7-25-2016

The Analysis of Consumers' Affective Responses to Brand Presentation, Awareness, and Loyalty: A Contemporary Development in Selecting Media Channels

Jessica F. McGinn

The Rochester Institute of Technology

School of Communication

College of Liberal Arts

The Analysis of Consumers' Affective Responses to Brand Presentation, Awareness, and

Loyalty: A Contemporary Development in Selecting Media Channels

by

Jessica F. McGinn

A Thesis submitted

in partial fulfillment of the Master of Science degree

in Communication & Media Technologies

Degree Awarded:

July 25, 2016

The members of the Committee approve the thesis of

Jessica F. McGinn presented on July 25, 2016.

_____

Andrea Hickerson, Ph.D.
Associate Professor and Director
School of Communication

_____

Grant Cos, Ph.D.
Associate Professor and
Director for Graduate Programs
Communication & Media Technologies

_____

Rudy Pugliese, Ph.D.
Professor
School of Communication
Thesis Advisor

_____

Bruce A. Austin, Ph.D.
Director, RIT Press
Thesis Advisor

Table of Contents

THE ANALYSIS OF CONSUMERS' AFFECTIVE RESPONSES TO BRAND

PRESENTATION, AWARENESS, AND LOYALTY: A CONTEMPORARY

DEVELOPMENT IN SELECING MEDIA CHANNELS

Jessica F. McGinn

School of Communication

College of Liberal Arts

Master of Science in Communication & Media Technologies

Term Degree Awarded: Summer 2016 (2158)

Abstract

In today's digital age, it is becoming increasingly difficult for advertising professionals to effectively evaluate which media channel will best reach their target audience. This study investigated the differences in self-reported consumer affective responses to brand presentation, brand awareness, and brand loyalty by medium. An experiment was performed to determine if there were differences in brand presentation, brand awareness, and brand loyalty between traditional and digital media advertisements. Statistically significant differences were found between participants' responses to viewing a Facebook-branded business page and a traditional print advertisement.

Keywords: advertising, brand presentation, brand awareness, brand loyalty, digital media, social media, traditional media

The Analysis of Consumers' Affective Responses towards Brand Presentation, Awareness, and

Loyalty: A Contemporary Development in Selecting Media Channels

Advertising is a company's primary means of communicating with consumers about

product information, brand, and changes in the marketplace (Iacobucci, 2009). Paid media

exposure allows a company to create and enhance brand awareness and to persuade consumers to

purchase a specific brand. Advertising, like all forms of persuasion, is used to effect a change in

consumer beliefs, attitudes, and behaviors. Advertising agencies use advertising as a form of

selling a product, service, brand, or position.

Advertising agencies use various media channels to distribute their persuasive messages.

Traditionally, these channels have included newspapers, magazines, radio, television, and even

billboards. Today, digital media is being used to persuade audiences.

Traditional media channels such as print allow advertising agencies to reach a large

audience. The message presentation is uniform and directed to readers in a one-way form of

communication. Uniform, one-way communication enhances the control the persuader has in

managing how the message will be presented. Advertisers choose which media channel in which

to present their advertisements. The messages can be separately crafted to exploit each channel's

best advantage. For instance, perceived advantages for print advertisements include message

presentation to large-sized audiences in a semi-permanent form, when compared to digital media.

Digital media advances have enhanced the range of channels a persuader has available

and they allow advertisers to combine and exploit features true to legacy media (i.e., print as

with newspapers, magazines and sound as with radio, and moving images as with television).

Digital media hold perceived advantages for message presentation. The content created for

digital media can establish an instantaneous two-way communication between consumers and

advertisers (Groom & Biernatzki, 2008). Consumers have the ability to e-mail, instant message, fill out forms and surveys about the company, its website, or products virtually instantaneously. Instant feedback is available for both consumers and advertisers thus increasing consumer communication about brands. The advertising field is experiencing a shift from a product-oriented market to an integrative and consumer-oriented market because of the interactive message presentation on digital media that enhance two-way communication (Groom & Biernatzki, 2008).

Interactivity is widely used to describe the type of communication that happens on digital media (Ferber, Foltz, & Pugliese, 2005). While academic research has not yet been able to pinpoint a cohesive definition of the term, for this study we refer to McMillan's (2002) four-part model of interconnectivity which outlines a more holistic view on the type of communication, both one-way and two-way, that takes place on the Web (see Figure 1) as well as Ferber, Foltz and Pugliese's (2005) revision which builds upon McMillan's (2002) work with the introduction of a three-way, six-part communication model. This model is highlighted in Figure 2 and will be used to further investigate the relationship between interactivity and the type of communication that takes place on digital media. For this study, interactivity will be defined as "the state or process of communicating, exchanging, obtaining and or modifying content and/or its form with or through a medium which responds to both the communicator's and the audience's communication needs by including hypertext links and reciprocal communication" (Macias, 2003, pp. 33-34). Research by McMillian and Hwang (2002), Ferber et al. (2005), and Macias (2003) provide a better understanding of how consumers can interact with websites through the flow of information in both giving or receiving–features which are unique and have yet to be fully available in traditional media such as print, television, or radio.

Social networking sites such as Facebook offer advertising and marketing firms the chance to connect with their audience and interact with brands in a way that was previously unavailable. Social networking sites are a special case for digital media where interactivity is possible, indeed emphasized and expected.

Facebook is a popular social networking site with a substantial number of users. It has been reported that Facebook had 1.65 billion users in the first quarter of 2016 (Statista, 2016). "Millions of people use Facebook everyday to keep up with friends, upload an unlimited number of photos, share links and videos, and learn more about the people they meet" (Facebook, February 2004). The site is complex and includes photo hosting, video hosting, sharing information, Facebook chatting (instant messaging), game applications, social groups, and sites for organizational charity causes. The feature of interactivity presented on Facebook is hypothesized by scholars as the reason people go to social networking sites. People want to be active and have the ability to share comments on walls, photographs, and videos. The present study used Facebook as a case study to test digital media's unique interactive capability to influence a large audience. Traditional and digital media each have specific advantages, and this study sought to determine what differences there were by medium and self-reported affective responses to brand awareness and brand presentation on each.

Brand is defined by Chaudhuri and Holbrook (2001) as specific versions of particular product classes. Brand awareness and loyalty are important variables for advertising agencies. Brand awareness is defined by Hoyer and Brown (1990) as a consumer's basic level of brand knowledge that includes, at least, recognition of the brand name. It is the lowest level of brand knowledge that an agency expects for its products. Brand loyalty is defined as a consumer's commitment to repurchase a preferred product or service consistently despite other influences

and marketing efforts from competitors (Chaudhuri & Holbrook, 2001). Awareness followed by

loyalty are the two stages of consumer behavior that advertisements aspire to provoke.

When choosing which channel to advertise through, persuaders need to understand what

differences there are by medium and consumers' self-reported affective responses to brand

presentation as well as the differences in brand awareness and brand loyalty. Advertising

agencies hope the creation of messages presented through different channels can provoke a sense

of brand awareness and brand loyalty with their audience.

Research Questions

1. What differences are there by medium and self-reported affective responses to brand presentation?

2. What differences are there by medium and self-reported affective responses to brand awareness?

3. What differences are there by medium and self-reported affective responses to brand loyalty?

Rationale

Personal

As a professional working in public relations, and an early adopter of social networking

sites, it surprises me that scholarly research has not taken the opportunity to effectively evaluate

the interactivity presented on such sites. Advertising and marketing research is full of self-

reported analysis on consumer choices, behaviors, and effects and yet, at the time of this study,

advertisers were not taking advantage of such a large number of users on social networking sites.

Job positions have been created for social media personnel to represent companies and interact

with customers on sites such as Facebook, YouTube, LinkedIn, and Twitter. As a professional

who has worked in the communications space for more than five years, I seek a better

understanding of how to interact with consumers, and this experiment will help me explore the

options in doing so. To become an expert in one's field of study begins with research, and this study will provide me a better understanding of digital media channels and what opportunities lie ahead.

Social

Kiousis (2002) explains that the ongoing influx of new communication technologies has led many traditional concepts of mass communication to be redefined, reworked, and reinvented. Advertising practitioners have a vast population of over 1.09 billion daily active users on Facebook to reach and connect via their profile pages (Statista, 2016). Coyle and Thorson (2001) explain that the demand for a greater knowledge about how to create better brand presence online is increasing. Advertising practitioners need to understand the differences in traditional media and digital media channels in order to better manage the broad spectrum of planned and unplanned communication about the company's products and services (Duncan & Moriarty, 1998). Digital media change the relationship between producers and consumers by creating easier perceived communication, and advertisers need to begin to understand what advantages the digital media channels offer (Coyle & Thorson, 2001). Macias (2003) explains that as advertising channels continue to diversify, it will become important that advertisers expand their knowledge of their effects on consumers.

Scholarly

Advertising and marketing research are full of conceptual and empirical studies that have focused on traditional versus digital media channel effects on consumers. The advertising field still does not have a complete understanding of consumer responses towards digital media channels and the persuasiveness of this communication process (Sicilia, Ruiz, & Munuera, 2005). According to McMillian and Hwang (2002) the distinct interactive attribute presented on

digital media needs more advertising and marketing research in order to produce a conclusive definition. This study aims to provide a deeper understanding of media channels, both traditional and digital, so that companies can identify and manage better brand communication that determines the quantity and quality of the company's brand relationships. Interactivity research has been sparse and relatively inconclusive, which results in a gap between advertising and marketing research (Liu & Shrum, 2002).

The popularity of social networking sites has led to news coverage of them along with academic research. Previous research on social networking sites focused on privacy, social capital, relationship building, site maintenance, role of identity, expression, and behavior (Hargittai & Walejko, 2008). Researchers are also trying to understand how and why social networking sites have become popular and the effects they have on people's lives. The academic study of digital media channels and advertising on them present many opportunities. The current study will contribute to the gap in advertising and marketing research by introducing interactivity and its relation to the use of digital media channels. The research investigates differences by medium in brand presentation as well as providing an advance understanding of the differences in self-reported, affective responses to brand awareness and loyalty.

<div align="center">**Review of Literature**</div>

Traditional versus Digital Media

Traditional media channels present an advertising agency's message in a linear form that allows a consumer to be passively exposed (Bezjian-Avery, Calder, & Iacobucci, 1998). Digital media channels allow for interactive advertising where the consumer actively navigates through messages presented (Bezjian-Avery et al., 1998). The linear flow of traditional advertising that is presented on television and in print sets it apart from the design of interactive systems. Because

of this, traditional advertising and media channels are experiencing a radical change (Berte &

DeBens, 2008).

Advances in digital media have increased the number of advertising channels available

(Berte & Bens, 2008). According to Berte and Bens (2008) digital channels are growing and

gaining importance at the expense of traditional media that have long relied on advertising

investments for existence. Digital media and traditional media are different in that digital media

offers a virtually unlimited amount of information delivered beyond time and space, virtually

unlimited amounts and sources of information, and the ability to target specified groups of

individuals (Sung-Joon & Joo-Ho, 2001). This review of related literature found that the most

important difference between traditional and digital media is the feature of interactivity.

Digital Media Interactivity

Digital media allow users to actively control and interact with information and people,

respectively. Active control allows the consumer to visit a website and control the flow of

information from one area to the next. Traditional media do not allow users to actively control

the process of information, but the web allows its users to seek out content and navigate through

the content (McMillan & Hwang, 2002). Online interactivity presents communication in

different contexts instantaneously while allowing consumers the opportunity to control the flow

of information from one area to the next.

The ability to facilitate two-way communication is an important element of interactivity

online. Traditional media now incorporate two-way communication with users via their online

versions. In the early establishment of online shopping, web browsing users were uneasy about

the one-way communication presented. McMillan (2002) identifies *monologue* and *feedback* as

forms of one-way communication that are most widely seen on corporate websites (see Figure

1). Monologue offers limited involvement from viewers with sources publicizing information to

a wide audience. While McMillan (2002) describes feedback as mostly one-way-communication,

it does allow for some participation with no guarantee of a response (i.e., e-mail links on a

website). McMillan (2002) says *responsive dialogue* is a good example of two-way

communication in that it allows for an exchange between two parties while control remains with

the sender. *Mutual discourse* occurs when the receiver has control while both parties send and

receive messages in a two-way conversation. Chatrooms, forums, and bulletin boards are

examples of mutual discourse presented by McMillan (2002).

Today the Internet has changed to make two-way communication almost instantaneous in

that consumers can now leave feedback to companies through e-mails, instant messages, or blogs

and forums (Liu & Shrum, 2002). While McMillan (2002) stopped at a four-point approach to

interactivity, Ferber et al. (2005) introduced a three-way model of communication by

establishing a difference between interpersonal and public communication (see Figure 2). They

define three-way communication as allowing "an unknown and yet-to-be-identified party to

receive the message, thus making it a publication" (pp. 393). Three-way communication best

highlights the type of interaction that happens on digital media because it accounts for both a

controlled response as well as *public discourse* (Ferber et al., 2005). Controlled response allows

for the site to maintain control over content posted by users. Public discourse allows the site to

have almost no control over user's content, but Ferber et al. (2005) note that site control can be

limited to removing libelous, obscenity, or other harmful content from users. Today's digital

media sites such as Facebook, LinkedIn, and Twitter facilitate the type of three-way

communication outlined in Ferber et al.'s (2005) six-part model of cyber-interactivity. Facebook,

LinkedIn, and Twitter monitor users' content but only remove content if it is deemed libelous,

obscene, or harmful to its community of users which is outlined by the definition of public

discourse in Ferber et al.'s (2005) research. Combining this type of engagement with two-way

communication allows marketers to generate positive word-of-mouth for their company

(McMillan & Hwang, 2002). Building positive word-of-mouth can strengthen relationships and

trusts between advertisers and consumers. Trust is created through positive feedback and positive

word-of-mouth being relayed to the consumers.

Traditional media provide fewer channels for consumer input and have limitations with

the time between sending and receiving a message (Liu & Shrum, 2002). Synchronicity is

referred to by Liu and Shrum (2002) as the level of user input into communication interaction

and the degree to which the responses they receive are simultaneous. The instantaneous

communication allowed by the Internet makes it much more synchronized (Liu & Shrum, 2002).

Creating a site that maintains its responsiveness in a timely manner is recognized by Liu and

Shrum (2002) as an important factor in positive interactivity in an online experience. Creating

positive interactive websites that will generate more audience awareness online is dependent on

how well marketers can facilitate active control, communication, and synchronicity.

Schlosser, Mick, and Deighton (2003) studied how consumers process information about

a product that is presented through online interactive media. They wanted to know if there were

benefits to presenting product information through a virtual interaction or object interactivity

such as aesthetic experiences (browsers) and images. The study found that the object interactive

site produced higher purchase intentions than did the passive site, regardless of the users' goals.

Image processing was found to play a large role in purchase intentions as well as the ability to

manipulate the product rather than just plain text. Allowing consumers to interact with brands

and products creates a more vivid mental picture of how the brand or product will benefit the

consumer.

Establishing Brand Awareness

Iacobucci (2009) believes that brands have a value above and beyond the benefits of the

product itself. The brand is used in order to communicate information about the company or

product to the consumer. According to Iacobucci (2009) the "U.S. Patent and Trademark Office

will issue more than 100,000 new brands each year" (pp. 66). These new brands increase

competition and present advertising challenges to creating brand awareness and loyalty. A brand

is created through a name and image advertised through media which creates a portfolio of

qualities associated with the name (Iacobucci, 2009). The company controls the brand's image

along with what and how the brand communicates to the consumer (Iacobucci, 2009).

Consumer awareness of the brand represents the lowest form of brand knowledge. The

knowledge ranges from the simple recognition of the brand's name to a higher cognitive

structure based on more detailed information (Hoyer & Brown, 1990). According to Campbell,

Keller, Mick, and Hoyer (2003) brand-awareness can influence consumer processing and stages

of familiarity. The process of perceiving a brand that was formerly encountered is regarded as

recognition by Hoyer and Brown (1990), although recognition and awareness are hard to

distinguish.

Prior to the widespread use of the web, Hoyer and Brown (1990) analyzed research

which suggested that consumers in purchasing situations tended to be passive recipients of

product information and spent minimal time and effort in choosing brands. Consumers may

choose a brand because of familiarities based on family or friends who have used the product,

advertisements or marketing communication in the media, or even the packaging of the product

(Campbell, Keller, Mick, & Hoyer, 2003). Awareness typically results from advertising exposure and information sources (Hoyer & Brown, 1990). According to Campbell et al. (2003) brand awareness captures brand associations that exist in the consumer's memory. Familiar/unfamiliar brands are different in terms of the knowledge the consumer has regarding the brand. Familiar brands have a variety of different types of associations with consumers.

Consumers gain familiarity with a brand through repeated exposure where perceived risks tend to decline (Hoyer & Brown, 1990). Familiarity with a product can lead to greater intent to purchase and is recognized as the level of awareness a consumer has on a brand. Unfamiliar brands have a lack of association because of a lower level of awareness. Advertising agencies hope to create a level of awareness about product brands in order to achieve repeat customers and create a sense of loyalty with their consumers.

Creating Brand Loyalty

Reputations are built through adverting efforts, and the goal is for corporate brands to create a reliable product for their consumers (Iacobucci, 2009). Consumers like the reassurance of a brand because it makes the decision process much easier and there is less risk involved with the purchase choice (Iacobucci, 2009). A brand that is marketed well can create loyalty in repeat customers who buy familiar, reliable brands (Iacobucci, 2009). The less risky a brand seems, the easier the brand choice, the higher the brand-loyalty, and the greater likelihood of repeat purchases.

Brand loyalty is a concept that advertisers strive for in their company's relationships with consumers. Consumers who are brand loyal are typically willing to pay more for a brand because they appreciate the distinctiveness of the brand that competitors cannot provide (Chaudhuri & Holbrook, 2001). Trust and loyalty are two concepts that are repeated throughout brand-

consumer relationship research. Chaudhuri and Holbrook (2001) found that brand loyalty can

lead to greater market shares for companies when consumers repeat purchases and develop a

reliable trust in the brand. Raj (1985) found that brands with a larger market share of users have

a larger percentage of loyal buyers. A company with a positive brand image has a larger

advertising expenditure and can spread out advertising costs over different media channels while

reaching a larger audience (Raj, 1985).

As with interpersonal relationships, brand loyalty and trust are two components

considered important in relational exchanges (Chaudhuri & Holbrook, 2001). According to

Chaudhuri and Holbrook's (2001) research, building brand loyalty leads to reduced market costs,

greater trade leverages, increased interpersonal relationships, favorable consumer word-of-

mouth, and increased resistance to competitors' marketing strategies. Chaudhuri and Holbrook

(2001) call for future use of this research to justify expenditures on design, communication, and

merchandising strategies that will create greater brand loyalty and long-term effects on

consumer's loyalty.

Method

Population Sample

A convenience sample of 65 college students from the Rochester Institute of Technology

(RIT) participated in this study during the fall quarter of 2010. Each class was randomly assigned

to analyze either condition one, a Facebook business page for Reebok, or condition two, print

advertisements for Reebok (see Appendix A and B). Randomization of the subjects to the

treatment of the experiment helped to minimize a threat to internal validity. Participating

students ranged from freshmen to senior status at RIT and included 49 women and 16 men.

Instrument Design

Participants took part in an experiment where they viewed either condition one (a Facebook business page for Reebok) or condition two (print advertisements for Reebok). After they reviewed their assigned condition, participants reacted to statements soliciting their responses to Reebok brand's presentation, awareness, and loyalty.

Participants viewing the first condition saw a mock-website similar to a Facebook business advertisement for Reebok shoes (see Appendix A). The mock-website included all of the interactive features present on a Facebook business advertisement. The interactive features included a wall (for posting comments, images, and videos), information page (company website, mission, and general information about the company), photographs, videos, and a YourReebok where visitors could design their own product. Participants viewing the second condition saw a series of print advertisements from Reebok shoes that ran between 2009 and 2010. Convenience samples of print advertisements were chosen (see Appendix B).

The Reebok brand, a subsidiary from Adidas Corporation, was chosen as the product for this particular experiment. Reebok is recognized globally as a creative brand for a simple, well-understood product. Reebok is categorized as a sports and lifestyle product for both men and women. The Reebok brand is not dominantly advertised through a single media channel, but through multiple channels. This makes Reebok an appropriate brand to be used in this experiment because it is actively advertised through print and social media sites like Facebook. This study used the Reebok brand to test it in two manipulated conditions of a digital media advertisement on Facebook and a traditional print advertisement.

Procedure

The experiment took place on the RIT campus in classrooms that were randomly assigned to a condition based on a computer-generated list. Subjects were introduced to the

experiment through an oral message by the researcher (see Appendix C). The introduction

included the experimental nature, services that were or were not available, means by which

assignment to treatments/conditions were made, and information if they chose not to participate

or withdrew after beginning the experiment (Reinard, 2008). All materials were submitted to

Institutional Review Board (IRB) for consent before implementing the experiment.

Subjects were then given details about the procedure and how to navigate through the

experiment. If assigned to condition one (Facebook) subjects were asked to view the mockup on

a computer followed by a series of statements that measured brand presentation, awareness, and

loyalty. If assigned to condition two (print advertisements) subjects read through the handout of

Reebok print advertisements followed by the same series of statements that measured brand

presentation, awareness, and loyalty. The experiment ended with a few demographic questions

(see Appendix G) and a debriefing. The debriefing followed IRB consent rules and information

on how to contact the researcher and find the results from the study (see Appendix H). The

procedure was as follows: introduction to the experiment, presentation of one of two conditions,

variable measuring, demographic questions, and a debriefing from the administrator.

Measurement Scales

Three variables were tested in this experiment to address the proposed research questions.

Brand presentation (variable one) and brand loyalty (variable two) were measured by a seven-

point semantic differential scale of bipolar responses while brand awareness (variable three) was

measured through a seven-point Likert scale. Semantic differential scales are used to measure the

meaning of an object to an individual (Miller & Salkind, 2002). Likert scales are used to measure

the subject's agreement or disagreement about a service or product. Both scales will allow for an

accurate measure of brand presentation, loyalty, and awareness proposed in this study.

Brand presentation. In order to accurately measure affective responses to brand presentation, the subjects were asked to rate the given advertisement condition on a series of seven-point bipolar ratings. The respondents were introduced to this scale with the introductory statement: "You just viewed an advertisement from Reebok shoes. Below is a series of adjective pairs for you to use judgment about the Reebok advertisement by circling one number for each adjective pair between 1 and 7." The scale ranges were as follows: not persuasive/persuasive, unappealing/appealing, bad/good, unattractive/attractive, not clear/clear, unconvincing/convincing, simple/complex, overall disliking/overall liking. The scale (see Appendix D), was adapted from Bezjian-Avery et al. (1998). This allowed for an accurate measure of the subject's evaluation of brand-presentation by rating the individual's perception of the advertisement itself and comparing the results. Subjects circled the best response and moved onto the next question.

Brand awareness. Brand awareness measurements were adapted from Sicilia et al. (2005), who used a seven-point Likert scale, anchored by strongly agree/strongly disagree, to measure subjects' brand awareness. The instrument was based on a series of statements relating to product knowledge. The subjects were told: "Next, we would like you to indicate how much you agree or disagree with the four statements presented below. Please circle the one number that best indicates how much or little you agree with each statement," (see Appendix E). The range of statements were as follows: "I feel very knowledgeable about this product," "If a friend asked me about this product, I could give them advice about different brands," "If I had to purchase this product today, I would need to gather very little information in order to make a wise decision," and "I feel confident about my ability to tell the difference in quality among different brands of this product." Comparing the subject's knowledge of the product after viewing one of the two

conditions allowed for an accurate measure of brand awareness differences between the two

conditions.

Brand loyalty. Brand loyalty was the last variable measured. According to Mellens,

Dekimpe, and Steenkamp (1996) measuring brand loyalty consists of behavioral or attitudinal

measurements. Deciding between measuring behavioral or attitudinal depends on the research

study's intentions (Mellens, Dekimpe, & Steenkamp, 1996). This study measured attitudinal

responses of purchase intentions and commitment because of the specific advantages for the

affective response intentions. The advantages of using attitudinal measuring include the ability to

separate repeat buying from brand loyalty, being less sensitive to short-run fluctuations, and

having an easier method for subjects to pick the right decision unit (Mellens et al., 1996). This

study concentrated on evaluating subjects' affective responses to brand loyalty differences by

medium. Measuring purchase intentions and commitment through brand-orientation allows for

an accurate measure of stated purchase intentions/preferences and commitment measures. A

three-item, semantic differential scale of bipolar responses was used to measure purchase

intentions from the following dimensions: probable/improbable, likely/unlikely, and

possible/impossible in relation to the introductory statement of: "Thinking only about Reebok,

please make a choice about your likelihood of purchasing the brand by circling one number

between 1 and 7 for each of these dimensions." The dimensions were influenced by Coyle and

Thorson (2001) while the statement was created by the researcher (see Appendix F). To further

investigate brand loyalty based on purchasing decisions, participants were asked, "Thinking

about the likelihood to purchase, what is the percentage at which you would buy the Reebok

brand?" Participants then provided the percentage at which they would buy with zero meaning

there's no chance they would buy Reebok and 100 meaning they were certain to purchase

Reebok (see Appendix F).

Commitment was measured through the use of a brand-oriented measure of the number

of subjects committed to the brand, or the mean level of commitment being computed.

Commitment to the brand can be measured by the extent to which subjects will recommend the

brand to others (Mellens et al., 1996). The subjects were asked to respond to an introductory

statement adapted by Machleit and Wilson (1988). The statement was: "Suppose a friend called

you last night to get your advice on his/her search for a sneaker. Would you recommend that

she/he buy a Reebok sneaker? Rate your likelihood of recommending Reebok to your friends by

circling one number between 1 and 7 for each of these dimensions." Subjects were then asked to

circle a dimension: probable/improbable, likely/unlikely, possible/impossible (see Appendix F),

again influenced by Coyle and Thorson (2001). Measuring purchase intentions and commitment

through a three-point semantic differential scale and an open-ended question allowed for easy

interpretation and collection of data on brand loyalty.

Demographics

The procedure ended with typical demographic questions of subject's age and sex (see

Appendix G) as well as the debriefing statements (see Appendix H).

Analysis

A total of 65 participants completed the experiment. Of the 65 participants, 49 were

women and 16 were men. An independent samples *t*-test and a Mann-Whitney *U*-test were used

to analyze significant relationships between the two conditions and the three variables being

tested: brand presentation, brand awareness, and brand loyalty. Participant responses to brand

awareness differed significantly by condition. Although additional differences by condition were found between brand presentation and brand loyalty, they were not statistically significant.

Research question one asked, "What differences are there by medium and self-reported affective responses to brand presentation?" As we outlined in the measurement section, brand presentation was measured through a seven-point semantic differential scale. Within the scale, participants were asked to rate between one and seven their judgment about the Reebok advertisement (see Appendix D). While statistically significant results were not found as it relates to the research question, results did indicate that there was a statistically significant difference between the mean rating for male and female on clarity ($t = -2.237$, $p = .029$), whether the advertisement was convincing ($t = -2.047$, $p = .045$), and the participant's overall liking ($t = -2.002$, $p = .050$).

Research question two asked, "What differences are there by medium and self-reported affective responses to brand awareness?" Testing product knowledge after viewing condition one and condition two through a seven-point Likert scale, anchored by strongly agree/strongly disagree, was used to measure brand awareness. Analyzing the data with a Mann-Whitney U-test revealed a statistically significant difference between subjects' responses to Facebook (condition one) and the print advertisements (condition two). Facebook and print differed significantly regarding advice about different brands ($U = 373.5$, $p = .037$). Facebook scored higher with a median of 38.12 as compared to 28.88 for print. In other words, the respondents reported they were less knowledgeable after viewing the Facebook condition. Additional correlations were not found as it relates to the research question presented, but statistically significant results were found between participants' year born and responses to whether they felt confident in their ability to tell the difference in quality among different brands of this product after viewing the

advertisement ($r = -.249$, $p = .045$). Age was negatively correlated with confidence. In other words, the younger the respondent, the more confidence s/he reported.

Research question three asked, "What differences are there by medium and self-reported affective responses to brand loyalty?" Using purchase intensions and commitment as a measure of brand loyalty for this experiment, the results did not produce statistically significant results as it relates to the research question presented. One can speculate that the lack of statistically significant results around brand loyalty could be due to the timeframe presented in this study. Participants in this study reviewed the brand advertisement once, in a short period of time, and provided responses to a series of questions where brand loyalty is traditionally built over a longer period of time. While differences by sex are not significant for the research questions proposed, highly significant differences were found by gender when participants in this study were asked how likely they were to purchase the brand ($t = .175$, $p = .006$).

Discussion

After a careful review of related literature, it is apparent that traditional media and digital channels have distinct attributes. Persuaders need to learn how to craft their messages relative to the advantages and disadvantages of each media channel. Traditional media channel studies emphasize a linear model of communication while digital media is gaining support for its interactive and engaging features. The conclusion of this study found that those viewing brand business pages on Facebook elicit stronger brand awareness compared to traditional forms of advertising in print publications.

Brand awareness is the lowest form of brand knowledge, or the first achievement for advertisers in persuading a consumer audience. As discussed in the literature review section, familiarity with a product can lead to greater intent to purchase. The statistically significant

findings in this study indicate that digital media channels, such as Facebook, can produce greater

brand awareness for advertisers. Although few statistically significant results were found as it

relates to the research questions presented, results around correlations with age and sex could be

addressed in future research. In addition, the timeline of such a study could be lengthened to test

differences in brand loyalty. As stated in the analysis, we could presume that longer exposure to

a brand could create a stronger sense of loyalty. Future research could build upon this study's

results as it relates to brand loyalty. Questions for future research, include: What generational

differences are there by medium? What differences are there between men and women by

medium? What differences are there by medium in message penetration? What differences are

there by medium in likelihood to purchase?

Limitations and Strengths

If this study were implemented today, there would be a few limitations and strengths to

consider. Given the sample size is based on 65 RIT students, future research should consider a

wider and more diverse sample. The data collected were self-reported and affects the validity of

the study as subjects' report of attitude or feelings may not coincide with their actions or

behaviors.

The experiment design is an appropriate strength of this research study. The use of

semantic-differential scales based on attitudinal analysis allows the researcher to focus on the

experimental variables without other confounding variables. Repeat buying can be confused with

brand loyalty, but by using an attitudinal measurement for brand loyalty with a semantic

differential scale, Mellens et al. (1996) report that it separates the two variables. Nuisance

variables were controlled by having the researcher regulate the flow of the procedure and limit

outside interruptions. This study's strength is in creating a smaller gap in advertising and

marketing research on media channel differences. Future research should be conducted to address these limitations and strengths to ensure a more comprehensive research study.

Future Research

The review of related literature was accompanied by many questions for further research on digital media channels' unique use of interactivity in comparison to traditional channels. With progress being made in understanding and defining interactivity within scholarly research, there is still work to be done in further evaluating the concept as the digital media landscape evolves. Social networking sites offer a unique environment where interactivity is expected. Using this study's results and the findings of previous studies, more in-depth research can be done to provide advertisers insights by medium. Future research on social networking sites like Facebook should be conducted in order to strengthen the scholarly and social understandings of how to appropriately craft persuasive messages based on the advantages or disadvantages of each medium, especially by sex and age.

References

Berte, K., & De Bens, E. (2008). Newspapers go for advertising! *Journalism Studies*, *9*(5).

doi:10.1080/14616700802207623.

Bezjian-Avery, A., Calder, B., & Iacobucci, D. (1998). New media interactive advertising vs. traditional

advertising. *Journal of Advertising Research*, *38*(4).

Campbell, M., Keller, K., Mick, D., & Hoyer, W. (2003). Brand familiarity and advertising repetition

effects. *Journal of Consumer Research*, *30*(2).

Chaudhuri, A., & Holbrook, M. (2001). The chain of effects from brand trust and brand affect to brand

performance: The role of brand loyalty. *Journal of Marketing*, *65*(2).

Coyle, J., & Thorson, E. (2001). The effects of progressive levels of interactivity and vividness in web

marketing sites. *Journal of Advertising*, *30*(3).

Duncan, T., & Moriarty, S. (1998). A communication-based marketing model for managing relationships.

Journal of Marketing, *62*(2).

Facebook [Website information]. (February 2004). Retrieved December 16, 2009, from

http://www.facebook.com

Ferber, P., Foltz, F., & Pugliese, R. (2005). The Internet and public participation: State legislature

Websites and the many definitions of interactivity, Bulletin of Science, Technology & Society,

25(1), 1-9. doi: 10.1177/0270467604271245

Ferber, P., Foltz, F., & Pugliese, R. (2007). Cyberdemocracy and online politics: A new model of

interactivity. Bulletin of Science Technology Society, 27(5), 391-

400. doi: 10.1177/0270467607304559

Groom, S., & Biernatzki, W. (2008). Integrated marketing communication anticipating the 'age of

engage'. (pp. 3-19). Centre for the Study of Communication & Culture.

Hargittai, E., & Walejko, G. (2008). The participation divide: Content creation and sharing in the

digital age. *Information, Communication & Society*, *11*(2). doi:10.1080/13691180801946150

Hoyer, W., & Brown, S. (1990). Effects of brand awareness on choice for a common, repeat-purchase product. *Journal of Consumer Research*, *17*(2).

Iacobucci, D. (2009). *MM what's inside: An innovative approach to teaching and learning marketing management* (M. Acuna, Ed.). Mason, OH: South-Western Cengage Learning.

Kiousis, S. (2002). Interactivity: a concept explication. *New Media Society, 4*.

Liu, Y., & Shrum, L. (2002). What is interactivity and is it always such a good thing? Implications of definition, person, and situation for the influence of interactivity on advertising effectiveness. *Journal of Advertising*, *31*(4).

Machleit, K., & Wilson, R. (1988). Emotional feelings and attitude toward the advertisement: The roles of brand familiarity and repetition. *Journal of Advertising*, *17*(3).

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*, *25*(2).

McMillan, S. J. (2002). A four-part model of cyber-interactivity. *New Media & Society, 4*(2).

McMillan, S., & 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).

Mellens, M., Dekimpe, M., & Steenkamp, J. (1996). A review of brand-loyalty measures in marketing. *Economie in Management, 41*(4).

Miller, D. C., & Salkind, N. J. (n.d.). Semantic differential. in D. C. Laughton (Ed.), *Handbook of research design and social measurement* (6th ed., pp. 343-345). (Original work published 1995).

Raj, S. (1985). Striking a balance between brand 'popularity' and brand loyalty. *Journal of Marketing*, *49*(1).

Reinard, J. C. (2008). *Introduction to communication research* (E. Barrosse, Ed., 4th ed.). New York: McGraw-Hill Higher Education.

Schlosser, A., Mick, D., & Deighton, J. (2003). Experiencing products in the virtual world: The role of goal and imagery in influencing attitudes versus purchase intentions. *Journal of Consumer Research*, *30*(2).

Sicilia, M., Ruiz, S., & Munuera, J. (2005). Effects of interactivity in a website. *Journal of Advertising*, *34*(3).

Statista (2016). Number of monthly active Facebook users worldwide as of 1st quarter 2016 (in millions). Retrieved June 26, 2016 from http://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/

Sung-Joon, Y., & Joo-Ho, K. (2001). Is the internet more effective than traditional media? Factors affecting the choice of media. *Journal of Advertising Research*, *41*(6).

Appendix A: Condition 1

Facebook Advertisement

Appendix B: Condition 2

Print Advertisements

Appendix C: Introduction of Experiment

Consent Form

Researchers in the Department of Communication Studies are interested in people's perceptions of advertisements on different media channels. I am here today to have you participate in a study designed to gather information in these areas. Your participation in this study would be greatly appreciated; however participation is **entirely voluntary**.

There are some things about this study you should know. You will be first asked to view an advertisement then answer survey questions. This survey has no anticipated harms, discomforts or inconveniences. There are no anticipated risks beyond ordinary survey responses.
Not everyone who takes part in this study will benefit. A benefit means that something good happens to you. We think these benefits might be to gain a deeper understanding of media channels, traditional and new, so that companies can identify and manage better communication with their consumers.

When we are finished with this study we will write a report about what was learned. This report will not include your name or that you were in the study.

You do not have to be in this study if you do not want to be. If you decide to stop after we begin, that's ok too.

If you decide you want to be in this study, please sign your name.

I, _____, want to be in this research study.

_____ _____
(Sign here)   (Date)

If you have any questions about the study or comments please contact:

Jessica Fuller
105 Selborne Chase
Fairport, NY 14450
607-745-5552
Jessicafuller4387@gmail.com

Appendix D: Dependent Variable

Measuring Brand Presentation

You just viewed an advertisement from Reebok shoes. Below is a series of adjectives pairs for you to use judgment about the Reebok advertisement by CIRCLING one number for each adjective pair between 1 and 7.

Not Persuasive	1	2	3	4	5	6	7	**Persuasive**
Unappealing	1	2	3	4	5	6	7	**Appealing**
Bad	1	2	3	4	5	6	7	**Good**
Unattractive	1	2	3	4	5	6	7	**Attractive**
Not Clear	1	2	3	4	5	6	7	**Clear**
Unconvincing	1	2	3	4	5	6	7	**Convincing**
Simple	1	2	3	4	5	6	7	**Complex**
Overall Disliking	1	2	3	4	5	6	7	**Overall Liking**

Appendix E: Dependent Variable

Measuring Brand Awareness

Next, we would like you to indicate how much you agree or disagree with four statements presented below. Please CIRCLE the one number that best indicates how much or little you agree with each statement.

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
I feel very knowledgeable about this product.	1	2	3	4	5
If a friend asked me about this product, I could give them advice about different brands.	1	2	3	4	5
If I had to purchase this product today, I would need to gather very little information in order to make a wise decision.	1	2	3	4	5
I feel very confident about my ability to tell the difference in quality among different brands of this product.	1	2	3	4	5

Appendix F: Dependent Variable

Measuring Brand Loyalty

Thinking ONLY about Reebok, please make a choice about your likelihood of purchasing the brand by CIRCLING one number between 1 and 7 for each of these dimensions:

| **Very Probable** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Improbable** |

| **Very Likely** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Unlikely** |

| **Very Possible** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Impossible** |

Thinking about your likelihood to purchase, what is the percentage at which you would buy the Reebok brand? Please fill in your percentage, zero meaning there's no chance you'd buy Reebok and 100 meaning you are certain to buy Reebok.

_____%

Suppose a friend called you last night to get your advice on his/her search for a sneaker. Would you recommend that s/he buy a Reebok sneaker? Rate your likelihood of recommending Reebok to your friends by CIRCLING one number between 1 and 7 for each of these dimensions:

| **Probable** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Improbable** |

| **Likely** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Unlikely** |

| **Possible** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Impossible** |

Appendix G: Demographics

The following two questions allow the researcher to know some demographic statistics about the sample population. Please CIRCLE A or B for questions 1 and WRITE your birth year for question 2.

1. What is your sex?
   a. Male
   b. Female

2. In what year were you born? _____

Appendix H: Conclusion

Debriefing Experiment

This concludes the study. Thank you very much for participating in this research. If you have any questions regarding this study or learning the results, please e-mail or call Jessica Fuller using the contact information on the Consent Form.
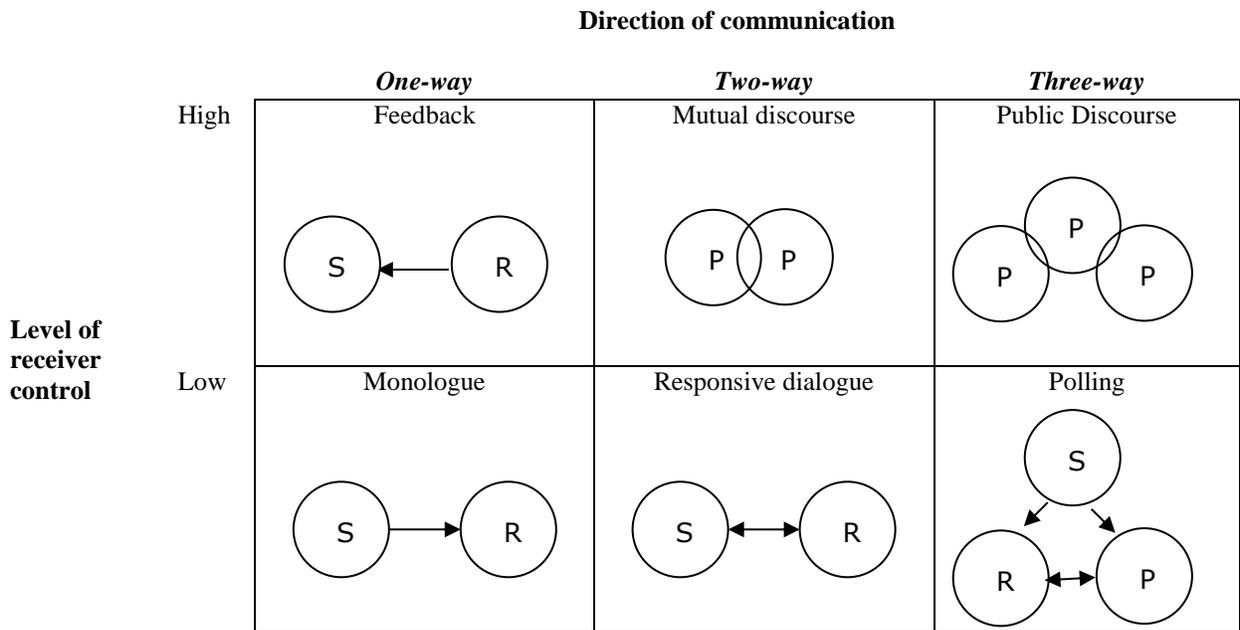
Thank you again for your cooperation.

Figure 1: McMillan's four-part model of cyber-interactivity

Direction of communication
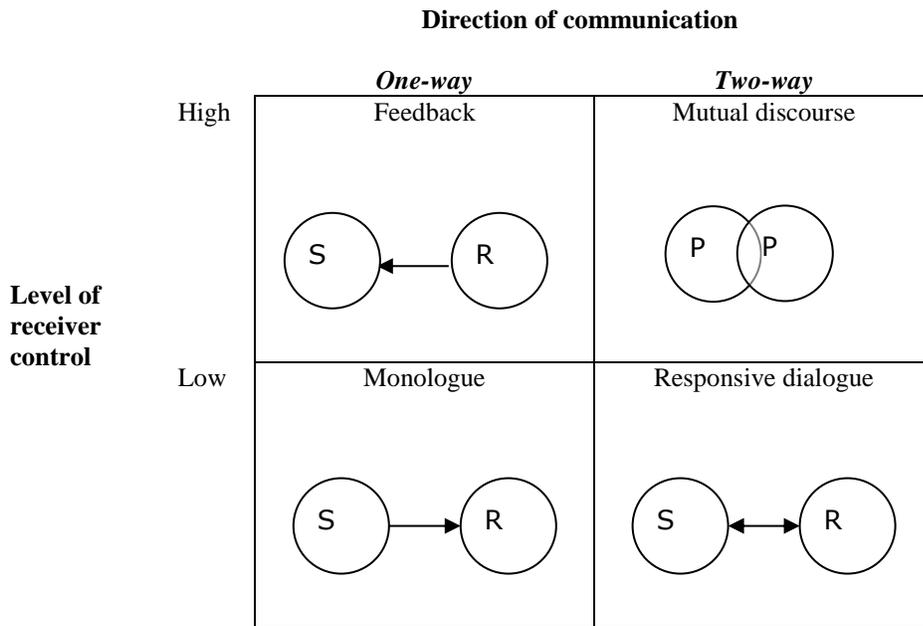
S = sender, R = receiver, P = participant (sender/receiver roles are interchangeable)

Figure 2: Ferber, Foltz, and Pugliese's six-part model of cyber-interactivity

Direction of communication

	One-way	*Two-way*	*Three-way*

Level of receiver control

S = sender, R = receiver, P = participant (sender/receiver roles are interchangeable)