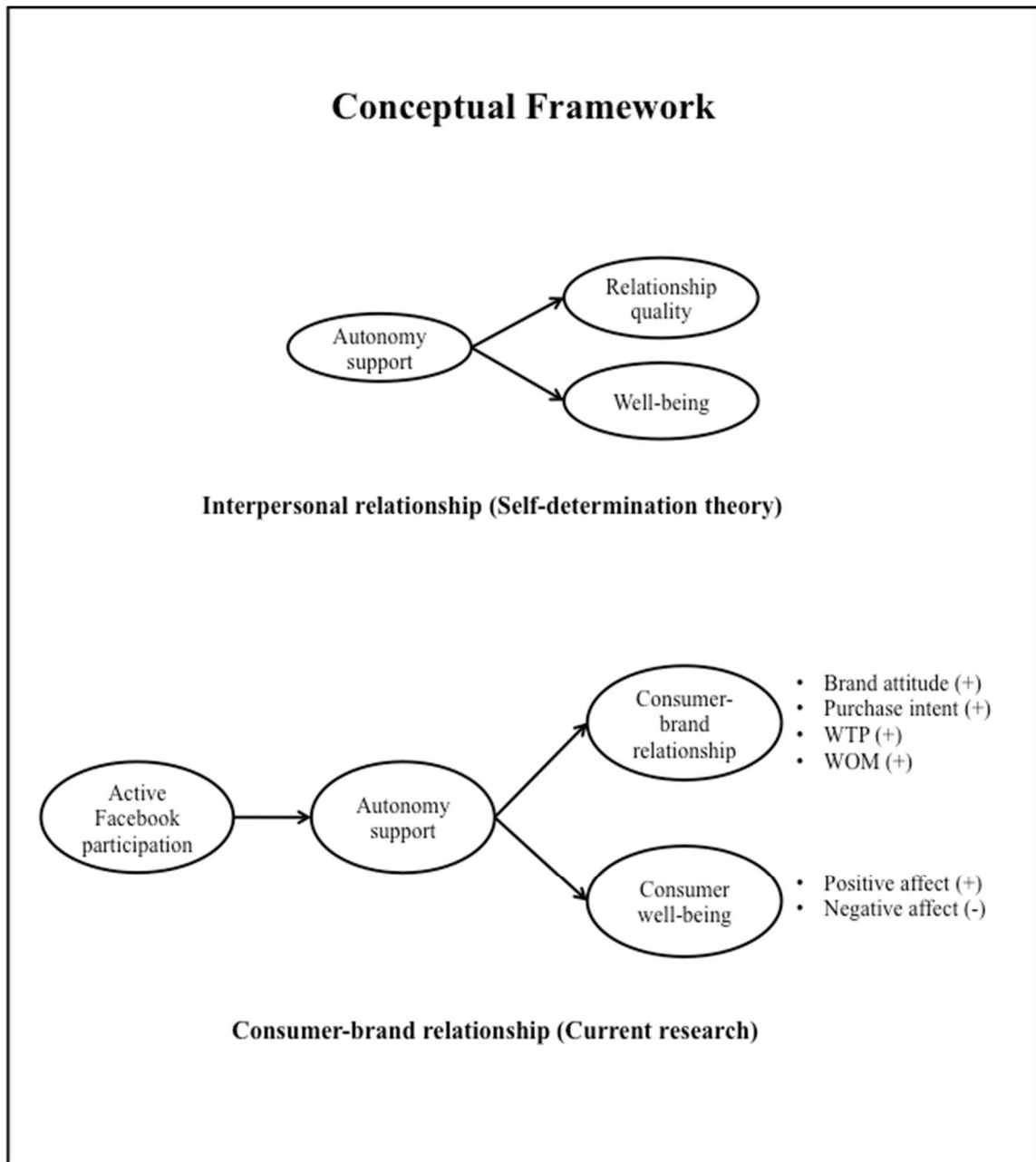


Figure 7. Framework of proposed relationships.

Hypotheses Development

This study had three objectives. The first objective was to assess the impact of consumer-brand relationships established and maintained through active Facebook participation on marketing outcomes. The second was to assess the impact of active interaction with brands through Facebook on non-brand related outcomes, specifically, on consumer well-being. The third was to assess whether autonomy support as identified by self-determination theory explained why active Facebook participation lead to any favorable brand attitude and the experience of positive affect. The specific hypotheses were developed to fulfill these objectives.

Marketing Outcomes of Active Facebook Participation

Consumers' active Facebook participation has been shown to generate positive word-of-mouth (Dholakia & Durham, 2010), brand loyalty (Jang, Olfman, Ko, Koh, & Kim, 2008; Kim, Choi, Qualls, & Han, 2008), brand recommendation (Fournier & Lee, 2009), brand attachment (Zhou, Zhang, Su, & Zhou, 2012), and actual purchases (Algesheimer, Dholakia, & Herrmann, 2005). Thus, Hypothesis 1 addressed the impacts of consumers' active Facebook participation on marketing outcomes.

H1. Consumers' active (vs. passive) Facebook participation relative to a brand results in favorable brand attitude, willingness-to-pay, purchase intention, and word-of-mouth.

In dyadic relationships, giving as well as receiving autonomy support contributed to the quality of relationship and relationship satisfaction (e.g., Deci et al., 2006). Since the basic premise of consumer-brand relationships is that consumers consider some brands as relationship partners, it is probable that autonomy support results in the same

outcomes in consumer-brand relationships. In this case, autonomy support mediates the relationship between consumers' active Facebook participation and positive marketing outcomes. Autonomy support contributes to the quality and positive satisfaction found in strong consumer-brand relationships such that when autonomy support is present, consumers experience positive brand attitude, high willingness-to-pay, strong purchase intention, and positive intentions relative to word-of-mouth. Thus, hypotheses two and three were proposed.

H2. Consumers' active (vs. passive) Facebook participation relative to a brand results in autonomy support.

H3. Consumers' autonomy support explains the relationship between active Facebook participation and brand attitude, willingness-to-pay, purchase intention, and word-of-mouth.

Well-being as an Outcome of Active Facebook Participation

According to existing research about the relationship between the use of social media and users' happiness, active participation in social media increased happiness but passive participation did not (Ellison et al., 2007; Valenzuela et al., 2009; Valkenburg et al., 2006). Thus, Hypothesis 4 and 5 were developed to test the relationship between active Facebook participation and consumer well-being.

H4. Consumers' active (vs. passive) Facebook participation related to a brand results in positive affect.

H5. Consumers' active (vs. passive) Facebook participation related to a brand will not result in negative affect.

In dyadic relationships, self-determination theory offers an explanation for well-being as well as relationship quality. Specifically, giving as well as receiving autonomy support is thought to contribute to a giver's subjective well-being (e.g., Deci et al., 2006). Applied to consumer-brand relationships, autonomy support should mediate the relationship between consumers' active Facebook participation and positive affect/negative affect. Thus, Hypotheses 6 and 7 were proposed.

H6. Consumers' autonomy support explains the relationship between active Facebook participation and positive affect.

H7. Consumers' autonomy support explains the relationship between active Facebook participation and negative affect.

Tendency to Humanize Brands

Facebook provides an opportunity to humanize brands easily. Different from the traditional one-sided communication of advertising, using Facebook consumers can express their feelings and thoughts directly to the brand and the brand can "respond." In addition, consumers can share their feelings and opinions about the brand with other consumers and actively create brand-related contents (referred to as user generated contents or UGC) that can be shared via their Facebook page. Thus, Facebook enables the brand to communicate with consumers and build a relationship with them similar to the way that relationships are established between people. Thus, Hypothesis 8 was developed to test whether active Facebook participation leads to humanizing brand more than passive Facebook participation.

H8. A brand will be rated more human-like when consumers participate in active Facebook activity relative to the brand as compared to when consumers participate in passive Facebook activity.

Overview of the Research

This section provides a quick overview of the research design for the current project. It explains the purpose of each study and provides the rationale for each research design.

Study 1 was a preliminary study to test the overall relationships of the key variables before the main experimental study, Study 2. The research hypotheses were tested by experimental Study 2. Next, experimental studies 3 and 4 were conducted to strengthen the findings of Study 2 and eliminate an alternative explanation of the results of Study 2 (see Table 2). Overall, the current project was expected to benefit from a multi-method approach to research.

Table 2

The Order and Purpose of the Studies

	Purpose of the studies	Methods
Study 1	Preliminary study	Survey
Study 2	Main study: Test hypotheses	Experiment
Study 3	Supplement study 1: Eliminate alternative explanation	Experiment
Study 4	Supplement study 2: Determine a boundary condition	Experiment

Study 1 employed a survey method to fulfill the purpose of study. Surveys have an advantage in that they enable data collection relative to a number of variables that allow testing of multiple relationships simultaneously. Therefore, it is appropriate to gather data via a survey method to explore a newly suggested relationship between variables and formulate specific hypotheses for further research. Study 2 employed an experiment to test main hypotheses developed. Experiments, different from surveys, have the ability to test direct causal relationships between two variables. Therefore, conducting experiments to test the hypotheses that are suggested by the results of Study 1 would be necessary if one is interested in determination causation. The following table presents the purposes of the current project and related hypotheses (see Table 3).

Table 3

The Purpose of the Current Project and Hypotheses

Purpose	Related hypotheses
1. To assess the impact of brand-related active Facebook participation on marketing outcomes.	<p>H1. <i>Consumers' active (vs. passive) Facebook participation relative to a brand results in favorable brand attitude, willingness-to-pay, purchase intention, and word-of-mouth.</i></p> <p>H8. <i>A brand will be rated more human-like when consumers participate in active Facebook activity relative to the brand as compared to when consumers participate in passive Facebook activity.</i></p>
2. To assess the impact of brand-related active Facebook participation on consumer well-being.	<p>H4. <i>Consumers' active (vs. passive) Facebook participation related to a brand results in positive affect.</i></p> <p>H5. <i>Consumers' active (vs. passive) Facebook participation related to a brand will not result in negative affect.</i></p>
3. To test self-determination theory in the context of consumer-brand relationships.	<p>H2. <i>Consumers' active (vs. passive) Facebook participation relative to a brand results in autonomy support.</i></p> <p>H3. <i>Consumers' autonomy support explains the relationship between active Facebook participation and brand attitude, willingness-to-pay, purchase intention, and word-of-mouth.</i></p> <p>H6. <i>Consumers' autonomy support explains the relationship between active Facebook participation and positive affect.</i></p> <p>H7. <i>Consumers' autonomy support explains the relationship between active Facebook participation and negative affect.</i></p>

Both for the preliminary survey project and the main experiment, I used data collected via Amazon Mechanical Turk (MTurk). Since MTurk was introduced to the academic community, social scientists are now using MTurk to recruit human subjects for their research as there are many advantages over traditional methods of data collection.

MTurk provides quick, easy, and inexpensive access to potential research participants (Goodman, Cryder, & Cheema, 2013). It is a streamlined process of study design, participant recruitment, and data collection (Buhrmester, Kwang, & Gosling, 2011). Also, it provides access to a large, stable, and diverse subject pool (Buhrmester, Kwang, & Gosling, 2011). With the low cost of doing experiments, it provides faster iteration between developing theory and executing experiments (Mason & Suri, 2012).

Many researchers have examined the quality of the data collected through MTurk. Regarding reliability of the data, the self-report data was as reliable as 81%-98% (Rand, 2012). MTurk participants produce reliable results consistent with other samples (Goodman et al., 2013) and the data obtained are at least as reliable as those obtained via traditional methods (Buhrmester et al., 2011). Regarding diversity, MTurk participants are slightly more demographically diverse than are standard Internet samples and are significantly more diverse than typical American college samples (Buhrmester et al., 2011). When compared with other online and offline methods of recruiting subjects, MTurk showed a lower chance of errors and risks (Paolacci, Chandler, & Ipeirotis, 2010; see Table 4).

Table 4

Tradeoffs of Different Recruiting Methods (Paolacci, Chandler, & Ipeirotis, 2010)

	Laboratory	Traditional web study	Web study with purpose built website	Mechanical Turk
Susceptibility to coverage error	High	Moderate	Moderate	Low
Heterogeneity of samples across labs	Moderate	High	High	Low
Non-response error	Low	High	High	Moderate
Subject Motivation	Moderate / High	Low	Low	Low
Risk of multiple responses by one person	None	Moderate	Moderate	Low
Risk of contaminated subject pool	Moderate	High	Moderate	Low
Risk of dishonest responses	Moderate	Low	Low	Low
Risk of experimenter effects	Low	None	None	None

Therefore, MTurk was employed to recruit participants and gather data to take advantages of these strengths. Also, as MTurk data better represent the population than other convenience samples, testing hypotheses with MTurk data increases the external validity of results. To minimize the limitations of MTurk data, the length of the tasks given to the participants were not longer than 15 minutes and the compensation was fixed within the same task. Participation is affected by compensation rate and task length (Buhrmester et al., 2011). In addition, following suggestions from previous researchers experienced with MTurk as a means of data collection (Goodman et al., 2013), data collection was restricted to US participants to ensure language comprehension, no questions requiring factual answers were included, and demographic questions were included to test for effects of individual differences of the participants.

CHAPTER 3

METHODS, RESULTS, and DISCUSSION

This chapter will present the methods, results, and discussion of studies one, two, three, and four respectively. For each study the chapter includes a presentation of data collection processes, participants, procedures, measures, data analysis, results, and discussion.

Study 1

The preliminary study had three purposes: 1) to categorize Facebook activities into passive and active activities, 2) to modify an existing scale to measure the degree to which an individual humanized a brand, and 3) to explore the overall relationship of variables of interest (Facebook participation, consumer-brand relationship, customer-based brand equity, well-being, and tendency to humanize brands) for the main experiment (Study 2).

Method Study 1

Participants. Two hundred and three participants were recruited using the Amazon Mechanical Turk (MTurk) website (www.mturk.com). Participants from Amazon MTurk usually vary in age, ethnicity, education, and income compared to convenience samples drawn from college undergraduates (Buhrmester, Kwang, & Gosling, 2011). Thus, gathering data via MTurk enhanced the generalizability of the findings.

Volunteers who were interested in participating in the research gained access to the questionnaire through a posted invitation on MTurk website. The invitation was restricted to the MTurk workers who reside in the US only. The offered incentive was 50

cents. After being recruited to participate, individuals were asked two qualifying questions to assess whether or not they should proceed to the main research activity. Potential participants were asked 1) if they were 18 years or older and 2) if they had an active Facebook account. Individuals who answer yes to both of these questions were directed to the consent form for the research. After reading the consent form, if an individual consented to participate, he or she was directed to the questionnaire for preliminary study. Individuals who answer no to either question were directed out of the research project.

Procedure. A survey method was used to gather data. The questionnaire was constructed and administered using the Qualtrics website (www.qualtrics.com).

The following measures were included in the questionnaire. The questionnaire was organized into three sections: 1) life-related (subjective well-being, loneliness, boredom), 2) brand-related (customer-based brand equity, consumer-brand relationship, tendency to humanize brands), and 3) Facebook-related questions (general Facebook use, consumers' brand-related activities on Facebook) to minimize any possible overriding effects of consumer-brand relationships and Facebook use on the participants' responses to the life satisfaction measure (see Figure 8).

The following sections provide a description of each measurement.

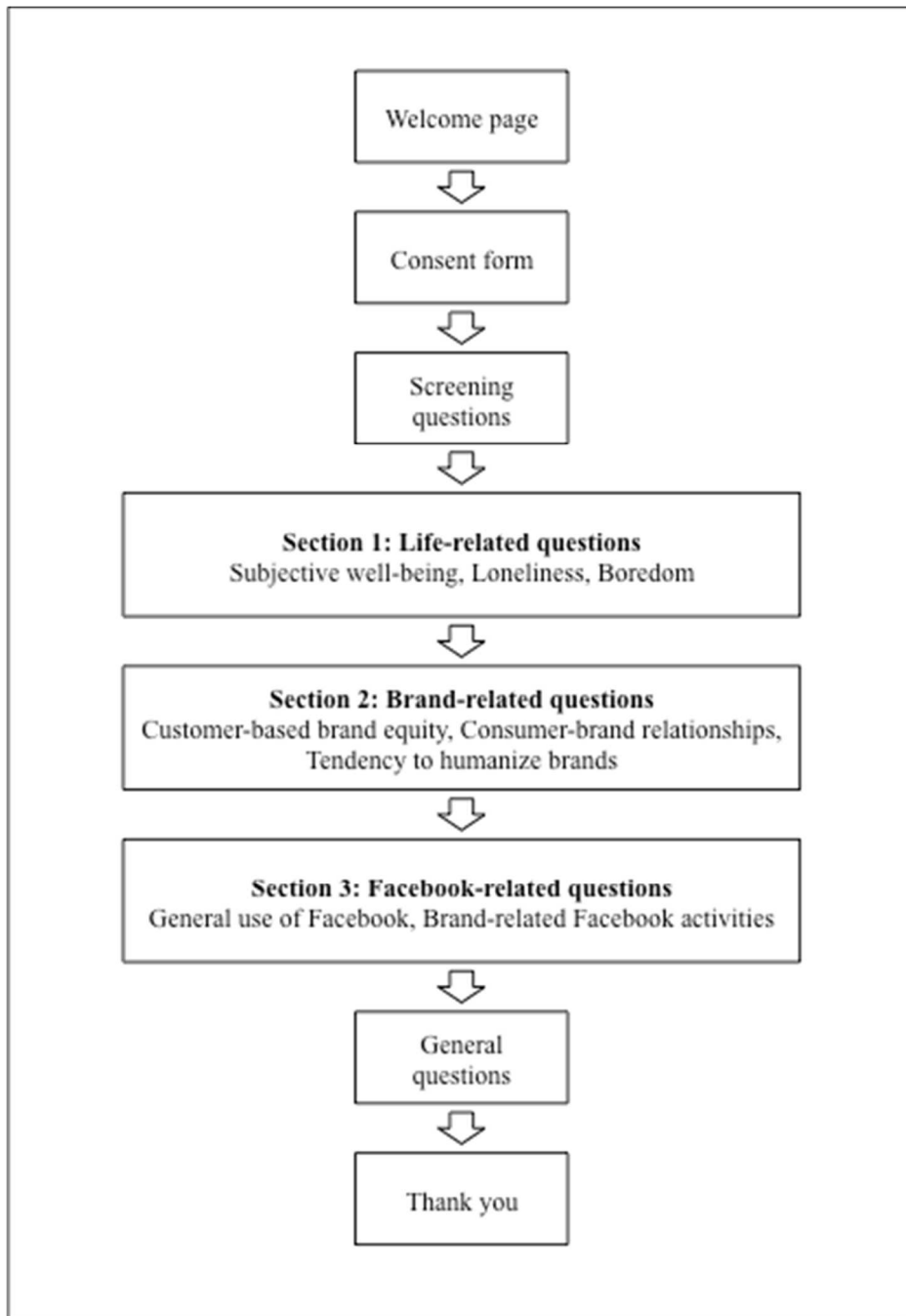


Figure 8. The procedure of preliminary study (Study 1).

Section 1: Subjective Well-being. This measure consisted of two parts; one measuring cognitive responses and the other affective: Life Satisfaction and Positive Affect and Negative Affect (Diener et al., 1999). To assess life satisfaction, participants responded to a five-item satisfaction with life scale (Diener et al., 1985). They were asked how strongly they agree or disagree with each statement using a 7-point likert scale. A sample item was “In most ways my life is close to my ideal.” The initial reported reliability of this scale was .91 (Cronbach’s alpha).

Second, to assess affect, participants responded to a twenty-item scale (Diener, Smith, & Fujita, 1995). Participants had to report how often they experienced each of eight positive emotions (e.g., joy, pride) and sixteen negative emotions (e.g., anger, fear) using 7-point scales from 1 (never) to 7 (always). The reported reliability of this scale was .80 (Cronbach’s alpha). A score for each participant was obtained by calculating the mean for each scale.

Loneliness. The UCLA Loneliness Scale by Russell (1996) assessed loneliness. The scale contains 20 statements and participants responded using a 4-point scale where 1 = not at all and 4 = always. A sample item was “How often do you feel alone?” The score of loneliness for each participant was calculated by getting the mean of responses to all items. Reported reliability ranged from .89 to .94 (Cronbach’s alpha).

Boredom. The Boredom Proneness Scale by Farmer and Sundberg (1986) assessed boredom. The scale contains 28 statements and participants responded using a 5-point scale from 1 (strongly disagree) to 7 (strongly agree). A sample item was “Time always seems to be passing slowly.” The score of boredom was calculated by getting the

mean of items. The reported reliability of this scale was .79 (Cronbach's alpha). A score for each participant was obtained by calculating the mean for each scale.

Section 2: Customer-based brand equity. For the brand-related section of questionnaire, participants were first given the following directions. "This section will ask you about what you feel and think about your favorite fashion brand. Please choose one of your favorite fashion brands in your mind and write it down (e.g., Dior, Coach, Nine West, Banana Republic, J.Crew, Tiffany, Forever 21, Alexander McQueen)." After participants wrote down one of their favorite fashion brand, they were directed to the next set of questions.

A scale developed by Netemeyer et al. (2004) was used to measure customer-based brand equity. Customer-based brand equity scale included three facets: perceived quality/perceived value for the cost, uniqueness, and willingness to pay a price premium. There were 15 items and participants indicated their responses using 7-point Likert scales (1=strongly disagree, 7=strongly agree). A sample item was "The brand is the best brand in its product class." There was also one multiple-choice question (e.g., "I am willing to pay ___% more for the brand over other brands of the same product category: 0% 5% 10% 15% 20% 25% 30%, or more."). A score for each participant for customer-based brand equity was obtained by calculating the mean. Reported reliabilities ranged from .85 to .92 (Cronbach's alpha).

Consumer-brand relationship. The 25-item brand relationship scale from Aaker, Fournier, and Brasel (2004) was used to measure consumer-brand relationship. The measure consisted of five facets: commitment, intimacy, satisfaction, self-connection, and partner quality. Participants indicated their degree of agreement with each item using

7-point Likert scales (1 = strongly disagree, 7 = strongly agree). Sample items included “I am very loyal to the brand” and “I can always count on the brand to do what’s best.” A score for each participant was obtained by calculating the mean. Reliabilities ranged from .80 to .96 according to the original study.

Tendency to humanize brands. There was no existing scale to assess individual’s tendency to humanize brands, thus the need to develop such a measure. To begin this process, the individual differences in anthropomorphism questionnaire (IDAQ; Waytz, Cacioppo, & Epley, 2010; Cronbach’s alpha = .82) was used to generate question items. This questionnaire measures an individual’s tendency to humanizing objects and animals. To modify the existing scale for this new use and test it whether it was adequate to measure the tendency to humanize brands instead of objects and animals, each question was reworded so the item addressed “brands.” Specifically, ten items were used including five anthropomorphic traits (e.g., has a mind of its own, has freewill, has consciousness, has intentions, and can experience emotions) and five nonanthropomorphic traits (e.g., durable, useful, good-looking, active, and lethargic) that could be used to describe a brand. Nonanthropomorphic traits that are “clearly observable or functional feature of objects and animals” were included to dissociate anthropomorphism traits from other attributions. Participants reported their agreement with each statement when thinking about their favorite fashion brand using likert-type scales (1 = strongly disagree, 7= strongly agree). Each participant received a score on this measure by calculating the mean of each set of traits.

Section 3: General Facebook use. Participation in Facebook activities was assessed by two different measurements: 1) general Facebook use and 2) consumer’s

brand-related activities on Facebook. First, to assess general Facebook use, a measure developed by Ellison et al. (2007) was employed. This measure contained eight items. Example items included the number of Facebook “friends” and the amount of time spent on Facebook on a typical day. Ellison et al reported a reliability of .83 (Cronbach’s alpha). A score for each participant was obtained by calculating the mean for each scale.

Consumer’s brand-related activities on Facebook. To categorize and measure activities on Facebook, it was necessary to make a comprehensive list of consumer’s online brand related activities first. Thus, the typology of consumer’s online brand related activities of Muntinga et al. (2011) was adapted. The original typology applied to general online brand-related activities and was not specific to Facebook. Thus, some items were modified to be relevant to Facebook. Regarding consumption, participants were asked to indicate whether they had any brands on Facebook they “liked” or regularly followed. Also, they were asked how often they watched, listened to, or read brand-related contents such as videos, audios, and other content on Facebook. Regarding contribution, participants were asked to indicate how often they clicked “like,” “commented” on or “shared” brand-related contents on Facebook. Regarding creation, participants were asked how often they participated in firm-created contests, games, and other activities on Facebook. Eventually, nineteen activities reflecting either consumption, contributing, or creating were selected (see Table 5). Participants answered how often they engaged in each of these activities from 1 (not at all) to 7(always). A score for each participant was obtained by calculating the mean for each scale.

Table 5

Consumer's Brand-related Activities on Facebook (Study 1)

Activities	
1	Viewing brand-related video
2	Watching brand-related picture
3	“Like” brand pages
4	Reading comments on brand page
5	Reading products reviews on brand page
6	Following brand pages
7	Engaging in conversations on brand page
8	Commenting on brand-related weblogs
9	Commenting on brand-related audio
10	Commenting on brand-related pictures
11	Publishing a brand-related weblog
12	Uploading brand-related video
13	Uploading brand-related audio
14	Uploading brand-related pictures or images
15	Writing brand-related articles
16	“Like” pictures or images of brand page
17	“Share” pictures or images of brand or products
18	“Like” others’ comments on brand page
19	“Reply” to others’ comments on brand page

General questions. At the end of the questionnaire, personal information concerning participant characteristics such as age, gender, income, relationship status, and ethnicity was gathered. In addition, following procedures described by White and Dahl (2007), a suspicion probe was conducted to check whether participants were aware of the purpose of the study and/or the developed hypotheses. This probe consisted of an open-ended question (i.e., “what do you think was the purpose of the study?”).

Results Study 1

Sample characteristics. Two hundred and three participants completed the questionnaire. Participants' ages ranged from 18 to 68 years, with an average age of 33 years. Participants were women (49%), Caucasian (74%), and varied in relationship status (single: 36%, in a relationship: 21%, married/living with a partner: 43%). Their yearly income varied from less than \$25,000 to \$100,000 or more. More than half earned less than \$50,000 (64%) annually (see Table 6).

Table 6
Participant Characteristics (Study 1)

	Characteristics	Participants (<i>N</i> = 203)
Ethnicity	Caucasian	151 (74%)
	African American	14 (7%)
	Asian	21 (10%)
	Hispanic	12 (6%)
	Others	5 (3%)
Relationship status	Single	74 (36%)
	In a relationship	42 (21%)
	Married/Living with a partner	87 (43%)
Income	Less than \$25,000	62 (30%)
	\$25,000-\$49,999	67 (33%)
	\$50,000-\$74,999	46 (23%)
	\$75,000-\$99,999	14 (7%)
	\$10,000 or more	14 (7%)
Gender	Male	103 (51%)
	Female	100 (49%)
Age		18-68 (median = 30)

Facebook participation. Exploratory factor analysis was conducted to categorize Facebook activities according to degree of participation. Principal component analysis and varimax rotation were selected to determine the number of factors. The scree plot graph showed two factors and eigenvalues were 14.64 and 2.83 respectively. The two factors explained 73% of the total variance. Eleven items that had factor loadings above .65 and no larger than .30 on the other factor were selected out of the initial nineteen items (see Table 7) to meet the requirement of unidimensionality of factor loadings (Steenkamp & van Trijp, 1991). The other eight activities possible via Facebook were not clearly perceived as either active or passive. Rather, according to the results of the factor analysis, activities were responded to as if they were both active and passive.

The first factor contained five items relating to activities such as reading, following, and “liking” brand pages and was labeled “passive” Facebook participation. The second factor contained six items related to commenting and uploading brand-related contents and was labeled “active” Facebook participation. For the further analyses, a score for each participant for active Facebook participation and for passive Facebook participation was calculated by getting the mean of all the relevant activities based on the result of factor analysis. The reliability of the passive Facebook participation was .92 and active Facebook participation was .96 (Cronbach’s alpha).

Table 7

Factor Loadings of Facebook Participation Items

Items	<i>M</i>	<i>SD</i>	Factor 1	Factor 2
Reading comments on brand page	2.29	1.31	.84	.28
Reading product reviews on brand page	2.29	1.34	.83	.23
Following brand pages	2.51	1.33	.88	.16
"Like" brand pages	2.68	1.32	.89	.17
"Like" pictures or images of brand page	2.58	1.31	.86	.18
Commenting on brand-related audio	1.50	.98	.28	.86
Publishing a brand-related weblog	1.38	.89	.21	.89
Uploading brand-related video	1.40	.89	.21	.92
Uploading brand-related audio	1.38	.90	.19	.93
Uploading brand-related pictures or images	1.49	.98	.19	.87
Writing brand-related articles	1.40	.90	.19	.88

Note. Factor 1=passive participation, Factor 2=active participation

Tendency to humanize brands. Exploratory factor analysis was conducted to modify the existing scale for a new use and test it whether it is adequate to measure the tendency to humanize brands. Principal component analysis and varimax rotation were selected to determine the number of factors. The scree plot graph showed two factors and eigenvalue of 5.46 and 1.86 respectively. The first factor explained 54% of the variance and the two factors cumulatively explained 73% of the total variance. All the items had factor loading above .65 on one factor and no larger than .30 on the other factor, which shows that the factors meet the unidimensionality requirement for factor loadings (Steenkamp & van Trijp, 1991). As the items grouped similarly to the original scale, the first factor was labeled anthropomorphic traits and contained the corresponding items and

the second factor was labeled nonanthropomorphic traits and contained the corresponding items.

Different from the previous study of objects and animals, “I believe the brand is active” and “I believe the brand is lethargic” loaded higher on the anthropomorphism factor than on the nonanthropomorphism factor. According to the previous study (Waytz, Cacioppo, & Epley, 2010) that examined anthropomorphizing animals or objects, being active or lethargic was “clearly observable or functional features of objects and animals,” thus these were considered to be nonanthropomorphism traits. However, when a brand instead of animals or objects is the focus of the questions, it seems being “active” or “lethargic” can represent attributes of humans. Thus, the tendency to humanize brands scale included the “active” and “lethargic” items.

The final scale consisted of seven items: I believe the brand... can experience emotions, has consciousness, has free will, has a mind of its own, has intention, is lethargic, and is active (see Table 8). For further analyses, a score for each participant was calculated by getting the mean of all the anthropomorphism traits based on the result of the factor analysis. Again, nonanthropomorphic traits were included to dissociate anthropomorphism traits from other attributions. These were not included in the calculation of participants’ tendency to humanize brands score. The reliability of anthropomorphism traits was .94 and nonanthropomorphism was .67 (Cronbach’s alpha).

Table 8

Factor Loadings of Tendency to Humanize Brands Items

Items	<i>M</i>	<i>SD</i>	Factor 1	Factor 2
I believe the brand experiences emotions.	2.73	1.97	.93	-.01
I believe the brand has free will.	2.33	1.81	.93	.01
I believe the brand has a mind of its own.	2.17	1.80	.92	-.07
I believe the brand has consciousness.	2.62	2.01	.89	.00
I believe the brand is active.	2.43	1.96	.88	.05
I believe the brand has intentions.	2.24	1.80	.87	.03
I believe the brand is lethargic.	2.06	1.57	.73	-.23
I believe the brand is useful.	5.94	1.17	-.12	.83
I believe the brand is durable.	5.87	1.24	-.06	.82
I believe the brand is good-looking.	5.75	1.41	.09	.68

Note. $N=203$; Factor 1=anthropomorphic traits, Factor 2=nonanthropomorphic traits.

Preliminary analyses. To explore the relationship between the variables of interest in this research, a correlation analysis between variables (see Table 9) and regression analyses were conducted (see Tables 10 and 11).

Correlation analysis. According to the results of the correlation analysis (see Table 9), there were positive correlations between tendency to humanize brands and all of the brand-related variables including brand equity ($r = .33^{**}$) and consumer-brand relationship ($r = .40^{**}$). Both passive Facebook participation ($r = .37^{**}$) and active Facebook participation ($r = .40^{**}$) also showed positive correlations with tendency to humanize brands.

In addition, general Facebook use and passive Facebook participation showed positive correlation with brand equity ($r = .15^*$ and $r = .21^{**}$) and consumer-brand

relationship ($r = .20^{**}$ and $r = .34^{**}$). However, active Facebook participation was not correlated with either brand equity or consumer-brand relationship. Finally, there were positive correlations between positive affect, the brand-related variables of brand equity ($r = .32^*$), and consumer-brand relationship ($r = .26^{**}$).

Regression analyses. Based on the correlation analyses, separate multiple regression analyses were conducted for 1) consumer-brand relationship as the dependent variable and 2) customer-based brand equity as the dependent variable. Positive affect, tendency to humanize brands, general Facebook use, and passive Facebook participation were significant positive predictors of consumer-brand relationship (see Table 10). Put another way, when participants indicated feeling positive emotions often, considered the brand as human-like, used Facebook often and had many friends on Facebook, and read and “liked” brand-related contents frequently on Facebook, they reported strong consumer-brand relationships with their favorite brands.

Table 9

Correlation of Variables (Study 1)

Variable	LS	PA	NA	LO	BO	BE	CB	HB	FU	PF	AF
Life satisfaction											
Positive affect	.67**										
Negative affect	-.56**	-.43**									
Loneliness	-.62**	-.59**	.61**								
Boredom	-.48**	-.55**	.53**	.59**							
Brand equity	.16*	.32**	-.06	-.15*	-.12						
CB relationship	.15*	.26**	.00	-.09	-.02	.75**					
Humanizing brand	.06	.05	.16*	.08	.24**	.33**	.40**				
Facebook use	.04	.14*	.01	-.18**	-.07	.15*	.20**	-.03			
Passive Facebook	.01	.06	.11	.05	.01	.21**	.34**	.37**	.28**		
Active Facebook	-.07	-.11	.05	.06	.14*	.00	.12	.40**	-.03	.45**	

Note. $N = 203$, CB relationship=Consumer-brand relationship, * $p < .05$, ** $p < .01$

Table 10

Summary of Regression Analyses for Variables Predicting Consumer-Brand Relationship (Study 1)

Variable	<i>B</i>	<i>SE B</i>	β
Life satisfaction	-.02	.05	-.03
Positive affect	.18	.07	.23**
Loneliness	.03	.13	.02
Humanizing brand	.19	.04	.36***
Facebook use	.12	.06	.13*
Passive Facebook	.15	.06	.20**
Active Facebook	-.10	.08	-.10
R^2		.28	
F		10.96***	

Note. $N = 203$; * $p < .05$, ** $p < .01$, *** $p < .001$

Regression analyses were also conducted to identify predictors of customer-based brand equity (see Table 11). Consumer-brand relationship was a dominant predictor along with positive affect (Model 1, see Table 11). When the consumer-brand relationship variable was removed from the regression analysis, positive affect, tendency to humanize brands, and active Facebook activity were significant positive predictors of customer-based brand equity (Model 2, see Table 11). Active Facebook activity showed a negative relationship to customer-based brand equity. Put another way, when participants indicated a strong consumer-brand relationship with their favorite brand and reported often feeling positive emotions, they were more likely to score high on customer-based brand equity of their favorite brands. Removing consumer-brand relationship as an

independent variable, when consumers reported frequent positive emotions, considered the brand as human-like, and did not often comment on or upload brand-related contents on Facebook, they were likely to score their favorite brands high on customer-based brand equity.

Table 11

Summary of Regression Analyses for Variables Predicting Customer-based Brand Equity (Study 1)

Variable	Model 1		Model 2			
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>B</i>	<i>SE B</i>	β
Life satisfaction	-.06	.04	-.09	-.07	-.05	-.11
Positive affect	.12	.05	.17*	.24	.07	.32***
Loneliness	-.07	.09	-.05	-.05	.13	-.04
Humanizing brand	.05	.03	.10	.18	.03	.35***
Facebook use	-.01	.05	-.01	.08	.06	.08
Passive Facebook	-.03	.04	-.03	.08	.06	.11
Active Facebook	-.09	.06	-.09	-.16	.08	-.15*
CB relationship	.68	.05	.70***			
R^2		.59			.24	
F		35.34***			8.94***	

Note. $N = 203$; CB relationship=Consumer-brand relationship, * $p < .05$, ** $p < .01$, *** $p < .001$

Discussion Study 1

Study 1 had three initial purposes: 1) to categorize Facebook activities into passive and active activities, 2) to modify an existing scale to measure the degree to which an individual humanized a brand, and 3) to explore the overall relationship of variables of interest for the main experiment.

Facebook activities were grouped into active and passive activities. Overall it showed that activities related to reading, following, and “liking” brand page were passive Facebook brand activities participation and activities related to commenting and uploading brand-related contents were active Facebook brand activities. This result provided an empirical basis for labeling brand activities as either active (i.e., commenting) or passive (i.e., reading) for the main experiment of the research.

Second, a seven-item scale to measure individuals’ tendency to humanize brands was developed. Interestingly, different from results wherein participants were asked to direct their responses to animals or objects (Waytz, Cacioppo, & Epley, 2010), some traits that were previously considered to be nonanthropomorphic (i.e., active, lethargic) were considered anthropomorphic when participants were asked to apply them to brands. These differing results can be attributed to the symbolic and abstract characteristics of brands (e.g., Aaker, 1997; Keller, 1993). Considering the abstractness of the brand personality, for example, sincerity, excitement, competence, sophistication, and ruggedness, brands seem to be able to embrace many more human attributes than animals or objects. Animals and objects are real and tangible and likely to represent more concrete ideas than brands. Therefore, it is plausible to conclude that brand personality is

abstract and multidimensional and, as a result, humanizing brands includes a more comprehensive list of human attributes than does humanizing animals or objects.

Third, as a pilot test for the main experiment, preliminary analyses of the variables under investigation revealed that positive affect, tendency to humanize brands, general Facebook use, and both passive and active Facebook participation predicted both consumer-brand relationship and customer-based brand equity. These results provide support for inclusion of these variables for the main study designed to examine relationships between type of Facebook activity and consumer-brand relationships. However, active Facebook participation negatively predicted customer-based brand equity. This result might be attributed to the limitations of survey data or how the active Facebook participation was measured. Therefore, active Facebook participation was included for the main study. Neither loneliness nor boredom predicted either consumer-brand relationship or customer-based brand. Thus, these variables were excluded from further examination.

Although survey data provided good initial overview of possible relationships among variables, there were limitations. First, causal relationships between variables cannot be assessed. For example, it is difficult to tell whether active Facebook participation caused the negative consumer-brand relationship or vice versa. It is possible that participants who had pre-existing strong consumer-brand relationships did not regularly participate in active Facebook activities. It is also difficult to tell whether their consumer-brand relationship was established and maintained solely on Facebook. They might interact with their favorite brands through other marketing channels as well. With survey data alone, it is impossible to examine the consumer-brand relationship that is

solely established and maintained on Facebook without interference from other marketing channels. In addition, participants responded to the questionnaire while thinking about different fashion brands from each other, as each was instructed to think about their own favorite brand. Thus, another limitation of the pilot data could be that participants did not answer the questions thinking about the same brand. Finally, when measuring and calculating active Facebook participation, only six specific Facebook activities according to the result of the factor analysis were included. This decision may have reduced important variance that explains active Facebook participation.

Thus, an experiment was designed to address these limitations. Based on the findings of the preliminary study, Study 1 was planned to investigate causal relationships between variables and underlying explanations for the relationship between Facebook activity and brand equity. Specifically, participants was exposed to and asked about a fictitious brand so that, different from the preliminary study, they could respond to the variable measures when thinking about the same brand. In that way, confounding influences be controlled related to participants' existing perceptions and attitudes about an established brand. In addition, the experiment enabled the testing of autonomy support as a potential mediator of the relationship between active Facebook participation and brand attitude. Designing an experiment enabled the testing of an underlying explanation for the effect (i.e., a mediator) as well as for the main effects of the variables under investigation.

Study 2

There were two purposes for the main study. The first purpose was to test the proposed hypotheses. Specifically, the direct causal relationship between active (vs. passive) participation on Facebook and customer-based brand equity (hypothesis 1) was tested. The second objective was to reveal an explanation for why people who participated in active Facebook activity reported experiencing positive emotions as compared to those who participated in passive Facebook activity (hypothesis 4-7). Self-determination theory explains why giving autonomy support to a relationship partner can result in enhancing both the quality of relationship and well-being. Applying self-determination theory to this research suggested that active Facebook participation provides support for the brand and thus, was expected to result in positive brand attitude (quality of relationship) and positive affect (well-being). Thus, autonomy support was predicted to be a possible mediator between active Facebook participation and brand attitude (hypothesis 2, 3), which was a proxy for brand equity.

Method Study 2

Participants. Participants were recruited using the MTurk website. Recruitment was limited to individuals residing in the US. Volunteers were offered an incentive of 30 cents. In combination with the qualifying questions used in the preliminary study, individuals were asked an additional qualifying question (i.e., are you female?) because the experimental stimuli developed featured Emma, a women's fashion brand. Thus, it was assumed that only women, as potential customers of this hypothetical brand, could build a relationship with it and form attitudes towards the brand. Individuals who answered yes to all the qualifying questions (are you female, do you have active

Facebook account, are you 18 years or older) were directed to the consent form for the research.

Stimuli development. Fashion brands were selected since they are hedonic (vs. utilitarian brands, Carroll & Ahuvia, 2006) and relational brands (vs. transactional brands, Yim, Tse, & Chan, 2008) as well as because consumers tend to become attached to fashion brands. To develop stimuli for Study 2, an original Facebook page was constructed. Photos of fashion products and images from various women's fashion brands including J.Crew, Madewell, Michael Kors, Coach, Banana Republic, Nine West, and Jimmy Choo were collected. To prevent participants from recognizing the brands, photos that were taken several years ago were selected for use that did not show any logos or distinctive styles associated with an existing brand. The photos covered comprehensive fashion items from clothing (dresses, sweaters, jeans, skirts), sunglasses, shoes, to bags. Also, there were some photos that did not merely focus on fashion items but suggested an overall brand image (see Figure 9).

A pretest was conducted to examine whether the selection of brand name, brand logo, products, and images was appropriate for Study 2. Specifically, the purpose of the pretest was to test that the fictitious brand name or logo would not exert an influence on the judgments of participants in Study 2, in other words, that any possible effects would be controlled for. A separate group of twenty-nine female participants was recruited from MTurk for a compensation of 30 cents. They indicated their attitude (from 1 = bad to 5 = good) toward the brand name, brand logo, and 25 photos to be used for Study 2. First, the participants were asked whether they have ever heard of the brand name, Emma. The result showed that twenty-four participants had not heard of the brand name previously.

before. There was one participant who reported that she had for a dress brand. However, an Internet search revealed that the brand Emma did not exist. However, there was a brand called Emmao. Overall, participants indicated a favorable attitude toward the brand name, Emma ($M = 3.5$) and the logo ($M = 3.2$). Therefore, the results of this pretest showed that there was unlikely to be an issue with using the brand name Emma and the logo for Study 2. Second, regarding the photos, most of the photos received favorable ratings from 2.8 to 3.9. Two photos that were rated below 3 (i.e., 2.8, 2.9) were not used.



Figure 9. Sample pictures from the pretest

Procedure. For Study 2, participants were invited to participate in a brand evaluation. The instructions read as follows. “We are interested in how consumers evaluate brands. You will visit a Facebook page of a fashion brand, Emma, and answer some questions about it. As Emma is at its preparatory phase, we are interested in learning what potential customers think about the brand. Your input will be invaluable for its brand positioning, targeting customers, and product assortment.” Participants were told to copy and paste the following link to the Emma Facebook page into their browser (<https://www.facebook.com/pages/Emma/1428288834091772>) and needed to be logged into Facebook to see the page (see Figure 10).



Figure 10. Stimuli for Study 2: A part of the Emma brand Facebook page

Facebook participation manipulation. To manipulate the independent variable, type of brand participation, participants were randomly assigned to one of two conditions: active or passive. According to the categorization results of the preliminary study, the activity of “writing comments” was selected to operationalize active participation and “reading” was selected to operationalize passive participation. Those who were assigned to the active participation condition were given the following instructions at the beginning of their questionnaire. “Please write comments as you read descriptions and view photos of Emma’s Facebook page.” In contrast, participants who were assigned to the passive participation condition were given these instructions at the beginning of their questionnaire. “Please read the descriptions and view the photos of Emma’s Facebook page.” After exploring the Facebook page, participants were instructed to return to the questionnaire and answer several questions about the brand.

Manipulation check. After reading descriptions and viewing photos from the Facebook page, participants were directed to return to their questionnaire and asked to respond to the following question, “As you explored the Emma Facebook page, to what extent were you active/participative?” from 1 (not at all) to 7 (very much). In addition, to show that there was no difference in motivation level between the two conditions, participants were also asked to respond to the following four questions, “As you explored the Emma’s Facebook page, to what extent were you motivated/interested/involved/engaged?” from 1 (not at all) to 7 (very much).

Measurements. The measures of autonomy support, brand attitude, purchase intent, willingness-to-pay, word-of-mouth, tendency to humanize brands, PANAS and

general questions (see Figure 11) were posted online in a questionnaire. The descriptions for each measurement follow.

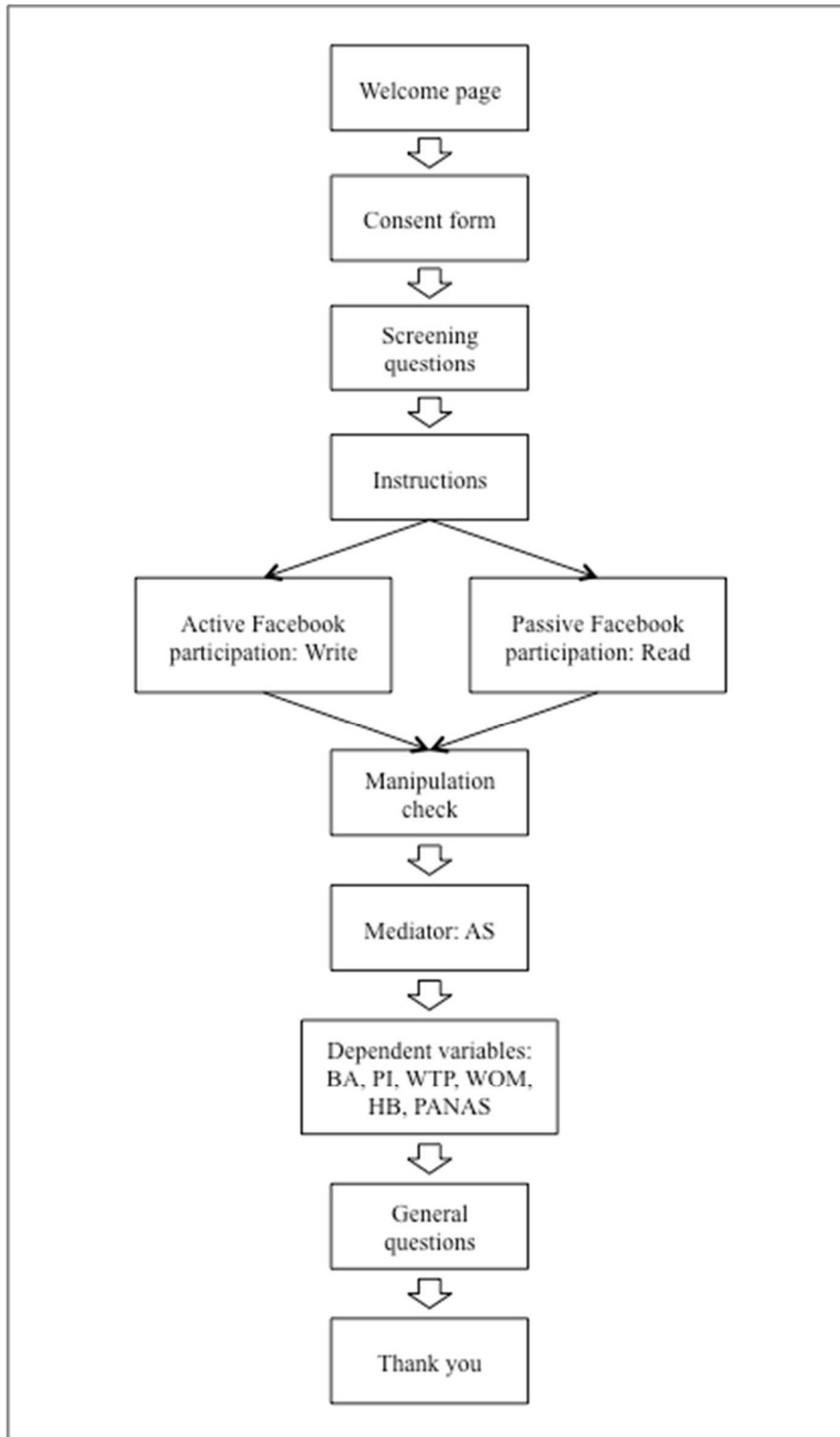


Figure 11. The procedure of Study 2

Note. AS=autonomy support, BA=brand attitude, PI=purchase intent, WTP=willingness-to-pay, WOM=word-of-mouth, HB=tendency to humanize brands

Autonomy support. Since there was no scale to measure autonomy support, a measure had to be developed. The adjectives “contributing” and “supportive” from the definition of autonomy support were identified. Participants were asked to indicate the extent to which they were contributing to and supportive of the brand using a 7 point scale (1 = not at all, 7 = very much). The two questions were “As you explored Emma’s Facebook page, to what extent were you contributing?” and “As you explored the Emma’s Facebook page, to what extent were you supportive?” A score for each participant was obtained by calculating the mean of the responses to both of the two questions.

Brand attitude. Brand attitude was measured by a general evaluation scale developed by MacKenzie, Lutz, and Belch (1986). Brand attitude was measured using five 7-point semantic differential scales (1="unfavorable, negative, bad, dislike, poor" and 7 = "favorable, positive, good, like, excellent"). Reported reliability was .92 (Cronbach’s alpha). A score for each participant was obtained by calculating the mean of the five items.

Purchase intent. A scale from Netemeyer et al. (2004) was used to measure purchase intent. The scale contained one item with three ways to respond to it. For example, participants responded to the following item “For my next purchase of fashion category, I intend to buy the Emma brand” using a scale with endpoints of unlikely–likely, probably will –probably will not, disagree– agree. Reported reliability was .75 (Cronbach’s alpha). The score of purchase intention was calculated by getting the mean of three items.

Willingness-to-pay. This variable was assessed by using a single item according to the scale from Netmeyer et al. (2004). Participants responded to the following item by typing any number in the blank: “I am willing to pay ___% more for the brand, Emma, over other fashion brands.”

Word-of-mouth. A scale from Carroll and Ahuvia (2006) was used to measure intention to engage in positive word-of-mouth concerning the brand. This scale consisted of four items and participants indicated their responses using 5-point Likert scales (1=not at all, 5=very much). Sample items included “I have recommended this brand to lots of people” and “I try to spread the good-word about this brand.” In Carroll and Ahuvia (2006), this scale produced a reliability of .92 (Cronbach’s coefficient alpha). A score for each participant was obtained by calculating the mean of the four items.

Tendency to humanize brands. The scale developed in Study 1 was used to assess to what extent participants humanized the brand. (See Study 1 results for a description of this scale.)

PANAS. The Positive and Negative Affect Schedule from Watson, Clark, and Tellegen (1988) was used to measure participant’s positive and negative affect. The scale consisted of 20 different emotions: 8 were positive affect (e.g., excited, proud) and 12 were negative affect (e.g., irritable, distressed). Reported reliability was .84-.90 (Cronbach’s coefficient alpha). Participants were asked, “This scale consists of a number of words that describe different feelings and emotions. Indicate to what extent you feel this way right now, that is, at the present moment.” PANAS was selected because it is considered to be an adequate measure to capture the instant affect of a participant in an

experimental setting instead of the subjective well-being that measures individual's general and stable level of well-being.

General questions. Finally, demographic information was gathered from the participant's including age, income, marital status, and ethnicity. In addition participants were asked an open-ended question to check whether they were able to discern the purpose of the research (e.g., "what do you think was the purpose of the study?").

Results Study 2

Participant characteristics. Seventy-three participants were randomly assigned to the two experimental conditions and completed the experiment. Participants' ages ranged from 19 to 66 years, with an average age of 26 years. Participants were women (100%), Caucasian (79%), and varied in a relationship status (single: 45%, in a relationship: 32%, married/living with a partner: 23%). Their yearly income varied from less than \$25,000 to \$49,999. There was no significant difference in demographic characteristics between two experimental groups (see Table 12). This finding indicates that any difference in responses on the dependent measures could not be attributed to differences in demographic characteristics.

Table 12

Participant Characteristics (Study 2)

Characteristics		Passive group (<i>n</i> = 43)	Active group (<i>n</i> = 30)
Ethnicity	Caucasian	36 (84%)	22 (73%)
	African American	1 (2%)	5 (17%)
	Asian	1 (2%)	3 (10%)
	Hispanic	3 (7%)	0 (0%)
	Others	2 (5%)	0 (0%)
Relationship status	Single	16 (37%)	17 (57%)
	In a relationship	16 (37%)	7 (23%)
	Married/Living with a partner	11 (26%)	6 (20%)
Income	Less than \$25,000	22 (51%)	17 (57%)
	\$25,000-\$49,999	21 (49%)	13 (43%)
Age		19-59 (median = 27)	20-66 (median = 24)

Reliability of the measures. All the reliability scores were calculated using Cronbach's alpha. The reliability of the manipulation check measure (As you explore the Emma's Facebook page, to what extent were you active/participative?) was .77. The reliability of the motivation measure (motivated, interested, involved, engaged) was .90. The reliability of brand attitude scale (favorable, positive, good, like, and excellent) was .93. The reliability of autonomy support scale (supportive, contributing) was .75. The reliability of purchase intention scale was .96. The reliability of word-of-mouth was .97. The reliability of positive affect was .91 and negative affect was .87. The reliability of tendency to humanize brands was .93. In sum, the reliability of the measures ranged from .75 to .97 that were either "good" or "excellent" according to the guideline (Kline, 2000).

Manipulation check. Participants assigned to the active condition ($n = 30$) reported that they were more active and participative than those assigned to the passive condition ($n = 43$) when they explored the Emma's Facebook page ($M_{\text{active}} = 4.95$ vs. $M_{\text{passive}} = 3.95$, $F(1, 71) = 7.48$, $p < .01$). Importantly, the manipulated effect was not driven by the difference in the motivation level of the two tasks. Participants from both conditions reported the same level of motivation for reading and writing comments ($M_{\text{active}} = 5.06$ vs. $M_{\text{passive}} = 4.59$, $F(1, 71) = 1.82$, $p = .18$).

Main effect. It was hypothesized that consumer's active (vs. passive) Facebook participation relative to a brand results in positive brand attitude, high willingness-to-pay, positive purchase intention, and positive word-of-mouth (hypothesis 1). As expected, the active group indicated a more positive brand attitude than the passive group ($M_{\text{active}} = 4.13$ vs. $M_{\text{passive}} = 3.64$, $F(1, 71) = 4.82$, $p < .05$; see Figure 12). Although the active group indicated a higher purchase intent, willingness-to-pay, and word-of-mouth than the passive group, the difference between the two groups did not reach statistical significance (purchase intent, $F(1, 71) = .78$, $p = .38$; willingness-to-pay $F(1, 71) = .49$, $p = .49$; word-of-mouth, $F(1, 71) = 1.42$, $p = .24$). Therefore, hypothesis 1 was only partially supported.

Hypothesis 2 proposed that consumer's active (vs. passive) Facebook participation relative to a brand yields autonomy support (hypothesis 2). As expected, the active group showed significantly higher autonomy support than did the passive group ($M_{\text{active}} = 4.83$ vs. $M_{\text{passive}} = 3.45$, $F(1, 71) = 13.38$, $p < .001$). Therefore, hypothesis 2 was supported.

Hypothesis 4 proposed that consumer's active (vs. passive) Facebook participation related to a brand yields positive affect (hypothesis 4) and not negative

affect (hypothesis 5). As expected, the active group indicated they experienced a higher level of positive affect than did the passive group ($M_{\text{active}} = 3.14$ vs. $M_{\text{passive}} = 2.38$, $F(1, 71) = 11.02, p < .01$). Thus, hypothesis 4 was supported. However, different from the expectation, negative affect did not significantly differ between groups ($F(1, 71) = .02, p = .90$). Thus, hypothesis 5 was not supported.

Finally, it was hypothesized that a brand would be rated higher on humanization when a consumer participates in active brand activities via Facebook as compared to when a consumer participates in passive brand activities (hypothesis 8). As expected, the active group rated the brand as more human-like than did the passive group ($M_{\text{active}} = 4.50$ vs. $M_{\text{passive}} = 3.55$, $F(1, 71) = 5.52, p < .05$). Therefore, hypothesis 8 was supported.

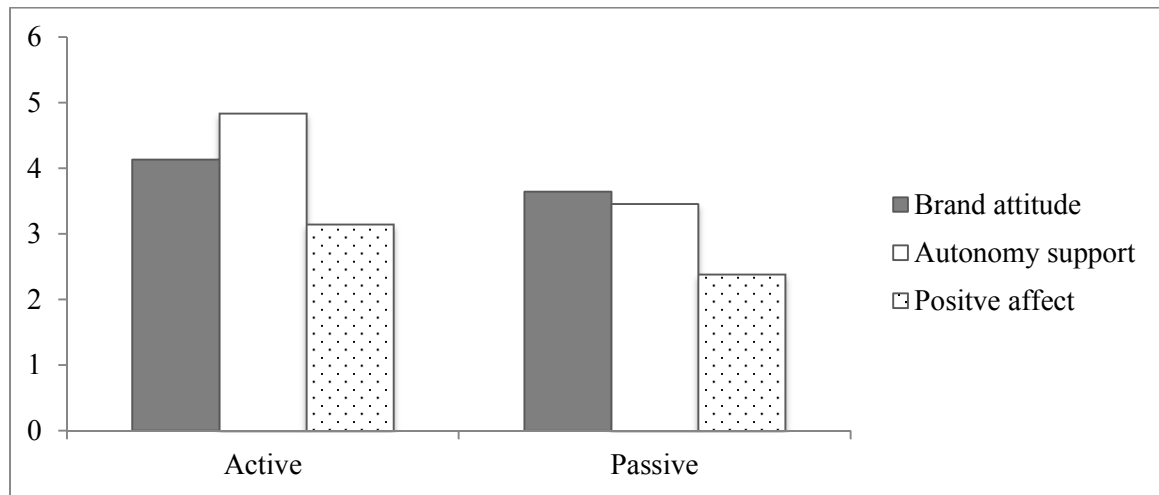


Figure 12. The impact of active versus passive participation on dependent variables (Study 2)

Mediation analyses. Hypothesis 3 proposed that the relationship between brand participation via Facebook and brand attitude was mediated by autonomy support (see

Figure 13). To test for autonomy support as a mediator, several regression analyses were conducted. Specifically, when brand attitude was regressed onto brand participation, the addition of autonomy support in the analyses decreased the beta weight for Facebook participation from .25 ($t(70) = 2.20, p < .05$) to .02 ($t(69) = .15, p = .88$). Thus, autonomy support mediated the effect of Facebook participation on brand attitude (Sobel test = 3.15, $p < .01$). The bootstrapping technique (Zhao, Lynch, & Chen, 2010) also supported the proposed mediation relationship. When 1,000 bootstrapped samples were used, 95% BCa (bias corrected and accelerated) bootstrap confidence interval did not include zero [.084 to .338]. Thus, hypothesis 3 was supported.

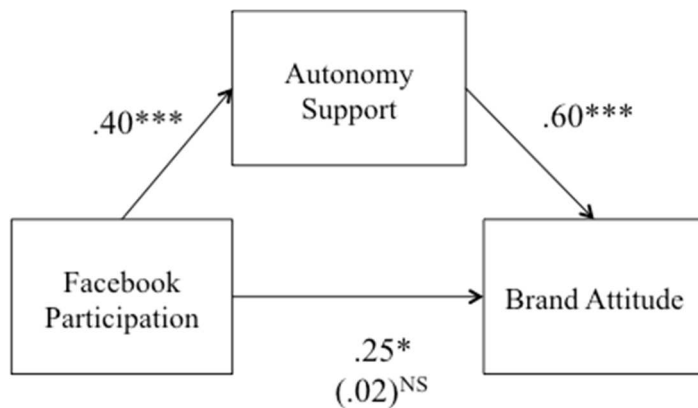


Figure 13. Mediation analysis related to brand attitude (Study 2)

Next, whether or not consumer's autonomy support explains the relationship between active brand participation via Facebook and positive affect (hypothesis 6) was tested (see Figure 14). When positive affect was regressed on active brand participation, including autonomy support decreased the beta weight for brand participation from .38 ($t(71) = 3.47, p < .001$) to .12 ($t(70) = 1.28, p = .20$). Thus, the relationship between brand participation and positive affect was mediated by autonomy support (Sobel test =

3.36, $p < .001$). The bootstrapping technique also supported the proposed mediation relationship. When 1,000 bootstrapped samples were used, 95% BCa (bias corrected and accelerated) bootstrap confidence interval did not include zero [.223 to .433]. Thus, hypothesis 6 was supported.

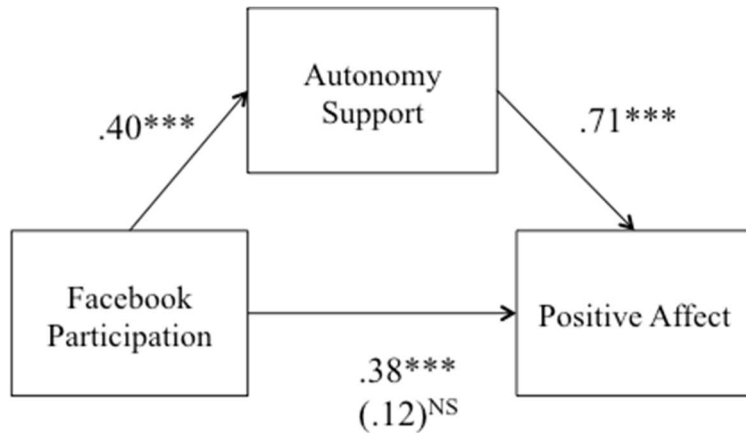


Figure 14. Mediation analysis related to positive affect (Study 2)

Since hypothesis 4 was not supported, whether consumer's autonomy support explains the relationship between active brand participation and negative affect (hypothesis 7) was not tested. Thus, hypothesis 7 was not supported.

Discussion Study 2

As hypothesized the experimental study revealed that active (vs. passive) brand participation via Facebook resulted in positive brand attitude. Consumers' provision of autonomy support for the brand (i.e., writing comments about the brand) seemed to be the underlying mechanism to explain this effect. According to self-determination theory (Deci et al., 2006), giving as well as receiving autonomy support enhances relationship

quality and the experience of well-being. Participants in the active group appear to have formed a favorable brand attitude toward Emma because they provided help to the brand. Specifically, the instructions of the experiment described that Emma was a new brand and that participant input was invaluable for its brand positioning, targeting customers, and product assortment. After recognizing what Emma (the brand) wanted, participants in the active group were able to provide support for the Emma by writing relevant comments to its Facebook page. This was not the case for the participants in the passive group. As a result of providing autonomy support, participants in active group formed a more favorable attitude toward Emma and experienced higher positive affect than those in the passive group.

The second purpose of Study 2 was to identify a possible explanation for the link between active brand participation and happiness. This experiment revealed one possible explanation for why people who engaged in active brand participation experienced more happiness compared with those who engaged in passive brand participation.

For future research, the results of Study 2 pointed to the possibility of using the “tendency to humanize brands” as a moderator to predict brand attitude and positive affect. Although post-hoc analyses of the current data were non-significant, there was a consistent pattern in the results such that participants with a high tendency to humanize brands tended to report positive brand attitude and positive affect as compared to participants with a low tendency to humanize brands. Likewise, the tendency to humanize brands might be a possible mediator to explain relationships between brand participation on Facebook and brand attitude and between brand participation on Facebook and positive affect. Future research is necessary to further examine this idea.

Although the experiment made it possible to examine causality between variables and tested the applicability of self-determination theory to a hypothetical consumer-brand relationship, it also had limitations. First, proxy measurements were used for the experiment. In a highly controlled experimental setting, the manipulation or the effect does not last long, thus, researchers have to use brief measures. For example, brand attitude was measured instead of consumer-brand relationship or brand equity, and PANAS was measured instead of subjective well-being. Based on previous research, the measures that best represented the corresponding construct of consumer-brand relationship/brand equity and subjective well-being and that could be used in an experimental context were selected. However, choosing proxy measurements might qualify the generalizability of the results from an experiment to the real world.

Second, different from brand attitude, as compared to passive participation with brands, active participation did not result in significantly higher scores on purchase intent, willingness-to-pay, and word-of-mouth. These three variables measure behavioral intention instead of attitude and behavioral intentions are known to be more difficult to change than brand attitude (e.g., Baumeister, Vohs, & Funder, 2007). Thus, the lack of significant results may have been due to the possibly weak manipulation of the independent variable (i.e., brand participation). In the future researchers might want to develop a stronger manipulation of brand participation via Facebook to validate this interpretation.

The third limitation is related to the possible weak manipulation of the independent variable, brand participation. When participants were asked to write comments on Emma's Facebook page, some did not write comments. The number of

people who wrote comments on Facebook was less than the number of participants who completed the questionnaire ($n = 30$). Those that did not write comments might have felt uncomfortable making comments because on Facebook their comments would not have been anonymous. Also, different from some online questionnaire delivery methods such as Qualtrics where participants are not able to skip questions, participants' answers could not be forced in Facebook. Consequently, those who did not write comments might have lowered the power of the effect because they answered the dependent variable without properly participating in the manipulation task required of the independent variable. In addition, as shown in results of Study 2, active participation did not result in significantly lower negative affect than passive participation. The result also can be attributed to the possibly weak manipulation of the independent variable. However, the limitation is an inevitable consequence of using the real Facebook for the experiment. If the experiment had used a screenshot of Facebook, for example, not the real Facebook brand page, it would have forced all the participants write comments. But the alternative experimental setting would have not observed how people respond to the real Facebook in terms of active and passive participation. Therefore, a weak manipulation might be the inevitable cost of using a real Facebook page for the experiment. Alternatively, if there were a tool to match participants' responses on Qualtrics and their responses on Facebook, the study would greatly improve the validity of the current manipulation.

Furthermore, the experiment's autonomy support did not fully reflect the nature of autonomy support. Autonomy support is freely given to a relationship partner in the real world and "autonomy" is the key aspect of the concept. However, in the experiment, participants were "asked" to give support to the brand by writing comments. They did not

autonomously give support to the brand. Of course participants had the freedom to write any positive or negative comments as well as helpful or unhelpful comments. So the instructions did not really force participants to give any specific type of comment. But still, the request to write comments may not have fully reflected an empirical relationship to a brand and real autonomy support. If the instruction to write comments had not been specified and if participants had been allowed to read or not and/or make comments or not, the study would have been higher in realism. However, the problem with a “let it happen or not approach” is when this behavior occurs in a natural setting, the researchers cannot control for possible confounding variables such as personality. For example, people who are highly extraverted might make more comments to the brand on the brand’s Facebook page than those who are low in extraversion. The advantage of the current experiment is that it provided a conservative setting to test these hypotheses (e.g., autonomy support will mediate the relationship between active Facebook participation and favorable brand attitude). It is highly likely that when participants can provide real “autonomy” support, the same or a greater effect will occur.

Finally, Study 2 did not rule out an alternative explanation, that is, general positive affect might have caused the effect. Presumably, if participants in the active group felt positive affect as a result of the manipulation, they might have become more agreeable than usual and as a result gave positive ratings to any of the variables under study including autonomy support, tendency to humanize brands, or brand attitude. Usually, in an experimental study, affect is not used as a dependent variable. Rather, it is a variable that is often controlled. To exclude an affect explanation, researchers show, for example, two groups who have different manipulations that do not differ in positive

affect and negative affect. Accordingly, it would also be necessary to demonstrate that affect does not explain the suggested effect to support the interpretation of the results of Study 2. Thus, Study 3 was planned to control the positive affect and examine the effect of active brand participation via Facebook on autonomy support, tendency to humanize brands, and brand attitude.

Study 3

To exclude alternative explanations for the results of Study 2 and strengthen support for the argument that the effect of active brand participation via Facebook on brand attitude was due to autonomy support, two additional studies (3 and 4) were conducted. Since positive affect has an influence on thinking and decision making (Isen, 2008), it was important to effectively control for its possible effect. Therefore, to examine the effect of active Facebook participation and autonomy support after controlling for positive affect, Study 3 presented negative information (e.g., brand crisis) related to the brand to participants. When negative information about brands is present, active as well as passive Facebook participation was not expected to create the same level of positive affect as when only positive information about brand is present. Thus, Study 3 examined the mediating influence of autonomy support without the interference of positive affect.

Method Study 3

Participants were recruited from MTurk for a compensation of 50 cents. This study followed the same procedures outlined in Study 2 except for four things. First, a short description of the brand's use of a sweatshop to produce its apparel was placed on the Emma's Facebook page (see Figure 15). Specifically, it said, "Emma has been accused of using sweatshops. Emma found cheap labor in Indonesia, Cambodia, and Vietnam, countries that prohibit labor unions. When workers demanded additional rights and benefits in these countries, the Emma factories closed and moved to a different location that would enable them to continue operating at a low cost. Emma was heavily criticized for selling goods produced in sweatshops." In addition, to strengthen the impact of the negative information on participations, the study presented Emma's denial of using

sweatshop. The use of denial by a brand is considered an inappropriate response to a brand crisis and not helpful to recovering the brand crisis (Loken & John, 2009; Puzakova, Kwak, & Rocereto, 2013). Specifically, the denial statement said, “Recently, Emma has issued an official statement in response to these accusations. It has come to our attention that there are reports suggesting that there have been issues regarding the production of Emma clothing. We strongly deny these allegations and wish to ensure that the company has fulfilled its promises in delivering the best quality to our customers responsibly. Specifically, our internal investigation has confirmed that the Emma clothes are consistently produced in sweatshop-free environments and workers in the factories we use are treated and paid fairly. We are proud to continue to provide our customers with the finest clothing, shoes, and bags available.”



Figure 15. The stimuli for Study 3: A part of Emma’s Facebook page

The second difference was Study 3 only tested brand attitude as a dependent measure. This decision was based on the results of Study 2 demonstrating that purchase intent, willingness-to-pay, and word-of-mouth were not significantly related to the passive and active brand activities via Facebook (i.e., independent variable of Study 2).

The third difference was related to the measurement of autonomy support. Study 2 used two items to measure autonomy support. Since multiple-item measurements have higher reliability and validity than single- or two-item measurements (Burisch, 1984), two additional items were used to measure autonomy support. These items were “As you

explored the Emma's Facebook page, to what extent were you "responsive?" and "As you explored the Emma's Facebook page, to what extent were you "responsible?"

Finally, participants were asked to answer manipulation check questions after they answer dependent variable questions. It was to prevent a possible demanding effect that might have happened in Study 2 when participants answered manipulation check questions right after the manipulation.

Following the data collection procedure outlined in Study 2, participants were randomly assigned to one of the two experimental conditions: active or passive brand participation. In the active condition, participants were told to write comments as they read descriptions of the brand and viewed photos of the Emma's Facebook page.

Participants of the passive condition were told to read descriptions of the brand and view photos of Emma's Facebook page. Next, participants responded to the brand attitude, tendency to humanize brands, PANAS, and autonomy support measurement items. They also completed manipulation check questions, a measure of their motivation level, the demographic questions, and the suspicious probe. Details concerning these measures are presented in methods section of Study 2.

Results Study 3

Participant characteristics. Seventy-four participants' volunteered for the research. They were randomly assigned to one of the two experimental conditions of the study. Their ages ranging from 18 to 39 years, with an average age of 27 years.

Participants were women (100%), Caucasian (74%), and varied in a relationship status (single: 35%, in a relationship: 27%, married/living with a partner: 38%). Their yearly income ranged from less than \$25,000 to \$100,000 or more. There was no significant

difference in demographic characteristics between the two experimental groups (see Table 12). This finding supports the conclusion that any difference in response to the dependent measures could not be due to demographic characteristics.

Table 13
Participant Characteristics (Study 3)

Characteristics		Passive group ($n = 37$)	Active group ($n = 37$)
Ethnicity	Caucasian	28 (75%)	27 (73%)
	African American	4 (11%)	3 (8%)
	Asian	1 (3%)	4 (11%)
	Hispanic	4 (11%)	3 (8%)
Relationship status	Single	12 (32%)	14 (38%)
	In a relationship	12 (32%)	8 (22%)
	Married/Living with a partner	13 (36%)	15 (40%)
Income	Less than \$25,000	19 (51%)	18 (49%)
	\$25,000-\$49,999	11 (30%)	11 (30%)
	\$50,000-\$74,999	5 (14%)	5 (14%)
	\$75,000-\$99,999	1 (3%)	3 (8%)
	\$100,000 or more	1 (3%)	0 (0%)
Age		19-39 (median = 26)	18-38 (median = 27)

Reliability of measures. Reliabilities of all of the scales were determined using Cronbach's alpha. The reliability of the manipulation check measure (As you explore the Emma's Facebook page, to what extent were you active/participative/responsive/responsible?) was .79. The reliability of the measure of participant motivation (motivated, interested, involved, engaged) was .88. The reliability

of the positive affect scale was .90 and negative affect was .82. The reliability of autonomy support scale (supportive, contributing, responsive, and responsible) was .87. The reliability of brand attitude scale (good, pleasant, favorable, like, excellent) was .98 and of the tendency to humanize brands scale was .88. In sum, the reliability of the measures ranged from .79 to .99 that were either “good” or “excellent” according to the guideline (Kline, 2000).

Manipulation check of negative information. The ratings of brand attitude by the participants in Study 3 was significantly lower than those of the ratings of participants in Study 2 ($N = 73$; $M_{\text{Study 2}} = 3.77$, $SD_{\text{Study 2}} = .94$ vs. $M_{\text{Study 3}} = 3.02$, $SD_{\text{Study 3}} = 1.23$, confidence level = .99). This finding suggests that the negative information concerning the brand resulted in participants’ holding less positive brand attitudes than did participants in Study 2 who were not presented with any information about the brand. Therefore, the stimulus successfully controlled for a general positive affective effect of participants when indicating their responses toward the Emma apparel brand.

Manipulation check of brand participation via Facebook. Participants assigned to the active condition ($n = 37$) reported that they were more active and participative in brand activities on Facebook than participants assigned to the passive condition ($n = 37$) when they explored the Emma’s Facebook page ($M_{\text{active}} = 4.64$ vs. $M_{\text{passive}} = 3.97$, $F(1, 72) = 2.81$, $p = .09$). This difference approached significance but was not statistically different. The manipulation check was considered to be successful for the further analysis. Again, as shown in Study 2, the difference between two groups was not driven by differences in the motivation level of the two tasks. Participants from both conditions reported the same level of motivation ($M_{\text{active}} = 4.61$ vs. $M_{\text{passive}} = 4.79$, $F(1,$

72) = .32, $p = .58$). Therefore, the following results were attributed to the difference of manipulation but not the level of motivation between two groups.

PANAS. As expected, active participants and passive participants were not significantly different in their level of positive affect ($M_{\text{active}} = 2.65$ vs. $M_{\text{passive}} = 2.53$, $F(1, 72) = .26$, $p = .62$) or negative affect ($M_{\text{active}} = 1.75$ vs. $M_{\text{passive}} = 1.79$, $F(1, 72) = .12$, $p = .74$). This finding also suggests that the negative information about the brand successfully controlled for any possible general positive affective state mediating the influence of active and passive Facebook participation on brand attitude.

Supplementary analyses. Even after controlling for positive affect, active Facebook participation resulted in higher levels of autonomy support ($M_{\text{active}} = 4.16$ vs. $M_{\text{passive}} = 3.30$, $F(1, 72) = 5.11$, $p < .05$) for the brand. Furthermore, as expected, autonomy support significantly predicted brand attitude ($\beta = .51$, $t(1, 72) = 4.97$, $p < .001$). However, active Facebook participation did not lead to higher ratings of brand attitude ($M_{\text{active}} = 3.11$ vs. $M_{\text{passive}} = 2.93$, $F(1, 72) = .36$, $p = .55$) or of tendency to humanize brands ($M_{\text{active}} = 3.30$ vs. $M_{\text{passive}} = 2.98$, $F(1, 72) = .92$, $p = .34$) than did passive Facebook participation.

Discussion

The design of Study 3 eliminated the possible confounding effect of general positive affect. Without positive affect, active Facebook participation continued to predict autonomy support. Although active Facebook participation did not lead to significantly higher brand attitude than passive Facebook participation, autonomy support was a significant predictor of brand attitude. This finding supports the previous interpretation of

the findings in Study 2, that is, that it was the participants' engagement in autonomy support (i.e., writing the comments) that caused the favorable attitude toward the brand.

Furthermore, the results demonstrated the importance of autonomy support to developing favorable brand attitude. According to the results, participants in the active Facebook group did not form a more positive brand attitude than did those in the passive Facebook participation group, even though active Facebook participation resulted in higher autonomy support than did the passive Facebook participation. It is likely that the difference in autonomy support was not large enough to result in a significant difference on brand attitude.

Study 3 had some limitations. Above all, the manipulation check approached significance but was not statistically different ($p = .09$). The failure of the manipulation undermines the results of Study 3. As noted in the discussion of Study 2, the failure of manipulation check might have resulted from the weak manipulation.

Next, the second supplementary study (Study 4) was planned to clarify the boundary condition of the effect that was shown in the main study (Study 2).

Study 4

The purpose of Study 4 was to strengthen the findings of Study 2 and to show the boundary condition of the active Facebook participation effect. According to self-determination theory, autonomy support means acknowledging others' perspectives and being responsive to others. When consumers are not able to acknowledge the brand's perspective or to be responsive to the brand, they cannot provide autonomy support. Therefore, it was predicted that when participants cannot tell what brands want from them and why they have to write comments about the brands, the effect of active Facebook participation would disappear.

Method Study 4

Participants were recruited from MTurk for a compensation of 50 cents. Study 4 followed the same procedure outlined in Study 2 except that instructions to participants no longer specified the needs of the apparel brand, Emma. The following phrases were eliminated. "As Emma is at its preparatory phase, it would like to hear from you; what potential customers might think about the brand. Your input will be invaluable for its brand positioning, targeting customers, and product assortment." Instead, instructions simply said, "Brand Evaluation: You will visit a Facebook page of a fashion brand, Emma, and answer some questions about it."

Similar to Study 2, participants were randomly assigned to one of the two experimental conditions (i.e., active vs. passive). Participants assigned to the active condition were told to write comments as they read the descriptions and viewed photos of Emma's Facebook page. Participants assigned to the passive condition were told to read the descriptions and view the photos on Emma's Facebook page. Next, they completed

the manipulation check questions, a measure of their motivation level, brand attitude, PANAS, tendency to humanize brands, the demographic questions, and the suspicious probe as outlined in Study 3.

Results Study 4

Participant characteristics. Seventy-three participants volunteered for the research through MTurk. Participants' ages ranged from 19 to 65 years, with an average age of 29 years. Participants were women (100%), Caucasian (100%), and varied in a relationship status (single: 38%, in a relationship: 21%, married/living with a partner: 41%). Their yearly income ranged from less than \$25,000 to \$100,000 or more. There was no significant difference in demographic characteristics between the two experimental groups (see Table 14). This finding supports the conclusion that any difference in response to the dependent measures could not be due to these demographic characteristics.

Reliability of measures. Reliabilities of all of the scales were determined using Cronbach's alpha. The reliability of the manipulation check measure (As you explore the Emma's Facebook page, to what extent were you active/participative?) was .57. The reliability of the measure of participant motivation (motivated, interested, involved, engaged) was .84. The reliability of the positive affect scale was .91 and negative affect was .85. The reliability of autonomy support scale (supportive, contributing, responsive) was .90. The reliability of brand attitude scale (good, pleasant, favorable, like, excellent) was .96 and of the tendency to humanize brands scale was .75. In sum, the reliability of the measures ranged from .75 to .96 that were either "good" or "excellent" according to

the guideline (Kline, 2000) except the reliability of the manipulation check measure that was “poor.”

Table 14

Participant Characteristics (Study 4)

Characteristics		Passive group (<i>n</i> =39)	Active group (<i>n</i> =34)
Relationship status	Single	16 (41%)	12 (35%)
	In a relationship	7 (18%)	8 (24%)
	Married/Living with a partner	16 (41%)	14 (41%)
Income	Less than \$25,000	12 (31%)	8 (24%)
	\$25,000-\$49,999	16 (41%)	13 (38%)
	\$50,000-\$74,999	8 (20%)	9 (27%)
	\$75,000-\$99,999	1 (3%)	4 (11%)
	\$100,000 or more	2 (5%)	0 (0%)
Age		19-65 (median = 29)	19-56 (median = 29)

Supplementary analyses. ANOVA was conducted between two groups. As expected, without the specific instructions concerning the brand’s needs, there was no difference in brand attitude between the active and passive brand participation groups ($F(1, 72) = .00, p = .97$). Furthermore, there was no difference in autonomy support between the groups. Only “contributing” was marginally significant among the four autonomy support measures ($M_{\text{active}} = 4.35$ vs. $M_{\text{passive}} = 3.62, F(1, 71) = 3.33, p = .07$). Also, tendency to humanize a brand, positive affect, and negative affect were not significantly different between the groups. However, different from other experiments of current project, the manipulation check was not significant ($F(1, 72) = .27, p = .61$).

Again in Study 4, autonomy support was a significant predictor of both brand attitude ($\beta = .54, t(1, 71) = 5.44, p < .000$) and positive affect ($\beta = .47, t(1, 71) = 4.46, p < .000$).

Discussion Study 4

The findings supported the hypothesis that the mere activity of writing comments is not producing the significant effect of active participation in brand activities using Facebook on brand attitude identified in Study 2. Instead, it was the autonomy support that generated both the positive brand attitude as well as the positive affect. Participants fulfilled their psychological needs by providing their support for a brand in need of help when the help was requested. However, when the need of the brand (i.e., help) was not clearly identified, writing comments did not result in a favorable brand attitude toward the brand nor in positive affect. Also, the manipulation did not result in participants considering the brand as human-like.

Therefore, study 4 identified a boundary condition for the active brand participation effect. That is, it is necessary for a brand to specify their needs and ask consumers for help to get the desired benefits (i.e., positive brand attitude) from active participation in brand events via Facebook.

However, there was a limitation to this last study. The manipulation check assessing differences in level of brand participation was not significant. A possible explanation for why the manipulation check was not significant might be attributed to the low reliability of the measure. Different from the Study 2 and 3, the reliability of the manipulation check measure was very low (Cronbach's alpha = .57) and poor (vs. good

or excellent) according to the guideline (Kline, 2000). It might explain the insignificant result of manipulation check.

The results of study 4 might be attributed to the failure of the experimental manipulation. Specifically, one might argue that there was no difference of brand attitude between the two groups because the manipulation was not successful. On the other hand, nullifying the difference between active and passive Facebook participation might be the very effect of the nonexistence of brand's specific instructions to participants. That is, making comments without motivation might be no different from reading newsfeeds from the brand's Facebook page. Since there is no specific theoretical prediction about it, it is difficult to conclude that making comments without motivation is as same as reading newsfeeds at this point. This result needs further investigation for clarification.

CHAPTER 4

SUMMARY, CONCLUSIONS, and IMPLICATIONS

This chapter begins with a summary of the current research. A general discussion follows in order to interpret and integrate the results of all four studies. Next, theoretical and managerial implications of the current research are presented. Finally, limitations of the current research and suggestions for future research are described.

Summary of the Research Project

The Study 1 categorized Facebook activities into passive and active, successfully modified an existing scale to measure the degree to which an individual humanizes a brand, and explored the overall relationship of variables of interest (Facebook participation, consumer-brand relationships, customer-based brand equity, well-being, and tendency to humanize brands). Positive affect, tendency to humanize brands, general Facebook use, and passive Facebook participation were significant positive predictors of consumer-brand relationship. When the consumer-brand relationship variable was removed from the regression analysis, positive affect, tendency to humanize brands, and active Facebook activity were significant positive predictors of customer-based brand equity.

The Study 2 examined the direct causal relationships between active (vs. passive) brand participation via Facebook and customer-based brand equity. A between-subject experiment was conducted with a fictitious apparel brand, Emma. Study 2 revealed autonomy support as a possible explanation for why people who participated in active brand activities reported experiencing positive emotions as compared with those who participated in passive brand activities Facebook. Study 2 showed, as predicted,

autonomy support was a mediator between participation in active brand activities and brand attitude, a proxy for brand equity.

Study 3 eliminated the possibility that general participant positive affect was causing the positive brand attitude. Study 3 controlled for positive affect and examined the effect of participation in active brand behaviors and autonomy support on brand attitude. To control for positive affect, negative information (e.g., brand crisis) related to the brand was provided to participants. As expected, after controlling for positive affect, participation in active behaviors concerning the brand resulted in autonomy support and autonomy support predicted positive brand attitude.

The purpose of Study 4 was to strengthen the interpretation of the results of Study 2 by demonstrating the boundary condition of participation in active behaviors concerning a brand. The results indicated that when participants could not tell the intended use for the comments they were asked to make, (i.e., did not receive the request for help from the brand), the effect of participation in an active behavior on brand attitude disappeared.

Table 15

Summary of the Current Project

Purpose	Related hypotheses	Test results
1. To assess the impact of brand-related active Facebook participation on marketing outcomes.	<p>H1. <i>Consumers' active (vs. passive) Facebook participation relative to a brand results in favorable brand attitude, WTP, purchase intention, and WOM.</i></p> <p>H8. <i>A brand will be rated more human-like when consumers participate in active (vs. passive) Facebook activity relative to the brand.</i></p>	Partially supported
2. To assess the impact of brand-related active Facebook participation on consumer well-being.	<p>H4. <i>Consumers' active (vs. passive) Facebook participation related to a brand results in positive affect.</i></p> <p>H5. <i>Consumers' active (vs. passive) Facebook participation related to a brand will not result in negative affect.</i></p>	Supported
3. To test self-determination theory in the context of consumer-brand relationships.	<p>H2. <i>Consumers' active (vs. passive) Facebook participation relative to a brand results in autonomy support.</i></p> <p>H3. <i>Consumers' autonomy support explains the relationship between active Facebook participation and brand attitude, WTP, purchase intention, and WOM.</i></p> <p>H6. <i>Consumers' autonomy support explains the relationship between active Facebook participation and positive affect.</i></p> <p>H7. <i>Consumers' autonomy support explains the relationship between active Facebook participation and negative affect.</i></p>	Supported
		Partially supported
		Supported
		Not supported

Conclusions

My research purposes were threefold. The first was to assess the impact of active participation in brand-related Facebook activities on marketing outcomes such as brand attitude and purchase intention. Overall, the test partially supported the initial hypothesis (hypothesis 1) that participation in active compared to passive behavior relative to brand contributes to desired marketing outcomes. Specifically, the results of Study 2 showed that participation in active (vs. passive) behaviors resulted in favorable brand attitudes. Although the other three variables (purchase intent, willingness-to-pay premium prices, intention to engage in word-of-mouth activities) showed the same pattern as brand attitude (i.e., participants engaged in active behaviors rating these higher than those engaged in passive behaviors), the differences between the active and passive group were not statistically significant. Therefore, the results demonstrated that consumers' active Facebook participation could result in positive attitudinal change toward the related brands but not behavioral one.

Regarding the first purpose, the test successfully supported the initial hypothesis (hypothesis 8) that a brand will be rated more human-like when consumers participate in active (vs. passive) Facebook activity relative to the brand. As discussed earlier, humanizing brand is one of most effective ways to build consumer-brand relationships and benefit from the relationships. Therefore, the result also supported the positive impacts of active Facebook participation relative to brands.

The second purpose of the current project was to assess the impact of brand-related active Facebook participation on consumer well-being. The test supported the initial hypothesis (hypothesis 4) that consumers' active (vs. passive) Facebook

participation related to a brand results in positive affect but did not supported the other hypothesis (hypothesis 5) that consumers' active (vs. passive) Facebook participation related to a brand will not result in negative affect. Therefore, the results demonstrated that active Facebook participation could make consumers happier but not less unhappy.

The third purpose was to test self-determination theory in the context of consumer-brand relationships. The test successfully supported the initial hypothesis (hypothesis 2) that consumers' active (vs. passive) Facebook participation relative to a brand results in autonomy support, and the consumers' autonomy support explained the relationship between active Facebook participation and brand attitude (hypothesis 3). Regarding consumer well-being, consumers' autonomy support also explained the relationship between active Facebook participation and positive affect (hypothesis 6). Therefore, the result supports application of the tenets of self-determination theory to understanding consumer-brand relationships.

Specifically, according to self-determination theory, giving autonomy support in an interpersonal relationship contributes to the giver's well-being. This association seems to hold in a consumer-brand relationship. When participants wrote comments (i.e., participated in an active activity), it resulted in high scores on positive affect as well as on autonomy support. Additionally, autonomy support explained the relationship between active Facebook participation and positive affect. Again, these results support the idea that self-determination theory can be useful in explaining relationships between consumers and brands as well as between people.

Finally, from the results of supplementary studies, it can be concluded that enabling consumers to provide autonomy support to brands may be more important to

developing positive brand attitudes than simply enabling consumers to participate in Facebook activities relative to the brand. Put another way, if consumers participate in active brand activities via Facebook but those events do not require them to provide autonomy support, that participation will not contribute to building positive brand attitudes. Therefore, brand managers might want to make sure that their Facebook events have an autonomy support component.

Implications

Theoretical Implications. The findings have theoretical implications concerning consumer-brand relationships. The current research studied consumers' contributions to the consumer-brand relationship via Facebook. When traditional marketing was prevalent, the consumer's role in consumer-brand relationship was highly limited. However, as social media marketing has grown, the consumer's participation in and contribution to the relationship has dramatically increased. Now through their use of social media, consumers can participate in creating and establishing brand images (Mangold & Faulds, 2009) and they co-create brand meaning (Allen, Fournier, & Miller, 2008). The current research applied a general consumer-brand relationships approach to consumer-brand relationships that are built and/or maintained using Facebook. Consumer-brand relationships suggest when a brand plays an important role in a consumer's life it creates a strong consumer-brand relationship (Fournier, 1998). The current research showed consumers rather than brands can initiate and create strong consumer-brand relationships when they provide help (i.e., autonomy support) to the brand. The findings suggest an additional route to forming strong consumer-brand

relationships, that is, consumer-driven relationships. The findings thus, build and extend the literature of consumer-brand relationships.

Second, the impact of participation in active behaviors concerning brands via Facebook on non-brand related outcomes, specifically, on consumer well-being was demonstrated. Given a controlled experimental setting, the change in positive affect was considered a proxy for consumer's well-being. The data supported the hypothesis that participation in active behaviors compared to participation in passive behaviors relative to a brand contributes to a positive affective experience. However, participation in active compared with passive behaviors relative to a brand did not diminish a negative affective experience. The results might be attributed to the weak manipulation that was discussed earlier.

Different from previous brand and social media research that focused on the benefits to brands resulting from social marketing, the current research investigated the benefits to consumers obtained from their participation in a brand's social media marketing activities. It was encouraging that the results from current research imply a reciprocal relationship may exist between consumers and brands. It is likely that through Facebook marketing, brands can create customer-based brand equity and consumers can improve some well-being by participating in brand's social marketing activities that require that consumers provide some autonomy support for the brand.

Third, most importantly, the applicability of self-determination theory to consumer-brand relationships was assessed. In the process, whether tenets of self-determination theory explained why participation in active behaviors leads to favorable brand attitudes and the experience of positive affect was examined. The results repeatedly

demonstrated that autonomy support explained the relationship between participation in active behaviors relative to a brand and favorable brand attitude and between participation in active behaviors relative to a brand and positive affect. Contrary to prediction, autonomy support did not explain the relationship between participation in active behaviors and negative affect. Thus, results showed consistent support for the idea that self-determination theory can be applied to consumer-brand relationships. The finding implies that fulfilling basic psychological needs of autonomy, competence, and relatedness can further explain and predict consumer-brand relationships.

Using self-determination theory, previous researchers usually explained close relationships including reciprocal relationships and nonreciprocal partnerships. Some examples of reciprocal relationships included established romantic relationships and relationships between friends whereas examples of nonreciprocal partnerships included teacher-student and parent-child. Different from previous researchers, the current project studied new and early relationships. Specifically, a new and hypothetical brand was introduced to potential consumers and how consumers established relationships with the brand was studied from the perspective of self-determination theory. Thus, some individuals may question whether self-determination theory is applicable to new and early relationships.

One rationale to justify the application of the theory to new relationships is found in work by La Guardia and Patrick (2008). They emphasized the importance of studying reciprocal relationship rather than nonreciprocal partnerships from the perspective of self-determination theory since the former relationship provide “unique dynamics of interdependence, as they have the greatest potential for reciprocal, mutual exchange” (p.

201). The consumer-brand relationships that were suggested by the current experiments were reciprocal. Specifically, the potential consumers were asked to provide helpful comments for the newly established brand as the brand was providing a selection of clothing items to consumers. Although new and early, the relationship between consumer and brand resembles more of reciprocal relationship than nonreciprocal partnership according to the researchers' categorization. Therefore, the applicability of self-determination theory to early and new relationship is reasonable.

However, whether the finding can be generalized to overall consumer-brand relationships needs further examination. The findings from the current project might be found only between new brands and consumers but not between well-established brands and consumers. For new brands, at least in the current experiments, consumers were able to provide autonomy support by making comments. On the other hand, consumers might not be able to do that for well-established brands. Therefore, future research will be necessary to examine whether consumer-brand relationships with well-established brands as well as new brands can be explained by self-determination theory. Using real brands for experiments instead of hypothetical brands is one means to test this proposition.

Managerial implications. The current research presents practical implications for both firms and consumers to better understand consumer-brand relationships. Related to the controversy of assessing social media ROI (return on investment) that was discussed at the beginning of the project, companies need to categorize their customers' activities on their social media into active and passive. According to the current findings, the number of visitors of their Facebook page, for example, would not contribute to increase their ROI but the number of comments on their Facebook page would. The current

project might provide a useful explanation for the social media ROI controversy and contribute to clarify the specific factor of social media influencing marketing outcomes.

Furthermore, based on the current findings, brand managers might want to develop active rather than passive social media content to shape positive brand attitude. For example, there are many brands using promotions that encourage Facebook users to click “like” or make comments to enter into a drawing for gifts or money, thinking that users’ participation will eventually increase brand equity. However, mere participation might not lead to an increase of brand equity. Encouraging autonomy support from Facebook users or existing/potential customers appears to be one key to strengthening consumer-brand relationships and increasing brand equity.

Bringing out genuine participation of consumers will be much more difficult than encouraging superficial participation of consumers. One way to do it is describing what brands need and asking for consumer’s contribution so that consumers feel their participation is necessary and valuable. Internally motivated participation, that is, autonomy support can build customer-based brand equity.

The current research has implications for consumers as well. According to the findings, consumers might want to engage in active behaviors relative to a brand rather than passive behaviors. Active contributions can provide psychological benefits to consumers. Genuine and internally motivated participation in brand activities via Facebook can contribute to consumers’ happiness. If, however, consumers simply want to kill time and participate in passive brand activities, these activities are unlikely to increase perceived happiness. The current project might provide a useful suggestion for the ongoing research of social media and happiness.

Limitations and Suggestions for Future Research

The current research has limitations. First, only one fashion brand was tested. It would be worthwhile to test whether the same results would be replicated with a different category of brands instead of a fashion brand. The experiments included only women since the stimulus was a women's fashion brand. Although it is not likely that there is a gender difference in consumer-brand relationships, it might be worthwhile to test whether men show the same effect. Also, the experiment used a fictitious brand. It might be important to test whether the use of existing fashion brands would result in replicating these findings. Regarding the existing brands, the question is whether the manipulation of active (vs. passive) behaviors would be strong enough to have an effect on multiple marketing outcomes. As discussed earlier, only brand attitude showed an effect related to type of Facebook participation. Thus, developing and testing a more powerful manipulation task than that employed herein would further validate these findings.

In addition, it is questionable whether the effect of participation in active behaviors could be replicated in a natural setting. Participation in active behaviors might be a fleeting effect that can only be captured in a laboratory setting. If the same findings could be found in a natural setting, the replication would greatly help to increase the generalizability of the findings.

Building on the findings of the current project suggests some interesting future research. Specifically, a weak manipulation was one of the issues of the current study. For example, active Facebook participation did not result in higher purchase intention than passive Facebook participation (Study 2). The non-significant results can be attributed to a weak experimental manipulation. Generally, it takes more power to change

behavioral intentions or real behaviors than it does to impact attitudes. Thus, it would be worthwhile to develop a stronger manipulation of active and passive brand behaviors than writing comments and reading comments. For example, if participants interacted with brands on Facebook by getting replies to their questions and posts, it may create a much stronger operationalization of participation in active brand behaviors than the current manipulation.

Second, the focus herein was on consumers giving autonomy support to the brands. For future research, consumers receiving autonomy support from brand managers and brand managers' perception of receiving autonomy support from consumers would be interesting topics to investigate. Furthermore, it would be interesting to investigate how consumer-brand relationships fulfill the other innate psychological needs such as competence or relatedness.

Also, it would be interesting to study consumer-brand relationships when the brand is in crisis. Studying consumer-brand relationships in situations wherein a brand is confronting a crisis might contribute to self-determination theory as previous researchers have not tested self-determination theory with individuals that suffer from bad reputations. Future researchers might want to study what is consumers' autonomy support in a brand crisis situation (criticizing vs. patronizing) and how it impacts consumer-brand relationships. Research findings from these potential studies can build and extend self-determination theory.

In addition, the current experiments did not include a control condition (vs. active and passive condition) for the independent variable of brand participation. For example, participants who are assigned to control condition could view photos and read articles

about the hypothetical Emma brand located in a magazine or other media source. If a control condition were included the researcher would be able to show the incremental benefit of social media marketing via Facebook by calculating the difference between the outcomes (i.e., dependent variables) linked to the control condition and passive condition, for example, in terms of brand attitude and positive affect. If there were no difference between the outcomes of control condition and the passive condition, the result would imply there is no significant benefit to social media marketing compared with traditional marketing via magazines and other sources. In that case, brand managers would need to reconsider the use of social media marketing for their brands.

Finally, one of the post-hoc analyses of the main study revealed a finding consistent with a previous study of humanizing brand that showed people humanize objects or animals when they have certain motivations. For example, when people are lonely, they might tend to see human attributes in objects and animals (Waytz, Cacioppo, & Epley, 2010). Thus, it would be useful to test whether the same pattern holds related to brands instead of objects or animals. Specifically, do lonely people humanize brands more than people who are not lonely? If this were indeed the case, there could be managerial implications. For example, thinking of objects as alive makes people less willing to replace them (Chandler & Schwarz, 2010). Chandler and Schwarz found that when people were asked to think about their cars as human, they were less likely to replace them and put less weight on their quality when considering replacing them. It would be interesting to test whether lonely people consider their cars more as human, care less about their cars' quality, and are less willing to replace them than people who are not lonely. There might be managerial implications to car leasing industry. When car

salespeople want their customers who are not married (presumably lonely) to buy their cars at the end of a three-year lease's term, they might want to humanize the brand to persuade their customers. The lonely customers might want to keep their cars instead of returning them to the car salesperson.

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APPENDIX

Study 1

Consent Form: Facebook Research

We ask that you read this form and ask any questions you may have before agreeing to be in the study. This study is being conducted by: Jayoung Koo (PhD student in Retail Merchandising Program at the College of Design, University of Minnesota).

Background Information

The purpose of this study is to better understand consumers' preference and their use of Facebook related to their favorite brands. To participate, you need to have an active Facebook account.

Procedures

If you agree to be in this study, you will be asked to a series of questions. The entire study will take 15-20 minutes for most people, but feel free to answer the questions at any speed you like.

Risks and Benefits of Being in the Study

Please note that if you experience extreme discomfort during the study, you are free to halt participation at any time.

Compensation

You will get 25 cents after you finish all the tasks. If you decide to withdraw before the study is complete, you will receive no compensation.

Confidentiality

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions

The researcher to contact for this study is: Jayoung Koo. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at kooxx051@umn.edu. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

Do you agree to proceed?

- Yes
 No

>>

Do you have an active Facebook account?

- Yes
- No

>>

Section I.

This section of the questionnaire will ask questions about what you feel and think about your life in general.

Below are five statements with which you may agree or disagree. Using 1-7 scale from 1 (strongly disagree) to 7 (strongly agree), indicate your agreement with each item.

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. So far I have gotten the important things I want in life.
5. If I could live my life over, I would change almost nothing.

>>

How often **during the past month** have you felt each emotion when you were awake? Using 1-7 scale from Never (1) to Always (7).

1. Fear	<input type="text"/>
2. Affection	<input type="text"/>
3. Anger	<input type="text"/>
4. Shame	<input type="text"/>
5. Joy	<input type="text"/>
6. Sadness	<input type="text"/>
7. Worry	<input type="text"/>
8. Love	<input type="text"/>
9. Irritation	<input type="text"/>
10. Guilt	<input type="text"/>
11. Happiness	<input type="text"/>
12. Loneliness	<input type="text"/>

.

13. Anxiety	<input type="text"/>
14. Caring	<input type="text"/>
15. Disgust	<input type="text"/>
16. Regret	<input type="text"/>
17. Contentment	<input type="text"/>
18. Unhappiness	<input type="text"/>
19. Pride	<input type="text"/>
20. Nervous	<input type="text"/>
21. Fondness	<input type="text"/>
22. Rage	<input type="text"/>
23. Embarrassment	<input type="text"/>
24. Depression	<input type="text"/>



The following statements describe how people sometimes feel. For each statement, please indicate how often the statement describes the way you feel using the accompanying scale [1 = never, 2= rarely, 3= sometimes, 4 = always].

	Never 1	Rarely 2	Sometimes 3	Always 4
1. How often do you feel that you are "in tune" with the people around you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. How often do you feel that you lack companionship?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. How often do you feel that there is no one you can turn to?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. How often do you feel alone?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. How often do you feel part of a group of friends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. How often do you feel that you have a lot in common with the people around you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. How often do you feel that you are no longer close to anyone?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. How often do you feel that your interests and ideas are not shared by those around you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. How often do you feel outgoing and friendly?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. How often do you feel close to people?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
.				
	Never 1	Rarely 2	Sometimes 3	Always 4
11. How often do you feel left out?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. How often do you feel that your relationships with others are not meaningful?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. How often do you feel that no one really know you well?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. How often do you feel isolated from others?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. How often do you feel you can find companionship when you want it?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. How often do you feel that there are people who really understand you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. How often do you feel shy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. How often do you feel that people are around you but not with you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. How often do you feel that there are people you can talk to?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. How often do you feel that there are people you can turn to?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



The following are statements that you might agree or disagree. For each statement, please indicate your agreement by using 1-5 scale from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree 1	2	3	4	Strongly agree 5
1. It is easy for me to concentrate on my activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Frequently when I am working I find myself worrying about other things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Time always seems to be passing slowly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I often find myself at "loose ends," not knowing what to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I am often trapped in situations where I have to do meaningless things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Having to look at someone's home movies or travel slides bores me tremendously	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I have projects in mind all the time, things to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I find it easy to entertain myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Many things I have to do are repetitive and monotonous.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. It takes more stimulation to get me going than most people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree 1	2	3	4	Strongly agree 5
11. I get a kick out of most things I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I am seldom excited about my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. In any situation I can usually find something to do or see to keep me interested.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Much of the time I just sit around doing nothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I am good at waiting patiently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I often find myself with nothing to do-time on my hands.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. In situations where I have to wait, such as a line or queue, I get very restless.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I often wake up with a new idea.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. It would be very hard for me to find a job that is exciting enough.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I would like more challenging things to do in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree 1	2	3	4	Strongly agree 5
21. I feel that I am working below my abilities most of the time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Many people would say that I am a creative or imaginative person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I have so many interests, don't have time to do everything.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Among my friends, I am the one who keeps doing something the longest.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Unless I am doing something exciting, even dangerous, I feel half-dead and dull.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. It takes a lot of change and variety to keep me really happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. It seems that the same things are on television or the movies all the time; it's getting old.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. When I was young, I was often in monotonous and tiresome situations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Section II.

This section will ask you about what you feel and think about **your favorite fashion brand**. Please choose one of the fashion brands in your mind and write it down, for example, Dior, Coach, Nine West, Banana Republic, J.Crew, Tiffany, Forever 21, Alexander McQueen, etc.

Your favorite fashion brand

About **your favorite fashion brand** you chose, please answer the following questions on 7-point scale (1= strongly disagree, 7 = strongly agree) except the last question.

1. Compared to other brands of fashion, the brand is of very high quality.
2. The brand is the best brand in its product class.
3. The brand consistently performs better than all other brands of fashion.
4. I can always count on the brand for consistent high quality.
5. What I get from the brand is worth the cost.
6. All things considered (price, time, and effort), the brand is a good buy.
7. Compared to other brands of fashion, the brand is a good value for the money.
8. When I use the brand, I feel I am getting my money's worth.
9. The brand is "distinct" from other brands of fashion.
10. The brand really "stands out" from other brands of fashion.
11. The brand is very different from other brands of fashion.
12. The brand is "unique" from other brands of fashion.
13. The price of the brand would have to go up quite a bit before I would switch to another brand of fashion.
14. I am willing to pay a higher price for the brand than for other brands of fashion.
15. I am willing to pay a lot more for the brand than other brands of fashion.

16. I am willing to pay ___% more for the brand over other brands of fashion: 0% 5% 10% 15% 20% 25% 30%, or more.

%



About **your favorite fashion brand** you chose, please indicate to what extent each of the following statements describes the relationship you have with the brand. [1 = strongly disagree, 7= strongly agree].

1. I am very loyal to the brand.
2. I am willing to make small sacrifices in order to keep using the brand.
3. I would be willing to postpone my purchase if the brand site was temporarily unavailable.
4. I would stick with the brand even if it let me down once or twice.
5. I am so happy with the brand that I no longer feel the need to watch out for other alternatives.
6. I am likely to be using the brand one year from now.
7. I would feel comfortable sharing detailed personal info about myself with the brand.
8. The brand really understands my needs in the fashion category.
9. I'd feel comfortable describing the brand to someone who was not familiar with it.
10. I am familiar with the range of products and services the brand offers.
11. I have become very knowledgeable about the brand.
12. I am completely satisfied with the brand.

13. I am completely pleased with the brand.
14. The brand is turning out better than I expected.
15. The brand connects with the part of me that really makes me tick.
16. The brand fits well with my current stage of life.
17. The brand says a lot about the kind of person I would like to be.
18. Using the brand lets me be a part of a shared community of like-minded consumers.
19. The brand makes a statement about what is important to me in life.
20. I can always count on the brand to do what's best.
21. If the brand makes a mistake, it will try its best to make up for it.
22. I know I can hold the brand accountable for its actions.
23. The brand is reliable.
24. Given my image of the brand, letting me down would surprise me.
25. A brand failure would be inconsistent with my expectations.



Below are ten statements with which you may agree or disagree. Using 1-7 scale from 1 (strongly disagree) to 7 (strongly agree), indicate your agreement with each item about **your favorite fashion brand**.

1. I believe my favorite fashion brand is durable.
2. I believe my favorite fashion brand experience emotions.
3. I believe my favorite fashion brand is useful.
4. I believe my favorite fashion brand has consciousness.
5. I believe my favorite fashion brand is good-looking.
6. I believe my favorite fashion brand has free will.
7. I believe my favorite fashion brand has intentions.
8. I believe my favorite fashion brand is lethargic.
9. I believe my favorite fashion brand has a mind of its own.
10. I believe my favorite fashion brand is active.

>>

Section III.

General use of Facebook

The following questions will ask about your daily Facebook activities.

1. About how many total Facebook friends do you have?

- 10 or less 11–50 51–100 101–150 151–200 201–250 251–300 301–400 more than 400

2. In the past week, on average, approximately **how many minutes per day** have you spent on Facebook?

- less than 10 minutes 10–30 minutes 31–60 minutes 1–2 hours 2–3 hours more than 3 hours

Below are six statements with which you may agree or disagree. Using 1-5 scale from 1 (strongly disagree) to 5 (strongly agree), indicate your agreement with each item.

3. Facebook is part of my everyday activity.
4. I am proud to tell people I'm on Facebook.
5. Facebook has become part of my daily routine.
6. I feel out of touch when I haven't logged onto Facebook for a while.
7. I feel I am part of the Facebook community.
8. I would be sorry if Facebook shut down.

>>

Consumer's brand-related Facebook activities

The following questions will ask about your brand-related Facebook activities. Indicate **how often you engage** in each of the following activities on Facebook related to **your favorite brand** you chose previously [1 = never, 5 = always].

	Never 1	2	3	4	Always 5
1. Viewing brand-related video	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Watching brand-related pictures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. "Like" brand pages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Reading comments on brand page	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Reading product reviews on brand page	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Following brand pages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Engaging in conversations on brand page	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Commenting on brand-related weblogs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Commenting on brand-related audio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Commenting on brand-related pictures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Never 1	2	3	4	Always 5
11. Publishing a brand-related weblog	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Uploading brand-related video	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Uploading brand-related audio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Uploading brand-related pictures or images	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Writing brand-related articles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. "Like" picture/image of brand page	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. "Share" picture/image of brand or product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. "Like" others' comments on brand page	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. "Reply" to others' comments on brand page	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Section IV. General Questions

What is your gender?

- Male
- Female

What is your age?

What is your ethnicity?

- Caucasian
- African American
- Asian
- Hispanic
- Others

What is your relationship status?

- Single
- In a relationship
- Married / Living with a partner

What is your income?

- Less than \$25,000
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$99,999
- \$100,000 or more

Study 2

Consent Form: Facebook Research

We ask that you read this form and ask any questions you may have before agreeing to be in the study. This study is being conducted by: Jayoung Koo (PhD student in Retail Merchandising Program, University of Minnesota).

Background Information

The purpose of this study is to better understand consumer's preference of women's fashion brand. To participate, you need to have an active Facebook account.

Procedures

If you agree to be in this study, you will be asked to a series of questions. The entire study will take less than 10 minutes for most people, but feel free to answer the questions at any speed you like.

Risks and Benefits of Being in the Study

Please note that if you experience extreme discomfort during the study, you are free to halt participation at any time.

Compensation

You will get 30 cents after you finish all the tasks. If you decide to withdraw before the study is complete, you will receive no compensation.

Confidentiality

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions

The researcher to contact for this study is: Jayoung Koo. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at kooxx051@umn.edu. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

Do you agree to proceed?

- Yes
- No (End of Survey)

>>

Are you female?

- Yes
- No (End of Survey)

>>

Do you have an active Facebook account?

- Yes
- No (End of survey)

>>

Active Facebook Participation Condition

Brand Evaluation

We are interested in how consumers evaluate brands. You will visit a Facebook page of a fashion brand, **Emma**, and answer some questions about it. As Emma is at its preparatory phase, it would like to hear from you; what potential customers might think about the brand. Your input will be invaluable for its brand positioning, targeting customers, and product assortment.

1) Copy and past the following link. You need to be logged in Facebook to see the page.

<https://www.facebook.com/pages/Emma/1428288834091772>

2) Please "write comments" as you read descriptions and view photos of Emma's Facebook page.

3) Next, come back to this survey and answer several questions about it.



Passive Facebook Participation Condition

Brand Evaluation

We are interested in how consumers evaluate brands. You will visit a Facebook page of a fashion brand, **Emma**, and answer some questions about it. As Emma is at its preparatory phase, it would like to hear from you; what potential customers might think about the brand. Your input will be invaluable for its brand positioning, targeting customers, and product assortment.

1) Copy and past the following link. You need to be logged in Facebook to see the page.

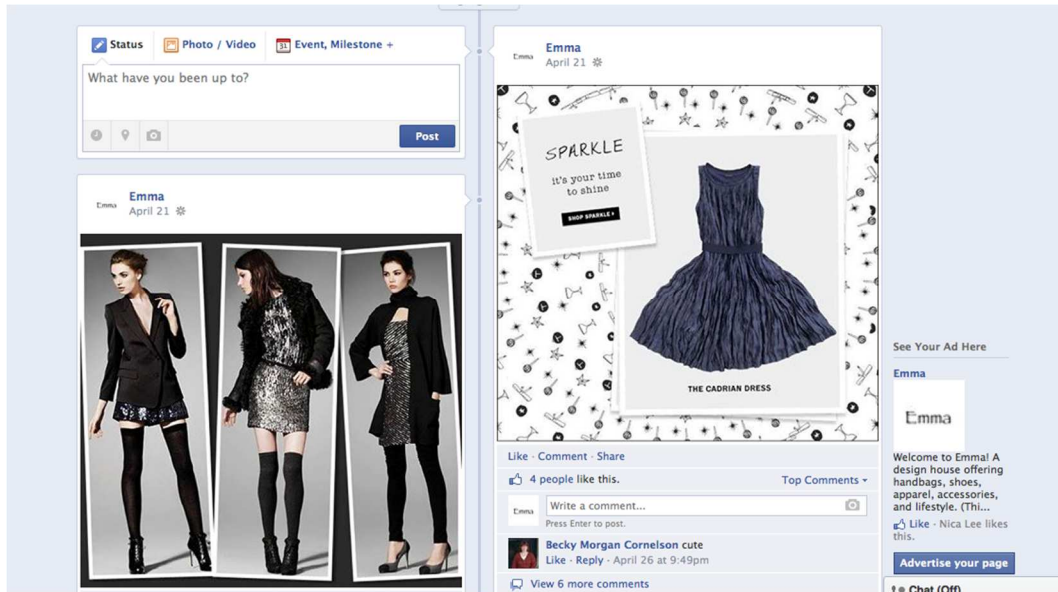
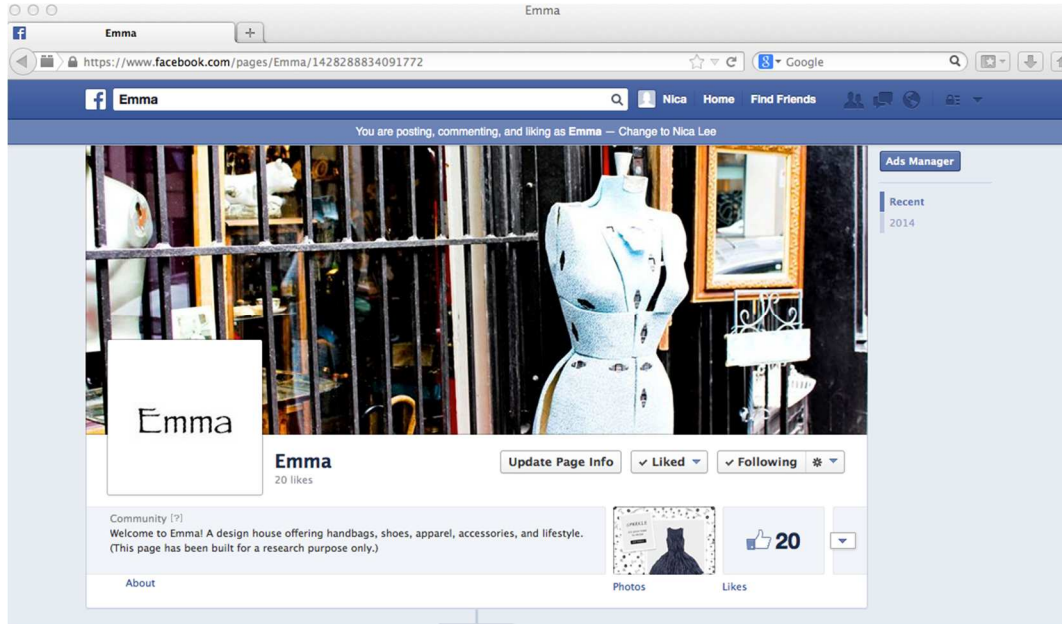
<https://www.facebook.com/pages/Emma/1428288834091772>

2) Please read descriptions and view photos of Emma's Facebook page.

3) Next, come back to this survey and answer several questions about it.



Emma's Facebook brand page




Write a comment...
Press Enter to post.

Shady Shipier Love it
Like · Reply · April 26 at 9:30pm

View 4 more comments

4 people saw this post

Emma
April 21



Like · Comment · Share

3 people like this. Top Comments -


Write a comment...
Press Enter to post.

Anna Wendt Stunning photo!
Like · Reply · April 26 at 9:57pm

Liz Downey Sutton Amazing photo
Like · Reply · April 22 at 7:20am

28 people saw this post

Emma
April 21



Like · Comment · Share


2 people like this.

Write a comment...
Press Enter to post.

Shawna Redding I love this sweater!
Like · Reply · April 24 at 12:44pm

3 people saw this post

Emma
April 21



See Your Ad Here

Emma


Welcome to Emma! A design house offering handbags, shoes, apparel, accessories, and lifestyle. (Thi...

Like · Nica Lee likes this.

Advertise your page

Chat (Off)

Emma
April 21



Like · Comment · Share

3 people like this. Top Comments -

Write a comment...
Press Enter to post.


Wendy Byers Love the hand bag...
Like · Reply · April 26 at 6:51pm

Sandy De Meis The shoes are cute, I wish they were a lower heel.
Like · Reply · April 26 at 5:18pm

View 3 more comments


2 people saw this post

Emma
April 21



Sandy De Meis Love the handbag!
Like · Reply · April 26 at 5:18pm

Emma
April 21



Like · Comment · Share

4 people like this. Top Comments -

Write a comment...
Press Enter to post.

Anna Wendt Love that white jacket.
Like · Reply · April 26 at 9:58pm

Wendy Byers Very Classy and Sexy...
Like · Reply · April 26 at 6:51pm

View 1 more comment

See Your Ad Here

Emma

Welcome to Emma! A design house offering handbags, shoes, apparel, accessories, and lifestyle. (Thi...

Like · Nica Lee likes this.

Advertise your page

Chat (Off)

Like · Comment · Share

Alexandra Jones likes this. Top Comments ▾

Write a comment...
Press Enter to post.

Sandy De Meis very pretty dresses!
Like · Reply · April 26 at 5:19pm

Becky Allenbaugh stylish
Like · Reply · April 23 at 4:21pm

1 person saw this post

Emma
April 21

Like · Comment · Share

1 person saw this post

Emma
April 21

Emma
April 21

Like · Comment · Share

4 people like this. Top Comments ▾

Write a comment...
Press Enter to post.

Sandy De Meis love the polka dot dresses
Like · Reply · April 26 at 5:19pm

View 4 more comments

28 people saw this post

Emma
April 21

Recent
2014

See Your Ad Here

Emma

Welcome to Emmal A design house offering handbags, shoes, apparel, accessories, and lifestyle. (Thi...
Like · Nica Lee likes this.

Advertise your page

Chat (Off)

Like · Comment · Share

3 people like this.

Write a comment...
Press Enter to post.

Bobby Dempsey Beautiful photo of the Eiffel Tower.
Like · Reply · April 25 at 1:15am

67 people saw this post

Like · Comment · Share

1 person saw this post

Emma
April 21

Like · Comment · Share

2 people like this.

Write a comment...
Press Enter to post.

Chalese Marva Butters Luv this^^
Like · Reply · April 24 at 8:59pm

58 people saw this post

Recent
2014

See Your Ad Here

Emma

Welcome to Emmal A design house offering handbags, shoes, apparel, accessories, and lifestyle. (Thi...
Like · Nica Lee likes this.

Advertise your page

Chat (Off)

As you explore the Emma's Facebook page, to what extent were you _____?

	Not at all 1	2	3	4	5	6	Very much 7
engaged	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
involved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
motivated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
supportive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
participative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
contributing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

Using the following items, indicate your attitude toward the brand, **Emma**.

Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Favorable
Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Like
Poor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excellent

For my next purchase of fashion product, I intend to buy the brand, **Emma**.

Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Likely
Probably not	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Probably
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

I am willing to pay ___% more for the brand, **Emma**, over other brands of fashion: 0% 5% 10% 15% 20% 25% 30%, or more.

%



Indicate the extent you agree or disagree with the following statements about **Emma**.

1. I will recommend this brand to lots of people.

Not at all				Very much
1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. I will 'talk up' this brand to my friends.

Not at all				Very much
1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. I will try to spread the good-word about this brand.

Not at all				Very much
1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. I will give this brand tons of positive word-of-mouth advertising.

Not at all				Very much
1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

Below are five statements with which you may agree or disagree. Using 1-7 scale from 1 (strongly disagree) to 7 (strongly agree), indicate your agreement with each statement about **Emma**.

1. I believe the brand experience emotions.
2. I believe the brand has consciousness.
3. I believe the brand has free will.
4. I believe the brand has a mind of its own.
5. I believe the brand is sometimes active.



Your Mood

This scale consists of a number of words that describe different feelings and emotions. Indicate to what extent **you feel this way right now, that is at the present moment.**

	Not at all 1	A little 2	Moderately 3	Quite a bit 4	Extremely 5
1. Interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all 1	A little 2	Moderately 3	Quite a bit 4	Extremely 5
11. Irritable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Jittery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

General Questions

What is your age?

What is your ethnicity?

- Caucasian
- African American
- Asian
- Hispanic
- Others

What is your relationship status?

- Single
- In a relationship
- Married / Living with a partner

What is your income?

- Less than \$25,000
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$99,999
- \$100,000 or more

>>

Thank you very much for your participation!

IMPORTANT: The verification number is **G27885**. Please type it 1) in the box below and 2) on the MTurk site for the confirmation of your participation.

Verification number



Study 3

Consent Form: Facebook Research

We ask that you read this form and ask any questions you may have before agreeing to be in the study. This study is being conducted by: Jayoung Koo (PhD student in Retail Merchandising Program, University of Minnesota).

Background Information

The purpose of this study is to better understand consumer's preference of women's fashion brand. To participate, you need to have an active Facebook account.

Procedures

If you agree to be in this study, you will be asked to a series of questions. The entire study will take less than 10 minutes for most people, but feel free to answer the questions at any speed you like.

Risks and Benefits of Being in the Study

Please note that if you experience extreme discomfort during the study, you are free to halt participation at any time.

Compensation

You will get 50 cents after you finish all the tasks. If you decide to withdraw before the study is complete, you will receive no compensation.

Confidentiality

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions

The researcher to contact for this study is: Jayoung Koo. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at kooxx051@umn.edu. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

Have you participated in the same survey before?

- Yes (End of survey; I am sorry but you cannot participate in the same survey again.)
- No

>>

Are you female?

- Yes
- No (End of Survey)

>>

Do you have an active Facebook account?

- Yes
- No (End of survey)

>>

Brand Evaluation

We are interested in how consumers evaluate brands. You will visit a Facebook page of a fashion brand, **Emma**, and answer some questions about it. As Emma is at its preparatory phase, it would like to hear from you; what potential customers might think about the brand. Your input will be invaluable for its brand positioning, targeting customers, and product assortment.

>>

Active Facebook Participation Condition

1) Copy and past the following link. You need to be logged in Facebook to see the page.

<https://www.facebook.com/pages/Emma/1428288834091772>

2) Please "write comments" as you read descriptions and view photos of Emma's Facebook page.

3) Next, come back to this survey and answer several questions about it.

>>

Passive Facebook Participation Condition

1) Copy and past the following link. You need to be logged in Facebook to see the page.

<https://www.facebook.com/pages/Emma/1428288834091772>

2) Please read descriptions and view photos of Emma's Facebook page.

3) Next, come back to this survey and answer several questions about it.

>>

Facebook interface for the Emma page. The top navigation bar includes the Emma logo, a search bar, and user options for Nica, Home, and Find Friends. Below this, a status bar indicates the user is acting as Emma. The main content area features a cover photo of a clothing store interior with a mannequin. A profile picture placeholder for Emma is visible. Navigation tabs for Page, Activity, and Settings are at the top left, while Build Audience and Help are at the top right. A sidebar on the right shows 'UNREAD' counts for Notifications (0) and Messages (0), along with a 'Recent' section for the year 2014. Below the cover photo, there are buttons for 'Liked', 'Following', 'Message', and a menu icon. A 'PEOPLE' section below the cover photo shows options for Status, Photo/Video, and Event/Milestone. A small 'Emma' logo is also present in the sidebar.

Facebook interface showing a post from Emma. The post is dated May 22 and has been edited. The text of the post reads: "Recently, Emma has issued an official statement in response to these accusations, as follows: 'It has come to our attention that there are reports suggesting that there have been issues regarding the production of Emma clothing. We strongly deny these allegations and wish to ensure that the company has fulfilled its promises in delivering the best quality to our customers responsibly. Specifically, our internal investigation has confirmed that the Emma clothes are consistently produced in sweatshop-free environment, and our factory workers are treated and paid fairly. We are proud to continue to provide our customers with the finest clothing, shoes, and bags available.'" The post has 2 likes and 2 comments. Below the post, there is a 'PHOTOS' section displaying a grid of images related to Emma's clothing line. The footer of the page includes the text "English (US) · Privacy · Terms · Cookies · More · Facebook © 2014".

Using the following items, indicate your attitude toward the brand, **Emma**.

Bad | ● ● ● ● ● | Good

Using the following items, indicate your attitude toward the brand, **Emma**.

Unpleasant | ● ● ● ● ● | Pleasant

Using the following items, indicate your attitude toward the brand, **Emma**.

Unfavorable | ● ● ● ● ● | Favorable

Using the following items, indicate your attitude toward the brand, **Emma**.

Dislike | ● ● ● ● ● | Like

Using the following items, indicate your attitude toward the brand, **Emma**.

Poor | ● ● ● ● ● | Excellent

>>

Your Mood

This scale consists of a number of words that describe different feelings and emotions. Indicate to what extent **you feel this way right now, that is at the present moment.**

	Not at all 1	A little 2	Moderately 3	Quite a bit 4	Extremely 5
1. Interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all 1	A little 2	Moderately 3	Quite a bit 4	Extremely 5
11. Irritable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Jittery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

As you explore the Emma's Facebook page, to what extent were you _____?

	Not at all 1	2	3	4	5	6	Very much 7
active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
supportive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
participative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
contributing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
responsible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

As you explore the Emma's Facebook page, to what extent were you _____?

	Not at all 1	2	3	4	5	6	Very much 7
engaged	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
involved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
motivated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

General Questions

What is your age?

What is your ethnicity?

- Caucasian
- African American
- Asian
- Hispanic
- Others

What is your relationship status?

- Single
- In a relationship
- Married / Living with a partner
- Others

What is your income?

- Less than \$25,000
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$99,999
- \$100,000 or more

>>

Thank you very much for your participation!

IMPORTANT: The verification number is **A3785**. Please type it 1) in the box below and 2) on the MTurk site for the confirmation of your participation.

Verification number

>>

Study 4

Consent Form: Facebook Research

We ask that you read this form and ask any questions you may have before agreeing to be in the study. This study is being conducted by: Jayoung Koo (PhD student in Retail Merchandising Program, University of Minnesota).

Background Information

The purpose of this study is to understand consumer's preference of women's fashion brand. To participate, you need to be female and have an active Facebook account.

Procedures

If you agree to be in this study, you will be asked to a series of questions. The entire study will take less than 10 minutes for most people, but feel free to answer the questions at any speed you like.

Risks and Benefits of Being in the Study

Please note that if you experience extreme discomfort during the study, you are free to halt participation at any time.

Compensation

You will get 35 cents after you finish all the tasks. If you decide to withdraw before the study is complete, you will receive no compensation.

Confidentiality

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions

The researcher to contact for this study is: Jayoung Koo. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at kooxx051@umn.edu. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

Have you participated in the same survey before?

- Yes (End of survey: I am sorry but you cannot participate in the same survey again.)
- No

>>

Are you female?

- Yes
- No (End of Survey)

>>

Do you have an active Facebook account?

- Yes
- No (End of survey)

>>

Active Facebook Participation Condition

Brand Evaluation

You will visit a Facebook page of a fashion brand, **Emma**, and answer some questions about it.

- 1) **Copy and past the following link.** You need to be logged in Facebook to see the page.
<https://www.facebook.com/pages/Emma/1428288834091772>
- 2) Please **"write comments"** as you read descriptions and view photos of Emma's Facebook page.
- 3) **Next, come back to this survey** and answer several questions about it.



Passive Facebook Participation Condition

Brand Evaluation

You will visit a Facebook page of a fashion brand, **Emma**, and answer some questions about it.

- 1) **Copy and past the following link.** You need to be logged in Facebook to see the page.
<https://www.facebook.com/pages/Emma/1428288834091772>
- 2) Please **read descriptions and view photos of Emma's Facebook page.**
- 3) **Next, come back to this survey** and answer several questions about it.



Using the following items, indicate your attitude toward the brand, **Emma**.

Bad	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Good
Unpleasant	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Pleasant
Unfavorable	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Favorable
Dislike	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Like
Poor	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Excellent

Your Mood

This scale consists of a number of words that describe different feelings and emotions. Indicate to what extent **you feel this way right now, that is at the present moment.**

	Not at all 1	A little 2	Moderately 3	Quite a bit 4	Extremely 5
1. Interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all 1	A little 2	Moderately 3	Quite a bit 4	Extremely 5
11. Irritable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Jittery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

As you explore the Emma's Facebook page, to what extent were you _____?

	Not at all 1	2	3	4	5	6	Very much 7
1. engaged	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. involved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. motivated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. supportive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. participative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. contributing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



General Questions

What is your age?

What is your ethnicity?

- Caucasian
- African American
- Asian
- Hispanic
- Others

What is your relationship status?

- Single
- In a relationship
- Married / Living with a partner

What is your income?

- Less than \$25,000
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$99,999
- \$100,000 or more

>>

Thank you very much for your participation!

IMPORTANT: The verification number is **B27885**. Please type it 1) in the box below and 2) on the MTurk site for the confirmation of your participation.

Verification number

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