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The effects of brand involvement and message strategy on user responses on Facebook brand pages

Su Yeon Cho
Iowa State University

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The effects of brand involvement and message strategy on user responses on Facebook brand pages

by

Su Yeon Cho

A thesis submitted to the graduate faculty in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Major: Journalism and Mass Communication

Program of Study Committee:
Su Jung Kim, Major Professor
Gang Han
Emily Julia Berg

The student author, whose presentation of the scholarship herein was approved by the program of study committee, is solely responsible for the content of this thesis. The Graduate College will ensure this thesis is globally accessible and will not permit alterations after a degree is conferred.

Iowa State University
Ames, Iowa
2018

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ABSTRACT

This study examined the influence of different message strategies (direct vs. indirect) on user responses (Like, Comment, Share) between high-involvement and low-involvement brands. A total of 714 Facebook messages posted by four brands were analyzed. The results showed that: (1) High- and low-involvement brands manage Facebook fan pages differently. High-involvement brands use direct message strategies more than indirect message strategies on their Facebook fan pages. In contrast, low-involvement brands use indirect message strategies more frequently; (2) High- and low-involvement brands provide different types of content in their Facebook posts. The results are partially consistent with findings from previous research that direct message strategies are more effective for high-involvement brands, whereas indirect message strategies are more effective for low-involvement brands. However, for low-involvement brands, there was no difference in user responses, depending on the type of message strategy; (3) There is an interaction between message strategy types and the levels of brand involvement on the number of shares, but not on the number of likes or comments.

This study concludes with theoretical and practical implications of the findings, as well as limitations and suggestions for future research.
CHAPTER 1. INTRODUCTION

It is no doubt that social media are a popular media platform in influencing people’s daily lives across the globe (Chaffey, 2016; Perrin, 2015). According to Chaffey (2016), there were over 2 billion active social media users as of January 2016. This figure shows that almost one out of every four people in the world uses social media. In 2016, the social media usage rate increased by 10%, compared to the previous year. In the United States, social media adoption by adults has increased from 7% to 65% in a decade, again showing its rapid growth.

Kaplan and Haenlein (2010) define social media as “the 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). Since social media adoption and usage have grown exponentially in the past decade, various types of social media applications have also diversified. Social media services can be categorized such as social networking sites (e.g., Facebook), microblogging sites (e.g., Twitter), content communities (e.g., YouTube), and virtual social worlds (e.g., Second Life) (Chu, 2011; Kaplan & Haenlein, 2010). Among these various types, Facebook is the most popular social media platform, with the largest number of users among any other social media services. Almost 80% of Internet users have their own Facebook account, and Facebook users visit Facebook more frequently than do users of other social media platforms (Chaffey, 2016).

Because of a large number of users and the voluntary dissemination of personal information among those users, many companies provide their own social media accounts as a marketing tool (Kaplan & Haenlein, 2010; Okazaki & Taylor, 2013). Social media can be an effective business communication channel for brands (Hsu, 2012). According to Fortune,
84% of the top 500 global brands use more than at least one social media outlet for their consumers (Lee & Kim, 2012). Facebook is the most frequently used social media, given that it has more than 850 million active users (Chaffey, 2016; Nelson-Field, Riebe, & Sharp, 2012). By using a Facebook fan page, marketers can encourage users to become “Fans” of their brand fan page by clicking the “Like” button on their page. Users who become “Fans” of this page are exposed to messages posted on the brand fan page. This is a two-way communication between users and a brand, and users can share posts with their friends on Facebook (Lipsman, Mudd, Rich, & Bruich, 2012; Nelson-Field et al., 2012). Brand fan pages are not only a channel for a brand to provide messages to consumers, but also a platform for the brand and its consumers to communicate and build positive relationships. Thus, it is one of the most important marketing communication channels (Jahn & Kunz, 2012; Parsons, 2011).

Given the importance of social media as an effective marketing communication for brands, this study examines the effect of brand message strategy on user responses on Facebook, focusing on the posts on brands’ official Facebook fan pages. To classify brand message strategy, this study applies the concept of involvement in dual-process theories (Eagly & Chaiken, 1993b; Petty & Cacioppo, 1986) and the typology of Facebook messages (Kwok & Yu, 2013, 2016) to Facebook posts published by brands. Dual-process theories have been used in traditional advertising research to understand the ways that people process persuasive messages (Chaiken, 1980; Liu & Shrum, 2009; Petty & Cacioppo, 1986). According to these theories, the level of involvement during message processing is considered as an important factor in determining the route of persuasion (Petty, Cacioppo, Strathman, & Priester, 2005). People are more likely to be engaged in an extensive cognitive
process when they are in a high-involvement condition (Park, Turner, Pastore, Chitiyo, & Yoh, 2016). In high-involvement product categories, an informational appeal in advertising is more effective than an emotional appeal. An informational appeal requires high-level involvement from consumers to process the message. On the other hand, emotional appeals in advertising are more effective in low-involvement product categories (Coulter, 2004; Dens & De Pelsmacker, 2010). The second variable of interest in this study is the message type on Facebook. Previous research on brands’ use of social media suggests that brands’ message strategies are targeted at their users. Kwok and Yu (2016) propose two types of message strategy. First, a sales/marketing message is defined as a one-way communication message to sell or promote a service, product, or brand, focusing on factual information. The second strategy is referred to as a conversational message, which is defined as a two-way communication message to encourage interaction with users, without focusing on factual information about a service, product, or brand.

This thesis consists of six chapters. First, Chapter 1 introduces the purpose, motivation, and scope of this research. Chapter 2 reviews the existing literature on the main concepts used in this research (i.e., involvement, brands’ message strategy in social media). Based on the literature review, in Chapter 3, research questions and hypotheses are suggested. Chapter 4 describes the process of data collection and analysis. Specifically, this chapter explains the types of messages and brands used in this research. Next, the results of the empirical analysis are presented in Chapter 5. Finally, Chapter 6 summarizes the key findings, discusses implications, and addresses the limitations and suggestions for future research.
CHAPTER 2. LITERATURE REVIEW

Dual-process Theories

Dual-process theories have focused on understanding the ways that people process received messages. Dual-process approaches examine two factors: the content of the received message and the factors excluding the content (Zhang & Watts, 2004). The two most prominent models in dual-process theories are the heuristic-systematic model (HSM) (Eagly & Chaiken, 1993b) and the elaboration likelihood model (ELM) (Petty & Cacioppo, 1986).

HSM proposes two types of processing: systematic processing, which involves a deep level of engagement and careful attention, and heuristic processing, which involves less demanding and higher efficiency using easily comprehended factors (Chaiken, 1980). A heuristic process requires fewer cognitive abilities, such as knowledge and attention, and is related to factors other than the content of the message (e.g., the source’s expertise). Systematic processing is based on judgment-relevant information (Koh & Sundar, 2010).

HSM claims that people tend to engage in heuristic processing over systematic processing. According to Chen and Chaiken (1999), people are guided in part by a “principle of least effort.” Thus, people tend to engage in heuristic processing first, and then use systematic processing when they receive more comprehensive and analytical information. (Koh & Sundar, 2010).

ELM, developed by Petty and Cacioppo (1986), explains how involvement, ability and motivation influence the process of persuasion in a given message. It argues that when people receive a message, they change their attitude via dual routes, including a central route and a peripheral one. According to ELM, when people are highly motivated and involved in
evaluating a message, they elaborate on the argument(s) of the message and use a central route to process the message’s claim. When motivation and involvement are low or absent, people are less likely to elaborate on the arguments of the message, and thus take a peripheral route. In the peripheral route, people focus on the factors that are indirectly related to the argument(s) presented, such as simple cues (e.g., the attractiveness of the speaker) or tangential evidence of the claim (e.g., the length of the arguments in the message). Although both of the two routes are efficient in persuading people, these two routes undergo different types of information processing and produce different outcomes (Benoit & Benoit, 2008; Petty & Cacioppo, 1986). The central route focuses on processing the arguments in a message, whereas the peripheral route focuses on processing the elements that are indirectly related to the arguments, such as simple cues and tangential evidence of the arguments (Bhattacherjee & Sanford, 2006). Effortful elaboration, which is an essential part of the central route, requires paying attention to the information in a message (Petty et al., 2005). The central route necessitates more thoughtful understanding of the message claim and the ability to evaluate the quality of the message’s argument. The peripheral route, however, is less demanding and simply involves simple cues or tangential evidence of the message’s argument (Petty, Cacioppo, & Goldman, 1981).

There are differences and similarities between the two dual-process theories. HSM assumes that heuristic and systematic processing can occur simultaneously and can influence both the independent and interdependent effects on decision-making (Eagly & Chaiken, 1993a). However, ELM assumes that central and peripheral routes cannot co-occur. Although there are subtle differences between ELM and HSM, this study uses the general term “dual-process theories” instead of choosing either ELM or HSM, given that the focus is more on
the dual routes than whether or not they occur simultaneously. Both models discuss the two
processes of persuasion, and there are several similar factors known to affect persuasion such
as motivation, ability and involvement. In particular, involvement is one of the determining
factors in which people choose one of the dual routes for message processing or in which one
becomes a more dominant route (Lee, Yun, & Lee, 2005; Shavitt, Swan, Lowrey, & Wänke,
1994). In the next section, involvement is discussed in greater detail.

Involvement

Involvement is generally interpreted as a person’s perceived relevance of the crucial
object based on inherent needs, values and interests (Zaichkowsky, 1994). As discussed
above, dual-process theories posit that there are two entirely different ways of processing a
message (i.e., central route/systematic processing or peripheral route/heuristic processing),
which results in different outcomes. A peripheral route or heuristic processing is
characterized by a lack of personal involvement, whereas a central route or systematic
processing is characterized by a high degree of personal involvement. More specifically, high
involvement entails personal relevance or importance, Also, studies on involvement indicate
that study participants in a high-involvement condition are more likely to be engaged in an
extensive cognitive process than those in a low-involvement condition (Park et al., 2016).

There are several definitions of involvement found in previous literature. Day (1970)
suggests that involvement is a general level of interest. Mitchell (1979) defines involvement
as an internal state variable that offers an amount of arousal and interest. Some other
definitions include: the strength of individuals’ beliefs (Zaichkowsky, 1985), a linkage to
consumers’ important relevance (Petty & Cacioppo, 1981; Robertson, 1976; Zaichkowsky,
stimulus can be either an object such as product and advertising message or the behavioral or situational stimulus regarding the object such as purchase-decision task” (p. 506). Other previous research has studied involvement with the product itself (Dens & De Pelsmacker, 2010; Krugman, 1966)

The level of involvement during message processing is considered a critical factor that determines the route of persuasion (Petty et al., 2005). As explained in the previous section, dual-process theories predict that persuasion occurs via a central (or systematic) route when an individual has high involvement, motivation and ability to process a message strategy. On the other hand, when any of these factors are absent, or when an individual has low involvement, low motivation or less ability to process, the message receiver will employ peripheral (or heuristic) processing of the message. The example of the peripheral (or heuristic) route in advertising includes music, celebrity endorsement, or the number of arguments in a message (Dens & De Pelsmacker, 2010). The high-involvement product category intends to engender central processing, and consumers exert their cognitive efforts to evaluate the issue-relevant arguments in the advertisements of products within such a product category (e.g., laptops, smartphones) (Brown, Homer, & Inman, 1998). Under this circumstance, consumers tend to focus highly on information to evaluate products (Dens & De Pelsmacker, 2010).

In traditional advertising research, scholars have used involvement as a variable to study message strategy (Coulter, 2004; Dens & De Pelsmacker, 2010; Martin, Sherrard, & Wentzel, 2005). They predict that the level of a message’s persuasiveness will be enhanced when there is a match between a consumer’s level of involvement and advertisement execution (Coulter, 2004). In this situation, an informational appeal in advertisement
execution is associated more with the central or systematic route of persuasion. An informational appeal in advertising requires high involvement from consumers to process the message in an advertisement (Dens & De Pelsmacker, 2010). Previous studies demonstrate that a utilitarian and informational appeal is more effective when involvement is high (Johar & Sirgy, 1991). Informational advertising appeals are effective for high-involvement products, whereas emotional appeals are effective for low-involvement products (Dens & De Pelsmacker, 2010).

This study offers a conceptual definition of product involvement by product price and technology, rather than by an individual factor. This allows us to manipulate involvement in the current study and to ensure substantial differences between the level of involvement. Certain arguments state that the level of involvement can differ, depending on consumers. However, the types of analysis that use product price and technology have been mentioned in previous research (Atkinson & Rosenthal, 2014; Zaichkowsky, 1985).

**Message Types in Social Media**

Social media are a new marketing platform for consumers and brands to increase opportunities to build relationships (Chu, 2011). Social media can be very effective in business communication for companies (Hsu, 2012). Companies have elicited users’ feedback using various messages in social media. In particular, Facebook is the most frequently used platform because it has the greatest number of users, with more than 850 million active users, among social media outlets (Chaffey, 2016; Nelson-Field et al., 2012). Advertisers create Facebook Fan pages for their companies or brands and then encourage users to become “Fans” of their pages by clicking the “Like” button on the page. Users who become “Fans” of these pages receive the companies’ or brands’ content. This two-way
communication between users and brands, and among users allow consumers to share content about these brands with their friends on Facebook (Lipsman et al., 2012; Nelson-Field et al., 2012)

Jahn and Kunz (2012) study the effects of brand fan pages on the relationships between consumers and brands. This study states that a brand fan page is a platform for companies and consumers to communicate with each other, and a tool for marketing communication to provide diverse messages. Lipsman et al. (2012) analyze 100 brands’ messages of Facebook fan pages. They find that users who are “Fans” of brand fan pages actively share brands’ messages with their friends on Facebook. Brands’ messages are exposed to an average of 34 people due to their fans’ clicking the “Like” button or making comments. Thus, companies can have opportunities to reach not only fans directly connected to their brand fan pages, but also fans’ friends by attracting people to like or comment on their Facebook posts. The relationships with fans and fans’ friends are important, given that they tend to show a significantly higher level of brand engagement than do other users (Lipsman et al., 2012).

Not only does the current research on social media’s role as a marketing platform analyze types of users; it also examines the nature of the content in social media and offers a new message strategy targeted at users in social media. Coursaris, Van Osch, and Balogh (2013) analyze message strategies using 256 posts on three brand fan pages (Delta Airlines, McDonald’s and Wal-Mart). These companies are divided into three categories, depending on their product involvement level. Delta Airlines represents a high-involvement brand; McDonald’s denotes low-involvement brand; and Wal-Mart is considered as a medium involvement brand. The authors provide seven overarching message categories: (1) brand
awareness (e.g., posts that build company presence and attentiveness in the digital consumer market); (2) corporate social responsibility (e.g., posts that build a brand image of being involved in supporting and strengthening the community, primarily among socially conscious consumers); (3) customer service (e.g., posts that aim to build consumer knowledge about products); (4) engagement (e.g., posts that build consumer connections/communities through direct interaction with the brand); (5) product awareness (e.g., posts that build product knowledge, understanding, and existence); (6) promotional (e.g., posts that are designed to stimulate immediate or near future purchases through monetary incentives); and (7) seasonal (e.g., posts that remind and inform consumers of seasonal and annual events, along with related products by the brand. Some of these message categories are directly related to the brand or company, while others are indirectly related to the brand or company’s information.

Kwok and Yu (2013) identify comprehensive message strategies by conducting an analysis of 982 social media messages. They categorize these messages into four types: status (text only), link (containing a URL), video (embedding a video), and photo (showing photos), and they examined user responses (clicking the “Like” button and writing comments). In a follow-up study, they analyze 2,654 messages posted by 26 companies in social media and classify them into two types of message strategy: (1) sales/marketing messages and (2) conversational messages. According to this study, sales/marketing messages are characterized by the fact that companies post one-way or persuasive messages to sell or promote a service, product, or brand, including its informational facts to social media users. In other words, sales/marketing messages are directly related to information about a service, product or brand. On the other hand, in the case of conversational messages, companies post messages without directly selling or promoting a service, product, or brand to
Facebook users. Put differently, sales/marketing messages are focused more on information about a service, product, or brand, whereas conversational messages are focused on building relationships with social media users.

Sales/marketing messages have five sub-categories such as social responsibility, direct boasting, indirect boasting, product highlights, and campaign/sales. Conversational messages have four sub-categories such as a call for action, eliciting feedback, advice/suggestions, and updates.

**User Responses on Facebook**

User engagement in social media is important because user responses such as liking, sharing and commenting are used as a measure of the effect of the content on social media (De Vries, Gensler, & Leeflang, 2012; Sabate, Berbegal-Mirabent, Cañabate, & Lebherz, 2014). Lipsman et al. (2012) examine the nature of the reach and frequency of branded content on Facebook. They find that, for the top 100 brand pages, an average of 34 users can be reached because they are friends with a fan of a brand who clicked “Like” or who commented on a brand’s post. De Vries et al. (2012) describe that the number of “Likes” and “Comments” can indicate the popularity and influence of the content. Advertising via Facebook pages is effective not only in increasing the depth of engagement, but also in generating offline behaviors that are beneficial to the company such as purchasing the brand’s product or service, sharing positive word-of-mouth about the brand, or establishing positive attitudes toward the brand. Alhabash, McAlister, Lou, and Hagerstrom (2015) show that if users receive persuasive messages in social media and have favorable responses to the message, they move one step closer to performing the above-mentioned offline behaviors.

Users can engage with content on Facebook using three different engagement tools –
Like, Comment and Share – which appear at the bottom of each post. These three tools reflect different levels of engagement (Cho, Schweickart, & Haase, 2014). Liking a post is an easier way to engage in Facebook content than sharing and commenting, since it does not require any verbal expression. There is a strongly positive association between attitudes toward Facebook content and clicking on the “Like” button; consequently, this association can influence users’ offline behavior positively (e.g., sharing positive word-of-mouth, purchasing the brand’s product). Users can also engage with a brand’s content by making comments. Commenting requires the highest level of engagement, given that making comments takes more time and effort for users to respond to a brand’s content directly. Sharing allows users to become a voluntary messenger of the brand’s content to their friends on Facebook (Alhabash et al., 2015; Cho et al., 2014).

User responses are significantly influenced by content type. The types of content that are posted on brand pages are diverse (De Vries et al., 2012; Luarn, Lin, & Chiu, 2015). Informational content includes information regarding products, brands, and companies. Entertainment content does not contain direct information about brands or companies, but has humorous videos, teasers, slogans and wordplay. Remuneration content includes promotions, coupons and special offers to attract attention. Social content contains questions or statements that lead consumers to interact with the brand (Luarn et al., 2015). Luarn et al. (2015) show that user responses are different, depending on the content type. For example, remuneration and informational content can increase the level of engagement via liking. Entertainment and social content can develop the level of engagement through commenting. In this study, user responses are used as a dependent variable to measure the effectiveness of the brand’s message.
Figure 1. Research model for this study
CHAPTER 3. RESEARCH QUESTION & HYPOTHESES

The purpose of this study is to analyze brands’ Facebook fan pages and identify effective message strategies, depending on the level of brand involvement. By employing user responses as a dependent variable, this study examines the association of the level of brand involvement and the types of messages with user responses on Facebook. Thus, this study analyzes the content published by brands on their official Facebook pages. In traditional advertising research, the level of involvement during message processing is considered as a critical factor in understanding how messages are processed and how they influence people’s attitudes, intentions, and behaviors (Petty et al., 2005). Previous research suggests that when a product in a high-involvement product category is presented with a direct message, whose content is directly related to product information, the persuasiveness of the message increases. On the other hand, when a product in a low-involvement product category is presented with an indirect message, which focuses on the surrounding cues of the product, the persuasiveness of the message is strengthened (Dens & De Pelsmacker, 2010; Petty, Cacioppo, & Schumann, 1983). Based on previous research suggesting an association between the level of product involvement and the types of message strategy in the context of traditional advertising research, this study extends the context to social media and investigates brand message strategies in social media, mainly Facebook. Therefore, this study starts with a research question that inquires about different message strategies associated with the levels of brand involvement on Facebook:

*RQ1: Is there a difference in the use of message type, depending on the level of brand involvement on Facebook?*

This study analyzes user responses to brands’ posts on their official Facebook pages.
In social media, user responses are important because they show the popularity and influence of the content (De Vries et al., 2012; Sabate et al., 2014). Also, by employing user responses, advertisers can project consumers’ offline behaviors (e.g., product purchases) or can infer consumer attitudes/sentiments toward the brand (Alhabash et al., 2015). Previous studies on traditional advertising have found that different types of advertising messages result in different user responses. Direct message strategies are more effective in a high-involvement situation, whereas in a low-involvement situation, indirect message strategies are the best (Dens & De Pelsmacker, 2010). On Facebook, users can interact with content using three different engagement tools: Like, Comment, and Share. These three tools reflect different levels of engagement (Cho et al., 2014). In this study, these three tools are used to measure user responses. Therefore,

**H1:** For high-involvement brands, the direct message strategy increases user responses.

**H1-a:** For high-involvement brands, the direct message strategy increases the number of Likes.

**H1-b:** For high-involvement brands, the direct message strategy increases the number of Comments.

**H1-c:** For high-involvement brands, the direct message strategy increases the number of Shares.

**H2:** For low-involvement brands, the indirect message strategy increases user responses.

**H2-a:** For low-involvement brands, the indirect message strategy increases the number of Likes.
H2-b: For low-involvement brands, the indirect message strategy increases the number of Comments.

H2-c: For low-involvement brands, the indirect message strategy increases the number of Shares.

Lastly, previous research suggests a possible interaction between message strategies and levels of brand involvement. However, extant research has been conducted on advertising in mass media. This study analyzes user responses to brands’ posts in social media. Due to the novelty of the medium, this study poses the following research question:

RQ2: Is there an interaction between message strategy type and the level of brand involvement on user responses?
CHAPTER 4. METHODS

This study conducts a content analysis to examine posts on Facebook brand fan pages. The unit of analysis is each post created on selected brands’ Facebook fan pages. Below, the definition and measures of the key variables are provided.

Message Strategy

This study adapts a taxonomy of Facebook messages created by Kwok and Yu (2016) and message types from Lee and Kim (2012). There are two types of brand messages on Facebook: sales/marketing and conversational messages. A sales/marketing message can be defined as a post that is directly related to sales by the brands, thereby selling or promoting their service, product, or brand to Facebook users. A conversational message refers to a post that is not directly related to sales by the brands, for example, posting a one-way or two-way message to their Facebook users (Kwok & Yu, 2013, 2016). Lee and Kim (2012) categorize brands’ Facebook posts as: (1) a diary: messages related to daily events, thoughts, and feelings; (2) advertising: messages to promote a brand, induce purchases, and announce new products; (3) event notification: messages for the purpose of selling their product or increasing the number of their fans; (4) providing information: messages that disseminate a brand’s news and lifestyle tips. Based on previous studies, messages on Facebook brand fan pages can be divided into two categories – direct messages and indirect messages – and each category has sub-categories, as described below.

The direct message strategy is defined as using a one-way or persuasive message to sell or promote a service, product, or brand. The indirect message strategy refers to using one-way or two-way communication without directly selling or promoting a service, product,
or brand. Direct messages consist of product highlights, events/promotions, direct boasting, and indirect boasting. Product highlights refer to advertising that provides information about a service, product, or brand, including seasonal products or services. Events/promotions consist of a message created to announce, follow-up, remind, or release the results of an event or promotion offered. Direct boasting involves a message that promotes a service, product, or brand by emphasizing the achievement or award that the brand has received or by stating that the brand is featured in the mainstream media. Indirect boasting involves a message that promotes a service, product, or brand by making connections with a well-known public figure/organization.

Indirect messages are classified into feedback-provoking, a diary, social responsibility, and advice/suggestions. Specifically, feedback-provoking is defined as a message that asks users to comment, seek feedback or do something that is not associated with any sales or marketing efforts. A diary involves a message that indicates a daily event, thoughts, or feelings. Social responsibility is related to a message that builds a brand image with respect to being involved in supporting and strengthening the community. Even though social responsibility is considered as a sales/marketing message, according to the category used in Kwok and Yu (2016), the current study considers this as an example of an indirect message because social responsibility is not directly related to sales, but rather is an activity with the purpose of strengthening a brand image (Coursaris et al., 2013). Advice/suggestion refers to a message that offers Facebook users useful or helpful information that is not related to a brand. Tables 1 and 2 show the definition of each category, with corresponding examples.
### Table 1

**Types of direct messages**

<table>
<thead>
<tr>
<th>Direct messages</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product highlight</td>
<td>Message related to advertising that provides information about a brand,</td>
<td>Progress illuminates the world. Audi LED technology has innovated vehicle lighting since 2008. #DriveProgress [Audi USA]</td>
</tr>
<tr>
<td></td>
<td>product, or service offered, including temporal products or services</td>
<td></td>
</tr>
<tr>
<td>Event/Promotion</td>
<td>Message that is used to announce, follow-up, remind, or release the</td>
<td>Buy a Galaxy S8 at Best Buy this summer and save $300. [Samsung Mobile]</td>
</tr>
<tr>
<td></td>
<td>results of an event or promotion offered</td>
<td></td>
</tr>
<tr>
<td>Direct boasting</td>
<td>Message that promotes a brand, product, or service by emphasizing the</td>
<td>It’s a big world out there. Experience it with the Daily 360 from the <em>New York Times</em> and the Gear VR [Samsung Mobile]</td>
</tr>
<tr>
<td></td>
<td>achievement or award that the brand has received or by stating that the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>brand is featured in the mainstream media</td>
<td></td>
</tr>
<tr>
<td>Indirect boasting</td>
<td>Message that promotes a product, service, or brand by making connections</td>
<td>Actress Olivia Munn faces the G-forces and your Reddit AMA questions in the world’s fastest AMA. #ThinkFaster [Audi USA]</td>
</tr>
<tr>
<td></td>
<td>with a well-known public figure/organization</td>
<td></td>
</tr>
</tbody>
</table>
Table 2.

*Types of indirect messages*

<table>
<thead>
<tr>
<th>Indirect messages</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback-provoking</td>
<td>Message that asks users to comment, seek feedback, or do something that is not associated with any sales or marketing effort</td>
<td>Sometimes you just can’t help yourself. What are you most excited about during the holiday season? [M&amp;M’s]</td>
</tr>
<tr>
<td>Diary</td>
<td>Message that indicates a daily event, certain day, thoughts, or feelings</td>
<td>Is there anything scarier than running out of Reese’s on Halloween? #CountdownToHalloween [Reese’s]</td>
</tr>
<tr>
<td>Social responsibility</td>
<td>Message that build a brand image of being involved in supporting and strengthening the community</td>
<td>We’re stepping up to create a healthier planet :) M&amp;M’S supports the United Nations Sustainable Development Goals! <a href="http://www.mms.com/fansofwind">www.mms.com/fansofwind</a> #GlobalGoals [M&amp;M’s]</td>
</tr>
<tr>
<td>Advice/Suggestion</td>
<td>Message that offers useful or helpful information not related to the brand, to Facebook users</td>
<td>Check out our Facebook page at 1:15pm ET as Allie LaForce goes on LIVE to answer your March Madness questions. [Reese’s]</td>
</tr>
</tbody>
</table>

**Brand Involvement**

Previous research on involvement views costly and technologically advanced products as high-involvement products, for example, cars, smartphones, and TVs (Atkinson & Rosenthal, 2014; Zaichkowsky, 1985). On the other hand, fast-moving consumer goods such as coffee, cereal, candy are considered as low-involvement products (Dens & Pelsmacker, 2010; Zaichkowsky, 1985). In this study, Samsung Mobile and Audi USA are selected as high-involvement brands and their Facebook brand fan pages are analyzed. The low-involvement brands chosen are Reese’s and M&M’s. These four brands are all listed
among the top 25 brands by Socialbakers (2017, October 27), a company that offers data on brand ranks based on the number of brands’ Facebook fans.

Table 3

**Brand Facebook fan pages selected for this study**

<table>
<thead>
<tr>
<th>Involvement</th>
<th>Brand name</th>
<th>Facebook pages</th>
<th>Number of Fans (11/26/17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Samsung Mobile USA</td>
<td><a href="https://www.facebook.com/SamsungMobileUSA/">https://www.facebook.com/SamsungMobileUSA/</a></td>
<td>25,711,242</td>
</tr>
<tr>
<td>Low</td>
<td>Reese’s</td>
<td><a href="https://www.facebook.com/reeses/">https://www.facebook.com/reeses/</a></td>
<td>10,821,545</td>
</tr>
<tr>
<td></td>
<td>M&amp;M’S U.S.A.</td>
<td><a href="https://www.facebook.com/mms/">https://www.facebook.com/mms/</a></td>
<td>10,495,189</td>
</tr>
</tbody>
</table>

**User Responses**

The user responses of Facebook fans are measured by the number of Likes, Comments and Shares. First, clicking the “Like” button below a post on Facebook is an easy way for users to react to a message. If a user clicks a “Like” button below a friend’s post, people who can see the post will be able to notice that the user clicked the “Like” button.

Second, users can comment on a post using their Facebook accounts, which is a reaction that goes one step further from merely liking a post. Other users can see the number of Comments below the post and get a sense of how much dialogue that post has generated. Third, clicking the “Share” button below a post allows users to upload posts on their personal Facebook pages. This is one step further from commenting on a post because users now allow a brand’s message on their own Facebook accounts and allows their connections to see the branded
message. Facebook users can see the number of Shares at the bottom of each post, which is an indicator of how much people are interested in the post. Because the unit of analysis of this study is each post on the selected brands’ Facebook fan pages, the numbers of Likes, Comments, and Shares per each post are collected.

**Coding Scheme and Analytical Strategies**

To conduct a content analysis, two coders are recruited and trained. They are provided with a coding book (Appendix A) with 14 questions that are used to analyze each Facebook post. They also receive a coding sheet as an Excel file to enter the data. The 14 questions are divided into 5 sections: (1) The first section includes three questions about the unique ID for each post, coder name, and message posting date. (2) The second section contains information about the brands selected for this study. The level of brand involvement is either high or low. The brand name indicates one of the four brands chosen for this study: Samsung Mobile, Audi USA, Reese’s, and M&M’s. As mentioned above, Samsung Mobile and Audi USA are considered as high-involvement brands, whereas Reese’s and M&M’s are regarded as low-involvement brands. (3) The third section consists of variables related to the components of each post, for example, the presence of photo(s), video(s), links, and/or tags in each post are recorded as a binary variable (i.e., Yes/No). (4) The fourth section involves the types of message strategy, which are composed of the direct and indirect message strategies. The coders categorize the content of each post into either the direct or indirect message strategy, based on the guide in the coding book (see Tables 1 and 2). When a message contains both direct and indirect message types, it is classified as the message type that is more dominant in length. (5) The last section concerns user responses to each Facebook post. The coders count the number of Likes, Comments, and Shares for each post.
A total of 714 messages from the four brands are used for the analysis, except for cover photo updates, profile photo updates, posts without any message (e.g., posts with an image or video only) and posts that generate an unusual level of traffic (e.g., social media contests that encourage Likes, Comments, and/or Shares). Hashtags and links on the messages are associated with the content of the message; thus, they are included in the coding process (see Figure 2). Hashtags contain a specific product name or promotion of the brand. Links complement the information provided by the given post.

Figure 2. Examples of tags and links included in sampled messages
There are 265 posts from Samsung Mobile’s official Facebook page, 120 posts from Audi USA, 96 posts from Reese’s, and 233 posts from M&M’s. Samsung Mobile and M&M’s have a higher number of posts than the other two brands on their Facebook pages. Thus, in order to balance the number of messages, the first post of the day on Samsung Mobile and M&M’s is used in the study. For Audi USA and Reese’s, all of their Facebook posts throughout the year are collected and analyzed (Table 4).

Table 4

<table>
<thead>
<tr>
<th>Number of posts on each brand’s Facebook page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand name</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Samsung Mobile</td>
</tr>
<tr>
<td>Audi USA</td>
</tr>
<tr>
<td>Reese’s</td>
</tr>
<tr>
<td>M&amp;M’S U.S.A.</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Data Source and Time Period

To analyze message strategy types, the coders code each post on the four brands’ Facebook for three weeks. The timeframe to sample the brands’ Facebook posts is a one-year period, ranging from January 1, 2017 to December 31, 2017. By including a one-year span, this study attempts to capture all seasonal fluctuations and special events for each of the four brands selected for this study.
Inter-coder Reliability for Types of Message Strategy

To test inter-coder reliability, Cohen’s kappa statistic is used. Cohen’s kappa statistic is frequently used to measure agreement between two coders employing categorical variables (Berry & Mielke Jr, 1988). Landis and Koch (1977, p. 165) have suggested that when the kappa statistic is less than zero, the strength of agreement is poor. The strength of agreement is substantial when the kappa statistic is between 0.61 and 0.80, and the level of agreement is almost perfect when the kappa statistic is between 0.81 and 1.00. The two coders code the message strategy types of 99 posts, where 1 represents a direct message, and 2 represents an indirect message. Also, they are instructed to code the sub-types of messages that are divided into eight categories. Cohen’s kappa of message type between these two coders is .828, which is considered as almost perfect agreement. Cohen’s kappa of the message sub-types between the two coders is .788, which is considered as having a substantial level of agreement. The results of the Cohen’s kappa statistic indicate that the inter-coder reliability is good overall and can be used for the analysis.
CHAPTER 5. RESULTS

A total of 714 messages are collected and analyzed in the data analysis. There are 385 (53.9%) messages from high-involvement brands and 329 (46.1%) messages from low-involvement brands. Among these messages, 710 (99.5%) messages include photos and/or videos. Among those 710 messages with photos and/or videos, 707 (99.3%) posts are related to their brand and product (Table 5). There are 387 (54.2%) messages with hashtags, but 327 (45.8%) messages do not include hashtags. There are 497 (69.6%) messages that do not contain links, and 217 (30.4%) messages that contain links. Among the 714 messages, 217 (30.4%) messages are classified as direct messages, and 497 (69.6%) messages are classified as indirect messages.

Table 5

<table>
<thead>
<tr>
<th>Content</th>
<th>Number of posts</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test only</td>
<td>3</td>
<td>.4%</td>
</tr>
<tr>
<td>Text with photo(s)</td>
<td>389</td>
<td>54.5%</td>
</tr>
<tr>
<td>Text with Video(s)</td>
<td>321</td>
<td>45.0%</td>
</tr>
<tr>
<td>Total</td>
<td>713</td>
<td>99.9%</td>
</tr>
</tbody>
</table>

Note. Total percentage is not 100% due to missing data.

The numbers of user responses – Likes, Comments, and Shares - are extremely right skewed due to the fact that they are count variables. The mean of the number of Likes is 7,466, and the minimum and maximum numbers are 35 and 210,000. The minimum of the number of Comments and Shares are 1 and 0, and the maximum are 67,000 and 67,198 (Table 6). The log transformation can be used to make highly skewed distributions less
skewed. This allows patterns in the data to be more interpretable and helps meet the assumptions of inferential statistics (DeVeaux, Velleman, & Bock, 2011). Thus, user responses are log-transformed to meet the assumptions of linear regression.

Table 6.

*Descriptive Statistics of the number of user responses*

<table>
<thead>
<tr>
<th></th>
<th>Number of Likes</th>
<th>Number of Comments</th>
<th>Number of Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of messages</td>
<td>714</td>
<td>714</td>
<td>714</td>
</tr>
<tr>
<td>Mean</td>
<td>7466.00</td>
<td>835.25</td>
<td>1022.60</td>
</tr>
<tr>
<td>Median</td>
<td>1116.50</td>
<td>88.00</td>
<td>84.00</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>18767.17</td>
<td>3577.70</td>
<td>4029.53</td>
</tr>
<tr>
<td>Minimum</td>
<td>35.00</td>
<td>1.00</td>
<td>.00</td>
</tr>
<tr>
<td>Maximum</td>
<td>210000.00</td>
<td>67000.00</td>
<td>67198.00</td>
</tr>
</tbody>
</table>

**Results for Research Question 1**

Research question 1 is posted to determine the difference in the use of a brand’s Facebook page, depending on the level of brand involvement. A chi-square test is conducted for research question 1 to find the difference in the use of the message strategy, depending on the level of brand involvement on Facebook. Table 8 shows the relationship between brand involvement and message type. There is a statistically significant relationship between the level of involvement and message type ($X^2 = 145.87, df = 1, p < .00$). On high-involvement brands’ Facebook pages, the percentage of direct messages is 49.6%, and that of indirect messages is 50.4%. In contrast, on low-involvement brands’ Facebook pages, the percentage of direct messages is 7.9%, and that of indirect messages is 92.1%. Both high-
and low-involvement brands contain more indirect than direct messages. Low-involvement brands have a significantly higher percentage of indirect messages on their Facebook pages (Table 7).

Table 7.

Comparing the use of message type on Facebook by the level of brand involvement

<table>
<thead>
<tr>
<th>Message type</th>
<th>Level of brand involvement</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Direct</td>
<td>191</td>
<td>26</td>
</tr>
<tr>
<td>Indirect</td>
<td>194</td>
<td>303</td>
</tr>
</tbody>
</table>

Note. * \( p < .05 \), ** \( p < .01 \), *** \( p < .001 \).

There is a statistically significant relationship between the level of brand involvement and the presence of links in each Facebook post (\( \chi^2 = 72.022, df = 1, p < .00 \)). On high-involvement brands’ Facebook pages, the number of messages with links is 169 (43.9%), and the number of messages without links is 216 (56.1%). On low-involvement brands’ Facebook pages, the number of messages with links is 48 (14.6%), and the number of messages without links is 281 (85.4%). Thus, high-involvement brands have a higher percentage of messages with links than do low-involvement brands (Table 8).

Table 8.

Comparing the use of links on the message by level of brand involvement

<table>
<thead>
<tr>
<th>Presence of links</th>
<th>Level of brand involvement</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>With link</td>
<td>169</td>
<td>48</td>
</tr>
<tr>
<td>Without link</td>
<td>216</td>
<td>281</td>
</tr>
</tbody>
</table>

Note. * \( p < .05 \), ** \( p < .01 \), *** \( p < .001 \).
There is a statistically significant relationship between the level of brand involvement and the presence of hashtags in each Facebook message ($\chi^2 = 107.10, df = 1, p < .00$). On high-involvement brands’ Facebook pages, the number of messages with hashtags is 140, (36.4%) and the number of messages without hashtags is 245 (63.6%). On low-involvement brands’ Facebook pages, the number of messages with hashtags is 247 (75.1%), and the number of messages without hashtags is 82 (24.9%). The low-involvement brands use hashtags in their Facebook messages more than the high-involvement brands (Table 9).

Table 9

<table>
<thead>
<tr>
<th>Presence of hashtag</th>
<th>Level of brand involvement</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>With hashtag</td>
<td>140</td>
<td>247</td>
</tr>
<tr>
<td>Without hashtag</td>
<td>245</td>
<td>82</td>
</tr>
</tbody>
</table>

*Note.*  *p* < .05,  **p** < .01,  ***p*** < .001.

Results for Hypothesis 1

Hypothesis 1 tests whether there is a difference in the level of user responses, depending on the types of message strategy on high-involvement brands’ Facebook pages. Specifically, H1 predicts that the direct message strategy of high-involvement brands positively influences user responses. This study examines message type differences in user responses, and an independent sample t-test is conducted to test the difference. The results show that all types of user responses such as Like, Comment, and Share are significantly different, depending on the message type on high-involvement brands’ Facebook pages. To be specific, there are significant differences in the logged number of Likes (Direct $N=191,$
$M=3.40, SD=.76$; Indirect $N=194, M=3.07, SD=.74, t=4.20, p<.01$), in the logged number of Comments (Direct $N=191, M=2.23, SD=.67$; Indirect $N=194, M=1.86, SD=.62, t=5.65, p<.01$), and in the logged number of Shares (Direct $N=190, M=2.12, SD=.85$; Indirect $N=193, M=1.73, SD=.88, t=4.32, p<.01$). On the high-involvement brands’ Facebook pages, the direct message strategy has a higher level of user responses than the indirect message strategy. Thus, H1 is supported (Table 10).

Table 10

*Comparison of user responses by message type in high-involvement brands*

<table>
<thead>
<tr>
<th>Message type</th>
<th>Direct</th>
<th>Indirect</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like (ln)</td>
<td>3.40</td>
<td>3.07</td>
<td>4.203***</td>
</tr>
<tr>
<td></td>
<td>(.76)</td>
<td>(.74)</td>
<td></td>
</tr>
<tr>
<td>Comment (ln)</td>
<td>2.23</td>
<td>1.86</td>
<td>5.653***</td>
</tr>
<tr>
<td></td>
<td>(.67)</td>
<td>(.62)</td>
<td></td>
</tr>
<tr>
<td>Share (ln)</td>
<td>2.12</td>
<td>1.73</td>
<td>4.323***</td>
</tr>
<tr>
<td></td>
<td>(.85)</td>
<td>(.88)</td>
<td></td>
</tr>
</tbody>
</table>

*Notes. * $p < .05$, ** $p < .01$, *** $p < .001$. Dependent variables (number of Likes, Comments, Shares) log-transformed.*

**Results for Hypothesis 2**

Hypothesis 2 examines the difference in the level of user responses, depending on the types of message strategy on the low-involvement brands’ Facebook pages. Specifically, H2 predicts that the indirect message strategy of low-involvement brands positively influences user responses. An independent sample t-test is conducted to test the difference. The results indicate that there is no difference in user responses, depending on the message type on low-involvement brands’ Facebook pages. All types of user responses, such as clicking Likes (Direct $N=26, M=3.18, SD=.89$; Indirect $N=303, M=3.16, SD=.71, t=.112, p>.05$), writing
Comments (Direct $N=26$, $M=2.10$, $SD=.127$; Indirect $N=303$, $M=2.00$, $SD=.91$, $t=.396$, $p>.05$), and clicking Shares (Direct $N=26$, $M=2.12$, $SD=1.27$; Indirect $N=303$, $M=2.16$, $SD=.87$, $t=-.180$, $p>.05$) show no significant difference. Thus, Hypothesis 2 is rejected (Table 11).

Table 11.

*Comparison of user responses by message type in low-involvement brands*

<table>
<thead>
<tr>
<th>Message type</th>
<th>Direct ($ln$)</th>
<th>Indirect ($ln$)</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like ($ln$)</td>
<td>3.18</td>
<td>3.16</td>
<td>.112</td>
</tr>
<tr>
<td></td>
<td>(3.89)</td>
<td>(3.71)</td>
<td></td>
</tr>
<tr>
<td>Comment ($ln$)</td>
<td>2.10</td>
<td>2.00</td>
<td>.396</td>
</tr>
<tr>
<td></td>
<td>(1.27)</td>
<td>(1.91)</td>
<td></td>
</tr>
<tr>
<td>Share ($ln$)</td>
<td>2.12</td>
<td>2.16</td>
<td>-.180</td>
</tr>
<tr>
<td></td>
<td>(1.27)</td>
<td>(1.87)</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Dependent variables log-transformed.

**Results for Research Question 2**

For the verification of research question 2, the interaction between types of message strategy and level of brand involvement is analyzed through ANOVA. As shown in Table 12 and Figure 3, there is a statistically significant interaction between the types of message strategy and the level of brand involvement on the logged number of Shares ($F=4.478$, $p < .05$). The logged number of Shares of the direct message is not different on either of the high-involvement or low-involvement brand Facebook pages. In the case of indirect messages, the logged number of Shares for messages on the low-involvement brands’ Facebook pages is higher than that on the high-involvement brands’ Facebook pages. The slight interaction between the types of message strategy and the level of brand involvement
on the logged number of Likes is shown. However, there is no significant interaction between the types of message strategy and the level of brand involvement on the logged number of Likes and Comments (Likes(ln) $F=3.216, p > .05$.; Comments(ln) $F=2.225, p > .05$.). Thus, there is an interaction between the level of brand involvement and the types of message strategy only on the logged number of Shares.

Table 12

*Result of ANOVA of types of message strategy and brand involvement on user responses*

<table>
<thead>
<tr>
<th>Source</th>
<th>Likes(ln)</th>
<th></th>
<th></th>
<th>Comments(ln)</th>
<th></th>
<th></th>
<th>Shares(ln)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>$F$</td>
<td>$p$</td>
<td>$F$</td>
<td>$p$</td>
<td>$F$</td>
<td>$p$</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1</td>
<td>5764.37</td>
<td>.000***</td>
<td>2014.39</td>
<td>.000***</td>
<td>1613.43</td>
<td>.000***</td>
<td></td>
</tr>
<tr>
<td>(A) Message</td>
<td>1</td>
<td>4.123</td>
<td>.430</td>
<td>6.741</td>
<td>.010**</td>
<td>2.775</td>
<td>.096</td>
<td></td>
</tr>
<tr>
<td>(B) Involvement</td>
<td>1</td>
<td>.561</td>
<td>.454</td>
<td>.000</td>
<td>.996</td>
<td>4.561</td>
<td>.033**</td>
<td></td>
</tr>
<tr>
<td>A x B (interaction)</td>
<td>1</td>
<td>3.216</td>
<td>.073</td>
<td>2.225</td>
<td>.136</td>
<td>4.478</td>
<td>.035**</td>
<td></td>
</tr>
</tbody>
</table>

*Note.*  *$p < .05$,  **$p < .01$,  ***$p < .001$.  


Figure 3. The interaction between the types of message strategy and the level of brand involvement on the number of Shares.
CHAPTER 6. DISCUSSION

Implications

This study examines the effect of brand involvement and message strategy on user responses in social media. This study offers substantive contributions. First, this study shows how successful brands on Facebook manage their message strategy in social media. The four brands used in this study are ranked within the top 25 companies in terms of the number of users on their official Facebook pages. The findings suggest that those successful brands manage Facebook fan pages differently, depending on their level of brand involvement. On the high-involvement brands’ Facebook fan pages, they use a direct message strategy more than an indirect message strategy. On the low-involvement brand’s Facebook fan pages, an indirect message strategy is used more frequently than a direct message strategy.

Also, the results indicate that successful brands in social media provide different types of content on their Facebook messages, depending on the level of brand involvement. High-involvement brands use links more in their messages than do low-involvement brands. Most links are connected to the websites of the brands, or news and blogs about the product. Social media have become an important channel for users to share news and information (Lerman & Ghosh, 2010). Links on a Facebook post offer more detailed and sophisticated information than hashtags. Thus, the results of this study indicate that high-involvement brands use a direct message strategy to provide more detailed information about their products to users on Facebook.

On the other hand, the low-involvement brands use hashtags more in their messages than do the high-involvement brands. Hashtags are short words or phrases that follow a hash (#), such as #MeToo, #HIV. When users click on hashtags in a Facebook message, they can
find all of the posts that contain the same hashtags, and some hashtags are connected to a Facebook page. Hashtags have been used to promote advocacy movements (Bruns & Burgess, 2011; Saxton, Niyirora, Guo, & Waters, 2015). The purpose of using hashtags is to spread these movements to other users of the social media platform (Saxton et al., 2015). All of the brands used for this study add hashtags frequently in their posts. Most hashtags in the posts are associated with the content of the message. For instance, most short words or phrases with hashtags in the high-involvement brand Facebook involve specific product titles and brand promotions. On the low-involvement brands’ Facebook pages, the hashtags are related to holidays and writers’ feelings. It is difficult to offer detailed information about brands and products using hashtags. This may explain why high-involvement brands add links more in their posts than hashtags. The findings of this study and previous research regarding hashtag usage show that low-involvement brands use hashtags more to simply spread their messages to other users on Facebook.

Second, this study provides theoretical implications regarding previous research that highlights the importance of brand involvement. The level of brand involvement has been used as an important factor to determine how people process persuasive messages. The results of this study are partially consistent with findings from previous studies, which have found that when a product in a high-involvement category is presented with a direct message, the persuasiveness of the message increases. On the other hand, when a product in a low-involvement category is presented with an indirect message, the persuasiveness of the message is strengthened (Dens & De Pelsmacker, 2010; Petty et al., 1983). This study finds evidence that partially supports these previous studies, predicting that a direct message strategy is more effective for high-involvement brands, whereas an indirect message strategy
is more effective for low-involvement brands (Coulter, 2004; Dens & De Pelsmacker, 2010; Johar & Sirgy, 1991). On the high-involvement brands’ Facebook fan pages, users respond more to direct message strategies than to indirect message strategies. These results indicate that users are responding to the message that contains more information about the brands and products on the high-involvement brand fan pages. However, on the low-involvement brands’ Facebook fan pages, there is no difference in user responses, depending on the types of message strategy. Therefore, the result for high-involvement brands is consistent with previous studies, while the result for low-involvement brands does not support previous findings. This may be because users have different reasons for becoming a brand fan on Facebook, depending on the level of brand involvement. McGee (2013) finds that the overall popular reasons for consumers to become fans on Facebook are “to support the brand I like,” “to get a coupon or discount,” and “to receive regular updates from brands I like.” Also, McGee states that consumers have different reasons for becoming a fan of different brands. There are few posts containing coupons or discounts on the four brands’ Facebook pages during the one-year time period. Thus, the results of this study indicate that users respond more to direct messages on high-involvement brands’ Facebook pages because their reason for becoming a fan of such brands is to receive information and news about the brands. However, on low-involvement brands’ Facebook pages, there is no difference in user responses because users become a fan to support the brands they like.

Third, the findings suggest that companies should customize their message strategy in response to their brand’s involvement level. There is an interaction between the types of message strategy and the level of brand involvement. On the low-involvement brands’ Facebook pages, the indirect message strategy has a higher number of Shares than the direct
message strategy, although the difference is not statistically significant. On the contrary, on the high-involvement brands’ Facebook pages, there are more Shares for the direct message strategy than the indirect message strategy. There is an interaction between them in terms of the number of Shares. Even though the difference is not statistically significant, there is a pattern of interaction between the types of message strategy and the level of brand involvement on the number of Likes. Raacke and Bonds-Raacke (2008) suggest that types of engagement show differences. Clicking the “Like” button is a simple and easy way for a user to express his or her opinion, while writing comments requires additional time and effort. Sharing a post is more closely related to a user who shares it, as opposed to merely liking or commenting on it because the shared message will be posted on the Facebook page of the user (Cho & Lee, 2015). Although sharing is most demanding response type, liking and sharing have a common feature. Both response types are the result of a simple action: by clicking a button. By doing so, a user can easily Share or Like a post. Thus, the interaction between the types of message strategy and the level of involvement is present in simple response types. This result suggests that companies with different types of brand-level involvement in their brand category should manage their message strategy, depending on each brand’s level of involvement in social media.

**Limitations and Suggestions for Future Research**

There are limitations to be addressed, which, in turn provides opportunities for future research. First, the generalizability of the findings may be limited, given that this study only samples posts from four brands’ Facebook fan pages. This study analyzes two high-involvement brands, Samsung Mobile USA and Audi USA, and two low-involvement brands, Reese’s and M&M’s, total four brands through a single web source, Socialbakers.
Analyzing only four brands’ fan pages is certainly not enough to generalize the findings. Future research may consider extending the findings to more brands in social media.

Second, only one type of social media, Facebook, is assessed in this study. The results of analyzing only one type of social media is difficult in terms of generalizing to all types of social media, even though Facebook has the highest number of users among all social media. It may be that other social media show different results. For instance, Facebook, Instagram, and Snapchat are popular social media, based on the number of shared posts. Most users on Facebook and Instagram are between 25-34 years old, but Snapchat has attracted many younger people aged between 16 and 24 (Chaffey, 2018). Because users are different, depending on the types of social media, the results may also be different. Future research should include diverse types of social media to see whether the results are different, depending on the types of social media.

Third, the four brands are divided into two levels of involvement, high and low, based on the price level of the products manufactured by these brands. Using price to categorize the level of brand involvement may be too simplistic, given the variety of brand types and characteristics. For instance, Walmart, Target, Coca-Cola and McDonald’s are the top-ranked brands on Socialbakers. Walmart and Target include diverse types of products with a huge range in price, and Coca-Cola and McDonald’s have a high level of brand loyalty. Thus, future research should consider the level of involvement from the viewpoint of consumers – i.e., how much each consumer finds a brand as relevant to them, and/or how much each consumer is committed to a brand.

This study analyzes the number of responses such as the number of Likes, Comments, and Shares. The study does not analyze the textual components of each post, for example,
sentiments or linguistic styles. Users can express their sentiments using different symbols on Facebook: Like, Love, Haha, Wow, Sad, and Angry. Also, comments can be categorized by valence. Thus, analyzing users’ responses in a more detailed manner will provide additional insights.

Lastly, although the coding scheme is developed to provide clear guidelines to classify messages into mutually exclusive categories, there remains an issue of ambiguity. For example, question C1-1 in the coding book, which aims to code “Types of photo and video,” is not clear with respect to what an “advertisement” means, or what it means to be “related or not related to a product or brand.” The criteria for defining an advertisement in this study are ambiguous, depending on the coder. The coded results after analyzing the data are incoherent. Thus, the study does not include data about question C1-1. Future research should describe the criteria for defining an advertisement in order to analyze the types of photos and videos in messages in social media.

Overall, this study shows the value of managing message strategies, depending on the level of brand involvement, to encourage more user responses. The findings of this study provide directions on how to increase media users’ responses. For instance, the marketing managers of a high-involvement brand should use informational messages regarding brands for their social media marketing strategy. This is important because marketing managers must host their brands’ social media and draw users’ attention in numerous advertisements in social media. Future research should consider the most effective ways to elicit user engagement, depending on the types of brands.
REFERENCES


CODING BOOK

A1. Unique ID number:
A2. Coder name:
A3. Message date: MM/DD/YY


C1. Message with photo and video: 1. Text only
   2. Text with a photo or photos
   3. Text with a video or videos
   4. Text with both photo and video
   5. Photo only
   6. Video only
C1-1. Types of photo and video: 1. Advertisement
   2. Not ads but related to a product or a brand
   3. Not related to a product or a brand

C2. Message with Link: 1. With link / 2. Without link
C3. Message with Tag: 1. With tag / 2. Without tag

D1. Types of message strategy: 1. Direct message / 2. Indirect message
D2. Sub-types of message: attached tables

E1. The number of “Like”:
E2. The number of “Comments”:
E3. The number of “Share”: 
<table>
<thead>
<tr>
<th></th>
<th>Direct messages</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td><strong>Product highlight</strong></td>
<td>Message related to advertising that provides information about a brand, product, or service, including seasonal products or services</td>
<td>Introducing the new E-class Coupe, with luxurious style and state-of-the-art technology. Discover all the features behind the newest member of the E-class family. [Benz]</td>
</tr>
<tr>
<td>②</td>
<td><strong>Event/Promotion</strong></td>
<td>Message used to announce, follow up, remind, or release the results of an event or promotion offered</td>
<td>Attention Miami: Get the gift you really want. Exchange any dud presents for a free Whopper at BK Miami. #WhopperExchange [Burger King]</td>
</tr>
<tr>
<td>③</td>
<td><strong>Direct boasting</strong></td>
<td>Message that promotes a brand, product, or service by emphasizing the achievement or award that the brand has received or by stating that the brand is featured in the mainstream media</td>
<td>It’s a big world out there. Experience it with the Daily 360 from the New York Times and the Gear VR [Samsung Mobile]</td>
</tr>
<tr>
<td>④</td>
<td><strong>Indirect boasting</strong></td>
<td>Message that promotes a product, service, or brand by making connections with a well-known public figure/organization</td>
<td>When you’re not ready for the party, make a call to the pros. Jimmy, Matt and Emmitt know how it's done. [Pizza Hut]</td>
</tr>
<tr>
<td></td>
<td>(2) Indirect messages</td>
<td>Definition</td>
<td>Example</td>
</tr>
<tr>
<td>---</td>
<td>----------------------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td>⑤</td>
<td>Feedback-provoking</td>
<td>Message that asks users to comment, seek feedback or do something that is not associated with any sales or marketing efforts</td>
<td>Which coffee has the doughnut advantage? [Krispy Kreme Doughnuts]</td>
</tr>
<tr>
<td>⑥</td>
<td>Diary</td>
<td>Message that indicates a daily event, certain day, thoughts, or feelings</td>
<td>Chocolate is always a welcome treat on Valentine’s Day [M&amp;M’s]</td>
</tr>
<tr>
<td>⑦</td>
<td>Social responsibility</td>
<td>Message that builds a brand image of being involved in supporting and strengthening the community</td>
<td>Did you know? The BURGER KING McLAMORE - Foundation’s BK - Scholars program has awarded $28.3 million in scholarships to outstanding high school seniors and BK employees. [Burger King]</td>
</tr>
<tr>
<td>⑧</td>
<td>Advice/Suggestion</td>
<td>Message that offers Facebook users useful or helpful information that is not related to the brand</td>
<td>The streets of Los Angeles are nearly empty between the hours of 12AM and 6AM-making it the best time to listen to your turbocharger sing [Audi]</td>
</tr>
</tbody>
</table>