

2013

## The effects of interactivity and involvement on users' attitude toward and perception of brands and purchase intent on Facebook

Christina Persaud

*Louisiana State University and Agricultural and Mechanical College*

Follow this and additional works at: [https://digitalcommons.lsu.edu/gradschool\\_theses](https://digitalcommons.lsu.edu/gradschool_theses)



Part of the [Mass Communication Commons](#)

---

### Recommended Citation

Persaud, Christina, "The effects of interactivity and involvement on users' attitude toward and perception of brands and purchase intent on Facebook" (2013). *LSU Master's Theses*. 820.

[https://digitalcommons.lsu.edu/gradschool\\_theses/820](https://digitalcommons.lsu.edu/gradschool_theses/820)

This Thesis is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Master's Theses by an authorized graduate school editor of LSU Digital Commons. For more information, please contact [gradetd@lsu.edu](mailto:gradetd@lsu.edu).

THE EFFECTS OF INTERACTIVITY AND INVOLVEMENT  
ON USERS' ATTITUDE TOWARD AND PERCEPTION OF BRANDS  
AND PURCHASE INTENT ON FACEBOOK

A Thesis

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements of the degree of  
Master of Mass Communication

in

The Manship School of Mass Communication

by  
Christina Persaud  
B.A., Louisiana State University, 2011  
May 2013

*I dedicate this thesis to my family for their enduring support, motivation and words of encouragement. Most importantly, thank you for believing in me when I did not always believe in myself.*

## **ACKNOWLEDGEMENTS**

First and foremost, I would like to thank Dr. Meghan Sanders, my thesis chair, for her generous support and mentorship. Her guidance throughout my graduate career has helped me grow immensely as both a student and as an individual. More importantly, thank you for always believing in me even when I did not always believe in myself. I would also like to thank my committee members for their incredible wisdom and guidance throughout this process. Thank you to Dr. Jensen Moore-Copple for instilling in me the drive to be a more effective and passionate strategic communicator and to Dr. Hyojung Park for helping me with my experimental design and method.

I would also like to thank my family and friends for their support. Thank you to my mother, Patricia Persaud, and grandmother, Sylvia Ali, for their unconditional encouragement and support throughout this entire process. Thank you to Justin Brown for always being there for me throughout this journey and to the lifelong friends I have made in my voyage through graduate school, Megan, Silvia and Jessy. Lastly, I would like to thank Kristen Higdon for her friendship over the last ten years and enduring support over the past two years. Thank you for keeping me in check and making this journey memorable.



## TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	iii
ABSTRACT.....	v
CHAPTER	
1 - INTRODUCTION.....	1
2 - LITERATURE REVIEW .....	7
3 - METHODOLOGY .....	22
4 - RESULTS.....	38
5 - DISCUSSION .....	46
REFERENCES .....	56
APPENDICES .....	62
APPENDIX A: MEASURES .....	62
APPENDIX B: STIMULUS.....	68
APPENDIX C: PRETEST QUESTIONNAIRE .....	83
APPENDIX D: MAIN QUESTIONNAIRE .....	87
APPENDIX E: IRB APPROVAL FORM .....	94
VITA.....	95

## **ABSTRACT**

Communications practitioners have long studied factors related to consumers' impressions of brands as well as their intent to purchase from brands. While early research has focused on traditional advertising methods, newer research is geared towards understanding how interactive features are changing this relationship. The rise of newer computer-mediated communication (CMC) technologies, specifically social media, has lead to many changes in the way organizations market their brands as they allow for unique, interactive communication between an organization and its publics.

While the notion of interactivity, a core feature of CMC, has no one definition, researchers continue to examine its effects within the digital sphere. This exploratory study investigated the effects of level of interactivity on the social networking site, Facebook, as well as level of product involvement on users' attitudes towards the brand and perceptions of the brand as well as their intent to purchase from the brand.

The study utilized a 2x2 (high interactivity, low interactivity X high involvement, low involvement) factorial design with level of interactivity and level of involvement as independent variables and attitudes toward the brand, perceptions of reputation and purchase intent as dependent variables. To explore these relationships, this study utilized a controlled online experiment with 96 adults. Participants were exposed to one of four possible conditions, and the data were analyzed using a factorial analysis of variance in SPSS. While this study did not find any significant effects for interactivity or product involvement on users' impressions or intent to purchase from the brand, it did find that interactivity, attitudes toward the brand, perceptions of the brand and purchase intent

were all highly, positively correlated with one another. Implications and recommendations for future research are discussed.

## **CHAPTER 1 INTRODUCTION**

Advertisers and public relations practitioners have long studied factors related to brand perception, purchase intent and attitudes toward brands. While early research focuses on traditional advertising and public relations methods, newer research is geared toward understanding how communications practitioners have adapted their techniques with the rise of interactive media. Due to this rise in organizational use of interactive media, this study sought to understand how the level of interactivity exhibited on a brand's Facebook page affects users' attitudes toward and perception of reputation as well as purchase intent for both high involvement and low involvement products.

Because this study seeks to understand the effects of interactivity on users' perceptions and attitudes toward brands, it is necessary to first understand what a brand is. Geller (2012) describes a brand as a combination of attributes that contribute to its identity. These attributes consist of a logo, words, type font, personality, service, price, colors and design. Brands typically exhibit a brand image which is defined as "product knowledge that enables consumers to identify a specific brand" (Meenaghan, 1995, p. 24).

Once a brand is created, organizations undeniably place heavy emphasis on advertising, public relations and marketing to build their brands. In 2004, the American Marketing Association defined marketing as "an organizational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders" (Wilkie & Moore, 2012, p. 63). While the definition of marketing has remained the same, the techniques employed to carry out marketing practices is continually changing.

Traditionally, organizations have utilized media that allow for one-way, asymmetrical communication such as print and televised advertisements (Hoffman & Novak, 1996). Communication practitioners utilized a rather passive, one-to-many model of communication in which they reached both segmented and un-segmented publics through marketing efforts that did not necessarily easily allow customer feedback (Hoffman & Novak, 1995). With traditional advertising, consumers receive information in a “linearly ordered string” as they have no control over the order in which they receive or are exposed to information (Bezjian-Avery, Calder & Iacobucci, 1998, p. 24). For example, years ago, an individual may have seen a print advertisement in his or her newspaper, but did not have the ability to choose to be exposed to the ad or to easily provide feedback regarding the ad. Such communication allowed for limited feedback from the consumer. These traditional communications efforts, however, have changed drastically with the development of computer-mediated communication (CMC), especially with the rise of the Internet. The rapid development of CMC, specifically the Internet, has significantly changed the nature in which organizations market their brands. As it allows many-to-many communication and simultaneous feedback, organizations can interact with their publics instantly without being physically present. More importantly, the development of social media on the Internet has strengthened CMC by bringing millions of online users together on a particular CMC platform (or social networking site).

Computer-mediated communication allows users to communicate with one another, interpersonally, without actually being face-to-face. As the Internet, which allows for computer-mediated communication between an organization and its publics, has developed, it has become a fundamental tool for communications practitioners. For

example, the Internet supports discussion groups, multi-player games and communications systems, file transfer, electronic mail, and global information access and retrieval systems (Hoffman & Novak, 1995). Additionally, it has transformed the manner in which brands communicate as it allows for instantaneous, interactive discourse. Customers can now pose questions and receive answers directly and, at times, even immediately.

Over the past several years, social media, a modern interpersonal communication technology and channel of networked CMC, has developed rapidly affecting the nature of relationships between brands and consumers. With regard to communication structure, “social media have led to a dramatic shift from mass communication to interactive digital communication” (Khang, Ki, & Ye, 2012, p. 281).

Social media are highly utilized, popular channels of CMC that continue to develop and affect interpersonal communication. Though there is some confusion regarding what is considered to be social media, the term most often refers to some form of CMC that is built upon the foundations of Web 2.0 and allows for the creation and exchange of user-generated content (Kaplan & Haenlein, 2010). Web 2.0 refers to the common applications/services such as blogs, video sharing, social networking and podcasting found on the Internet today. In other words, it is “a more socially connected Web in which people can contribute as much as they can consume” (Anderson, 2007, p. 4).

While the emergence and development of the Internet has revolutionized the way people communicate by allowing both individuals and organizations to communicate online interpersonally and immediately (without requiring users to be face-to-face), social media have amplified the manner in which this communication occurs. For example, with the emergence of brand pages on the popular social media site Facebook, which allows for

social networking, brands can now establish a “direct communication channel” with their fans and customers (Lipsman, Mud, Rich & Bruich, 2012, p. 5). Additionally, unlike websites, which rely on user inquiry to be directed toward a particular site, social media allows brands to be exposed to a vast variety of users in a networked community. For example, as of March 2012, the Skittles brand website attracted 23,000 U.S. unique visitors while the Skittles brand page on Facebook attracted 320,000 visitors—14 times as many visitors as the Skittles brand website (Lipsman et al., 2012). Furthermore, after surveying more than 1,000 social media users, Mashable reported that 50 percent of consumers found a brand’s Facebook page to be more useful than a brand’s actual website (Murphy, 2012). According to the same survey issued by Mashable, 82 percent of consumers also reported that Facebook was a good place to interact with brands (Murphy, 2012). This is especially relevant as a core characteristic of CMC and social media is its interactive functions.

Interactivity is a “process-related, variable characteristic of communication settings” (Rafaeli & Sudweeks, 1997, p. 3). For example, on the social media site Facebook, users can post clickable links, videos and photos, receive comments and engage in interactive dialogue all on one Web page; and all of these functions, as well as the site’s contingent message capabilities, contribute to a Web page’s interactivity. Within the context of new media and technology, interactivity is a growing topic of mass communication research. Interactive features on social media sites considerably contribute to its uniqueness; and now many organizations are modeling their website layouts to include interactive features commonly found on social media. Such features include news feeds, quizzes, the ability to view audiovisual content and various feedback

mechanisms (Park, Rodgers & Stemmler, 2011). While scholars continue to thoroughly examine the effects of CMC via website interactivity, few have examined the effects of how the inherent interactive features of social media sites like Facebook are utilized effectively.

Among many other things, social media sites facilitate the generation of perceptions and attitudes as well as the formation and maintenance of relationships among users and between users and organizations—and all of these factors contribute to a brand's reputation. According to Doorley and Garcia (2011), reputation adds value to the actual worth of a company and is built on performance, behavior and communication. A key component of brand reputation is its relationship with its publics. For a brand to achieve a positive reputation with its publics, it must establish a relationship that is two-way symmetrical, or in other words, mutually beneficial (Doorley & Garcia, 2011). Brands can utilize social media to listen to their publics, monitor what they are talking about and directly respond to any questions or concerns.

A recent national survey issued by the Pew Research Center revealed that 66 percent of adults online use social networking sites (Brenner, 2012). Given the surge in social media usage, organizations are now utilizing social media sites to promote and sustain their brands in addition to maintaining their websites. This exponential growth of interactive social media has allowed brands to join in on the conversation with their consumers. Moreover, social media allow brands to bolster and promote their intended identities and increase their interaction with key stakeholders (Guillory & Sundar, forthcoming).

According to Lipsman and colleagues (2012), social media allow for “two unique consumer experiences of interest to brand marketers” (p. 41). This includes (a) the ability



for consumers to identify brands of interest and connect with them by creating two-way relationships, sharing content and allowing feedback, and (b) the facilitation of new ways of sharing information about brands between friends (Lipsman et al., 2012). Furthermore, research has also indicated that the amount of sender-receiver feedback allowed by a communication technology (its interactivity) affects organizations' relationships with its publics (Guillory & Sundar, forthcoming).

Given the aforementioned benefits of interactive social media, it is important to understand how the interactive nature of social media affects brands. Since social media can serve as a platform for brands to interact directly with consumers via CMC, social media offer brands the ability to generate perceptions among users without requiring them to come into direct contact with the brand. Thus, users can develop ideas of what they perceive the brand to stand for. Social media also have the ability to affect users' attitudes toward brands or brands' products as users can form positive or negative attitudes as a result of a brand's social media presence. Understanding this relationship can ultimately lead to greater marketing impact and the production of more meaningful relationships between brands and consumers. This study examined how the level of interactivity utilized by both high and low involvement brands on the social networking site Facebook affects users' attitudes toward the brand, reputation of the brand and intent to purchase the brand's product.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **Computer-Mediated Communication**

Because social media are channels of interactive CMC, it is necessary to first understand what CMC is. According to Bin (2011), computer-mediated communication is conceptually “any communicative transaction that occurs through the use of two or more networked computers” (p. 531). CMC is a system that is comprised of a human and a computer. It is a “communication that takes place between human beings via the instrumentality of computers” (Herring, 1996, p. 1), and “it is an umbrella term for a range of computerized information and communication technologies” (McMurdo & Meadows, 1996, p. 348). Popular forms of CMC include massively multiplayer online games (MMOs), electronic mail, and online chat rooms (Bin, 2011).

A core characteristic of CMC is its interactive function. Interactivity was traditionally an attribute of face-to-face communication, but because of the continual development of computer-mediated communication, researchers continue to define the notion of interactivity.

While scholars continue to thoroughly examine the effects of CMC via website interactivity (Guillory & Sundar, forthcoming), few have examined the effects of how the inherent interactive features of social media sites like Facebook and Twitter are utilized. Additionally, most literature on CMC focuses on individual mediated features. Since social media encompasses numerous functions of computer-mediated interactivity, this study sought to examine interactivity specifically within the social networking, social media site, Facebook. However, in order to understand how interactivity via social media sites like Facebook are augmenting CMC, we must define interactivity.

## **Interactivity**

In order to maintain and create positive perceptions and attitudes toward organizations, marketers and public relations practitioners place heavy emphasis on an organization's relationships with its publics. Social networking sites foster and amplify these relationships as their interactive features permit ongoing, multidimensional dialogue and display a variety of interactive features (Park et al., 2011). This study sought to examine how interactive features exhibited and utilized on Facebook contribute to users' attitudes and perceptions of brands by looking at interactivity as an independent variable. While the nature of these social networking sites is inherently interactive, not all brands utilize these interactive features to their full advantage.

Though interactivity is not a novel concept, it has no unanimous definition as various researchers conceptualize interactivity differently (Heeter, 1989; Sundar, Kalynraman & Brown, 2003). Heeter (1989) outlined six dimensions of interactivity: available choice, user effort, medium responsiveness, potential for monitoring information use, ease of contributing information and potential to facilitate interpersonal communication. However, due to the development and merging of new media technologies, interactivity now most commonly refers to the user's ability "to be both sources and recipients of content and interaction" (Sundar et al., 2003, p. 32).

McMillan and Hwang (2002) categorize definitions of interactivity according to various researchers' emphasis on either (a) the process of interactivity, (b) features or functions of interactivity, (c) perceptions of interactivity or (d) a combination of various definitions. The following sections elaborate on these three types of definitions of interactivity.

## **Interactivity: A Contingency Perspective**

The contingency view of interactivity is a more “message-based” or process-related conceptualization of interactivity (Sundar et al., p. 33). This transactional conceptualization focuses on interactivity as a process involving users, media and messages and emphasizes “the behavioral nature of interaction between user and system” (Sundar & Kim, 2005, p. 7). It also places emphasis on how such messages relate to one another. Thus, under fully contingent interactivity, communication roles are interchangeable. Rafaeli (1988) explained that three levels of interactivity exist with regard to how messages relate to others: two-way/noninteractive, reactive, and responsive/interactive (Rafaeli, 1988, p. 119). At the two-way/noninteractive level, messages flow bilaterally (i.e. two-way, reciprocal communication). When later messages in this bilateral flow respond to messages immediately preceding them, they are reactive. When later messages in this flow respond to both messages immediately preceding them and other previous messages, they are fully responsive/interactive (Rafaeli, 1988). To summarize, “interactivity is feedback that relates to both previous messages and to the way previous messages related to those preceding them” (Rafaeli, 1988, p. 120). Sundar and colleagues (2003) found that contingency was strongly associated with users’ perceptions of interactivity.

Key elements of definitions that center on interactivity as a process include user control, two-way communication, responsiveness and real-time participation (McMillan & Hwang, 2002, p. 31). For example, Rafaeli’s (1988) process-oriented definition of interactivity stated that interactivity is “an expression of the extent that, in a given series of

communication exchanges, any third (or later) transmission (or message) is related to the degree to which previous exchanges referred to even earlier transmissions” (p. 111).

This definition of interactivity is supported in Sundar, Kalynraman and Brown’s (2003) study regarding interactivity and impression formation effects for political candidates’ websites. The researchers operationalized interactivity in terms of contingency by fragmenting website content for low interactivity, medium interactivity and high interactivity. They did so by “employing hierarchical hyperlinks in a political candidate’s website” and hypothesized that participants’ ratings of a website’s interactivity would be a direct positive function of the degree of message contingency presented in the site (Sundar et al., 2003, p. 36). They found support for their operationalization of contingent interactivity as a message-based process as participants differed significantly in their perceptions of level of interactivity of the experimental websites. Moreover, they found that participants in the moderate interactivity conditions had more positive perceptions of the political candidate.

### **Interactivity: A Functional Perspective**

Definitions that focus on interactivity as a function or feature tend to emphasize multimedia features, channels for exchange, features that allow user control, features that enable two-way communication, time required for interaction and functions that allow customized feedback (McMillan & Hwang, 2002). Ha and James (1998) identified five dimensions of interactivity: playfulness, connectedness, choice, integratedness, information collection and reciprocal communication. Jensen (1998) defined interactivity “as a measure of a media’s potential ability to let the user exert an influence on the content and/or form of the mediated communication” (p. 201). Additionally, Sundar, Kalynraman

and Brown (2003) described interactivity in terms of a “bells and whistles” approach as a medium’s interface suggests several functions (such as feedback, downloads, chat forums, etc.) that “offer rich potential for dialogue or mutual discourse” (as cited in Sundar & Kim, 2005, p. 6).

The functional view follows Heeter’s (1989) idea that interactivity dwells in the technological features of the medium. This view of interactivity is centered more on the façade of interactivity rather than the outcomes of interactivity (Sundar et al., 2003, p. 34). Under this “bells and whistles approach,” higher levels of interactivity refer to the interface’s ability to conduct dialogue or information exchange between users and the interface (Sundar, et al., 2003; Sundar & Kim, 2005). Such functions are identified in terms of “particular features (such as audio and video), attributes (such as the presence of choice and control), processes (e.g. reciprocal communication), or outcomes (e.g. user satisfaction)” (Sundar & Kim, 2005, p. 6). Instead of looking at the depth of interactive communication, this approach depends on a “headcount” of the amount of interactive elements offered by a medium’s interface (Sundar & Kim, 2005, p. 6). Therefore, the greater the number of functions provided on a website, the greater the interactivity.

Previous research has indicated that functional interactivity contributes to positive perceptions of website content. Sundar and colleagues (1998) found that apathetic users (versus involved users) rated website content of political candidates higher as the level of functional interactivity increased (Sundar & Kim, 2005). Since social media is an inherently interactive website, this study looked at functional interactivity in terms of how a brand utilizes the interactive features allowed on social media sites. While Facebook already has interactive features, not all brands utilize these features.

## **Interactivity: A Perceptual Perspective**

Definitions centered on perceptions of interactivity include key elements such as consumer involvement, simulation of interpersonal interaction, perceptions of two-way communication, user control, sense of place, sense of time, and navigation (McMillan & Hwang, 2002). Researchers concerned with the emphasis on perception argue that interactivity is such a multidimensional construct that it cannot be measured solely in terms of processes or functions. Instead, measures of perceived interactivity examine media users' perceptions in order to sufficiently comprehend users' behaviors (Leiner & Quiring, 2008). Newhagen, Cords and Levy (1995) conceptualized perceived interactivity in terms of both user efficacy and medium efficacy. Efficacy, they argue, is "a two-dimensional construct: internally based self-efficacy and externally based system efficacy" (Newhagen et al., 1995, p. 166). Liu (2006) further defined perceived interactivity as "a psychological state experienced by a site-visitor during his or her interaction with a website. It manifests in three dimensions:

(1) perceived control over (a) the site navigation, (b) the pace or rhythm of the interaction, and (c) the content being accessed; (2) perceived responsiveness from (a) the site-owner, (b) from the navigation cues and signs, (c) the real persons online; and (3) perceived personalization of the site (a) as if it were a person, (b) as if it wants to know the site visitor, and (c) as if it understands the site visitor (p. 91).

Wu, Hu and Wu (2010) found that users' perceived interactivity of a website had a significant positive impact on consumers' initial online trust as well as their attitude toward the website. McMillan, Hwang and Lee (2003) also found that the higher users perceived a website to be interactive, the more positive attitudes they had toward the website. Additionally, they perceived the products displayed on the more interactive websites to be more involving than those on lower interactive websites.

Measures of perceived interactivity focus on three elements that are commonly found in text regarding interactivity: direction of communication, user control and time (McMillan & Hwang, 2002). Since conceptualizing interactivity in terms of perceived interactivity provides for more unique insight from the mindset of a consumer, this study utilized McMillan and Hwang's (2002) measures for perceived interactivity as a manipulation check for levels of interactivity on Facebook.

Generally speaking, previous research indicates that level of website interactivity (both functional and contingent) does, indeed, affect users impressions. Sundar and colleagues (1998) found that website interactivity affected users' "affinity towards" a political candidate if the individual had little or no prior interest in politics (Sundar et al., 1998; Sundar, et al., 2003, p. 37). Ahern and Stromer-Galley (2000) also found that the greater number of interactive features on the website, the greater the liking of the political candidate who was featured on the site (Sundar & Kim, 2005). Additionally, Guillory and Sundar (forthcoming) found that individuals viewed interactivity as a "positive inclusion for organization websites" (p. 15), and found that the higher the interactivity present on an organization's website, the more positive users' perceptions of the organization's reputation.

While most previous research has examined interactivity via websites, this study examined how the utilization of the inherently interactive features (both functional and contingent) of the social media site Facebook contribute to users' attitudes toward brands, perception of brand reputation and purchase intent. Given the previous findings, and acknowledging both functional and contingent views of interactivity, I pose the following hypotheses:



H1: The more a brand utilizes interactive features, the more positive the attitudes toward the brand.

H2: The more a brand utilizes interactive features, the more positive perception of the brand's reputation.

## **Social Media**

The impact of social media on public relations practices has led to increased attention from both scholars and practitioners alike (Bridgen, 2011). Utilizing social media:

practitioners are now moving towards a situation where they can communicate directly with organizational stakeholders (who may then share, alter, discuss, ignore or exploit their message) via social media channels rather than having their organizational message mediated by journalists or other third parties (Bridgen, 2011, p. 62).

To completely understand interactivity via social media, it is necessary to define social media itself. Social media are continuously evolving channels of computer-mediated communication. According to Kaplan and Haenlein (2010), social media are “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content” (p. 61). The rise of social media use has influenced the way organizations market themselves as it allows for acquisition and retention online. Now, more organizations are turning to social media to build and promote their brands. Brands are additionally becoming more active in establishing a social presence to connect with their consumers. One hundred percent of advertisers selected for *Advertising Age's* Top 100 Advertisers had established Facebook pages for their brands (Lipsman et al., 2012, p. 41). Brands are utilizing social media engage in conversations with consumers, provide customer support and build brand

communities. They are also connecting to consumers by using interactive features. Such actions include posting and sharing videos or photos and replying to comments on Facebook (Park et al., 2011, p. 63).

Facebook is a social networking site (SNS) and form of social media. Research indicates that 53 percent of adults online follow a brand on social networking sites (*The Nielsen Report, Q3 2011*, 2011). A social networking site is a form of social media that allows users to “(a) construct a public or semi-public profile within a bounded system, (b) articulate a list of other users with whom they share a connection, and (c) view and traverse their list of connections and those made by others within the system” (Ellison, 2007).

Facebook is the most commonly used social media site, and it can be utilized virtually anywhere via various forms of technology (mobile phones, laptops, iPads, etc.). According to the third quarter 2011 Nielsen Social Media Report, Americans spend more time on Facebook than on any other website (*The Nielsen Report, Q3 2011*, 2011). Facebook is a flourishing social networking site with over 900 million active users (Nelson-Field, Riebe & Sharpe, 2012). Its mission is “to give people the power to share and make the world more open and connected” (Facebook, 2012). This translates to approximately three of every four Internet users visiting Facebook (Lipsman et al., 2012). While Facebook originally connected only enrolled college students, it now allows all individuals, brands and organizations to communicate across its network. Moreover, Facebook has an estimated 160 million visitors each month.

Facebook is described as a pragmatic and cost-effective channel for brands to acquire and communicate with real customers. Organizations can create Facebook “fan

pages” for their brands. Furthermore, they can encourage users on Facebook to become “fans” of their brands’ Facebook page by clicking the “like” button on the page. After a user has “liked” a brand’s Facebook fan page, it is shared within his or her network and on his or her newsfeed. They may then receive brand updates including remarks and interactions from other brand fans (Nelson-Field et al. , 2012).

Brands are currently utilizing Facebook as a free marketing resource to reach a wide fan base. Because Facebook brings a wide variety of online users together on one interconnected social networking site, brands can reach people that they might not otherwise reach via their website. Moreover, research indicates that the amount of traffic on brands’ Facebook pages is actually surpassing the amount of traffic to their actual websites (Nelson-Field et al., 2012; *The Nielsen Report, Q3 2011*, 2011). Now more online users migrate toward a brand’s Facebook page rather than visit their website since many are already spending time on Facebook. For example, Coca-Cola has 242,000 U.S. unique visitors to its website but has 10.7 million Facebook fans on its Facebook brand page (Neff, 2010). With the ability to post video and photo advertisements, obtain customer feedback and offer deals, brands are now engaging directly with fans on their Facebook pages.

Research has found that most branded content exposure occurs on the Facebook newsfeed indicating that users engage in electronic word of mouth to spread and receive information about brands on the social media platform (Lipsman et al., 2012). Additionally, in their study regarding the power the Facebook “like” button has in influencing brand reach, Lipsman and colleagues (2012) found that, compared to other forms of interactive advertising, social media impressions increased total online impression volume by a drastic 64 percent.

## **Attitudes toward Brands**

As social media sites, like Facebook, offer users the opportunity to be exposed to new brands online, they allow for the creation and alteration of perceptions and attitudes toward a brand's product and brand image. Brand image has been and continues to be an important concept in consumer behavior research. Additionally, perception and attitude have long been topics of communication research for both social scientists and communications scholars alike. Aaker (1996) argued that brand image helps shape consumers attitudes toward the brand. Likewise, consumer attitudes contribute heavily to an organization's brand image. As a result, organizations must carefully craft communications with consumers in order to shape attitudes toward its brands and/or products and create/maintain positive perceptions of its brands.

Thurstone (1931) first developed a scale for attitudes by defining an attitude as the amount of affect for or against a psychological object. Other definitions identify attitudes as a complex system that involves three identifiable components: (1) a cognitive component, (2) an affective component, and (3) an action component (Shaw, 1982). Additionally, Heath and Gaeth (1994) define attitude as "a general and enduring (consistent over time) negative or positive evaluation of a person, object, or issue" (Heath & Gaeth, 1994, p.129).

While there are numerous definitions for the term attitude, much research regarding attitudes toward brands and products has examined attitudes by looking at advertisements as the main influencers (Ketelaar, van Gisbergen, Bosman, & Beentjes, 2010). Studies have also shown that higher brand quality (Sheena, Mohanan & Naresh, 2012) and positive electronic word-of-mouth can lead to more positive attitudes (Doh & Hwang, 2009). This study utilized Heath and Gaeth's (1994) definition of attitude by

looking at it in terms positive or negative attitudes toward the brand as a result of interactivity on social media.

### **Perception of Brand Reputation**

Perception has been operationally defined in different ways and is sometimes hard to differentiate from an attitude. Some studies examine perception by looking at perception of brand quality or perception of brand identity (Ramakrishnan & Ravindran, 2012). Others measure perception in terms of positive or negative impressions (Sundar, et al., 2003). To differentiate perception from attitude, similar to Guillory and Sundar (forthcoming), perception in this study is operationalized in terms of perception of brand reputation.

According to Gibson, Gonzales and Castanon (2006), “reputation represents organizational past and present performance and portrays the ability to deliver reliable desirable results to various stakeholders” (p. 12). Within the context of social media, “reputation is the extent to which users can identify the standing of others, including themselves, in a social media setting” (Kietzmann et al., 2011, p. 241). Research has shown that brands place heavy emphasis on maintaining relationships with their publics to influence positive reputations. According to public relations scholars, reputation is also considered to be a brand’s most important asset (Gibson, Gonzales & Castanon, 2006). Page and Fearn (2005) found that consumers’ perceptions of an organization’s fairness to others and perceptions of success and leadership are the most heavily weighed factors when determining corporate reputation.

Because social media allows brands to reach such a vast number of people instantly, it is important to understand how brand reputation is affected via social media. Utilizing

the aforementioned definitions of reputation, this study specifically examines how a brand's utilization of interactivity on Facebook contributes to users' perception of brand reputation.

### **Purchase Intent**

To understand behavioral outcomes of interactivity, this study examines the role of interactivity and involvement on users' purchase intentions as the ultimate goal of advertising and marketing professionals is to get consumers to actually buy their product. Morwitz and Schmittlein (1992) stated, "in marketing research, purchase intentions are often used as a predictive measure of subsequent purchase behavior" (p. 391). Chen and Dubinsky (2003) argued that since the cognitive and physical effort of a purchase often occurs prior to actual buying, online marketers must know how to influence potential customers in their pre-purchase stage. Additionally, research has found that customers whose purchase intention was measured were more likely to buy a product than customers whose purchase intention was not measured (Fitzsimons & Morwitz, 1996).

Because one of the ultimate goals for a brand is to have consumers purchase its products, it is important to understand what factors play a role in affecting users' purchase intentions. While there is much research regarding interactivity, most research examines users' subsequent attitudes or impressions (Sundar & Kim, 2005; Sundar et al., 2003; Guillory & Sundar, forthcoming). Because this study examines both cognitive and behavioral effects of interactivity, I posit the following research question regarding interactivity and purchase intent:

RQ1: Is there a relationship between level of interactivity and users' purchase intentions for brands on Facebook?

## **Involvement**

To assure that interactivity effects can be generalized across various brands and products, this study looked at product involvement as an additional independent variable. While involvement can be conceptualized differently, it most often refers to “personal relevance” (Zaichkowsky, 1985, p. 342). Zaichkowsky (1985) defined involvement as “a person’s perceived relevance of the object based on inherent needs, values, and interests” (p. 342). She later refined product involvement as respondents’ overall evaluation of how important a product is to their lives (Zaichkowsky, 1994). In other words, consumers view shopping or consumption activities as personally relevant. Similarly, Day, Stafford and Camacho (1995) suggested that involvement is "a motivational state influenced by a person's perception of the object's relevance based on inherent needs, values, and interests" (p.70).

Houston and Rothschild (1978) defined involvement as a function of enduring involvement or a need derived from a value in an individual’s hierarchy of needs (Zaichkowsky, 1985, p. 343). Cardozo (1965) argued that the more valuable or significant a product is to a person, the more effort he will put forth to obtain it (Hupfer & Gardner, 1971). Therefore, the product would elicit a high level of involvement. On the contrary, a person may exhibit low-enduring involvement toward frequently purchased household goods that require less effort to obtain (Suh & Yi, 2006 ).

The involvement construct has garnered much interest by researchers with development of the Internet (Macias, 2003). In her study regarding how perceived interactivity and product involvement affect comprehension of interactive advertising websites, Macias (2003) found that comprehension of websites was higher for those

featuring with high involvement products than those with low involvement products.

Macias (2003) also found that there was an interaction effect between interactivity and product involvement as participants in the high product involvement condition comprehended the high interactivity site at a considerably higher level than the low interactivity site. Cho (1999) also found that product involvement influenced participants' motivation to process Web advertising content. Karson and Korgaonar (2001), on the other hand, did not find that involvement affected attitudes or purchase intention online.

Utilizing the aforementioned definitions of product involvement, this study looked at a high involvement product as a product that requires a greater amount of thought when making a purchase decision and a low involvement product as a product that requires little thought when making a purchase decision. The high involvement product in this study was a vitamin supplement, while the low involvement product was a bar of soap. By looking at product involvement in this manner, this study attempted to make sure results are generalizable across all types of brands.

To generalize findings regarding interactivity on users' perceptions of brand reputation, attitudes toward brands, and purchase intent for both high and low involvement products, I pose the following research question:

RQ2: Do the effects of interactivity on users' attitudes toward and perceptions of brands on Facebook differ for low involvement products versus high involvement products?



### **CHAPTER 3 METHODOLOGY**

This thesis examined the roles that interactivity on social media sites, specifically Facebook, and product involvement play in affecting users' attitude toward brands, perception of brands' reputations and purchase intent. Since people are continually turning to social media to receive and share information regarding brands, it was appropriate for this study to utilize the social networking site, Facebook. Thus, two faux brands were created to represent both high and low involvement products; and to address the hypotheses and research questions. Four separate Facebook pages were created to represent the faux brands.

In a 2 (interactivity: low/high) x 2 (involvement: low/high) between-subjects factorial design, with product involvement and interactivity as independent variables, participants were randomly assigned to interact with one of four possible treatments. They were exposed to a Facebook page for either a high or low level of involvement that exhibited either a high or low level of interactivity. Conditions included (a) a high involvement product on a low interactive Facebook page, (b) a low involvement product on a low interactive Facebook page, (c) a high involvement product on a high interactive Facebook page, or (d) a low involvement product on a high interactive Facebook page. Stimuli were pre-tested to check the perceived interactivity of the page and product involvement using McMillan and Hwang's (2000) Measures of Perceived Interactivity (MPI) scale and Zaichowsky's (1995) scale for level of product involvement, respectively.

#### *Stimulus Material*

To manipulate levels of site interactivity and product involvement, two hypothetical brands were created: Revive Soap and Natural Harmony. Since involvement refers to a

consumer's perceptions of importance of a particular product, this thesis chose to utilize a brand of soap to represent the low involvement condition and a brand of vitamin supplements to represent the high involvement condition (Zaickowsky, 1995).

The brand Revive was created to represent the low involvement brand product. The name "Revive" was intended to represent a brand that was gender neutral. Its tagline was "Revive. Feel the clean." The brand logo exhibited deep and navy blue colors, and all content posted on the page aimed at representing a brand that would be of interest for both males and females of a variety of ages (see Appendix B).

The brand Natural Harmony was created to represent the high involvement brand product. Similar to Revive, the name "Natural Harmony" was intended to represent a gender-neutral brand. The colors chosen were earthy tones, green and yellow, and they were specifically chosen to indicate health and nature. The tagline for Natural Harmony was "Natural Harmony. Bringing balance to your life, the natural way" (see Appendix B).

Four Facebook pages were created as stimuli for this experiment. Utilizing Sundar and colleagues' (2003) operationalization of interactivity, each brand had a high interactive Facebook page and a low interactive Facebook page. High interactive pages utilized more interactive features (functional interactivity) and provided more feedback and dialogue with other users (contingent interactivity), while low interactive pages did not utilize all interactive functions and did not engage in feedback or dialogue. For example, the high interactive pages for both Revive and Natural Harmony exhibited higher functional interactivity as they included more posts that included pictures, links with thumbnails, and links to videos. Additionally, such high interactive pages included comments in which the brand responded to users comments, thus engaging in contingent interactivity (see

Appendix B). The low interactive brand pages did not post as large of a variety of photos, videos or links in order to exhibit a low level of functional interactivity. Additionally, these low interactive pages exhibited low contingent interactivity as the brands did not respond directly to users' comments. All pages had a similar number of "likes." They also had the same number of posts as well as comments (see Appendix B).

### **Pretest One**

To determine the functionality of the manipulations, I conducted a pretest focusing on respondents' perceived interactivity in regards to the social media sites, and perceived level of involvement for each product type. Sixty-four students enrolled in the Manship School of Mass Communication's Media Effects Lab (MEL) subject pool participated in the first pretest. As compensation for participating, participants received extra course credit.

Participants were instructed to go to the Media Effects Lab to participate in the controlled pretest. The pilot test was controlled to ensure that no participants altered the stimuli Facebook pages by "liking" or commenting on any pages or posts. Once there, they were instructed by the researcher to complete an online experiment in Qualtrics. Via the questionnaire, they were randomly assigned to one of the four possible conditions: (a) a low involvement, high interactivity Facebook page, (b) a low involvement, low interactivity Facebook page, (c) a high involvement, high interactivity page, (d) a high involvement, low interactivity page. The post-exposure questionnaire items assessed perceived interactivity and involvement of the product.

Perceived interactivity was measured by using McMillan and Hwang's (2002) 18-item Measures of Perceived Interactivity (MPI) scale, a 7-point Likert scale (Cronbach's  $\alpha = .87$ ; see Appendix A for scale). Measures included questions such as "this brand enables

two-way communication” or “this brand primarily enables one-way communication” (McMillan & Hwang, 2002).

Involvement was measured using Zaichkowsky’s (1985) 20-item, 7-point semantic differential scale. Since Zaichkowsky (1985) operationally defined involvement in terms of relative importance, questions included anchors such as “important/unimportant,” “relevant/irrelevant,” and “vital/superfluous” (Zaichkowsky, 1985, p. 350).

To test the reliability of the scales measuring perceived interactivity and involvement, both scales were subjected to a reliability analysis. Inter-item reliability for the question items for perceived interactivity was statistically reliable (Cronbach’s  $\alpha = 0.85$ ). Inter-item reliability for the question items for involvement was also high (Cronbach’s  $\alpha = 0.94$ ).

To assure that high interactivity pages were perceived as having high interactivity and low interactivity pages were perceived as having low interactivity, a factorial analysis of variance (ANOVA) was conducted in SPSS. Interactivity for the Facebook pages was found to be statistically significant,  $F(1,60) = 4.48, p < .05$ . In other words, participants viewing the low interactivity Facebook brand pages ( $M = .4.75, SE = .17$ ) perceived them to exhibit significantly lower levels of interactivity than participants viewing the high interactivity Facebook brand page ( $M = 5.07, SE = .18$ ). However, there was also a main effect for product involvement on interactivity,  $F(1, 60) = 14.79, p < .001$ , which indicated users in the high involvement conditions perceived the brand pages to exhibit significantly higher interactivity ( $M = 4.41, SE = .11$ ) than those in the low involvement conditions ( $M = 3.88, SE = .09$ ). Furthermore, results showed that there was an interaction effect for the involvement and interactivity indices on interactivity,  $F(1, 60) = 1.70, p < .05, \eta^2 = .01$ .

**Table 1:** Estimated Marginal Means for Interactivity X Involvement Interaction Effect on Perceived Interactivity for Pretest 1

	Low Interactivity	High Interactivity
<b>Low Involvement Product</b>		
<b>M</b>	3.57 <sub>aB</sub>	4.19 <sub>bA</sub>
<b>SE</b>	.12	.13
<b>High Involvement Product</b>		
<b>M</b>	4.43 <sub>aA</sub>	4.38 <sub>bB</sub>
<b>SE</b>	.16	.14

$F(1, 60) = 1.70, p < .05$

Within rows, means with no lowercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.  
Within columns, means with no uppercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

There was a larger difference in participants' perception of product involvement for those in the low interactivity condition than within those in the high interactivity condition (see Table 1). This indicated that interactivity might be confounding involvement as the level of interactivity influenced participants' perception of product involvement.

To assure that the high involvement condition represented high involvement products while the low involvement condition represented low involvement products, I conducted a second between subjects factorial analysis of variance with perceived product involvement as the dependent variable. Results indicated that the difference in levels of involvement was not statistically significant,  $F(1, 60) = 3.48, p > .05$ . Participants in the low involvement condition ( $M = 4.66, SE = .17$ ) only viewed the low involvement condition as

**Table 2:** Estimated Marginal Means for Interactivity X Involvement Interaction Effect on Perceived Product Involvement for Pretest 1

	Low Interactivity	High Interactivity
<b>Low Involvement Product</b>		
<b>M</b>	4.30 <sub>aA</sub>	5.03 <sub>aA</sub>
<b>SE</b>	.23	.24
<b>High Involvement Product</b>		
<b>M</b>	5.20 <sub>aA</sub>	5.10 <sub>aA</sub>
<b>SE</b>	.31	.26

$F(1, 60) = 2.48, p > .05$

Within rows, means with no lowercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.  
Within columns, means with no uppercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

slightly less involving than participants in the high involvement condition ( $M = 5.15, SE = 20$ ). Furthermore, there was no main effect for interactivity and involvement on product involvement,  $F(1, 60) = 1.49, p > .05$ . Accordingly, there was no significant difference in participants' level of product involvement between those in the low interactivity conditions ( $M = 4.75, SE = .19$ ) than those in the high interactivity conditions ( $M = 5.07, SE = .18$ ).

The analysis also revealed that there was no interaction effect between interactivity and involvement on product involvement,  $F(1, 60) = 2.48, p > .05$ . There was a slight difference in participants' perception of product involvement for those in the low interactivity conditions versus those in the high interactivity conditions, but this difference

was not statistically significant (see Table 2). Because of this, a second pretest was conducted.

### **Pretest Two**

Similar to pretest one, pretest two was available to students registered in the MEL pool. Fifty-nine participants were recruited to participate in this pilot test. After analyzing the results of pretest one and discovering that the participants might be confounding involvement with interactivity, it was discerned that the interactivity of the cover photo on the high involvement, low involvement brand page might have influenced participants' answers regarding product involvement. To address involvement issues, the cover page of the Natural Harmony brand pages was changed to appear less engaging or interactive (see Appendix B).

After conducting the second pretest, there was no significant difference in participants' perceptions of interactivity,  $F(1,55) = .45, p > .05$ . Interestingly, participants in the low interactivity conditions found the brand pages to be more interactive ( $M = 3.86, SE = .10$ ) than those in the high interactivity conditions ( $M = 3.76, SE = .10$ ). There was also no main effect for involvement on interactivity,  $F(1, 55) = 2.01, p > .05$ , and participants in the low involvement conditions found the brand pages to be slightly more interactive ( $M = 3.09, SE = .10$ ) than those in the high involvement conditions ( $M = 3.71, SE = .09$ ). However, there was an interaction effect regarding interactivity and involvement on participants' perceived interactivity,  $F(1, 55) = 3.43, p < .01$ . There was a difference in participants' perception of involvement only in the high interactivity condition as participants in the low involvement, high interactivity condition ( $M = 4.10, SE = .15$ ) perceived the brand pages as

**Table 3:** Estimated Marginal Means for Interactivity X Involvement Interaction Effect on Perceived Interactivity for Pretest 2

	Low Interactivity	High Interactivity
<b>Low Involvement Product</b>		
<b>M</b>	3.71 <sub>aA</sub>	4.10 <sub>aA</sub>
<b>SE</b>	.14	.15
<b>High Involvement Product</b>		
<b>M</b>	4.00 <sub>aA</sub>	3.42 <sub>aB</sub>
<b>SE</b>	.13	.14

$F(1, 55) = 3.43, p < .01$

Within rows, means with no lowercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.  
Within columns, means with no uppercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

being more interactive than those in the high involvement, high interactivity condition ( $M = 3.42, SE = .14$ ; see Table 3).

Additionally, the difference in levels of product involvement was still not found to be statistically significant,  $F(1, 55) = .42, p > .05$ . Those in the low involvement conditions only viewed the brand pages as slightly less involving ( $M = 3.94, SE = .25$ ) than those in the high involvement conditions ( $M = 4.16, SE = .23$ ). There was also no main effect for interactivity on involvement,  $F(1, 55) = 1.84, p > .05$ . Participants in the low interactivity conditions perceived the product to be slightly more involving ( $M = 4.28, SE = .23$ ) than participants in the high interactivity conditions ( $M = 3.82, SE = .24$ ). Furthermore, there was no interaction effect between interactivity and involvement on participants' perception of product



**Table 4:** Estimated Marginal Means for Interactivity X Involvement Interaction Effect on Product Involvement for Pretest 2

	Low Interactivity	High Interactivity
<b>Low Involvement Product</b>		
<b>M</b>	4.11 <sub>aA</sub>	3.77 <sub>aA</sub>
<b>SE</b>	.34	.35
<b>High Involvement Product</b>		
<b>M</b>	4.44 <sub>aA</sub>	3.88 <sub>aA</sub>
<b>SE</b>	.31	.33

$$F(1, 55) = .102, p > .05, \eta^2 = .01$$

Within rows, means with no lowercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.  
Within columns, means with no uppercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

involvement,  $F(1, 55) = .102, p > .05$ . Those in the low involvement, low interactivity condition ( $M = 4.11, SE = .34$ ), those in the low involvement, high interactivity condition ( $M = 3.77, SE = .35$ ), those in the high involvement, low interactivity condition ( $M = 4.44, SE = .31$ ) and those in the high involvement, high interactivity condition ( $M = 3.88, SE = .33$ ) all had similar perceptions of the product's involvement (see Table 4). Because of the lack of significance regarding interactivity and involvement, pretest two was excluded.

### Pretest One (revisited)

After further examination of the issue, it was found that the high involvement/low interactivity condition was mistakenly not included in the questionnaire for pretest one.

**Table 5:** Estimated Marginal Means for Interactivity X Product Involvement Interaction Effect on Perceived Interactivity for Pretest 1 (revisited)

	Low Interactivity	High Interactivity
<b>Low Involvement Product</b>		
<b>M</b>	3.57 <sub>aA</sub>	4.19 <sub>aA</sub>
<b>SE</b>	.12	.13
<b>High Involvement Product</b>		
<b>M</b>	3.63 <sub>aA</sub>	4.38 <sub>aA</sub>
<b>SE</b>	.10	.14

$F(1, 82) = .28, p > .05, \eta^2 = .01$

Within rows, means with no lowercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.  
Within columns, means with no uppercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

Instead, the high involvement, high interactivity condition was listed twice. After adjusting the experiment in Qualtrics and returning to the original cover picture for the Natural Harmony brand pages, the online experiment link was sent to 33 new participants by utilizing snowball sampling. These participants only saw the high involvement, low interactivity condition, and this data was added to pretest one. This time, participants were able to participate in the questionnaire online rather than at the MEL. After merging this data with pretest one data, the total number of participants was eighty-six. After running a factorial analysis of variance on interactivity and involvement, I found a main effect for interactivity,  $F(1, 82) = .06, p < 0.01, \eta^2 = .03$ . Those in the high interactivity conditions perceived the page to be significantly more interactive ( $M = 4.29, SE = .10$ ) than

**Table 6:** Estimated Marginal Means for Interactivity X Product Involvement Interaction Effect on Product Involvement for Pretest 1 (revisited)

	Low Interactivity	High Interactivity
<b>Low Involvement Product</b>		
<b>M</b>	4.30 <sub>aA</sub>	5.03 <sub>aA</sub>
<b>SE</b>	.26	.27
<b>High Involvement Product</b>		
<b>M</b>	4.10 <sub>aA</sub>	5.10 <sub>aA</sub>
<b>SE</b>	.20	.30

$F(1, 82) = .29, p > .05, \eta^2 = .01$

Within rows, means with no lowercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.  
Within columns, means with no uppercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

those in the low interactivity conditions ( $M = 3.60, SE = .08$ ). There was no main effect for involvement on participants' perception of interactivity,  $F(1,82) = .94, p > .05$ . Thus, there was no significant difference in participants perception of interactivity for those in the low involvement conditions ( $M = 3.88, SE = .09$ ) versus participants in the high involvement conditions ( $M = 4.00, SE = .09$ ). Moreover, there was no interaction effect between interactivity and product involvement on participants' perceptions of interactivity,  $F(1, 82) = .28, p > .05$ . Thus, there was no significant difference for level of perceived interactivity for those in the low involvement, low interactivity condition ( $M = 3.57, SE = .12$ ), those in the low involvement, high interactivity condition ( $M = 4.19, SE = .13$ ), those in the high

involvement, low interactivity condition ( $M = 3.63, SE = .10$ ) and those in the high involvement, high interactivity condition ( $M = 4.38, SE = .14$ ; see Table 5).

Involvement, however, was still statistically insignificant,  $F(1, 82) = .06, p > .05$ . Those in the low involvement conditions ( $M = 4.66, SE = .19$ ) found the product to be slightly more involving than those in the high involvement conditions ( $M = 4.60, SE = .18$ ), but this difference was not statistically significant. There was also a main effect for perceived interactivity on participants' perception of product involvement,  $F(1, 82) = 11.36, p < .01$ . Participants in the high interactivity conditions ( $M = 5.07, SE = .20$ ) perceived the product to be significantly more involving than those in the low interactivity condition ( $M = 4.20, SE = .16$ ). Finally, there was no interaction effect between interactivity and involvement on participants' perceptions of product involvement,  $F(1, 82) = .29, p > .05$ . Thus, there was no significant difference among participants' perceptions of product involvement for those in the low involvement, low interactivity condition ( $M = 4.30, SE = .26$ ), those in the low involvement, high interactivity condition ( $M = 5.03, SE = .27$ ), those in the high involvement, low interactivity condition ( $M = 4.10, SE = .20$ ) and those in the high involvement, high interactivity condition ( $M = 5.10, SE = .30$ ; see Table 6).

At this juncture review of both the stimulus materials and measurement items was conducted. Upon close examination of the scale used to assess involvement, a potential conceptual fit problem was noticed. Product involvement was operationalized as "person's perceived relevance of the object based on inherent needs, values, and interests," while the items used to assess this included: beneficial/not beneficial, mundane/fascinating, exciting/unexciting (Zaichkowsky, 1985). Based on this, I began to question the validity of the involvement scale in regard to this study. Due to time constraints, a third pretest could

**Table 7:** Estimated Marginal Means for Site Interactivity X Product Involvement Interaction Effect on Perceived Product Involvement for Revised Involvement Items

	Low Interactivity	High Interactivity
<b>Low Involvement Product</b>		
<b>M</b>	4.87 <sub>aA</sub>	4.55 <sub>aA</sub>
<b>SE</b>	.23	.25
<b>High Involvement Product</b>		
<b>M</b>	5.83 <sub>aA</sub>	5.54 <sub>aA</sub>
<b>SE</b>	.25	.24

$$F(1, 92) = .00, p > .05, \eta^2 = .01$$

Within rows, means with no lowercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.  
 Within columns, means with no uppercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

not be conducted. However, five new involvement items were created and included as part of the main study as a manipulation check. These items included: “When thinking about buying this type of product, I think about the other brands in the market” and “when about to purchase this type of product, I do research on various brands.” The items were found to have high inter-item reliability (Cronbach’s  $\alpha = .82$ ).

To verify the manipulation check for product involvement, I ran a factorial analysis of variance on the new involvement index. The analysis revealed that the difference among levels of involvement was statistically significant,  $F(1, 92) = 16.15, p < .001$ . Participants in the high involvement conditions perceived the product to be significantly more involving ( $M = 5.68, SE = .17$ ) than those in the low involvement conditions ( $M = 4.71, SE = .17$ ). There

was no main effect for interactivity on participants level of product involvement  $F(1, 92) = 22.71, p > .05$ , as participants level of involvement was not statistically different between those in the low interactivity conditions ( $M = 5.34, SE = .17$ ) and those in the high interactivity conditions ( $M = 5.05, SE = .17$ ). Last, there was no interaction effect between interactivity and involvement on users' perception of product involvement,  $F(1, 92) = .00, p > .05$ . Participants' perception of product involvement did not significantly differ among those in the low involvement, low interactivity conditions ( $M = 4.87, SE = .23$ ), those in the low involvement, high interactivity condition ( $M = 4.55, SE = .25$ ), those in the high involvement, low interactivity condition ( $M = 5.83, SE = .25$ ) and those in the high involvement, high interactivity condition ( $M = 5.54, SE = .24$ ; see Table 7). Based on the results of the manipulation check, product involvement was manipulated properly (see Table 7).

## **Participants**

The sample for the main experiment consisted of 96 participants spreading over four conditions as follows: low involvement, low interactivity ( $N = 26$ ), low involvement, high interactivity ( $N = 23$ ), high involvement, low interactivity ( $N = 23$ ), and high involvement, high interactivity ( $N = 24$ ). Regarding interactivity conditions, 49 participants were exposed to the low interactivity brand page while 47 participants were exposed to the high interactivity brand page. Regarding involvement conditions, 49 participants were exposed to the low involvement condition, and 47 participants were exposed to the high involvement condition. All participants were provided with a consent form prior to participation, and the age of the sample ranged from 18-33 with 19 as the most frequently

reported age. The sample was a prime demographic since many social media users fall within this age range (*The Nielsen Report, Q3 2011, 2011*).

## **Procedure**

Participants were instructed to go to the Media Effects Lab to receive an extra credit point for a mass communication class. Once they arrived, I explained the consent form and provided them with the questionnaire in Qualtrics. After agreeing to consent and answering basic demographic questions, participants were told to view the stimulus for one to three minutes. A page with an external link to one of the four manipulated Facebook pages appeared. After viewing the stimulus, they then answered a questionnaire which included items regarding participants' attitude toward the brand, perception of brand reputation and purchase intent. Items regarding perceived interactivity were also included for exploratory purposes. Previously utilized scales were adapted to understand how interactivity and product involvement affects user attitudes towards the brand, perception of brand reputation and purchase intent.

## **Attitudes Toward the Brand**

Attitudes toward the brand were measured by utilizing a combination of two different scales. The first scale included four items on a 7-point semantic differential (1-7) scale (Holbrook & Batra, 1987). Anchors included "like/dislike," "positive/negative," "favorable/unfavorable," and "bad/good" (p. 415). The second scale by Aaker and Williams (1998) included six (7-point) semantic differentials (see Appendix A for scale). Both scales were adapted to measure attitudes toward the brand (Cronbach's  $\alpha = .92$ ).

## **Interactivity**

Interactivity was measured by utilizing items from Liu's (2003) 15 item 7-point Likert-type scale for interactivity. Some questions regarding active control and synchronicity were eliminated to prevent the low interactivity Facebook pages from scoring high due to the inherent interactive nature of the social media site. This scale included statements such as "this brand is effective in gathering visitors' feedback" and "it is difficult to offer feedback to this brand" (Cronbach's  $\alpha = .88$ ; see Appendix A for scale).

## **Perception of Brand**

Perception of brand reputation was measured by adapting a 22 item, 7-point Likert-type scale used by Guillory and Sundar (forthcoming). The scale was a combination of two scales regarding taxonomies of organization culture and reputation and was proved to be reliable (Braddy, Meade & Kroustalis, 2005; Fombrun, Gardberg & Server, 2000).

Participants were instructed to agree or disagree with statements such as "I think this brand has a clear vision" or "I think this brand promotes innovation" (Cronbach's  $\alpha = .93$ ; see Appendix A for scale).

## *Purchase Intent*

Purchase intention refers to the level of likelihood of making a purchase. Baker, Lavy & Grewals' (1992) "Willingness to buy" scale was used to measure purchase intention. Questions regarding purchase intent utilized a 7-point Likert-type scale with one representing "strongly disagree" and 7 representing "strongly agree." It included questions such as, "I would be willing to buy a product from this brand" or "I would recommend this brand to a friend" (Cronbach's  $\alpha = .92$ ; see Appendix A for scale).



## CHAPTER 4

### RESULTS

While previous studies have found that higher levels of interactivity lead to more positive attitudes toward the site, more positive attitudes toward the advertisement, and more positive perceptions of organizations (Wu, 2005; Guillory & Sundar, forthcoming; Cho & Leckenby, 1997), results from this study differ from such existing research regarding interactivity.

This study examined the effects of interactivity and product involvement exhibited on Facebook brand pages on users' attitudes toward the brand, perceptions of brand reputation and purchase intention. Table 8 displays the descriptive statistics for the key variables of interest.

#### **Attitude Toward the Brand**

H1 and H2 sought to examine the effects of interactivity levels on attitudes toward the brand and perceptions of brand reputation on Facebook brand pages. To examine H1 and H2 regarding attitude towards the brand, I ran a factorial analysis of variance (ANOVA) on an attitude index that consisted of the seven items adapted from Holbrook and Batra (1997) and Aaker and Williams (1998). According to the results, there was no statistically significant difference for attitude toward the brand between the low interactive Facebook brand page and the high interactive Facebook brand page,  $F(1, 92) = 1.06, p > .05$ .

Participants in the high interactivity conditions ( $M = 4.70, SE = .17$ ) had only slightly more positive attitudes towards the brand than participants in the low interactivity conditions ( $M = 4.45, SE = .17$ ). Thus, level of interactivity had no effect on participants' attitudes toward the brand, and Hypothesis 1, which stated that the higher level of interactivity, the more positive users' attitudes would be toward the brand, was not supported.

**Table 8:** Descriptive Statistics

	Means	Standard Deviation
Perceived Interactivity	3.17	(.75)
Attitude	4.56	(1.16)
Reputation	3.38	(.64)
Purchase Intention	4.01	(1.36)
Interactivity	4.40	(1.23)
Involvement	5.19	(1.27)

RQ2 sought to examine whether attitudes toward the brand differed for low involvement products versus high involvement products on the Facebook brand page. The analysis revealed that level of involvement had no effect on participants' attitudes toward the brand,  $F(1, 92) = .29, p > .05$ . Those in the high involvement condition ( $M = 4.64, SE = .17$ ) had only slightly more positive attitudes toward the brand than those in the low involvement condition ( $M = 4.51, SE = .17$ ).

The ANOVA results also showed there was no significant interaction effect regarding participants' attitude towards the brand,  $F(1, 92) = 1.50, p > .05$  (see Table 9). Participants in the low involvement, high interactivity condition ( $M = 4.78, SE = .24$ ) had slightly more positive attitudes toward the brand than those in the other conditions, but such attitudes were not statistically different from those in the low involvement, low interactivity condition ( $M = 4.24, SE = .23$ ), those in the high involvement, low interactivity condition

**Table 9:** Estimated Marginal Means for Site Interactivity X Product Involvement Interaction Effect on Attitude Toward the Brand

	Low Interactivity	High Interactivity
Low Involvement Product		
M	4.24 <sub>aA</sub>	4.78 <sub>aA</sub>
SE	.23	.24
High Involvement Product		
M	4.66 <sub>aA</sub>	4.61 <sub>aA</sub>
SE	.24	.24

$F(1, 92) = 1.50, p = .23, p > .05$

Within rows, means with no lowercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons. Within columns, means with no uppercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

( $M = 4.66, SE = .24$ ) and those in the high involvement, high interactivity condition ( $M = 4.61, SE = .24$ ).

### Perception of Brand Reputation

H1 and H2 also sought to examine how level of interactivity on the Facebook brand page affected users' perceptions of brand reputation. To assess this, I ran a factorial analysis of variance on the reputation index, which included 13 items adapted from the combination of scales Guillory and Sundar (forthcoming) utilized in their study regarding interactivity and perception of organizations. According to the results, there was no statistically significant difference for participants' perception of brand reputation between those in the low interactive Facebook brand page condition and those in the high

**Table 10:** Estimated Marginal Means for Site Interactivity X Product Involvement Interaction Effect on Brand Reputation

	Low Interactivity	High Interactivity
Low Involvement Product		
M	3.20 <sub>aA</sub>	3.45 <sub>aA</sub>
SE	.13	.13
High Involvement Product		
M	3.43 <sub>aA</sub>	3.46 <sub>aA</sub>
SE	.13	.13

$F(1, 92) = .66, p = .42, p > .05$

Within rows, means with no lowercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.  
Within columns, means with no uppercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

interactive Facebook brand page condition,  $F(1, 92) = 1.18, p > .05$ . Participants in the low interactivity condition ( $M = 3.31, SE = .09$ ) had only slightly less positive perceptions of the brand's reputation as those in the high interactivity condition ( $M = 3.45, SE = .09$ ).

Moreover, participants in both conditions had fairly neutral perceptions of brand reputation. Thus, level of interactivity had no significant effect on participants' perception of brand reputation; and Hypothesis 2, which stated that the higher the level of interactivity, the more positive perception of brand reputation, was not supported.

To address RQ2, which focused on the effects of involvement and interactivity on participants' perception of brand reputation, I examined the results of the involvement main and interaction effects. Regarding the effect involvement had on participants'

perceptions of brand reputation, results showed that there was no statistically significant difference between participants' perception of brand reputation for those in the low involvement condition and those in the high involvement condition,  $F(1, 92) = .92, p > .05$ . Those in the high involvement condition had slightly higher perceptions of brand reputation ( $M = 3.45, SE = .09$ ) than participants in the low involvement condition ( $M = 3.32, SE = .09$ ), but this difference was not statistically significant.

The analysis further revealed that there was no interaction effect for interactivity and involvement on participants' perception of brand reputation,  $F(1, 92) = .66, p > .05$ . Participants in the low involvement, low interactivity condition had slightly less positive perceptions of brand reputation ( $M = 3.20, SE = .13$ ) than those in the low involvement, high interactivity condition ( $M = 3.45, SE = .13$ ), those in the high involvement, low interactivity condition ( $M = 3.43, SE = .13$ ) and those in the high involvement, high interactivity condition ( $M = 3.46, SE = .13$ ), but the difference was not statistically significant. The difference between the high and low interactivity conditions for the high involvement product is only slightly smaller, than the difference found between levels of interactivity for the low involvement product (see Table 10).

## **Purchase Intent**

RQ2 also sought to examine whether there was a relationship between level of interactivity and users' purchase intentions for brands on Facebook. To examine this, I ran a factorial analysis of variance on the purchase intent index, which included four items adapted from Baker et al. (1992). Results indicated that there was no statistically significant difference for participants' intent to purchase from the brand between those who viewed the low interactive brand page and those who viewed the high interactive

**Table 11:** Estimated Marginal Means for Site Interactivity X Product Involvement Interaction Effect on Purchase Intention

	Low Interactivity	High Interactivity
Low Involvement Product		
M	3.77 <sub>aA</sub>	4.15 <sub>aA</sub>
SE	.27	.29
High Involvement Product		
M	4.05 <sub>aA</sub>	4.08 <sub>aA</sub>
SE	.29	.28

$F(1, 92) = 1.50, p = .53, p > .05$

Within rows, means with no lowercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

Within columns, means with no uppercase subscript in common differ at  $p < .05$  using bonferroni post hoc comparisons.

brand page,  $F(1, 92) = .53, p > .05$ . Participants in the high interactivity condition ( $M = 4.12, SE = .20$ ) were only slightly more apt to purchase from the brand than those in the low interactivity condition ( $M = 3.91, SE = .20$ ), but this difference was not statistically significant. Consequently, level of interactivity on the brands' Facebook pages had no significant effect on participants' intent to purchase from the brand.

With regard to RQ2 and the effect of involvement on purchase intent, there was no main effect for involvement on participants' intent to purchase from the brand,  $F(1, 92) = .15, p > .05$ . Participants in the high involvement condition ( $M = 4.07, SE = .20$ ) were only slightly more likely to purchase from the brand than participants in the low involvement condition ( $M = 3.96, SE = .20$ ), but this difference was not statistically significant. Thus level

**Table 12:** Correlations between Perceived Interactivity, Attitude, Reputation, Purchase Intention, Involvement and Interactivity Indices

	Perceived Interactivity	Attitude	Interactivity	Reputation	Involvement	Purchase Intent
Perceived Interactivity	-	-	-	-	-	-
Attitude	.64***	-	-	-	-	-
Interactivity	.83***	.60***	-	-	-	-
Reputation	.73***	.83***	.67***	-	-	-
Involvement	-.03	.01	-.02	.00	-	-
Purchase Intent	.60***	.83***	.56***	.81***	-.08	-

Note: \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$

of involvement had no significant effect on participants' intent to purchase from the brand.

Furthermore, the analysis revealed that there was no interaction effect for interactivity and involvement on participants' intent to purchase from the brand  $F(1, 92) = .40, p > .05$ .

Participants in the low involvement, high interactivity condition indicated that they were slightly more likely to purchase from the brand ( $M = 4.15, SE = .29$ ) than those in the high involvement, high interactivity condition ( $M = 4.08, SE = .28$ ), those in the high involvement, low interactivity condition ( $M = 4.05, SE = .29$ ), and those in the low involvement, low interactivity condition ( $M = 3.77, SE = .27$ ); but this difference in purchase intention was not statistically significant. Hence, there was no interaction effect for interactivity and involvement on users' purchase intent (see Table 11).

Though the factorial analyses of variance did not reveal significant effects for interactivity and involvement on participants' attitudes toward the brand, perceptions of brand reputation and intent to purchase from the brand, a correlation analysis revealed that multiple variables were highly correlated (see Table 12). Perceived interactivity, interactivity, attitude, reputation, and purchase intent were all positively correlated with one another ( $p < .001$ ). Thus, higher levels of perceived interactivity were correlated with more positive attitudes toward the brand, more positive perceptions of brand reputation, higher levels of interactivity and higher purchase intention while lower levels of perceived interactivity were correlated with less positive attitudes toward the brand, less positive perceptions of brand reputation, lower levels of interactivity, and lower purchase intention. Additionally, higher levels of interactivity were correlated with higher levels of perceived interactivity, more positive attitudes toward the brand, more positive perceptions of brand reputation, and higher purchase intention and vice versa. Involvement, however, was negatively correlated with both perceived interactivity and interactivity. Furthermore, involvement was not significantly correlated to any of the other variables.



## **CHAPTER 5 DISCUSSION**

Though many argue that social media sites like Facebook provide users with high functional interactivity, not all businesses utilize these functions to their full advantage. Previous research has indicated that higher levels of website interactivity generate more positive perceptions of an organization (Guillory & Sundar, forthcoming). Because more and more organizations are beginning to rely on social media to form and sustain relationships with their consumers, it is essential to understand how social media use affects these relationships. While many studies regarding social media look at these relationships, few have examined the role that both functional and contingent interactivity plays in creating them.

This empirical study sought to understand how interactivity and product involvement, specifically on the social networking site Facebook, affect users' attitude toward brands, perception of brand reputation and intent to purchase from the brand. These constructs are extremely important in understanding public relations and advertising on the Web, especially with the rise of interactive advertising and social media . Moreover, they are especially important in understanding consumer behavior as a brand's fate essentially lies in the hands of its consumers.

Unlike previous research, which shows that higher levels of interactivity exhibited on websites yields more positive perceptions of organizations (Guillory & Sundar, forthcoming), results from this study indicate that level of interactivity utilized on social media sites like Facebook does not affect users' attitudes toward the brand, perception of brand reputation, or purchase intent. These results have a number of implications for

communications practitioners regarding how to utilize social media. This chapter discusses these implications.

This experiment did not find that level of interactivity had a significant effect on participants' attitudes toward the brand, their perceptions of brand reputation or their intent to purchase from the brand. Though these findings were not hypothesized, they allow for interesting insight regarding what matters to users in forming attitudes toward brands, perceptions of reputation, and purchase intention on social media. Additionally, though participants' attitudes toward the brand, perceptions of reputation and purchase intention were not significantly different in the interactivity conditions, the means for each condition indicated that those in the high interactivity conditions had slightly more positive attitudes toward the brand, slightly more positive perceptions of brand reputation and slightly more intent to purchase from the brand than those in the low interactivity conditions, which was in line with the directionality of H1 and H2.

The correlation analysis also revealed that perceived interactivity, interactivity, attitudes toward the brand, perception of brand reputation, and purchase intent were all highly positively correlated with one another. These correlations are significant as they reveal that levels of perceived interactivity correspond directly with levels of interactivity, further supporting the manipulation check on interactivity. They also reveal that, though there was no significant difference for interactivity on any of the dependent variables, as level of interactivity increased, participants had more positive attitudes toward the brand, more positive perceptions of brand reputation and were more likely to purchase from the brand. This may indicate that, while higher levels of interactivity contribute to more positive impressions and greater purchase intention, there are other factors required for

users' to adequately form positive impressions and intent to purchase. On the other hand, involvement was not correlated to any other variables, which indicates that product involvement does not, indeed, have any affect on users' impressions or intent to purchase from the brand.

This study measured users' *initial* attitudes toward the brand and perceptions of reputation after interacting with a Facebook brand page. Because an attitude is a generally enduring, consistent over time, positive or negative evaluation of a person or object (Heath & Gaeth, 1994), true attitudes toward the brand may have been difficult to gauge upon first contact with the stimulus. Similarly, because reputation encompasses an organization's past and present performance (Gibson, 2006), and this study utilized a hypothetical new brand, reputation may also have been difficult to gauge. This may explain why participants' attitudes toward the brand were fairly neutral for both levels of interactivity. Perhaps more interaction with the brand page is necessary to successfully measure participants' attitudes toward brands and perceptions of brand reputation. Additionally, because attitudes toward the brand and perception of brand reputation play important roles in determining purchase intention, it is reasonable that because this study was only able to garner initial attitudes, purchase intention was difficult to gauge.

Going forward, organizations may not want to rely solely on interactivity within Facebook to influence consumers' impressions or purchase intention. Facebook may be a good platform for new brands to get the word out regarding the brand; but it may not necessarily heavily contribute to the formation of impressions and purchase intention regarding the brand upon immediate exposure.

Another plausible reason that interactivity did not have a significant effect on participants' attitudes toward the brand and perceptions of brand reputation could be due to involvement with the brand page itself (rather than with the product). Eroglu and colleagues' (2003) conceptualization of involvement into cognitive and affective components lends insight regarding why involvement with the site may mediate the relationship between interactivity and users' impressions and intent to purchase from the brand. Cognitive involvement is heightened when users are exposed to product descriptions, images and terms of sale while affective involvement is heightened when users are exposed to colors, animations and peripheral site information (Eroglu et al., 2003). Though Guillory and Sundar (forthcoming) did not find involvement with the website to mediate the relationship between interactivity and organization perception, involvement may mediate this relationship on social media since Facebook is an arguably involving website.

Moreover, Lipsman and colleagues (2011) revealed that the news feed is the primary channel for brand exposure on Facebook as Facebook users spend approximately 40 percent of their time on the site on their news feeds. It could be possible that users may feel lower levels of involvement with the brand page if they do not purposefully deviate from their news feed to the brand page. Thus, level of interactivity did not affect participants' attitudes toward the brand or perceptions of brand reputation because users were not actively seeking out information on the brand's Facebook page. Involvement with the brand page, in this sense, may serve as a possible mediating variable. This may also indicate that users value the *type of content* posted on the page more so than the *interactivity* of the content posted on the Facebook page. Since social media is inherently

interactive, perhaps users place more value on the type of content exhibited in each post, especially if they are primarily exposed to brands on their news feeds.

Another probable reason that there were no significant effects for interactivity and involvement on users' attitudes, perception of reputation and purchase intention could be due to the fact that the Facebook pages represented hypothetical brands rather than existing brands. Because of the hypothetical nature of the brands and lack of the brands' websites listed on the Facebook page, users had no other ability to verify the brand's reputation. Additionally, similar to attitude towards the brand, perhaps reputation may be more successfully measured after more interaction with the Facebook brand page and further interaction with external links concerning the brand itself (i.e. the brand's official website) in the high interactivity condition.

The successful manipulation of perceived interactivity is important as it accounts for individuals' perceptions of interactivity while also coinciding with the Sundar and colleagues' (2003) operationalization of functional and contingent interactivity. The successful manipulation of product involvement is also important as this study aimed to examine interactivity for both low and high involvement products.

Furthermore, after conducting the final pretest to assess the manipulation of interactivity and involvement, I noticed that participants were conflating high interactivity with high involvement. Moreover, those in the high interactivity condition found the products significantly more involving than those in the low interactivity condition. This interaction effect may suggest that higher levels of interactivity may elicit higher feelings of involvement with the product among users. Thus, the higher the level of interactivity exhibited on a brand's Facebook page, the more involving users may perceive the brand's

product to be. This finding may be beneficial to brands as higher levels of interactivity may cause users to think more carefully about the brand and its products, allowing for brands that are not dominant in the marketplace to be taken into consideration.

### **Limitations and Future Research**

While this research provides insight regarding social media usage for brands, it does have some limitations. First, the use of a convenience sample of college students limits the ability to generalize this study's findings to the population at large. The sample size of the study (N=96) was also smaller than preferable, in order to examine what we expect would be small effects. A larger sample would provide more power to examine the relationships between the key variables.

Another possible limitation is the design of this experiment. This study utilized a between-subjects factorial design in which each participant was exposed to one condition and one condition only. A within-subjects design in which participants were exposed to all conditions may have better suited this study and may have possibly led to more significant results regarding participants' attitudes toward the brand, perception of brand reputation and purchase intention. Exposure to all of the conditions may have allowed participants to more accurately observe the difference between each condition and may have possibly led to differences in their attitudes toward and impressions of the brands. Such a design would also greater mimic a real-world situation, where consumers must compare like-brands and information when considering which product to actually purchase.

As stated in the discussion, the hypothetical nature of the brands may have also served as a limitation. Because the brands were not backed by an actual brand website, this may have affected participants' attitudes towards the brand, perceptions of reputation

and purchase intention. Also, for the sake of consistency, no additional posts were added to the Facebook brand pages once pretesting began. For the sake of eliminating confounds, posts on each page began on January 14, 2013, and ended on February 14, 2013, to ensure that all participants were exposed to the same type of content. Since social media is a timely, interactive medium, this may have affected the dependent variables as it may not have seemed as realistic or up-to-date as a traditional brand's Facebook page.

Another possible limitation could be that all participants did not necessarily view the stimulus for the same amount of time. They were instructed to view the page for approximately three to five minutes; so some may have viewed the page longer than others. Participants in the same condition may have formed different impressions due to the varying amount of time they viewed the page.

Recommendations for future research include using qualitative measures in addition to quantitative measures to further assess what contributes to users' attitudes toward brands and perceptions of brands as well as purchase intention. Qualitative measures may allow for unique insight regarding what social media users expect to see on Facebook brand pages with regard to interactivity. Researchers may be able to more fully understand *how* and *why* these interactive features contribute to users' impressions. Qualitative measures may also include assessing what communication practitioners find beneficial with regards to content on social media. Because practitioners are the ones monitoring these social media pages, this allows researchers to understand what type of content practitioners find to be most engaging from the actual social media posters themselves.

Another recommendation for future research includes examining which attributes of interactivity, functional or contingent, affect users' perceptions of brands the most. While many studies concerning interactivity focus on interactivity as a whole or on a particular aspect of interactivity as the independent variable, examination of which particular aspects of interactivity are most influential may yield interesting and informative results for brands on social media.

Future research regarding interactivity exhibited on social media and users' impression of brands should also take involvement with the brand page (i.e. engagement with the page) into consideration as a possible mediating variable. Additionally, researchers looking at interactivity on social media should also consider users' liking of type of the content exhibited on the brand page as an additional mediating variable. Furthermore, this study did not include a question regarding whether users would "like" the brand page or recommend it to others. Future research regarding interactivity on social media should include these questions.

Researchers may also want to examine how the effects of interactivity influence users' impressions not only on Facebook, but also on other social media sites such as Twitter. It may also be of interest to compare interactivity across social media platforms. For example, researchers may examine how level of interactivity influences how users feel as a result of interactive content. There has been much discussion recently regarding users' feelings towards brands on social media. Future research may examine whether users feel more or less engaged or more or less that they are being "sold to" via interactive content on Facebook versus Twitter.



Lastly, researchers interested in understanding the effects of interactivity in new media should also consider examining interactivity on social media in terms of how much a brand encourages interaction with the page and how this affects users' impressions of the brand. Users impressions of the brand, in this case, may be operationalized in terms of how engaged versus how pushed they feel regarding the brand due to encouraged interaction on social media platforms. This under-explored aspect of interactivity may yield interesting insights with regards to interactivity, website involvement, and users' impressions. This will be especially beneficial for brands as it will allow for them to better understand how users perceive them and further comprehend what users prefer to see from brands on social media.

## **Conclusion**

Findings from this study contribute to the growing body of knowledge regarding social media and interactivity. While this study did not find any significant effects for interactivity or product involvement on users' impressions or intent to purchase from the brand, it lends insight regarding what users consider when browsing Facebook brand pages. Because interactivity is highly, positively correlated with attitudes toward the brand and perception of brand reputation, communications practitioners should utilize the functional and contingent features of interactivity afforded by Facebook. Because of this correlation, this study suggests that interactivity may indeed play a role in affecting users attitudes toward the brand, perception of brand reputation and purchase intent; however, it may also be accompanied by other variables, such as engagement or liking of the brand page.

This study provides unique insight regarding interactivity as it specifically examines the role of interactivity and product involvement on the social networking site, Facebook. As the development of interactive media continues to redefine interactivity, it is important to understand these implications. By understanding how to utilize the interactive features of Facebook, organizations can have a better understanding of what consumers want and expect to see on these brand pages

## REFERENCES

- Aaker, Jennifer L. & Williams, P. (1998). Empathy versus pride: the influence of emotional appeals across culture. *Journal of Communication Research*, 25, 241-261.
- Andersen, P. (2007). What is Web 2.0?: Ideas, technologies and implications for education. *JISC Technology and Standards Watch*, 1(1), 1-64.
- Bin, Y. (2011). Computer-mediated communication systems. *Triplec (Cognition, Communication, Co-Operation): Open Access Journal For A Global Sustainable Information Society*, 9(2), 531-534.
- Boczkowski, P. J., & Mitchelstein, E. (2012). How users take advantage of different forms of interactivity on online news sites: Clicking, e-mailing, and commenting. *Human Communication Research*, 38(1), 1-22. doi:10.1111/j.1468-2958.2011.01418.x
- Braddy, P. W., Meade, A. W., & Kroustalis, C. M. (2006). Organizational recruitment Website effects on viewers' perceptions of organizational culture. *Journal of Business and Psychology*, 20, 525-543.
- Brenner, J. (2012). Pew Internet: Social Networking (full detail). *Pew Internet & American Life Project*. <http://www.pewinternet.org> (accessed October 30, 2012).
- Brigden, L. (2011). Emotional labour and the pursuit of the personal brand: Public relations practitioners' use of social media. *Journal Of Media Practice*, 12(1), 61-76. doi:10.1386/jmpr.12.1.61\_1
- Chen, Z. & Dubinsky, A.J. (2003). A conceptual model of perceived customer value in e-commerce: A preliminary investigation. *Psychology & Marketing*, 20(4), 323-347
- Chen, Q., & Wells, W. D. (1999). Attitude toward the site. *Journal Of Advertising Research*, 39(5), 27-37.
- Cho, C. (1999). How advertising works on the WWW: Modified elaboration likelihood model. *Journal of Current Issues and Research in Advertising*, 21(Spring), 33-50.
- Cui, N., Tao W., & Shuang X. (2010). The influence of social presence on consumers' perceptions of the interactivity of web sites. *Journal of Interactive Advertising*, 11(1), 36-49.
- Day, E., Maria R.S., & Camacho, A. (1995). Opportunities for involvement research: A scale-development approach. *Journal of Advertising*, 24(3), 69-75.
- Diaz, A. (2012). Facebook 101: Is your brand worth a like? *Advertising Age*, 83(5), 6.

- Doh, S. J. & Hwang, J.S. (2009). How consumers evaluate eWOM (electronic word-of-mouth) Messages. *Cyberpsychology & Behavior*, 12(2), 193-197. doi:10.1089/cpb.2008.0109
- Doorley, J., & Garcia, H. F. (2006). *Reputation management: The key to successful public relations and corporate communication*. Routledge.
- Downes, E. J. & McMillan, S. (2000). Defining interactivity. *New Media & Society*, 2(2), 157-179.
- Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230. 10.1111/j.1083-6101.2007.00367.x
- Eroglu, S. A., Machleit K. A., & Davis, L. M. (2003) Empirical testing of a model of online store atmospherics and shopper responses. *Psychology & Marketing*. 20(2), 139-150.
- Facebook, 2012. Retrieved October 29, 2012 from [www.facebook.com/about](http://www.facebook.com/about).
- Fitzsimons, G. J. & Morwitz, V. G. (1996). The effect of measuring intent on brand-level purchase behavior. *Journal of Consumer Research*. 23(1), 1-11.
- Fombrun, C. J., Gardberg, N. A., & Sever, J. M. (2000). The reputation quotient: A multi stakeholder measure of corporate reputation. *Journal of Brand Management*, 7, 241-255.
- Geller, L. (2012). Why a brand matters. Retrieved November 22, 2012 from <http://www.forbes.com/sites/loisgeller/2012/05/23/a-brand-is-a-specialized/>
- Gibson, D., Gonzales, J., & Castanon, J. (2006). The importance of reputation and the role of public relations. *Public Relations Quarterly*, 51(3), 15-18
- Gorn, G. J., & Weinberg, C. B. (1984). The impact of comparative advertising on perception and attitude: Some positive findings. *Journal of Consumer Research*, 11(2), 719-727.
- Guillory, J., & Sundar, S. S. (forthcoming). How does website interactivity affect our perceptions of an organization? *Journal of Public Relations Research*.
- Ha, L., & James, E. (1998). Interactivity reexamined: A baseline analysis of early business Websites. *Journal Of Broadcasting & Electronic Media*, 42(4), 456.
- Heath, T.B. and Gaeth, G.J. (1994), Theory and method in the study of ad and brand attitudes: Toward a systematic model." In E. M. Clark, T. C. Brock, and D. W. Stewart (Eds.) *Attention, attitude, and affect in response to advertising*. (pp. 125-148), Hillsdale, NJ: Lawrence Erlbaum Associates.

- Heeter, C. (1989). Implications of new interactive technologies for conceptualizing communication. In J.L. Salvaggio & J. Bryant (Eds.) *Media use in the information age* (pp. 217-236). Hillsdale, NJ: Lawrence Erlbaum.
- Herring, S. (Ed.) (1996). *Computer-mediated communication: Linguistic, social and cross cultural perspectives*. Philadelphia: John Benjamins Publishing Company.
- Hill, R. P., & Moran, N. (2011). Social marketing meets interactive media. *International Journal Of Advertising*, 30(5), 815-838. doi:10.2501/IJA-30-5-815-838
- Hoffman, D.L, Novak, T. P. (1996). Marketing in hypermedia computer-mediated environments: Conceptual foundations. *Journal of Marketing*. 60, 50-68.
- Hoffman, D.L., Novak, T. P., & Peralta, M. (1999). Building consumer trust online. *Communications of the ACM*, 42(4), 80-85.
- Holbrook, M. B., & Batra, R. (1987). Assessing the role of emotions as mediators of consumer responses to advertising. *Journal Of Consumer Research*, 14(3), 404-420.
- Hupfer, N. T., & Gardner, D. M. (1971). Differential involvement with products and issues: An exploratory study. In *Proceedings: Association for Consumer Research* (pp. 262-269). College Park, MD: Association for Consumer Research.
- Kaplan, A., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59—68.
- Karson, E. J., Korgaonkar, P. K. (2001). An experimental investigation of internet advertising and the elaboration likelihood model. *Journal of Current Issues and Research in Advertising*, 23, 53-72.
- Ketelaar, P. E., van Gisbergen, M. S., Bosman, J. M., & Beentjes, H. (2010). The effects of openness on attitude toward the ad, attitude toward the brand, and brand beliefs in dutch magazine ads. *Journal Of Current Issues & Research In Advertising (CTC Press)*, 32(2), 71-85. 10.1080/10641734.2010.10505286
- Khang, H., Ki, E., & Ye, L. (2012). Social media research in advertising, communication, marketing, and public relations, 1997-2010. *Journalism & Mass Communication Quarterly*, 89(2), 279-298. doi:10.1177/1077699012439853
- LaPointe, P. (2012). Measuring facebook's impact on marketing. *Journal Of Advertising Research*, 52(3), 286-287. doi:10.2501/JAR-52-3-286-287.
- Lee, M., Rodgers, S., & Kim, M. (2009). Effects of valence and extremity of eWOM on attitude toward the brand and website. *Journal Of Current Issues & Research In Advertising (CTC Press)*, 31(2), 1-11.

- Leiner, D. J., & Quiring, O. (2008). What interactivity means to the user essential insights into and a scale for perceived interactivity. *Journal Of Computer-Mediated Communication*, 14(1), 127-155. doi:10.1111/j.1083-6101.2008.01434.x
- Lipsman, A., Mud, G., Rich, M., & Bruich, S. (2012). The power of "like": How brands reach (and influence) fans through social-media marketing. *Journal Of Advertising Research*, 52(1), 40-52. doi:10.2501/JAR-52-1-040-052
- Liu, Y. (2003). Developing a scale to measure the interactivity of websites. *Journal of Advertising Research*. 43(2), 207-216
- Macias, W. (2003). A beginning look at the effects of interactivity, product involvement and web experience on comprehension: Brand web sites as interactive advertising. *Journal Of Current Issues & Research In Advertising (CTC Press)*, 25(2), 31-44.
- Malär, L., Nyffenegger, B., Krohmer, H., & Hoyer, W. (2012). Implementing an intended brand personality: a dyadic perspective. *Journal Of The Academy Of Marketing Science*, 40(5), 728-744. doi:10.1007/s11747-011-0251-8
- McMillan, S. J., & Hwang, J. (2002). Measures of perceived interactivity: An exploration of the role of direction of communication, user control, and time in shaping perceptions of interactivity. *Journal Of Advertising*, 31(3), 29-42.
- McMillan, S. J., Hwang, J.S., & Guiohk, L. (2003). Effects of structural and perceptual factors on attitudes toward the website. *Journal Of Advertising Research*, 43(4), 400-409.
- McMurdo G., & Meadows, A.J. (1996). Acceptance and use of computer-mediated communication by information students. *Journal of Information Science*, 22(5), 335-348.
- Meenaghan, T. (1995). The role of advertising in brand image development. *Journal of Product & Brand Management*, 4(4), 23 - 34.
- Morwitz, V. G., & Schmittlein, D. (1992). Using segmentation to improve sales forecasts based on purchase intent: Which "intenders" actually buy? *Journal Of Marketing Research*, 29(4), 391-405.
- Naylor, R., Lamberton, C., & West, P. M. (2012). Beyond the "like" button: The impact of mere virtual presence on brand evaluations and purchase intentions in social media settings. *Journal Of Marketing*, 76(6), 105-120.
- Neff, J. (2010). What happens when Facebook trumps your brand site?. *Advertising Age*, 81(30), 2-22.

- Nelson-Field, K., Riebe, E., & Sharp, B. (2012). What's not to "like?" *Journal Of Advertising Research*, 52(2), 262-269. doi:10.2501/JAR-52-2-262-269
- Newhagen, J. E., & Cordes, J. W. (1995). Nightly@nbc.com: Audience scope and the perception of interactivity in viewer mail on the Internet. *Journal Of Communication*, 45(3), 164.
- Page, G., & Fearn, H. (2005). Corporate reputation: What do consumers really care about?. *Journal Of Advertising Research*, 45(3), 305-313.
- Park H., Rodgers S., & Stemmler J. (2011). Health organizations' use of Facebook for health advertising and promotion. *Journal of Interactive Advertising*, 12(1). 63-77.
- Rafaeli, S. (1988). Interactivity: From new media to communication. In R. Hawkins, J. Weimann, & S. Pingree (Eds.), *Advancing communication science: Merging mass and interpersonal processes* (pp. 110-134). Newbury Park, CA: Sage.
- Rafaeli, S., & Sudweeks, F. (1997). Networked interactivity. *Journal of Computer-Mediated Communication*, 2(4). 0-0. DOI: 10.1111/j.1083-6101.2000.tb00114.x
- Ramakrishnan, M. M., & Ravindran, S. (2012). A study on the consumer perception towards private label brands with special reference to Big Bazaar, Coimbatore, Tamil Nadu. *Researchers World: Journal Of Arts, Science & Commerce*, 3(4), 72-78.
- Ramirez, A. (2009). The effect of interactivity on initial interactions: The influence of information seeking role on computer-mediated interaction. *Western Journal Of Communication*, 73(3), 300-325. doi:10.1080/10570310903082040
- Nelson-Field, K., Riebe, E., & Sharpe, B. (2012). What's not to "like?". *Journal Of Advertising Research*, 52(2), 262-269. doi:10.2501/JAR-52-2-262-269
- Shaw, M. E. (1982). A theory of attitudes. *Communication*, 11(1), 1.
- Sheena, Mohanan, P. P., & Naresh, G. G. (2012). Brand success redefined: An analysis of the interrelationships among various brand dimensions. *Psychology Research*, 2(1), 32-39.
- Suh, J., & Yi, Y. (2006). When brand attitudes affect the customer satisfaction-loyalty relation: The moderating role of product involvement. *Journal Of Consumer Psychology (Lawrence Erlbaum Associates)*, 16(2), 145-155. doi:10.1207/s15327663jcp1602\_5
- Sundar, S. S., Xu, Q., & Bellur, S. (2010). Designing interactivity in media interfaces: A

- communications perspective. *Proceedings of the 28th International Conference on Human Factors in Computing Systems (CHI'10)*, 2247-2256.
- Sundar, S., Kalynraman, S., & Brown, J. (2003). Explicating web site interactivity: Impression formation effects in political campaign sites. *Communication Research*, 30(1), 30-59.
- Sundar, S. S., & Kim, J. (2005). Interactivity and persuasion: Influencing attitudes with information and involvement. *Journal of Interactive Advertising*, 5(2), 6-29.
- The Nielsen social media report, Q3 2011. (2011). *Seybold Report: Analyzing Publishing Technologies*, 11(18), 9-11
- Thurstone, L. L. (1931). The measurement of social attitudes. *Journal of Abnormal and Social Psychology*. 26, 249-269.
- Wilkie, W., & Moore, E. (2012). Expanding our understanding of marketing in society. *Journal Of The Academy Of Marketing Science*, 40(1), 53-73.  
doi:10.1007/s11747-011-0277-y
- Wu, G., Hu, X., & Wu, Y. (2010). Effects of perceived interactivity, perceived web assurance and disposition to trust on initial online trust. *Journal Of Computer-Mediated Communication*, 16(1), 1-26. doi:10.1111/j.1083-6101.2010.01528.x
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12(3), 341-352
- Zaichkowsky, J.L. (1994). The personal involvement inventory: Reduction, revision, and application to advertising. *Journal of Advertising*, 23(4), 59-70.



## APPENDIX A MEASURES

### *Perceived Interactivity Scale (McMain & Hwang, 2002)*

1. This website enables two-way communication

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

2. This website enables immediate communication.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

3. This website enables delayed communication.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

4. This website is interactive.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

5. This website primarily enables one-way communication.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

6. This website is interpersonal.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree620

7. This website enables conversation.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

8. This website loads fast.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

9. This website loads slowly.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

10. This website operates at high speed

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

11. This website has variety of content.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

12. This website keeps my attention.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

13. It was easy to find my way through the website.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

14. This website was unmanageable.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

15. This website doesn't keep my attention.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

16. This website appeared passive.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

17. This website provided immediate answers to questions.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

18. This website lacks content.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

*Interactivity (Liu 2003 Scale for Interactivity)*

Active control

1. I felt that I had a lot of control over my visiting experiences at this website.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

2. While I was on the website, I could choose freely what I wanted to see.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

3. While surfing the website, I had absolutely no control over what I can do on the site.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

4. While surfing the website, my actions decided the kind of experiences I got.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

Two-way communication

5. The website is effective in gathering visitors' feedback.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

6. This website facilitates two-way communication between the visitors and the site.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

7. It is difficult to offer feedback to the website.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

8. The website makes me feel it wants to listen to its visitors.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

9. The website does not at all encourage visitors to talk back.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

10. The website gives visitors the opportunity to talk back.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

Synchronicity

11. The website processed my input very quickly.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

12. Getting information from the website is very fast.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

13. I was able to obtain the information I want without any delay.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

14. When I clicked on the links, I felt I was getting instantaneous information.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

15. The website was very slow in responding to my requests

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

*Organization/Brand Perception (Guillory & Sundar, forthcoming)*

Please answer each question using a 1 – 7 scale, with a score of 1 indicating strongly disagree and a score of 7 strongly agree.

1. I think that this organization supports good causes
2. I think that this organization encourages its employees to serve their community  
(by volunteering and supporting good causes)
3. I think that this organization has excellent leadership.
4. I think that this organization has a clear vision for the future.
5. I think that this organization has an excellent record of profitability.
6. I think that this organization outperforms its competitors.
7. I think that this organization has promising growth prospects.
8. This organization would be a good place to work.
9. This organization hires good employees.
10. This organization provides rewards for good performance.
11. This organization has high quality products and services.
12. This organization promotes innovation.
13. This organization stands behind its products.
14. I admire and respect this organization's practices.
15. I would trust this organization to be a good employer.
16. I have positive feelings about this organization.

17. I think that this organization places value on professional growth.
18. I think that this organization sets high expectations for its employees.
19. I think that this organization promotes achievement by encouraging employees to be action-oriented.
20. I think that this organization promotes sharing of information.
21. I think that this organization promotes collaboration between employees.
22. I think that this organization promotes diversity within the organization.

*Attitude Toward the Brand (Aaker & Williams, 1998)*

- 1.) Good 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Bad
- 2.) Likeable 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Not Likeable
- 3.) Favorable 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Unfavorable
- 4.) How much do you like this brand/product?  
Extremely like 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Extremely Dislike
- 5.) Would you try this brand/product?  
Definitely yes 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Definitely No
- 6.) Would you buy this brand/product next time you see it in a store?  
Definitely Yes 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Definitely No

*Attitude Toward the Brand (Hokbrook & Batra, 1982)*

- 1.) Like 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Dislike
- 2.) Positive 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Negative
- 3.) Favorable 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Unfavorable
- 4.) Bad 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Good

*Purchase Intent* Baker (Lavy & Grewals 1992)

1. The likelihood that I would shop on this website is high.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

2. I would be willing to buy a product on this website.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

3. I would like to recommend this website to my friend.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

## APPENDIX B STIMULUS

### Low Involvement, Low Interactivity



**Revive Soap**  
22 likes

Health/Beauty  
Revive Soap. Feel the clean.

Change Cover

✓ Liked

22

About Photos Likes

Highlights

Status Photo / Video Event, Milestone +

How's it going?

**Revive Soap**  
February 14

Happy Valentine's Day from all of us here at Revive Soap!  
Hope your day is filled with love and laughter!

Like · Comment · Share

**Revive Soap** shared a link.  
February 5

You already know it's flu and cold season--Check out this awesome informative about hand washing from the CDC!

<http://www.cdc.gov/features/handwashing/>

**CDC Features – Wash Your Hands**  
[www.cdc.gov](http://www.cdc.gov)

Keeping hands clean is one of the best ways to prevent the spread of infection and illness.

Like · Comment · Share 2 1

**14 Friends**  
Like Revive Soap



+5

Recent Posts by Others on Revive Soap [See All](#)

**Minjie Li**  
I'm interested in buying revive but didn't see it at my l...  
January 31 at 3:58pm

**Revive Soap**  
February 6

Wash your hands with Revive, and feel the clean!

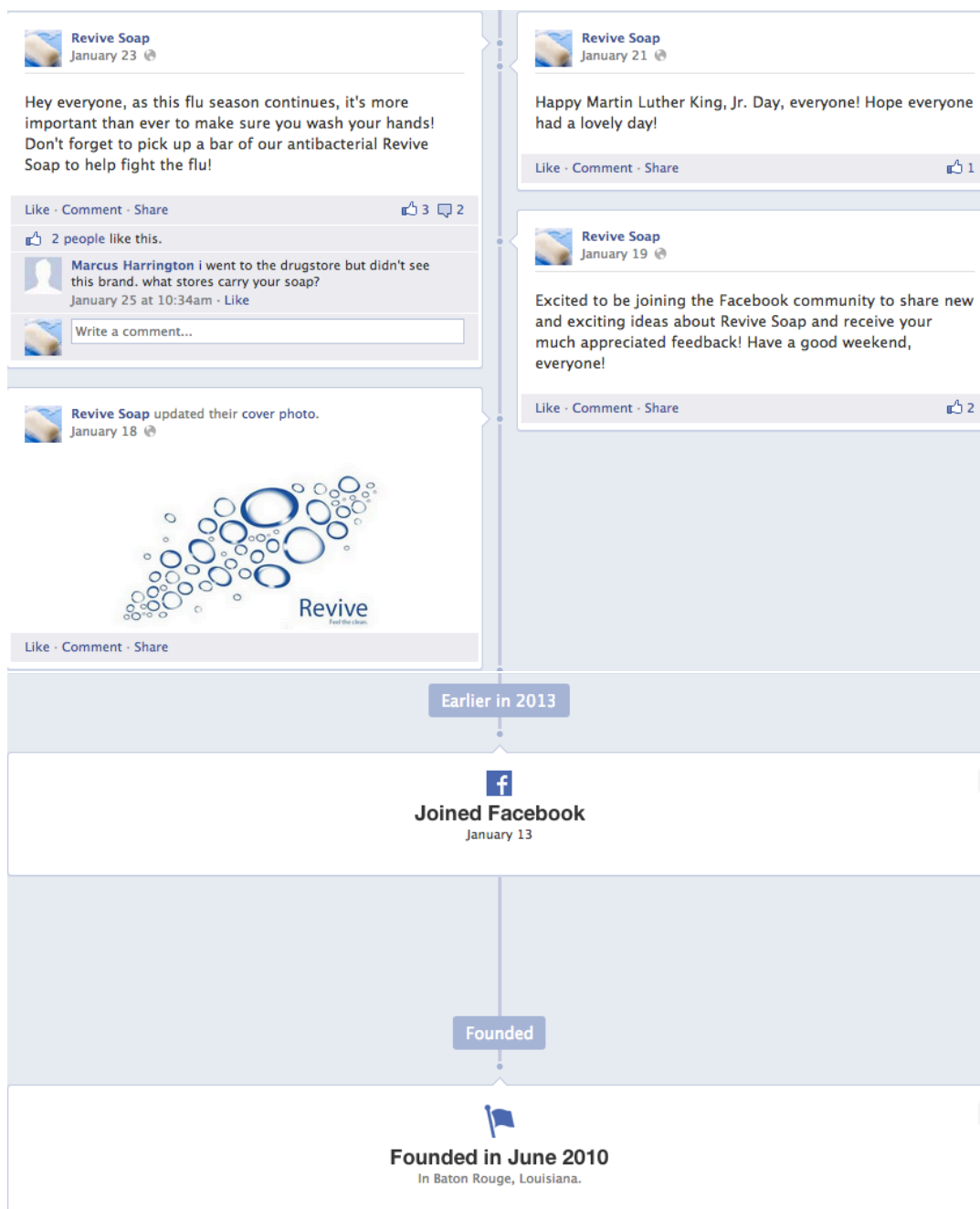
Like · Comment · Share

**Revive Soap**  
February 4

Save your sick days! Reduce the spread of germs by washing your hands with our liquid hand soap!







## Low Involvement, High Interactivity

The screenshot displays the Facebook profile of 'Revive Soap'. The cover photo features a large, artistic arrangement of blue bubbles of various sizes, with the brand name 'Revive' and the tagline 'Feel the clean.' positioned to the right. The profile picture is a close-up of a white bar of soap in a pool of blue water. The page header includes the name 'Revive Soap' with '20 likes' and a 'Liked' button. Below this, a navigation bar offers links to 'About', 'Photos', and 'Likes'. A 'Highlights' dropdown menu is visible. The main content area on the left contains a status update from February 14 with the text 'Happy Valentine's Day from all of us here at Revive Soap! Hope your day is filled with love and laughter!' and a large, 3D red 'Happy Valentines' graphic. The right sidebar shows '12 Friends' who like the page, a photo of hands being washed with Revive soap from February 6, and a link shared by Revive Soap on February 5. The overall design is clean and professional, emphasizing the brand's identity through high-quality imagery and clear, concise text.

**Revive Soap**  
20 likes

Health/Beauty  
Revive Soap. Feel the clean.

About Photos Likes

Highlights

Status Photo / Video Event, Milestone +

How's it going?

**Revive Soap**  
February 14

Happy Valentine's Day from all of us here at Revive Soap!  
Hope your day is filled with love and laughter!

**Happy Valentines**

Like · Comment · Share

**12 Friends**  
Like Revive Soap

**Revive Soap**  
February 6

Wash your hands with  
**Revive**  
and feel the clean.

Like · Comment · Share 2

**Revive Soap** shared a link.  
February 5

Revive Soap  
February 4



Like · Comment · Share

1

Revive Soap  
February 3

Oh hey, it's Superbowl Sunday! Who are YOU rooting for?!



Like · Comment · Share

Revive Soap  
January 27

We love our weekends here at Revive Soap. Who's not ready for Monday either?!



You already know it's flu and cold season--Check out this awesome informative about hand washing from the CDC!

<http://www.cdc.gov/features/handwashing/>



CDC Features – Wash Your Hands  
[www.cdc.gov](http://www.cdc.gov)

Keeping hands clean is one of the best ways to prevent the spread of infection and illness.

Like · Comment · Share

2

2 people like this.



Justin Jp Brown Nice article. I'm a nutrition major and washing hands before food preparation is super important.  
February 5 at 10:17pm · Like



Revive Soap Definitely, Justin. We couldn't agree more!  
February 5 at 10:24pm · Like



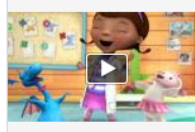
Write a comment...



Revive Soap shared a link.  
February 4

Stumbled upon this great video: Teach little ones the importance of washing their hands with this short, fun music video!

<http://www.youtube.com/watch?v=g8ZkiRf2mnc>



Music Video – Wash Your Hands – Doc McStuffins – Disney Junior Official  
[www.youtube.com](http://www.youtube.com)

Learn to wash your hands with Doc McStuffins! Watch Doc McStuffins on

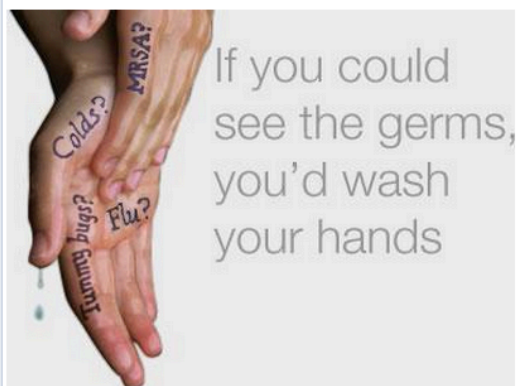
Like · Comment · Share



Revive Soap  
January 30

It's flu season, everyone. Stay healthy and make sure to wash your hands frequently!

And while you're at it, choose Revive Soap. It's antibacterial AND gentle on your skin :)



Like · Comment · Share

1

Revive Soap  
January 27

We love our weekends here at Revive Soap. Who's not ready for Monday either?!

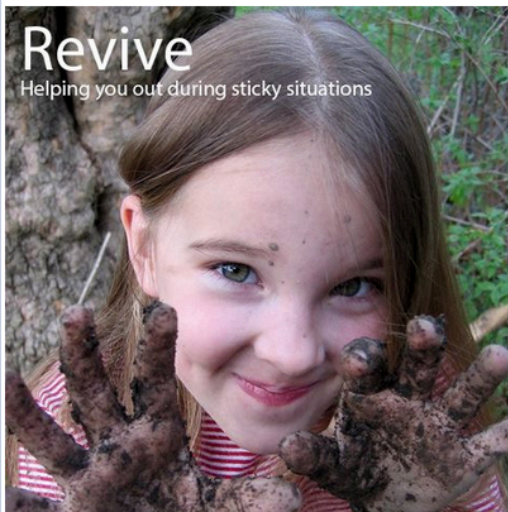


Like · Comment · Share

1 2

Revive Soap  
January 25

Sticky situation? Don't worry. We've got your back ;) Choose Revive.



Like · Comment · Share

1

And while you're at it, choose Revive Soap. It's antibacterial AND gentle on your skin :)



Like · Comment · Share

1

Revive Soap shared a link.  
January 27

So many of us take the simple things, like soap, for granted. Help us spread awareness on the importance and benefits of washing your hands with soap.

<http://www.cnn.com/2011/11/15/health/cnnheroes-soap-hygiene/index.html>



**Lack of soap means illness, death for millions of children**  
[www.cnn.com](http://www.cnn.com)

Hotel cleaning worker Fatoma Dia collects barely used soap as part of a global campaign to prevent deadly

Like · Comment · Share

1

Revive Soap shared a link.  
January 23

Hey everyone, as this flu season continues, it's more important than ever to make sure you wash your hands! Don't forget to pick up a bar of our antibacterial Revive Soap to help fight the flu!

[http://www.youtube.com/watch?v=ZlDqcmY\\_EV8](http://www.youtube.com/watch?v=ZlDqcmY_EV8)



**Put Your Hands Together**  
[www.youtube.com](http://www.youtube.com)

Scientists estimate that people are not washing their hands often or well enough and may transmit up to 80% of all infections by their hands.

Like · Comment · Share

4 3

3 people like this.



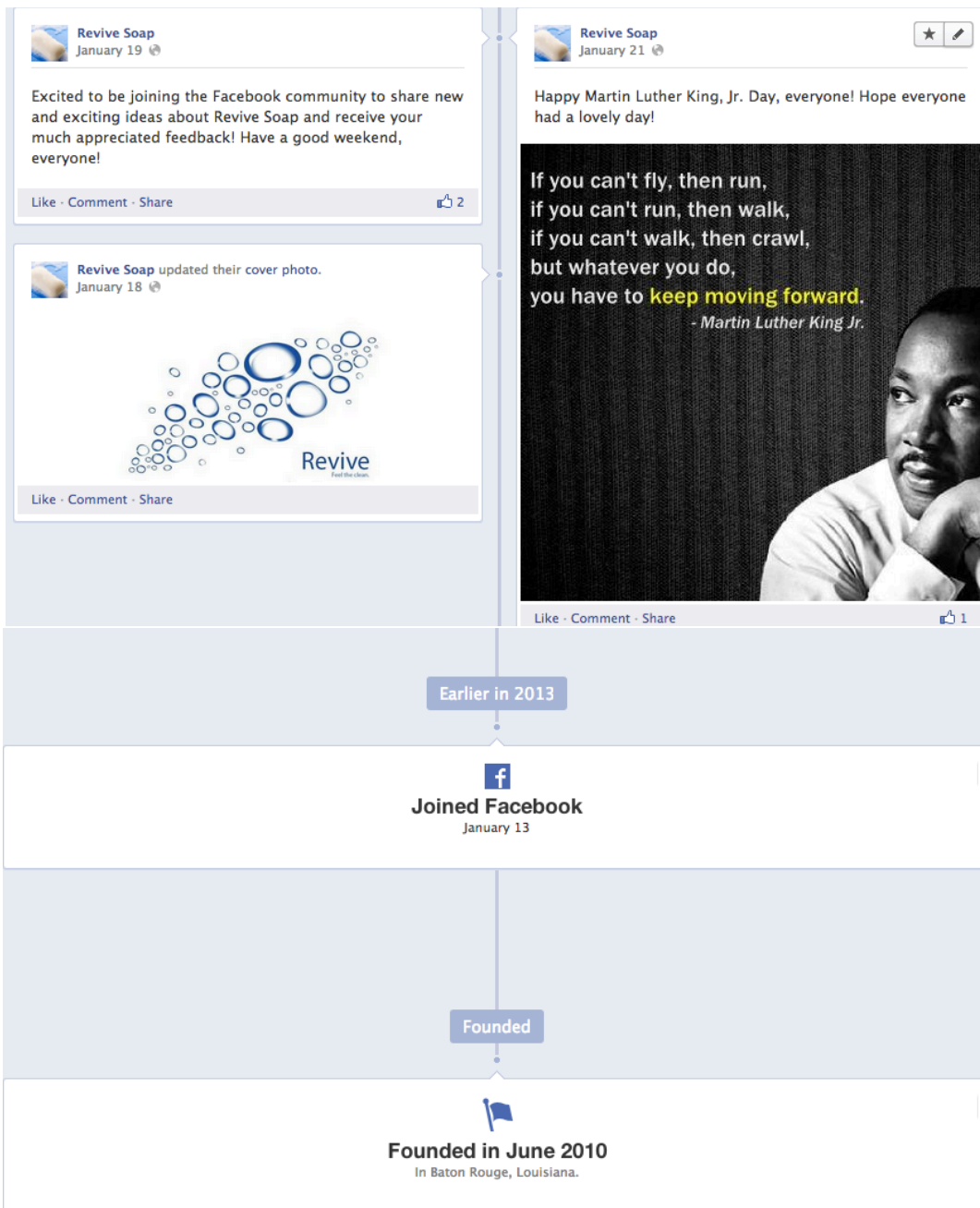
**Marcus Harrington** i went to the drugstore but didn't see this brand. what stores carry your soap?  
January 25 at 10:35am · Like



**Revive Soap** Hi Marcus, sorry that you were unable to find our soap! Wal-mart, CVS and Walgreens are a few retailers that carry our supplements. Hope this helps, and please let us know if you have any other questions!  
January 25 at 10:45am · Edited · Like



Write a comment...





## High Involvement, Low Interactivity



The image shows a screenshot of the 'Natural Harmony' Facebook page. The cover photo features a compass rose with the words 'Healthy Life' in green, and a small inset image of orange capsules with the text 'Natural Harmony' and 'Bringing Harmony to your body, the natural way'. The profile picture is a small version of the same capsule image. The page has 22 likes and is categorized as 'Vitamins/Supplements'. The feed includes several posts: a Valentine's Day greeting, a post about a U.S. News & World Report article on diets, and a post with a large green 'KEEP' graphic and a recycling symbol. The right sidebar shows 12 friends and a list of recent posts.

**Natural Harmony**  
22 likes

Vitamins/Supplements  
Bringing harmony to your body, the natural way.

About Photos Likes

Highlights

Status Photo / Video Event, Milestone +

How's it going?

**Natural Harmony**  
February 14

Happy Valentine's Day from all of us here at Natural Harmony! Hope your day is filled with love and laughter!

Like · Comment · Share

**Natural Harmony**  
February 5

U.S. News & World Report published a list of "best" overall diets. D.A.S.H. (Dietary Approaches to Stop Hypertension) developed by National Institute of Health earned the #1 spot. Check it out here: <http://health.usnews.com/best-diet/best-overall-diets>

Here's to eating healthy in 2013!

Like · Comment · Share 2 1

**Natural Harmony** shared a link.  
February 4

**12 Friends**  
Like Natural Harmony

**Natural Harmony**  
February 6

Keep your heart healthy by choosing nutrient-rich foods! Oh, and don't forget to take your daily multivitamin provided by yours truly :)

Like · Comment · Share

**Natural Harmony**  
February 4

Seriously.

**KEEP**

Respect yourself, and help give your body the nutrients it needs. Natural Harmony is proud to announce that you can now find a bottle of our daily multivitamin supplements at your local GNC.

<http://www.gnc.com/storeLocator/index.jsp>

**GNC – Store Locator**  
www.gnc.com

The Store Locator is designed to help you find the closest GNC store to you. For Quality, Value, and Service, visit one of our stores today.

Like · Comment · Share

1

**Natural Harmony**  
January 30

In addition to taking your Natural Harmony daily multivitamin, it's important to nourish our bodies with healthy food. What's in YOUR fridge?

Like · Comment · Share

**Natural Harmony**  
January 27

Dr. Andrew Weil discusses the importance of taking vitamins in a very special series on the Today Show. Check it out here:

[http://www.today.com/id/9402607/site/todayshow/ns/today-today\\_health/t/why-should-i-take-vitamin-my-health/](http://www.today.com/id/9402607/site/todayshow/ns/today-today_health/t/why-should-i-take-vitamin-my-health/)

**Natural Harmony**  
January 23

Vitamins are such an important part of all the chemical processes in our bodies! Head to your local store to pick up a bottle of Natural Harmony's quality-assured, budget-friendly daily multivitamin. You won't regret it!

Like · Comment · Share

2 2

Marcus Harrington likes this.

**Marcus Harrington** i went to the drugstore but didn't see these supplements. what retailers carry them?  
January 25 at 10:32am · Like

Write a comment...

**Natural Harmony**  
January 19

Excited to be joining the Facebook community to share new and exciting ideas about Natural Harmony and receive your much appreciated feedback! Have a good weekend, everyone!

Like · Comment · Share

1

# CALM AND TAKE YOUR VITAMINS

Like · Comment · Share

3

**Natural Harmony**  
February 3

Oh hey, it's Superbowl Sunday! Who are YOU rooting for?!

Like · Comment · Share

**Natural Harmony**  
January 27

We love our weekends here at Natural Harmony. Who's not ready for Monday either?!

<http://i.qkme.me/NF.jpg>

Like · Comment · Share

1 1

Jennifer Allemond likes this.

**Jennifer Allemond** This is how I feel every monday...  
February 6 at 9:29am · Like

**Natural Harmony**  
January 25

Have you had your vitamins today?? Like this status if you did!

Like · Comment · Share

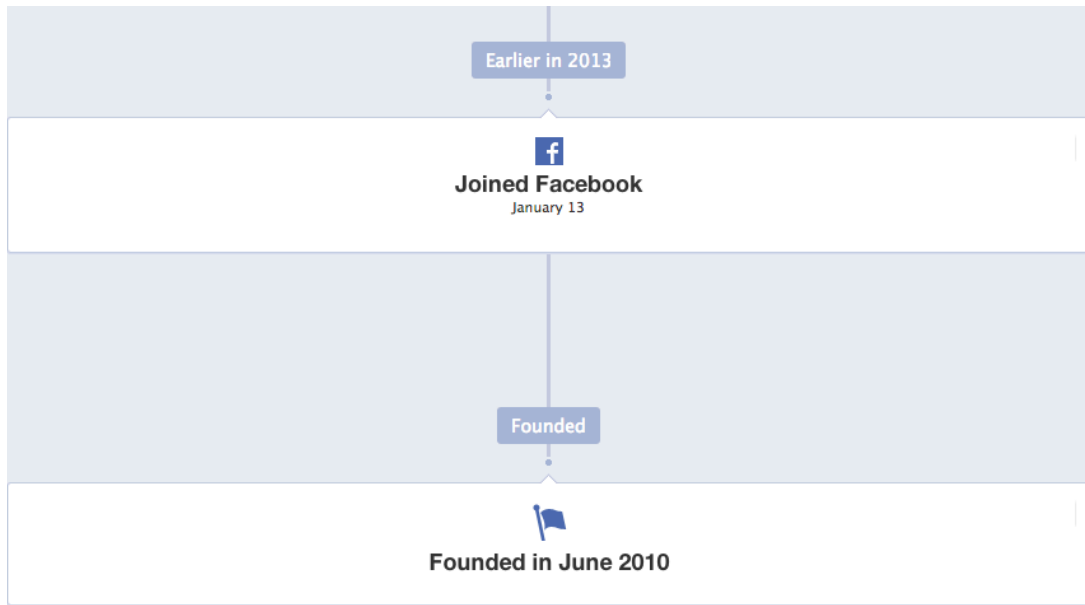
2

**Natural Harmony**  
January 21

Happy Martin Luther King, Jr. Day, everyone! Hope everyone had a lovely day!

Like · Comment · Share

1





## High Involvement, High Interactivity

The screenshot displays the Facebook profile of "Natural Harmony". The cover photo features a compass with the words "Healthy Life" written in green, curved text across it. The profile picture shows a jar of orange capsules with the text "Natural Harmony" and "Bringing Harmony to your body, the natural way".

**Natural Harmony**  
24 likes

Vitamins/Supplements  
Bringing harmony to your body, the natural way.

About Photos Likes

Highlights

Status Photo / Video Event, Milestone +

How's it going?

Natural Harmony updated their cover photo.  
March 4

Like · Comment · Share

Natural Harmony  
February 6

Keep your heart healthy by choosing nutrient-rich foods!  
Oh, and don't forget to take your daily multivitamin provided by yours truly :)

Natural

14 Friends  
Like Natural Harmony

Recent Posts by Others on Natural Harmony

Minjie Li  
I'm interested in buying this multivitamin but didn't s...  
1 · January 31 at 3:56pm

Natural Harmony  
February 14

Happy Valentine's Day from all of us here at Natural Harmony! Hope your day is filled with love and laughter!

Like · Comment · Share

February 3, 2013

SUPER BOWL  
XLVII

Like · Comment · Share

 **Natural Harmony** shared a link.  
February 5

U.S. News & World Report published a list of "best" overall diets. D.A.S.H. (Dietary Approaches to Stop Hypertension) developed by National Institute of Health earned the #1 spot. Check it out here: <http://health.usnews.com/best-diet/best-overall-diets>

Here's to eating healthy in 2013!





Top-Rated Diets Overall | US News Best Diets  
health.usnews.com

Diets are ranked by whether they are: easy to follow, nutritious, safe, and effective for weight loss and battling diabetes and

Like · Comment · Share  3  2

 3 people like this.

 **Justin Jp Brown** I'm a nutrition major and we talk about the DASH diet in our classes...it's a great diet if you're interested in losing weight the healthy way.  
February 5 at 10:16pm · Like ·  1

**Natural Harmony** Very nice! Glad to know the D.A.S.H. diet is being discussed in the classrooms of our future health professionals!  
February 5 at 10:23pm · Like · 1

Write a comment...

 **Natural Harmony** shared a link.  
February 4

Respect yourself, and help give your body the nutrients it needs. Natural Harmony is proud to announce that you can now find a bottle of our daily multivitamin supplements at your local GNC.

<http://www.youtube.com/watch?v=YhfBdAyg-Vg>



Respect Yourself – 2013 GNC TV Commercial  
www.youtube.com

GNC inspires you to "Respect Yourself". A variety of fit and healthy people show off their strength and

Like · Comment · Share  1

 **Natural Harmony**  
January 30 

In addition to taking your Natural Harmony daily multivitamin, it's important to nourish our bodies with healthy food. What's in YOUR fridge?





**Natural Harmony**  
January 27

We love our weekends here at Natural Harmony. Who's not ready for Monday either?!

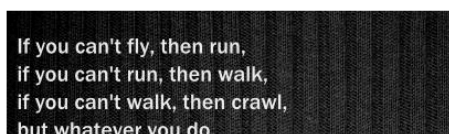


**Natural Harmony**  
January 25



**Natural Harmony**  
January 21

Happy Martin Luther King, Jr. Day, everyone! Hope everyone had a lovely day!



**Natural Harmony**  
January 30

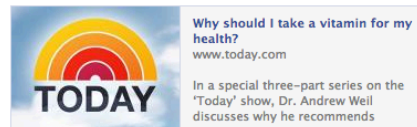
In addition to taking your Natural Harmony daily multivitamin, it's important to nourish our bodies with healthy food. What's in YOUR fridge?



**Natural Harmony** shared a link.  
January 27

Dr. Andrew Weil discusses the importance of taking vitamins on a very special series on the Today Show. Check it out here:

[http://www.today.com/id/9402607/site/todayshow/ns/to-day-today\\_health/t/why-should-i-take-vitamin-my-health/](http://www.today.com/id/9402607/site/todayshow/ns/to-day-today_health/t/why-should-i-take-vitamin-my-health/)

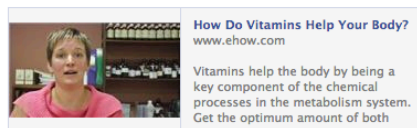


Like · Comment · Share

**Natural Harmony** shared a link.  
January 23

How do vitamins help your body? Watch this short video to see why, and head to your local store to pick up a bottle of Natural Harmony's daily multivitamin!

[http://www.ehow.com/video\\_4756613\\_vitamins-help-body.html](http://www.ehow.com/video_4756613_vitamins-help-body.html)



Like · Comment · Share

Marcus Harrington likes this.

**Marcus Harrington** i went to the drugstore but didn't see these supplements. what retailers carry them?  
January 25 at 10:33am · Like

**Natural Harmony** Hi Marcus, sorry that you were unable to find our supplements! Wal-mart, Sams Club and GNC are a few retailers that carry our supplements. Hope this helps, and please let us know if you have any other questions!  
January 25 at 10:46am · Like

Write a comment...





**Alternate Cover Picture for High Involvement, Pretest 2**



## **APPENDIX C PRETEST QUESTIONNAIRE**

**Study Title:** Understanding Organizations' Use of Facebook  
**IRB Approval #:** E8102

**Investigators:**

The following investigators are available for questions about this study:  
Christina Persaud  
cpersa2@tigers.lsu.edu

**Subject Inclusion:**

individuals 18 or older

**Study Procedures:**

The study will take place in the Media Effects Lab. After consenting to participate in the study, students will answer a basic demographic questionnaire. Students will then be exposed to one of four stimuli. Following exposure, they will answer a questionnaire.

**Benefits**

Students will receive 1 extra credit point towards their class. Additionally, the study may yield interesting and valuable information regarding how brands can utilize social media (specifically Facebook) to both their and their consumers' advantage.

**Risks**

The only risk associated with this study may be participant fatigue while taking the questionnaire. This risk can be alleviated as participants have the right to withdraw from the study at any point in time.

**Rights to Refuse**

Subjects may choose not to participate or withdraw from the study at any time without penalty or loss of any benefit to which they might otherwise be entitled.

**Privacy**

Results of this study may be published, but no names or identifying information will be included in the publication. Subject identity will remain confidential. By signing this form, I agree to adhere to this confidentiality agreement.

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about subjects' rights or other concerns, I can contact Robert C. Mathews, Institutional Review Board, (225) 578-8692, irb@lsu.edu, www.lsu.edu/irb. I agree to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

By clicking on the arrow below, you acknowledge that you are 18 years or older and consent to participate in this study.

---

On the following page you will be provided a link to a company Facebook page.

Please **DO NOT** "like," change or add any content to the page.

Click next to continue.

---

Below is a link to a Facebook brand page. Please click on the link (an external page will pop up) and peruse the page for approximately 3-5 minutes. Feel free to click on any links, pictures, videos, etc. When you are finished, close out the Facebook page and click the arrow to proceed to the next question.

[Click Here for Facebook Brand Page](#)

---

### **Involvement**

Q1. Please indicate how you feel towards the **general type of product** (not the brand) represented on the Facebook brand page.

Important	1_2_3_4_5_6_7_	Unimportant
Of no concern	1_2_3_4_5_6_7_	Of concern to me
Irrelevant	1_2_3_4_5_6_7_	Relevant
Means a lot to me	1_2_3_4_5_6_7_	Means nothing to me
Useless	1_2_3_4_5_6_7_	Useful
Valuable	1_2_3_4_5_6_7_	Worthless
Trivial	1_2_3_4_5_6_7_	Fundamental
Beneficial	1_2_3_4_5_6_7_	Not beneficial
Matters to me	1_2_3_4_5_6_7_	Doesn't matter
Uninterested	1_2_3_4_5_6_7_	Interested
Significant	1_2_3_4_5_6_7_	Insignificant
Vital	1_2_3_4_5_6_7_	Superfluous
Boring	1_2_3_4_5_6_7_	Interesting
Unexciting	1_2_3_4_5_6_7_	Exciting
Appealing	1_2_3_4_5_6_7_	Unappealing

Mundane	1_2_3_4_5_6_7_	Fascinating
Essential	1_2_3_4_5_6_7_	Nonessential
Undesirable	1_2_3_4_5_6_7_	Desirable
Wanted	1_2_3_4_5_6_7_	Unwanted
Not needed	1_2_3_4_5_6_7_	Needed

### **Perceived Interactivity**

Q2. On a scale from 1-7, with 1 representing strongly disagree and 7 representing strongly agree, please Answer the following questions:

1.) This brand page enables two-way communication.

Strongly Disagree 1\_\_\_\_\_2\_\_\_\_\_3\_\_\_\_\_4\_\_\_\_\_5\_\_\_\_\_6\_\_\_\_\_7\_\_\_\_\_ Strongly Agree

2.) This brand page enables immediate communication.

Strongly Disagree 1\_\_\_\_\_2\_\_\_\_\_3\_\_\_\_\_4\_\_\_\_\_5\_\_\_\_\_6\_\_\_\_\_7\_\_\_\_\_ Strongly Agree

3.) This brand page enables delayed communication.

Strongly Disagree 1\_\_\_\_\_2\_\_\_\_\_3\_\_\_\_\_4\_\_\_\_\_5\_\_\_\_\_6\_\_\_\_\_7\_\_\_\_\_ Strongly Agree

4.) This brand page is interactive.

Strongly Disagree 1\_\_\_\_\_2\_\_\_\_\_3\_\_\_\_\_4\_\_\_\_\_5\_\_\_\_\_6\_\_\_\_\_7\_\_\_\_\_ Strongly Agree

5.) This brand page primarily enables one-way communication.

Strongly Disagree 1\_\_\_\_\_2\_\_\_\_\_3\_\_\_\_\_4\_\_\_\_\_5\_\_\_\_\_6\_\_\_\_\_7\_\_\_\_\_ Strongly Agree

7.) This brand is interpersonal.

Strongly Disagree 1\_\_\_\_\_2\_\_\_\_\_3\_\_\_\_\_4\_\_\_\_\_5\_\_\_\_\_6\_\_\_\_\_7\_\_\_\_\_ Strongly Agree

7.) This brand page enables conversation.

Strongly Disagree 1\_\_\_\_\_2\_\_\_\_\_3\_\_\_\_\_4\_\_\_\_\_5\_\_\_\_\_6\_\_\_\_\_7\_\_\_\_\_ Strongly Agree

8.) This brand page has a variety of content.

Strongly Disagree 1\_\_\_\_\_2\_\_\_\_\_3\_\_\_\_\_4\_\_\_\_\_5\_\_\_\_\_6\_\_\_\_\_7\_\_\_\_\_ Strongly Agree

9.) This brand page keeps my attention



Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

10.) It was easy to find my way through the brand page.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

11.) This brand page doesn't keep my attention.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

12.) This brand page appeared passive.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

The brand page provides immediate answers to my questions.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

13.) This brand page lacks content.

Strongly Disagree 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_ 6 \_\_\_\_\_ 7 \_\_\_\_\_ Strongly Agree

### **Demographics**

1.) What is your age in numbers? (i.e. 21)

2.) What is your race?

- ☐ White
- ☐ African American
- ☐ Hispanic
- ☐ Asian
- ☐ Pacific Islander
- ☐ Native American
- ☐ Other

3.) Please Indicate your status.

- ☐ Freshmen
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Graduate Student

---

Thank you for your time. Please enter your 5-digit MEL ID to receive credit for participating in this study.

## **APPENDIX D MAIN QUESTIONNAIRE**

**Study Title:** Understanding Organizations' Use of Facebook  
**IRB Approval #:** E8102

**Investigators:**

The following investigators are available for questions about this study:

Christina Persaud

cpersa2@tigers.lsu.edu

**Subject Inclusion:**

individuals 18 or older

**Study Procedures:**

The study will take place in the Media Effects Lab. After consenting to participate in the study, students will answer a basic demographic questionnaire. Students will then be exposed to one of four stimuli. Following exposure, they will answer a questionnaire.

**Benefits**

Students will receive 1 extra credit point towards their class. Additionally, the study may yield interesting and valuable information regarding how brands can utilize social media (specifically Facebook) to both their and their consumers' advantage.

**Risks**

The only risk associated with this study may be participant fatigue while taking the questionnaire. This risk can be alleviated as participants have the right to withdraw from the study at any point in time.

**Rights to Refuse**

Subjects may choose not to participate or withdraw from the study at any time without penalty or loss of any benefit to which they might otherwise be entitled.

**Privacy**

Results of this study may be published, but no names or identifying information will be included in the publication. Subject identity will remain confidential. By signing this form, I agree to adhere to this confidentiality agreement.

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about subjects' rights or other concerns, I can contact Robert C. Mathews, Institutional Review Board, (225) 578-8692, irb@lsu.edu, www.lsu.edu/irb. I agree to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

By clicking on the arrow below, you acknowledge that you are 18 years or older and consent to participate in this study.

---

On the following page you will be provided a link to a company Facebook page.

Please **DO NOT** "like," change or add any content to the page.

Click next to continue.

---

Below is a link to a Facebook brand page. Please click on the link (an external page will pop up) and peruse the page for approximately 3-5 minutes. Feel free to click on any links, pictures, videos, etc. When you are finished, close out the Facebook page and click the arrow to proceed to the next question.

[Click Here for Facebook Brand Page](#)

---

### **Perceived Interactivity**

On a scale from 1-7, with 1 representing strongly disagree and 7 representing strongly agree, please Answer the following questions:

1.) This brand page enables two-way communication.

Strongly Disagree 1\_\_\_2\_\_\_3\_\_\_4\_\_\_5\_\_\_6\_\_\_7\_\_\_ Strongly Agree

2.) This brand page enables immediate communication.

Strongly Disagree 1\_\_\_2\_\_\_3\_\_\_4\_\_\_5\_\_\_6\_\_\_7\_\_\_ Strongly Agree

3.) This brand page enables delayed communication.

Strongly Disagree 1\_\_\_2\_\_\_3\_\_\_4\_\_\_5\_\_\_6\_\_\_7\_\_\_ Strongly Agree

4.) This brand page is interactive.

Strongly Disagree 1\_\_\_2\_\_\_3\_\_\_4\_\_\_5\_\_\_6\_\_\_7\_\_\_ Strongly Agree

5.) This brand page primarily enables one-way communication.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

8.) This brand is interpersonal.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

7.) This brand page enables conversation.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

8.) This brand page has a variety of content.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

9.) This brand page keeps my attention

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

10.) It was easy to find my way through the brand page.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

11.) This brand page doesn't keep my attention.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

12.) This brand page appeared passive.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

The brand page provides immediate answers to my questions.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

13.) This brand page lacks content.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

### **Attitude Toward the Brand**

1.) Please indicate how you feel toward the brand based on the following adjectives.

Bad 1\_2\_3\_4\_5\_6\_7\_ Good

Not likeable 1\_2\_3\_4\_5\_6\_7\_ Likeable

Favorable 1\_2\_3\_4\_5\_6\_7\_ Unfavorable  
Negative 1\_2\_3\_4\_5\_6\_7\_ Positive

2.) Please indicate your feelings toward the brand.

Extremely Like 1\_2\_3\_4\_5\_6\_7\_ Extremely Dislike

3.) Would you try this brand/product?

Definitely Yes 1\_2\_3\_4\_5\_6\_7\_ Definitely No

4.) Would you buy this brand the next time you see it in a store?

Definitely Yes 1\_2\_3\_4\_5\_6\_7\_ Definitely No

### **Interactivity**

On a scale from 1-7, with 1 indicating “strongly disagree” and 7 indicating “strongly agree,  
This brand is effective in gathering visitors' feedback.

1.) This brand facilitates two-way communication between the visitors and the page.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

2.) It is difficult to offer feedback to the brand

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

3.) The brand does not encourage visitors to talk back.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

4.) The brand gives visitors the opportunity to talk back.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

5.) This brand page has a variety of content.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

6.) This brand page is not interactive.

## **Reputation**

On a scale from 1-5, with 1 indicating “strongly disagree” and 5 indicating “strongly agree,  
This brand is effective in gathering visitors' feedback.

1.) I think that this brand supports good causes.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_Strongly Agree

2.) I think that this brand has excellent leadership.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_Strongly Agree

3.) I think that this brand has a clear vision.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_Strongly Agree

4.) I think that this brand has promising growth prospects

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_Strongly Agree

5.) This brand would be a good place to work.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_Strongly Agree

6.) This brand hires good employees.

7.) This brand has high quality products and services.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_Strongly Agree

8.) This brand promotes innovation.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_Strongly Agree

9.) This brand stands behind its products.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_Strongly Agree

10.) I admire and respect this brand's practices.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_Strongly Agree

11.) I would trust this brand to be a good employer.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_ Strongly Agree

12.) I have positive feelings about this brand.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_ Strongly Agree

13.) I think that this brand promotes sharing of information.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_ Strongly Agree

### **Product Involvement**

For each of the following items, please think about the **GENERAL TYPE** of product listed on the brand page (not the particular brand listed on the page).

On a scale from 1-7 with 1 representing "strongly disagree" and 7 representing "strongly agree," please answer the questions.

1.) When thinking about buying this type of product, I think about the other brands in the market.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

2.) When thinking about buying this type of product, I think about how important this product is to my daily living.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

3.) When about to purchase this type of product, I do research on various brands.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

4.) When thinking about buying this type of product, I think about my own personal body.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

5.) When thinking about buying this type of product, I think about how much it will cost.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

### **Purchase Intention**

On a scale from 1-7, with 1 representing "strongly disagree" and 7 representing "strongly agree," please indicate your responses to the following questions:

1.) The likelihood I would purchase from this brand is high.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

2.) I would be willing to buy a product from this brand.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

3.) I would recommend this brand to my friend.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

4.) I would not purchase any products from this brand in the future.

Strongly Disagree 1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_ Strongly Agree

### **Demographics**

1.) What is your age in numbers? (i.e. 21)

2.) What is your race?

- ☐ White
- ☐ African American
- ☐ Hispanic
- ☐ Asian
- ☐ Pacific Islander
- ☐ Native American
- ☐ Other

3.) Please Indicate your status.

- ☐ Freshmen
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Graduate Student

Thank you for your time. Please enter your 5-digit MEL ID to receive credit for participating in this study.



## APPENDIX E IRB APPROVAL FORM

### Application for Exemption from Institutional Oversight

Unless qualified as meeting the specific criteria for exemption from Institutional Review Board (IRB) oversight, ALL LSU research/ projects using living humans as subjects, or samples, or data obtained from humans, directly or indirectly, with or without their consent, must be approved or exempted in advance by the LSU IRB. This Form helps the PI determine if a project may be exempted, and is used to request an exemption.

-- Applicant, Please fill out the application in its entirety and include the completed application as well as parts A-F, listed below, when submitting to the IRB. Once the application is completed, please submit two copies of the completed application to the IRB Office or to a member of the Human Subjects Screening Committee. Members of this committee can be found at <http://research.lsu.edu/CompliancePoliciesProcedures/InstitutionalReviewBoard%28IRB%29/item24737.html>

-- A Complete Application Includes All of the Following:

- (A) Two copies of this completed form and two copies of parts B thru F.
- (B) A brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts 1&2)
- (C) Copies of all instruments to be used.  
\*If this proposal is part of a grant proposal, include a copy of the proposal and all recruitment material.
- (D) The consent form that you will use in the study (see part 3 for more information.)
- (E) Certificate of Completion of Human Subjects Protection Training for all personnel involved in the project, including students who are involved with testing or handling data, unless already on file with the IRB. Training link: (<http://phrp.nihtraining.com/users/login.php>)
- (F) IRB Security of Data Agreement: (<http://research.lsu.edu/files/item26774.pdf>)



Institutional Review Board  
Dr. Robert Mathews, Chair  
131 David Boyd Hall  
Baton Rouge, LA 70803  
P: 225.578.8692  
F: 225.578.5983  
[irb@lsu.edu](mailto:irb@lsu.edu)  
[lsu.edu/irb](http://lsu.edu/irb)

1) Principal Investigator:  Rank:   
Dept:  Ph:  E-mail:

2) Co Investigator(s): please include department, rank, phone and e-mail for each  
\*If student, please identify and name supervising professor in this space

Dr. Meghan Sanders  
[msand@lsu.edu](mailto:msand@lsu.edu)  
225-578-7380

IRB#	<u>E8102</u>	LSU Proposal #	
<input checked="" type="checkbox"/>	Complete Application		
<input checked="" type="checkbox"/>	Human Subjects Training		

3) Project Title:

Study Exempted By:  
Dr. Robert C. Mathews, Chairman  
Institutional Review Board  
Louisiana State University  
203 B-1 David Boyd Hall  
225-578-8692 | [www.lsu.edu/irb](http://www.lsu.edu/irb)  
Exemption Expires: 1/15/2016

4) Proposal? (yes or no)  If Yes, LSU Proposal Number

Also, if YES, either ☐ This application completely matches the scope of work in the grant  
OR ☐ More IRB Applications will be filed later

5) Subject pool (e.g. Psychology students)

\*Circle any "vulnerable populations" to be used: (children <18; the mentally impaired, pregnant women, the aged, other). Projects with incarcerated persons cannot be exempted.

6) PI Signature  Date  (no per signatures)

\*\* I certify my responses are accurate and complete. If the project scope or design is later changes, I will resubmit for review. I will obtain written approval from the Authorized Representative of all non-LSU institutions in which the study is conducted. I also understand that it is my responsibility to maintain copies of all consent forms at LSU for three years after completion of the study. If I leave LSU before that time the consent forms should be preserved in the Departmental Office.

Screening Committee Action:	Exempted <input checked="" type="checkbox"/>	Not Exempted <input type="checkbox"/>	Category/Paragraph	<u>2</u>
Signed Consent Waived?:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Reviewer	<u>Meghan Sanders</u>	Signature	<u>[Signature]</u>	Date <u>1/16/13</u>

## VITA

Christina Persaud graduated from Louisiana State University in May 2011 with a Bachelor of Arts in mass communication: public relations and minors in business administration and dance. Upon graduation, she enrolled in the master's program at Louisiana State University in August 2011 in the Manship School of Mass Communication. She has worked in communications for *Baton Rouge Parents Magazine* and for the Louisiana State University Office of Enrollment. She will complete her degree in May 2012. Following graduation, Christina will continue her career in mass communication by pursuing a position in the public relations field.