Seeing Is Believing?

Perceptions of Interactivity in Company-Consumer Interactions on Social Networking Sites

Thesis

Presented in Partial Fulfillment of the Requirements for the Master of Arts Degree in the Graduate School of The Ohio State University

By

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Abstract

Previous research on interactivity has focused on active engagement with a source and feature-based aspects of online platforms. This study seeks to clarify how merely viewing the interactions of others can meaningfully influence impressions of the source. Specifically, this study explores responsiveness and tailoring as key facets of interactivity. The results indicate that viewing specific types of interactions impact perceptions of interactivity. In addition, there is a significant indirect effect of the source providing responses to existing messages, through participants’ perceptions that they could receive a response, on attitudes toward the source and behavioral intention. There is also a significant indirect effect of the source providing tailored responses to existing messages, through participants’ perceptions that they could receive a tailored response, on assessment of quality of future interactions with the source, attitudes toward the source, and behavioral intention. The implications of this study’s results for interactivity, interactivity perceptions, and further research are discussed.
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CHAPTER 1: INTRODUCTION

Web 2.0 communication platforms, such as participatory websites, provide an ideal outlet for discussions between geographically dispersed individuals and groups. New media present opportunities for both companies and consumers because of their ability to facilitate various forms of interaction (e.g., company-consumer, consumer-consumer, company-company) that otherwise would be unfeasible face-to-face or too costly with traditional media (Wu, 2005). The degree to which new media afford interactive communication has been studied extensively and is thought to meaningfully affect the outcomes of online communication (Walther & Jang, 2012). Consequently, it can be assumed that interactions are important to consumers and companies.

Although a wide variety of organizations ranging from Fortune 500 companies to small businesses have implemented social media into their marketing mix (Culnan, McHugh, & Zubillaga, 2010), the specific types of interactions that take place on these platforms has been relatively understudied. Successful company-consumer interactions foster customer loyalty, willingness to try new offerings, and resistance to negative information about the company (Bhattacharya & Sen, 2003). Research suggests that social networking sites help promote greater communication among companies and consumers (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). However, a company’s mere presence on social networking sites does not guarantee advantageous company-consumer interactions. Past research has indicated that the interactive nature of
conversations is one thing that influences positive outcomes. Tailoring of message content may be one feature that is difficult to effectively execute for a company, but provides benefits to the consumer through better matching of preferences, services, and information (Godin, 1999; Hanson, 2000; Prahalad & Ramaswamy, 2004; Wind & Rangaswamy, 2001). Most of the work in this realm has focused on people actively engaging in interactions with a source. Social networking sites have allowed people to view and evaluate publicly available conversations without interacting themselves: People do not need to actively engage with the source to gain information and form impressions. This study builds on previous work by exploring how simply viewing the interactions of others is pivotal in shaping attitudes toward the source and behavioral intention.
CHAPTER 2: LITERATURE REVIEW

Past research on online company-consumer interactions suggests that objective or actual features of interactions cause consumers to feel positively toward a company. Actual interactivity typically refers to either features of the medium or capabilities of creating interactive content (Hoffman & Novak, 1996; Neuman, 1991; Steuer, 1992). For example, a traditional newspaper represents one-way mass media with low actual interactivity. The reader cannot easily communicate with the writer or easily seek out further information. In contrast, an online newspaper provides features such as a writer’s email address hyperlink to send messages and banner advertisements leading to other websites (Wu, 2005). These interactive features characterize high levels of actual interactivity. Previous research has operationalized actual interactivity online by varying the presence or absence of feature-based interactive elements including online chartrooms, hyperlinks, searchable pull-down menus, and the dynamic creation of content (Fortin, 1997; Frazer & McMillan, 1999; Wu, 2005). Thus, actual interactivity is more objective, which allows clearer distinctions about what constitutes interactivity.

Previous research suggests that actual interactivity has a direct positive impact on attitudes toward a website (Cho & Leckenby, 1999; Hwang & McMillan, 2002; Jee & Lee, 2002; McMillan, 2000; Yoo & Stout, 2001). Several studies have shown that the presence of interactive features contribute to increased feelings of telepresence on commercial websites (Coyle & Thorson, 2001), higher involvement with news websites
(Bucy, 2004), and more positive attitudes toward the platform (Fogg, 2003). Conversely, other studies conducted around the same time frame did not find a positive relationship between actual interactivity and attitudes toward a website (Bezjian-Avery, Calder, & Iacobucci, 1998; Coyle & Thorson, 2001). These mixed findings could be attributed to different conceptualizations of interactivity (Wu, 2005; Liu & Shrum, 2002). Some studies have explored interactivity from an objective or feature-based viewpoint (Bezjian-Avery, Calder, & Iacobucci, 1998; Coyle & Thorson, 2001; Fiore & Jin, 2003; Haseman, Nuipolatoglu, & Ramamurthy, 2001; Sundar, Kalyanaraman, & Brown, 2003), while others have conceptualized interactivity from a more subjective perspective (Cho & Leckenby, 1999; Hwang & McMillan, 2002; Wu, 1999).

Alternatively, perceived interactivity is conceptualized based on qualitative experiences that users equate with interactions (Burgoon et al., 2000). Perceived interactivity has been defined as a two-dimensional psychological construct of internally-based self-efficacy and externally-based system efficacy (Newhagen, Cordes, & Levy, 1995). Internally-based self-efficacy is the viewer’s perceived utility and control of interactions (Whitaker, 1998), while externally-based system efficacy is related to the perceived responsiveness of the platform (Wu, 1999). This suggests there is a link between perceptions of interactivity and actual features or characteristics of the platform. Several studies have found a significant positive relationship between perceived interactivity and outcome variables, such as attitudes and behavior (e.g., attitude toward brand, purchase intention; Cho & Leckenby, 1999; Hwang & McMillan, 2002; Jee & Lee, 2002; Schlosser, 2003; Wu, 1999; Yoo & Stout, 2001), while actual interactivity findings are seemingly less consistent (Bezjian-Avery, Calder, & Iacobucci, 1998; Coyle
Thorson, 2001; Fiore & Jin, 2003; Haseman, Nuijpolatoglu, & Ramamurthy, 2001; Sundar, Kalyanaraman, & Brown, 2003). Since perceived interactivity is more subjective and psychological in nature, the specific nature of online interactions that enhance perceptions of interactivity is relatively less understood. Previous work suggests that particular message characteristics of company-consumer interaction might (a) affect how the nature of the online interactivity is perceived by the viewers and (b) the impact perceptions of online interactivity have on viewers’ attitudes and behavior. Thus, perceptions of interactivity warrant further exploration.

Previous research has focused on how engaging in interactions themselves change consumer attitudes and behavior. However, consumers often do not have to actively engage in interactions themselves online. Many participatory online forums allow users to seek and gain access to information on demand. For example, social networking sites provide a unique communicative platform for companies and consumers to actively interact with others or passively view information. Today, many companies establish and maintain an interactive online presence via social networking sites, such as Facebook and Twitter, to engage with potential and current customers (Jansen et al., 2009; Rybalko & Seltzer, 2010; Wright & Hinson, 2009). Therefore, understanding characteristics that influence perceptions of interactivity are important for companies responding to consumers. This study seeks to clarify how specific dimensions of interactive company-consumer communication affect perceptions of interactivity, which lead to attitudes and behavioral intention. Does seeing other consumers receiving different types of feedback from companies influence viewers similar to actually interacting?
Perceived Interactivity

Interactivity depends largely on the perceiver during the interaction process (Williams, Rice, & Rogers, 1988). The greater potential for interaction in interactive media determines relative benefits to the viewers (Wu, 2005). Past research provides two important reasons why perceptions of interactivity are important to examine relative to actual interactivity. First, perceptions of interactivity vary subjectively when no variance exists objectively. A study found that perceptions of interactivity for three computer manufacturers’ websites (apple.com, dell.com, and hp.com) were different, while actual interactivity was the same across websites (Lee et al., 2002). This study suggests that actual interactivity can be held constant, but people will perceive the nature and quality of the interaction differently. Another study found that perceptual variables are stronger predictors of attitudes toward a website than structural variables (e.g., interactive site features; McMillan, Hwang, & Lee, 2003). Second, perceptions of interactivity mediate the effect actual interactivity has on outcomes of interest. A study demonstrated that perceptions of interactivity mediate actual (i.e., feature-based) interactivity in assessing attitudes toward a website (Wu, 2005).

While previous research provides a basis for further exploration of perceived interactivity in general, specific dimensions exist within interactivity (Downes & McMillan, 2000; Ha & James, 1998; Heeter, 2000; Zamith, 2008). Perceptions of interactivity are based on features of actual interactivity. Several studies have explored interactive features of responsiveness and tailoring (Dholakia, Zhao, Dholakia, & Fortin, 2000; Ha & James, 1998; Park & Lee, 2013; Wu, 2005). Unlike previous studies involving actual interactions, this study focuses on viewing different types of interactions...
as a basis for evaluations. It is normative on many new media platforms (e.g., social networking sites) to observe the interactions of others without participation to gain information and make assessments. As such, this study focuses on how merely viewing varying degrees of specific interactive dimensions influences perceptions of interactivity, attitudes, and behavior.

**Responsiveness.** On social networking sites, companies invite contributions from site users that are then presented for subsequent viewers to observe. In this study, responsiveness is defined as viewers’ perceptions about the probability of receiving a response (from a company) in a timely fashion (Wu, 2000). Research suggests that individuals gauge the responsiveness of a platform by the relatedness of messages between the sender and receiver (Dholakia, Zhao, Dholakia, & Fortin, 2000). In addition, consumers expect timely responses to their requests and questions (Lee, 2005). Social cognitive theory provides an explanation why viewers’ perceptions of existing online discussions between consumers and companies might affect how they choose to interact with the company online. As noted by Bandura (2001), people make sense of the world through observing the behavior of others and media have the ability to transmit ways of thinking and behaving simultaneously to the masses. Behaviors that produce positive or reward outcomes are easily adopted, while behaviors that produce negative or punishing outcomes are typically abandoned. Many times these behaviors do not have to be experienced directly; rather, people learn from the fortunes and mistakes of others. Technology has accelerated and expanded the scope of vicarious experiences people can have by transcending the boundaries of their immediate environments (Bandura, 2001). As such, a consumer’s perceived ability to interact with a company might be greatly
shaped by existing evidence that indicates whether or not companies are responsive to questions and concerns posted by consumers: If viewers observe others receiving responses from a company in a timely fashion, they will anticipate that they too should be able to do so as well. An e-commerce study found that a site’s ability to respond to specific questions quickly and relevantly increases perceptions of interactivity and customer trust (Lee, 2005).

H1a: The more viewers perceive companies as being responsive to existing consumer messages, the more they believe companies will be responsive to their own messages.

Previous research on commercial online chat rooms suggests that the speed of interactions between consumers and companies increases customer satisfaction, which leads to intentions to purchase (van Dolen, Dabholkar, & de Ruyter, 2007). Another study on mobile commerce found that companies providing rapid feedback to consumers influenced customer satisfaction (Suki, 2011). It is common for participatory websites to provide viewers cues that indicate the timeliness of company responses (e.g., timestamps). Responsiveness is thought to produce more positive evaluations of a source (Moorman, Deshpande, & Zaltman, 1993; Morgan & Hunt, 1994). Research suggests that trust has a direct effect on purchasing intentions (Jarvenpaa & Tractinsky, 1999).

H1b: The more viewers perceive a company to be responsive to their own messages, the more favorably they evaluate the company.

H1c: The more viewers perceive a company to be responsive to their own messages, the more willing they are to make purchases from the company.
**Tailoring.** Although the ability to receive a timely response matters, the nature and quality of the response can also influence perceptions of the company. Simply providing a response is easy on social networking sites; however, tailored responses are more difficult to provide (Verhagen, van Nes, Feldberg, & van Dolen, 2014). Companies provide different types of responses to site users for viewers to observe. Social networking sites provide an ideal platform for tailored responses with the potential for one-on-one interactions between parties. In this study, tailoring is defined as viewers’ perception of the degree to which information (from a company) is individualized to meet the specific needs of the receiver (Dholakia, Zhao, Dholakia, & Fortin, 2000). Similar to responsiveness, social cognitive theory (Bandura, 2001) explains why consumers should expect tailored responses by observing other company-consumer interactions. Consumers’ perceived ability to have a tailored interaction with a company might be greatly shaped by existing evidence that indicates whether or not companies are providing individualized responses to questions and concerns posted by consumers: If viewers observe others receiving tailored responses from a company, they will anticipate that they too should be able to do so as well. Overall, more individualized responses increase perceptions of interactivity for the viewer.

H2a: The more viewers perceive companies as providing tailored responses to existing consumer messages, the more they believe companies will provide tailored responses to their own messages.

Further, a consumer’s perceived ability to have quality discussion with a company in the future might be greatly shaped by tailored responses to other consumers: If viewers observe others receiving tailored responses from a company, they will anticipate
favorable future discussion. Previous research suggests that tailoring of content increases personal relevance to the individual (Blom, 2000).

H2b: The more viewers perceive companies as providing tailored responses to their own messages, the more favorably they evaluate the quality of future interactions.

Tailored interactions build a relationship between the consumer and the company (Simonson, 2005; Wind & Rangaswamy, 2001). A study of talk radio listeners found that tailored content predicted frequent exposure to programming, increased perceptions of the talk show host as a credible source of information, and increased the feeling that the talk show host influenced listeners’ attitudes and behaviors (Rubin & Step, 2000). Research also suggests that increased tailoring of mass media may increase credibility and persuasiveness of the message (Beninger, 1987). Active, involved media use with others can affect attitudes and subsequent behaviors (Rubin, 2002). Tailored interactions are most effective in shaping these outcomes (Brooks, 1957). A study of a political candidate’s blog containing highly individualized message content enhanced perceptions of the political candidate’s website, attitudes toward the political candidate, and voting preferences (Thorson & Rogers, 2006). Another study with virtual customer service agents found that tailored responses have a strong effect on service encounter satisfaction (Verhagen, van Nes, Feldberg, & van Dolen, 2014).

H2c: The more viewers perceive a company to provide tailored responses to their own messages, the more favorably they evaluate the company.

H2d: The more viewers perceive a company to provide tailored responses to their own messages, the more willing they are to make purchases from the company.
CHAPTER 3: METHOD

Research Design Overview

A one-factor between-subjects experiment was conducted to test the proposed hypotheses. Participants were randomly assigned to one of three conditions that varied how a company responded to consumer postings on their company Facebook page. In the no response condition, the company did not provide any response to consumer postings. In the low tailoring response condition, the company provided a timely response, but it was not tailored to the particular consumer posting. In the high tailoring response condition, the company provided a tailored response that specifically responded to each consumer posting. After viewing the stimulus material in their assigned condition, participants completed an online questionnaire.

Sample

The sample consisted of 126 participants from The Ohio State University who received extra course credit in exchange for their participation. Participants ranged from age 18 to 35 ($M = 21, SD = 2.17$) and identified as “White/Caucasian” (74%), “African American” (10%), “Asian-Pacific Islander” (11%), “Hispanic” (3%), or “Other” (2%). Participants who choose “Other” specified in an open-ended response box that they “prefer not to say” and “multi-racial”. More participants identified as male (56%) than female (44%). The vast majority of participants (98%) indicated that they are Facebook
users. Each participant was randomly assigned to one of the three experimental conditions to obtain sufficient statistical power.

**Stimulus Materials**

Facebook, the most popular social networking site worldwide (eBizMBA, 2014), was used as the platform for creation of mock Facebook consumer posts and company comments. Facebook interactions were created using www.simulator.com, a fake Facebook status generator. Features, such as profile owner names, profile photos, wall posts, and comments, were manipulated to reflect varying degrees of responsiveness and tailoring. Each Facebook page included two positive comments, two inquiries/questions, and two complaints to reflect varying scenarios on corporate social media pages. Consumers varied in gender (3 males, 3 females) and appearance to reflect average consumers.

Inertia Athletics is a local athletic apparel company created for purposes of stimulus materials. The fictitious company has a publicly accessible Facebook profile that operates under the Facebook profile account: Inertia Athletics, Inc. The company’s page reflects realistic indicators for an athletic apparel company. Facebook post content from sporting goods corporations, Dick’s Sporting Goods and lululemon athletica, were used for generating posts. The company logo and profile image is a running shoe. The image was used as the company’s profile image/logo in all conditions. An athletic apparel company was selected because of the wide range of goods and relevance to a broad audience, especially a college student population (see Appendix D).

**Responsiveness.** Responsiveness (response, no response) was manipulated by the presence or absence of responses provided from a company to consumers’ positive
comments, inquires/questions, and complaints. The company addressed consumers using gender-neutral names for purposes of external validity. Timestamps were used to illustrate timeliness of the response and were held constant across conditions (see Appendix D).

**Tailoring.** Tailoring (high vs. low) was manipulated through the types of responses. Company responses high in tailoring were targeted toward the specific positive comments, inquires/questions, and complaints of the consumer. Company responses low in tailoring provided static responses to all consumer posts. For example, a Facebook response in the low tailoring response condition read: “Thank you for contacting us. Please visit our company website at www.inertiaathletics.com” (see Appendix D).

**Procedure**

Participants were recruited through undergraduate communication courses at The Ohio State University for participation in the study. After viewing the recruitment letter, participants who decided to participate in the study were directed to the online survey via www.Qualtrics.com (see Appendix A). All respondents completed the survey on a computer of their choice. Participants gave informed consent electronically before viewing the cover story and stimuli (see Appendix B). Once consent was obtained, participants were directed to a cover story explaining their task in this study (see Appendix C). Then, each participant was randomly assigned to one of the three experimental conditions by the Qualtrics software. The stimuli Facebook pages contained posts that varied in degree of responsiveness and tailoring. The Facebook pages presented consumer comments, inquiries/questions, and complaints on in all conditions.
(see Appendix D). After viewing six Facebook posts (2 positive comments, 2 inquires/questions, 2 complaints) from one of the three conditions, participants rated the Facebook interactions on scales measuring perceptions of interactivity (perceived responsiveness, perceived tailoring), quality of future interaction, attitude toward company, willingness to purchase, as well as demographic information, Facebook use, and Facebook familiarity (see Appendix E). Participants were then thanked for their time. Participants were then directed to a separate survey that gathered their name and email address to earn their credit (see Appendix F). Overall, the survey took participants no more than 15 minutes to complete.

**Measures**

The primary variable of interest in this study was perceived interactivity (perceived responsiveness, perceived tailoring; Chu & Yuan, 2013). Quality of future interaction (Message Quality/Information Value; Munch & Swasy, 1988), attitude toward company (Osgood, Suci, & Tannenbaum, 1957), and willingness to purchase (Dodds, Monroe, & Grewal, 1991; Bhattacherjee, 2002) were also measured as outcome variables. A variety of measures were used to assess demographic information (gender, age, ethnicity), Facebook use (Papacharissi & Rubin, 2000), and Facebook familiarity (Bhattacherjee, 2002; see Appendix E).

**Perceived responsiveness.** Perceived responsiveness was the first facet of interest related to interactivity perceptions (Chu & Yuan, 2013). The 4-item, seven-point Likert scale (1 = “Strongly disagree”, 7 = “Strongly agree”) asked participants to indicate their feelings about the degree of responsiveness on Inertia Athletics’ Facebook page. Statements included “Inertia Athletics responds to consumers”, “Inertia Athletics
provides timely responses”, “Inertia Athletics has the ability to respond to my questions quickly”, and “Inertia Athletics has the ability to respond to my specific questions”. Reliability was assessed via Cronbach’s alpha, $\alpha = .85$.

**Perceived tailoring.** Perceived tailoring was another facet of interest related to interactivity perceptions (Chu & Yuan, 2013). The 5-item, seven-point Likert scale (1 = “Strongly disagree”, 7 = “Strongly agree”) asked participants their feelings about the degree of tailoring on Inertia Athletics’ Facebook page. Statements included “Inertia Athletics could provide content that I need”, “Inertia Athletics provides personalized responses to consumers”, “Inertia Athletics could make me feel that I am a unique user”, “Inertia Athletics could be sensitive to my needs for product information”, and “Inertia Athletics provides tailored feedback”. Reliability was assessed via Cronbach’s alpha, $\alpha = .93$.


**Attitude toward company.** Attitude toward company (Osgood, Suci, & Tannenbaum, 1957) was used to measure feelings about Inertia Athletics based on the information presented on the Facebook page. The 12-item, seven-point semantic

**Willingness to purchase.** Willingness to purchase was measured using an adapted willingness to buy scale (Dodds, Monroe, & Grewal, 1991). The 4-item, seven-point Likert scale (1 = “Strongly disagree”, 7 = “Strongly agree”) asked participants to indicate agreement with several statements about their willingness to make a purchase after exposure to the Facebook posts. Statements included “It is very likely that I would make a purchase from Inertia Athletics in the future”, “Based on the information shown on the Inertia Athletics’ Facebook page, I would consider buying from the company”, “I would feel comfortable purchasing from Inertia Athletics in the future”, and “I am willing to buy from Inertia Athletics”. Reliability was assessed via Cronbach’s alpha, $\alpha = .96$.

**Demographic items.** Several demographic items was used to assess the composition of the participant pool. Items included gender, age, and ethnicity. Participants indicated their gender by two responses: “male” and “female”. The age of participants was measured using an open-ended response box. Participants indicated their ethnicity from a list including “White/Caucasian”, “African American”, “Native-American”, “Asian-Pacific Islander”, “Hispanic”, or “Other”. If a participant chose “Other”, he/she was asked to specify in an open-ended response box.

**Facebook use.** Facebook use was measured using a 3 items adapted from
Papacharissi and Rubin’s (2000) items. Participants indicated whether they have used Facebook before by two responses: “yes” and “no”. If participants selected “yes”, they were asked to indicate the number of minutes per day they use Facebook and how long they have been a Facebook user in months.

**Facebook familiarity.** Familiarity with the Facebook platform was measured using a 6-item, seven-point Likert scale (1 = “Strongly disagree”, 7 = “Strongly agree”) adapted from Bhattacherjee’s (2002) items. Statements included “I am familiar with timelines on Facebook”, “I am familiar with reading the comments of others on Facebook”, “I am familiar with writing on Facebook walls”, “I am familiar with the term ‘friends’ in relation to Facebook”, “I am familiar with commenting on Facebook posts”, and “Overall, I am familiar with Facebook”. Reliability was assessed via Cronbach’s alpha, $\alpha = .97$. 

CHAPTER 4: RESULTS

Overall, the hypotheses examine how existing company-consumer can affect how viewers believe they can interact with a company in the future, which, in turn, affects how viewers feel about the source and intend to behave in the future. The analysis plan for this study follows two steps. First, analyses of variance are conducted to examine if features of the message affected perceptions responsiveness and tailoring as anticipated. Finally, mediation analyses are conducted to examine if the experimental factors affected the outcome measures through the proposed mediating variables. Table 1 provides the zero-order correlation matrix for all variables.

Responsiveness

The first set of hypotheses examined the effect of companies being more or less likely to provide a response to consumer postings. Hypothesis 1a predicted that the more viewers perceive companies as being responsive to existing consumer messages, the more they believe companies will be responsive to their own messages. A one-way analysis of variance was run to test the effect of the responsiveness factor. The results showed a significant difference in perceptions of company responsiveness on Inertia Athletics’ Facebook page. Consistent with H1a, when companies did not respond to existing consumer postings, participants were less likely to believe that they could receive a response from the company, $M = 2.46, SD = 1.19$, than when companies did respond to
existing consumer postings, $M = 5.32, SD = 1.59$, $F(1, 124) = 105.93$, \( p < .001 \), $\eta^2 = .46$. Thus, H1a was supported.

Mediation analyses were conducted to examine how the effect of existing company-consumer interactions on participants’ own perceived ability to receive a response from the company affected how they (a) evaluated the company (H1b), and (b) their willingness to make a purchase from the company (H1c). The macro PROCESS (Hayes, 2013) was used to obtain estimates of indirect effects and their corresponding 95% bias-corrected bootstrap confidence intervals (CI, based on 10,000 resamples). The results indicate a significant indirect effect of company responsiveness to existing postings, through participants’ perceptions of company responsiveness to their own postings, on both their attitude toward the company, point estimate = 2.40, 95% CI = [1.86, 3.05], and their willingness to make a purchase, point estimate = 1.86, 95% CI = [1.37, 2.48].

**Tailoring**

The next set of hypotheses examined how the nature of company responses to consumer postings effects perceptions of tailoring. Hypothesis 2a predicted that the more viewers perceive companies as providing tailored responses to existing consumer messages, the more they believe companies will provide tailored responses to their own messages. The results showed significant differences in perceptions of tailored content on Inertia Athletics’ Facebook page. Consistent with H2a, participants reported that it was more likely that they would receive a tailored response to their own posting when the company provided tailored responses to other users’ postings, $M = 5.89, SD = 0.81$, than when the company provided static, non-tailored responses, $M = 2.08, SD = 1.08$, $F(1, 82)$
Thus, H2a was supported.

Mediation analyses were conducted to examine how the nature of existing company-consumer interactions indirectly affected how participants (a) assessed the quality of potential future interactions (H2b), (b) evaluated the company (H2c), and (c) their willingness to make a purchase from the company (H2d), through perceptions that they could receive a tailored response from the company. The macro PROCESS (Hayes, 2013) was used to obtain estimates of indirect effects and their corresponding 95% bias-corrected bootstrap confidence intervals (CI, based on 10,000 resamples). The results indicate a significant indirect effect of the company providing tailored responses to existing postings, through participants’ perceptions that they could receive a tailored response from the company on the quality of future discussions with the company, point estimate = 1.82, 95% CI = [1.06, 2.71], their attitude toward the company, point estimate = 1.80, 95% CI = [.93, 2.64], and their willingness to make a purchase, point estimate = 1.86, 95% CI = [.88, 2.92].

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perceived responsiveness</td>
<td></td>
<td>.76**</td>
<td>.76**</td>
<td>.78**</td>
<td>.69**</td>
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<td>2. Perceived tailoring</td>
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<td>.83**</td>
<td>.72**</td>
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<td>3. Quality of future interaction</td>
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<td>.76**</td>
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<td>3.22</td>
<td>1.67</td>
</tr>
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</table>

*p < .05. **p < .01 (two-tailed).

Table 1. Zero-Order Correlations, Means, and Standard Deviations (N = 126)
CHAPTER 5: DISCUSSION

The primary goal of this study was to better understand specific facets of online interactivity. Previous work has focused on active engagement with a source or feature-based aspects of the online forum. While actual interactivity is more objective and clearer to distinguish, perceptions of interactivity require further exploration, especially in the evolving online environment. The affordances of social networking sites do not require users to actively engage with a source to gain information and form impressions. Thus, it is theoretically and practically important to understand what factors influence perceptions of interactivity. Past research has yet to parse out what types of interactions are most advantageous to viewers. This study sought to focus on two key aspects of interactivity: responsiveness and tailoring. Overall, the results provide support that simply viewing interactions of others has an impact on perceptions of interactivity and, in turn, outcomes, such as quality of future interactions with the company, attitude toward the company, and willingness to purchase from the company.

Findings

The findings of this study contribute empirical support for how merely viewing interactions of others influences perceptions of interactivity. Responsiveness and tailoring were manipulated as facets of interactivity. When companies did not respond to existing consumer postings, participants were less likely to believe that they could receive a response from the company. Alternatively, when companies responded to existing
consumer postings, participants were more likely to believe that they could receive a response from the company. Likewise, when the company provided targeted, tailored responses, participants were more likely to believe that they could receive a tailored response from the company. When the company provided static, non-tailored responses, participants were less likely to believe that they could receive a tailored response from the company.

Additionally, this study provides evidence for interactivity, through perceptions of interactivity, on outcomes: Responsiveness and tailoring were manipulated and perceptions of responsiveness and tailoring were measured and demonstrated to influence impressions. Company responsiveness to existing consumer postings, through perceptions of responsiveness, indirectly affects viewers’ attitudes toward the company and willingness to make a purchase. Similarly, company tailoring in existing consumer responses, through perceptions of tailoring, indirectly affects viewers’ assessments of the quality of future discussions, attitude toward the company, and willingness to make a purchase.

Implications

The results of this study have theoretical and practical implications. Theoretically, this work extends perceived interactivity of actual discussions. That is, the effects of interactions extend to people who are not actually engaging in the conversation. Previous studies have focused on actual engagement with a source and feature-based interactivity (Bezjian-Avery, Calder, & Iacobucci, 1998; Coyle & Thorson, 2001; Fiore & Jin, 2003; Haseman, Nuipolatoglu, & Ramamurthy, 2001; Sundar, Kalyanaraman, & Brown, 2003), while this study shows merely viewing interactions has an impact on
perceptions. More specifically, new media, such as social networking sites, afford people the ability to witness what others are doing and form these perceptions. Thus, this work explores impression formation in a new setting. Social cognitive theory (Bandura, 2001) has been previously applied to a number of offline settings. The theory provides an explanation why viewers’ perceptions of existing online discussions might affect how they choose to interact with the source. By applying social cognitive theory to online interactions, this work extends the scope of a theory that is already quite expansive.

Further, specific types of interactions have been relatively understudied. This work looked at two key facets of interactivity: responsiveness and tailoring. By exploring these two factors, this study began parsing out what particular features impact perceptions of interactivity. Additionally, these findings provide support for the mediating role of perceptions of interactivity. That is, when viewers perceive messages as responsive and tailored without actually interacting, it can meaningfully impact viewers’ evaluation of quality of their own future interactions, attitudes toward the source, and behavioral intention.

Practically, this research provides some interesting findings for company’s utilizing social media in their marketing mix. Today, many companies utilize social networking sites like Facebook to engage with potential and current customers (Jansen et al., 2009; Rybalko & Seltzer, 2010; Wright & Hinson, 2009). Facebook has over 30 million active small business pages worldwide (Ha, 2014). As suggested in the literature, successful company-consumer interactions foster customer loyalty, willingness to try new offerings, and resistance to negative information about the company (Bhattacharya & Sen, 2003). Effectively using social media provides companies a viable interactive
platform without losing economies of scale of mass marketing. Companies have the ability to provide a response to consumers relatively easily. Unfortunately, merely providing a response is not enough to reap positive returns. The findings suggest that a tailored response provides the greatest benefits in terms of assessment of quality of future discussions with the company, attitudes toward the company, and willingness to purchase from the company. Consequently, companies need to understand what types of interactions are viewed as most advantageous to consumers viewing their social media page.

**Limitations and Future Directions**

One potential limitation of this work is external validity. In order to induce experimental variance in this study, tailoring was strongly manipulated to make these differences apparent to the viewer. In the low tailoring response condition, the static, non-tailored responses presented extreme cases for lacking targeted content. Alternatively, the high tailoring response condition provided very detailed responses. This work looked at extremes for both degrees of responsiveness and tailoring. Future work should take a more nuanced approach by possibly varying timestamps or having responses that are moderately tailored.

Since perceptions of interactivity are more subjective and psychological in nature, there may be other factors to consider in the future. Responsiveness and tailoring are a starting point for examining interactivity perceptions. Future work should consider the type of source providing feedback on a platform. A company is a collective source responding to individuals. In this study, an individual was responding on behalf of the company. There are many contexts to explore different types of interactions online (e.g.,
person-to-person, group-to-group). In a different context, viewers could be evaluating an individual perhaps in seeking an online dating partner. This could look at responsiveness and tailoring as well as other features of interactivity, such as social connectedness. The viewer could assess their attitude toward the potential partner and willingness to take the relationship offline (i.e., dating).

**Conclusion**

Overall, this research takes an initial step in clarifying how people perceive different types of interactions and how these interactions can impact viewers’ perception of the source. In short, a company’s mere presence on a social networking site does not guarantee positive outcomes. Moreover, general or non-tailored company-consumer interactions on a social media page do not yield advantages for a company. Consequently, seeing interactions can lead to impression formation. As more entities are maintaining a social media presence, it is important to understand how viewers make sense of their interactions.
References


Ha, A. (2014, June 3). Facebook says there are now 30M small businesses with active pages, including 19M on mobile. Retrieved from http://techcrunch.com/2014/06/03/facebook-30m-small-businesses/


Liu, Y., & Shrum, L. J. (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), 53-64.


APPENDIX A: RECRUITMENT FORM

You have the opportunity to participate in a study and receive 4 point of extra credit. The study is an online survey that takes approximately 20 minutes. You will be asked to view content from a company’s social media page with posts from consumers and then answer questions about it and yourself.

We will ask for your name, but this information will only be used to identify you to the instructor for your course credit in exchange for participating. This information will be completely separate from your other responses in order to ensure that they remain completely anonymous.

You can choose not to participate without penalty. If you agree to participate, you can withdraw from the study at any time and there will be no penalty. If you have any questions, please email Dr. David C. DeAndrea, at deandrea.1@osu.edu.

If you do not decide to participate, you may complete an alternative assignment to receive the same amount of course credit. This assignment will involve writing a short research paper on your use of online product reviews. This assignment is designed to require a similar amount of time to complete as the research study. If you would like to participate, please follow the below link:

https://osu.az1.qualtrics.com/SE/?SID=SV_cM7ojZ1xTpCv17n
APPENDIX B: INFORMED CONSENT

For this experiment, you will be asked to evaluate a social network site profile that researchers at The Ohio State University created to better understand how people evaluate information appearing online. The content you will view is a website that provides information about a company. If you decide to participate in this study, you will be asked to answer questions related to how you feel about the company based on the information provided on their social media page. It is anticipated that the study will take no more than 20 minutes to complete.

In order to help make you comfortable in providing honest responses, we are employing a survey system that records all your answers anonymously. That is, no one can ever know who gave the answers that we collect. No individual participant can ever be identified with his/her answers. Although we are taking many precautions to ensure that your responses remain accessible only to the researchers, such as 128-bit SSL encryption and intrusion detection software, confidentiality cannot be guaranteed.

You may refuse to participate in this study without penalty or loss of benefits to which you are otherwise entitled. If you are a student or employee at Ohio State, your decision will not affect your grades or employment status in any way.

If you choose to participate in the study, you may discontinue participation at any time without penalty. By providing consent, you do not give up any personal legal rights you may have as a participant in this study.

A separate survey will be used to record your name so that you will receive the appropriate amount of credit for your time. The survey is completely separate from the questionnaire in order to ensure that your responses are collected in an entirely anonymous fashion. There are no other immediate benefits to you for participating, although the lessons we may learn from the research are likely to help understand how people judge information in online settings. There are no risks to participating in this study beyond what you might encounter viewing a class discussion blog on Carmen. Participants may skip questions they do not wish to answer and still receive an incentive.

If you have any questions about the study you may contact Dr. David C. DeAndrea via email at deandrea.1@osu.edu. If you have any questions about your rights as a participant or other research related concerns, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 614-688-8641.

If you agree to participate you should click the ">>" button below to continue.
APPENDIX C: COVER STORY

Welcome!

Your task is to evaluate various posts on an athletic apparel company’s Facebook page.

Please note that the results are important and you should evaluate the information carefully.

Inertia Athletics Inc. is a local athletic apparel company that has a public Facebook page.

The following posts appear on their page:

*Note:* Because it is important that you read the posts carefully, you will not be able to move on until 90 seconds have passed. Please read through the postings again if you have extra time.

Thank you!
APPENDIX D: STIMULI

Figure 1. Stimuli for Facebook Profile
Figure 2. Stimuli for High Tailoring Response Condition
Figure 3. Stimuli for Low Tailoring Response Condition
Figure 4. Stimuli for No Response Condition
APPENDIX E: SURVEY INSTRUMENT

Perceived Interactivity

Instructions: Based on the Facebook posts, indicate your feelings about the athletic apparel company, Inertia Athletics.

Perceived Responsiveness

Please indicate your agreement with the following statements about the Facebook posts.

1. Inertia Athletics responds to consumers.
2. Inertia Athletics provides timely responses.
3. Inertia Athletics has the ability to respond to my questions quickly.
4. Inertia Athletics has the ability to respond to my specific questions.

Perceived Tailoring

Please indicate your agreement with the following statements about the Facebook posts.

1. Inertia Athletics could provide content that I need.
2. Inertia Athletics provides personalized responses to consumers.
3. Inertia Athletics could make me feel that I am a unique user.
4. Inertia Athletics could be sensitive to my needs for product information.
5. Inertia Athletics provides tailored feedback.
Quality of Future Interaction

Instructions: On the scales below, please indicate the quality of the conversations you could have with Inertia Athletics based on what you viewed.

- Low quality – – – – – – – High quality
- Not informative – – – – – – – Informative
- Not valuable – – – – – – – Valuable
- Less useful – – – – – – – More useful
- Less helpful – – – – – – – More helpful
- Not enjoyable – – – – – – – Enjoyable
- Not relevant – – – – – – – Relevant
- Not friendly – – – – – – – Friendly

Attitude Toward Company

Instructions: On the scales below, indicate your feelings about the company based on the posts on their Facebook page.

- Untrustworthy – – – – – – – Trustworthy
- Not credible – – – – – – – Credible
- Unknowledgeable – – – – – – – Knowledgeable
- Low quality – – – – – – – High quality
- Unexceptional – – – – – – – Exceptional
- Dislike – – – – – – – Like
- Bad – – – – – – – Good
- Unappealing – – – – – – – Appealing
- Poor – – – – – – – Great
- Unpleasant – – – – – – – Pleasant
- Negative – – – – – – – Positive
- Unprofessional – – – – – – – Professional

Willingness to Buy Scale

Instructions: Please consider your agreement with the following statements.

1. It is very likely that I would make a purchase from Inertia Athletics in the future.
2. Based on the information shown on the Inertia Athletics’ Facebook page, I would consider buying from the company.
3. I would feel comfortable purchasing from Inertia Athletics in the future.
4. I am willing to buy from Inertia Athletics.
Demographic Items

Instructions: Please answer the following questions about your demographic background.

1. What is your age? ____

2. What is your ethnicity?
   - White/Caucasian
   - African American
   - Native-American
   - Asian-Pacific Islander
   - Hispanic
   - Other ____

3. What is your gender?
   - Male
   - Female

Facebook Use

Instructions: On the scales below, indicate the extent to which you use Facebook.

1. Have you ever used Facebook before?
   - Yes
   - No

2. Please indicate how many months you have been a Facebook user. ____

3. Please indicate the number of minutes per day that you use Facebook. ____
Facebook Familiarity

Instructions: On the scales below, indicate the extent to which you agree with the following statements about Facebook.

1. I am familiar with timelines on Facebook.
2. I am familiar with reading the comments of others on Facebook.
3. I am familiar with writing on Facebook walls.
4. I am familiar with the term “friends” in relation to Facebook.
5. I am familiar with commenting on Facebook posts.
6. Overall, I am familiar with Facebook.
Thank you for completing this task.

Please click on the forward arrow below to enter your name and email address for your extra credit compensation. By clicking forward, this will redirect you to a separate survey.

Your responses will not be associated with your name and email address.

First Name: __________

Last Name: __________

Please enter your OSU email address in the space provided to receive your extra credit compensation: _________________________