

Examining the Influence of Public Relations Strategies over Facebook on Student Attitude

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Abstract

Experimental methods were used to examine the influence of public relations strategies disseminated via Facebook on attitude. Public relations strategies were derived from Hazleton and Long's (1988) public relations process model. Results indicated that undesirable messages posted on Facebook had the most significant effect on participant attitude, and that using Facebook as a medium did not significantly affect attitude. These findings indicate that message content is important especially with unfamiliar content since the platform itself does not impact attitude.

Keywords: message strategies, Facebook, public relations process model, attitude

Introduction

In today's competitive business environment, effective communication is instrumental for achieving organizational goals. And, creating and delivering an effective message is part of the communication process. According to Hallahan (2000), a critical function in public relations is creating messages to reach strategically-important audiences. One theoretical framework for developing public relations message strategies is found in Hazleton and Long's (1988) public relations process model. This model describes public relations as a goal-driven communication endeavor in which goals must be translated into strategies that define specific actions for the organization to interact with target publics. Based on this tenet, seven message strategies were created to provide organizations with a guide to disseminate the appropriate message to its key stakeholders (Hazleton & Long, 1988).

A primary goal in developing message strategies is to clearly communicate a targeted message with key publics in order to elicit a desired attitude. Research indicates that it is the responsibility of public relations practitioners to create communication opportunities with key publics (Page & Hazelton, 1999; Werder & Holtzhausen, 2009), as most publics are not likely to initiate communication unless a message directly interests them (Hallahan, 2000).

One way for public relations practitioners to communicate with key publics is through social media networks (Waters, Burnett, Lambe, & Lucas, 2009). Research has posited that the specific social media site may matter more than the message itself (Schultz, Utz, & Goritz, 2011). Therefore, effective organizational communication must utilize the right social media platform to disseminate a message.

Several studies have empirically tested the message strategies derived from the public relations process model (e.g., Page & Hazelton, 1999; Werder, 2006). But, none to date have examined the impact of these message strategies when disseminated over social media. This study examines how organizational messages delivered through Facebook affect public attitude. The communication effects of seven message strategies derived from Hazleton and Long's (1988) public relations process model are explored to determine the message strategies that most affect public attitude when delivered through Facebook.

Review of Literature

Message Strategy Use and Effectiveness

Public relations message strategy use and effectiveness focuses on the message variable in the communication process (Werder & Holtzhausen, 2009). Several researchers have explored this variable in a public relations context (e.g., Grunig & Hunt, 1984; Hazleton, 2006). The situational theory of publics (Grunig, 1978) identifies relevant publics and when messages should be directed to them, but it does not address the content of the message (Vasquez, 1993). The theory of public relations competence (Hazleton, 2006) recognizes context as a central feature of public relations message effectiveness, but the theory is grounded in the receiver's interpretation of the message and not the content of the message itself. But, Hazleton and Long's (1988) public relations process model provides a theoretical framework for understanding public relations messages. Thus, Hazleton and Long (1988) developed their model to provide a framework for the content of the strategic messages that are communicated by organizations to key publics.

The model explains public relations as an open system consisting of multiple dimensions and subsystems. Specifically, the public relations process consists of:

“(1) input from the environment (exogenous input) to the system, (2) transformation of inputs into communication goals, objectives, and campaigns, and (3) output, in the form of messages, to target audiences located in internal and external environments. Target audience reactions to public relations messages provide stimuli or further input for organizational maintenance or adaptation, refinement of the public relations process, and alteration of the environment in which the organization exists” (Hazleton & Long, 1988, p. 80).

The model explains that the practice of public relations is impacted by how internal and external organizational factors are transformed into communication goals, objectives, and campaigns. These factors can serve as constraints in the public relations decision process (Hazleton & Long, 1988). The decision process provides guidelines for an organization to achieve a goal through communication. Moreover, goals must be translated into strategies that define specific actions for the organization to achieve that goal (Hazleton, 1993). The translation of goals into strategies establishes a theoretical link between organizational variables and public relations strategy use (Werder & Holtzhausen, 2009).

According to Greene (1990), a strategy is a phenomenon that indicates a sequence of behaviors enacted in pursuit of an identified goal or objective. From a public relations perspective, strategies are manifested in the form of messages that are directed to specific audiences.

Hazleton (1993) stated that public relations communication consists of symbols encoded as an organizational message that is decoded by the public. In public relations, messages can be analyzed as symbolic communication that contains unique physical, social, and psychological properties: “physically, messages are tangible stimuli that can be perceived. Psychologically, meanings attributed to messages by receivers can be specified. Socially, significant others influence individual message evaluation processes” (Hazleton & Long, 1988, p. 85).

Guided by Zaltman and Duncan’s (1977) social change literature, Hazleton (1993) identified taxonomy of seven public relations strategies organizations most often use. These message strategies represent the public relations goals in terms of the messages’ impact on audiences and the meanings the audience attributes to the messages. Four of the strategies—facilitative, informative, persuasive, and coercive—include concepts for planned change. Two functions—bargaining and cooperative problem solving—incorporate Grunig and Hunt’s (1984) ideas about communication’s direction and purpose. Specifically, these strategies reflect characteristics of the two-way asymmetrical and two-way symmetrical models of public relations.

The strategies, however, are dictated by the situation; depending on the situation, organizations may use some of the strategies or none at all (Page & Hazleton, 1999). Past research only examined the socially-desired strategies (informative, facilitative, persuasive, and cooperative problem-solving) because these are the most frequently-used strategies by organizations (Page & Hazleton, 1999). Promise and reward, threat and punishment, and bargaining strategies are used the least because these strategies typically pit one organization against another, which may result in a conflict between the organization and its publics (Page, 2000a, 2000b). Promise and reward and threat and punishment strategies are both derived from Zaltman and Duncan’s coercive strategy. Because this study is testing the strategies disseminated through a social media channel, all seven strategies will be used in order to understand the effectiveness of each strategy. Hazleton (1997) defines the seven taxonomy as:

Informative strategy: An informative strategy is based on the presentation of objective facts that do not draw conclusions. Informative messages are typically characterized as using neutral language to aid comprehension.

Facilitative strategy: A facilitative strategy involves providing resources to the public to influence the desired public action. Resources can range from tangible items to directions for accomplishing a specific task. “Facilitative strategies are useful when the public recognizes a problem, agrees remedial action is needed, is open to external assistance, and is willing to engage in self-help” (Zaltman & Duncan, 1977, p. 132).

Persuasive strategy: The purpose of a persuasive strategy is to make an appeal to the public’s values or emotions. Persuasive messages are directive, in which there is a call to action issued. Persuasive strategies are useful when it is necessary for an organization to ask the public

to reallocate resources from one organization to their own. Typically, persuasive messages are used in order to gain favoritism for the organization's cause or issue.

Cooperative problem-solving strategy: This strategy reflects an organization's willingness to not only define a problem, but also find a solution for that problem. Characteristics of this strategy include an open exchange of information in order to identify what a problem may be and then sharing responsibility and position for that problem. Inclusive language is typically used (Zaltman & Duncan, 1977).

Promise and reward strategy: Promise and reward strategies are used when an organization promises a reward to a public if they act a certain way. According to Page and Hazleton (2000a, b), "this strategy uses positive coercion in that it implies that the source of the message controls an outcome desired by the receiver of the message" (p. 6).

Threat and punishment strategy: This strategy implies that the source of the message controls an outcome that is feared or disliked by the message's receiver. In other words, an organization may threaten the public if they do not do what the organization asks of them.

Bargaining strategy: This strategy equalizes the sender and receiver. Bargaining messages are characterized by the use of contrasting symbols, which differentiate groups such as "they" and "we." Strategic withholding of information and acts of deception are used in order to mislead others concerning a wide range of alternatives. Pitting one group against another group falls into this category.

Message Dissemination through Social Media

Social networking sites (SNSs) are defined as tools driven by user-generated content and user participation (Tredinnick, 2006). SNSs provide organizations efficient channels to interact with key publics and to foster engagement between these publics and the organization on topics of mutual interest (Bortree & Seltzer, 2009; Waters et al., 2009). Opportunities from SNS use include the chance for publics to connect with organizations and provide real-time feedback to the organization's announcements (Lovejoy, Waters, & Saxton, 2012). Organizations can share key information with connections in a quicker and more efficient fashion (Briones, Kuch, Liu, & Jin, 2011).

Carrera et al. (2008) explored the opportunities organizations had in using SNSs as a way to disseminate information. Carrera et al. (2008) discovered the most common forms of message dissemination on SNSs include posting links to external news items about the organization, posting photos or videos, and using the message board to post announcements and answer questions. Of the numerous SNS platforms, Facebook is used most by organizations to interact with their publics (Ebizmba.com, 2015). Several studies have looked at Facebook as a forum for organizations to engage and communicate with publics. Waters et al. (2009) examined how nonprofit organizations use Facebook to engage and to foster relationships with their publics. Although nonprofit organizations are increasingly using Facebook to communicate with key publics, results showed that they are doing it ineffectively. Specifically, most organizations believe that solely having a profile is enough to trigger engagement and participation, which is not the case. After examining 1,000 updates made by nonprofits, Saxton and Waters (2014)

determined that, based on the posts that have the most comments and likes, individuals prefer dialogic and certain mobilizing messages over informational or one-way messages.

Sung and Kim (2014) analyzed the impact of organizational approaches such as non-promotional messages and levels of interactivity on perception. They discovered that publics consider corporate activities on Facebook more negatively when they perceive the medium as a personal space. In other words, if a participant believed the organization was impeding on their personal space, the participant's perception of that organization was negative. But, if the organization was highly interactive with its publics on Facebook, public perception was positive.

Examining message strategies on Facebook in crisis situations has also gained considerable traction in recent years. Through the lenses of the situational crisis communication theory and interactivity, Ki and Nekmat (2014) examined the effectiveness of Facebook usage among *Fortune* 500 companies during crisis situations. The authors discovered that an organization's use of two-way communication messages was positively correlated to a favorable reaction by key publics. Regardless of the organization type or situation at hand, all of these studies provide empirical evidence that the more interactive and dialogic the message is over Facebook, the more likely key publics will react positively to the message.

Although Facebook is increasingly examined by public relations scholars and others with regard to the platform's possibilities as a message strategy dissemination portal, no research to date in this realm has specifically used the theoretical lens of Hazleton and Long's (1988) taxonomy.

Measuring Attitudes Using the Theory of Reasoned Action

The theory of reasoned action provides a model for measuring people's intentions, attitudes, and beliefs based on messages received (Fishbein & Ajzen, 1975). The theory assumes that people rationally calculate the costs and benefits of engaging in a particular action and think carefully about how others will view the behavior (Perloff, 2010). According to the theory, a person's intention to perform a behavior is the immediate determinant of a person's overt behavior. Behavioral intention is a function of an individual's attitude toward the behavior and an individual's subjective norm with respect to the behavior. Attitude toward a behavior simply refers to an individual's positive or negative evaluation of performing a behavior (Petty & Cacioppo, 1996).

Studies testing the theory of reasoned action support its ability to account for intentions and behavior in numerous areas. This includes the use of natural resources (Fulton, Manfredi, & Lipscomb, 1996) and birth control (Crawford & Boyer, 1985). Additionally, reviews of the theory research revealed that intentions to engage in volitional acts were typically predicted by the combination of subjective norms and attitude toward behavior.

According to Fishbein and Azjen (1975), measures such as attitude towards people and/or institutions affect behavior only through more proximal determinants of behavior specified by the model. The researchers noted, however, that several conditions affect the predictive power of the reasoned action model, including the action, target, context, and time between intention and behavior. In application, the beliefs, attitudes, and intentions measures must be similarly worded in terms of these factors. But, the complete model does not have to be used for the individual predictions to be supported.

In respect to evaluating attitude formation based on public relations message strategies, Werder (2003) tested the tenets of the theory of reasoned action by exposing participants to strategic messages made by activist organizations. She found that individuals form attitudes toward public relations strategies communicated by organizations. Specifically, attitudes toward message strategies influence salient beliefs, which in turn influence attitude toward behavior. Along with subjective norm, attitude toward behavior then influences behavioral intention.

Research Questions

According to Liu and Horsley (2007), the value of Hazleton and Long's (1988) public relations model "is that it provides a roadmap of the entire public relations process...[and] incorporates the importance of unique environments" (p. 382). Several studies have supported the validity of the public relations strategies taxonomy (Page, 2000a, b; Page & Hazleton, 1999; Werder, 2005). This study advances the model by exploring the proposed dimensions of the process and the message strategy taxonomy through the lens of Facebook. Although studies (e.g., Werder, 2006) have tested the public relations strategies taxonomy using traditional public relations tools (i.e., news releases), none to date have examined the messages over a more interactive medium. As social media becomes a major tool in building relationships between an organization and its key publics, it is important to see if Hazleton's (1993) public relations message strategies are effective in a social media context.

The purpose of this study is to empirically test the public relations process model on public attitude—with special attention paid to Facebook. The first research question explores the effect desirable message strategies will have on participant attitude. For this study, the desirable message strategies include facilitative, persuasive, promise and reward, and cooperative problem-solving strategies.

RQ1: How will desirable message strategies influence participant attitude?

The second research question examines the relationship between undesirable or disliked message strategies and participant attitude. For this study, the undesirable or disliked message strategies include threat and punishment and bargaining strategies.

RQ2: How will undesirable strategies influence participant attitude?

The third research question examines the relationship between the neutral message strategy and participant attitude. The neutral message strategy is the informative strategy. Although the informative strategy has been considered a socially-desired strategy in previous research (Page & Hazleton, 1999), the results of whether it produces positive or negative attitudes are inconclusive. Therefore, testing it on its own is important.

RQ3: What affect will the informative message strategy have on participant attitude?

One of the main purposes of this study is to examine how message strategies impact and influence public attitude when disseminated via Facebook. Therefore, the fourth research question explores the interaction effect between the influence of the medium and its impact on attitude.

RQ4: Does the dissemination of message strategies via Facebook impact the public's attitude?

Methodology

To test the research questions, this study utilized a between subjects, post-test only design with a control and two measures for each condition. The experiment tested the influence of the specific message strategies on participant attitude.

Stimulus Materials

To achieve the factorial design, seven treatment conditions and one control condition was created. Stimulus material used for the eight treatments included a fact sheet of a fictitious university. All participants were exposed to the fact sheet.

Following the fact sheet, participants in the eight treatments were exposed to two of 16 different Facebook messages from the university about two major announcements (one Facebook post per announcement). One announcement was in regards to the hiring of a new university president. The second announcement was in regards to the construction of a dormitory. Fourteen messages were created using the public relations strategy definitions discussed in the literature review. An eighth condition containing two generic Facebook messages about the university was created as an overall control condition. The manipulations for strategy type can be found in Table 1.

All messages were featured on the fictitious university's Facebook page and contained between 25 to 75 words. Each condition had two Facebook messages to serve as message repetition to safeguard against unique effects of a single message. All eight conditions used the same instrument to measure the variables of interest.

Table 1

Manipulations for Strategy Type

Manipulated strategy	Message 1 (new president announcement)	Message 2 (dorm construction announcement)
Informative strategy	“Northwest State University has hired President Richard Lewis as the 14th President in school history. Mr. Lewis was the past president at the University of Idaho from 1999 to 2013. Mr. Lewis earned his Bachelor’s and Master’s in Education from Purdue University.”	“Northwest State University is building a new dormitory for incoming freshmen. The dormitory will be named McArthur Towers after Mr. and Mrs. James McArthur. Northwest State alumni James and Alice McArthur gave a donation of \$3 million to the school for the completion of the dormitory.”
Facilitative strategy	“Northwest State University recently hired President Richard Lewis as the 14th President in school history. Mr. Lewis was hired by a statewide president search committee and appointed by the governor. If you are a concerned party and wish to comment on this hiring, we suggest you contact the state capitol at 1-512-463-5495.”	“Northwest State University has broken ground on the new McArthur Towers student residence facility. The McArthur Towers is being built by the Anderson Construction company. If you are a concerned party and wish to comment on the construction, we suggest you contact this company toll-free at 1-888-332-4357.”
Persuasive strategy	“We are very excited to announce the hiring of President Richard Lewis as our 14th president in school history! Mr. Lewis has a great track record and will do great things for our university. This hiring is for you—our valued students. Support Northwest State’s commitment to excellence.”	“We believe that building a state-of-the-art facility for our beloved students is a major priority. Through the generous donation of the McArthur family, we are pleased to announce that we have broken ground on the new McArthur Towers! This facility is for you—our valued students. Support Northwest State’s commitment to excellence.”

Table 1 (*Continued*)

Manipulated strategy	Message 1 (new president announcement)	Message 2 (dorm construction announcement)
Cooperative problem-solving strategy	<p>“Northwest State was not performing at the level that we hoped. Therefore, we have hired Richard Lewis as our 14th president. With Mr. Lewis’ leadership, our great university will work with local businesses and the local community to push this university into the future. Together, Northwest State University will soon become a top university in the state and nation.”</p>	<p>“Due to complaints from the student body that there were not enough opportunities to live on campus, with the help from the McArthur family, we have broken ground on the new McArthur Towers. Through meetings with the student council, together, we will create a living experience that is like no other.”</p>
Promise and reward strategy	<p>“As a university-wide initiative, Northwest State’s goal is to provide students with the best environment to succeed in academics. To improve educational efforts, we have hired Richard Lewis as our 14th president. To show support for better education, Mr. Lewis promises to donate 10% of his salary back to the university. Go Rams and support President Lewis.”</p>	<p>“We believe the student body has identified some important issues concerning living conditions on campus. Northwest State promises to build a new dorm facility that will adhere to your needs. The new facility will include state of the art technology and be a place for students to call home. Go Rams and support the new dorm facility.”</p>

Table 1 (*Continued*)

Manipulated strategy	Message 1 (new president announcement)	Message 2 (dorm construction announcement)
Threat and punishment strategy	“Northwest State believes hiring President Richard Lewis is the best option for our university to grow. Although he was not the popular choice by students, keeping the former president would have resulted in higher tuition costs without corresponding improvements in academic quality. We believe keeping the former president would not serve the interests of our students. Support President Lewis.”	“Northwest State believes creating a new dormitory for students would create serious problems for the economy of the school. The result of complying with student’s demands for more state-of-the-art facilities would increase tuition without corresponding improvements in academic quality. We believe building a new dormitory would not serve the interests of our students. Go Rams.”
Bargaining strategy	“We feel that keeping the former president and his unrealistic salary demands will result in tuition increases for you – our valued students. We feel your input is critical to the satisfactory resolution of this matter. In an effort to better understand your needs and concerns, we are soliciting your comments. Please contact the president’s office at 1-612-346-8914.”	“We feel that building a new residence facility for students will result in tuition increase for you – our valued students. We feel your input is critical to the satisfactory resolution of this matter. In an effort to better understand your needs and concerns, we are soliciting your comments. Please contact the housing office at 1-612-346-7594.”
Control message	“Northwest State University is a highly competitive public state university with an enrollment of 33,000 students. There are more than 30 colleges ranging from Agricultural Sciences to the Arts. We host 60 research centers and institutes.”	“There are more than 516 student clubs and organizations at Northwest State University. There are 11 Panhellenic Sororities and 24 InterFraternity Council Fraternities. Approximately 20% of students live on campus.”

Instrumentation

After reading the university fact sheet and the two Facebook message posts from the university, participants were asked to complete an online questionnaire containing items that measure attitude and beliefs. Attitude was measured in this study using items adapted from measures traditionally used to test the theory of reasoned action (Fishbein & Ajzen, 1975). Specifically, 7-point semantic differential scales were created to measure attitude toward strategy. It was measured by using items similar to: 1) Messages from Northwest State University are unbalanced/balanced; and 2) My attitude toward situations involving Northwest State University is negative/positive. Seven-point Likert scales were created to measure salient beliefs and attitude toward Facebook. The Likert scale ranged from “strongly disagree” to “strongly agree.”

Salient beliefs were measured based on items evaluating the participants’ feelings toward university policy and structure. It was measured by using items similar to: 1) I believe that higher education is important; and 2) I believe that communication from the university aids academic success.

Finally, this study explored if using Facebook to disseminate the message strategies had an impact on the participants’ attitude. It was measured by using items similar to: 1) I believe reading the message on Facebook was easy; and 2) I believe the university’s use of Facebook to announce the messages was appropriate. In addition, participants were asked to provide demographic information. Data collected including gender, age, ethnicity, academic major, and year of study.

Participants

Institutional Review Board approval of the study’s stimuli, protocol, data collection procedure, and participant selection was granted prior to data collection. The research participants ($N = 267$) were recruited from a population of undergraduate students (62 males, 205 females) enrolled at a large southwestern university. Participants’ ages ranged from 17 to 40 years and averaged 21.25 years ($SD = 3.33$) Students were recruited through the Sona research participation system.

Procedure

Sona directed participants to Qualtrics to complete the study online. Qualtrics randomly assigned participants to one of the eight conditions. The study took participants approximately 15 to 20 minutes to complete and was administered over the course of two weeks. The first screen participants saw on Qualtrics was an informed consent message notifying them that the study was voluntary. After agreeing to the parameters of the study, the participants were introduced to a fact sheet about a fictitious university. The factsheet’s purpose was to provide participants familiarity with the university. Following the factsheet, participants were asked to read two Facebook messages on a screenshot of the university’s Facebook page. The design of the page and the information included (such as the “About” blurb, photos, and the amount of “likes”) were the same for every condition. The only difference was the messages highlighted about the announcements (depending on the random assignment). For the treatment conditions, the first Facebook post focused on the hiring of a new president. The second announcement was about the construction of a new dormitory. The participants in the control group saw two generic Facebook posts about the fictitious university.

Manipulation Check for Strategy Type

Prior to hypotheses testing, a manipulation check was conducted to assess the degree to which the fictitious university's response message treatments agreed with the public relations strategy definitions presented in Hazleton's (1993) taxonomy. An instrument was developed and administered to undergraduate students not in the hypothesis testing. The manipulation check utilized a balanced repeated measures design ($N = 41$) to examine aspects of agreement.

To determine if the correct message strategy employed was identified, participants were asked to rate agreement with response items reflecting the use of the strategies on a 5-point Likert-type scale from 1 (strongly agree) to 5 (strongly disagree). For each response message, mean differences were compared across strategy definitions. Mean differences were significant at the .05 level.

A repeated measures analysis of variance (ANOVA) was conducted with the response message as the within-subjects factor and strategy definition as the dependent variable with seven levels to compare the means for each message across the seven strategy definitions.

The results of the manipulation check indicated mixed support for the manipulation of public relations strategy type. Overall, the manipulations for the informative ($F(2,10) = 62.57, p < .001$) and cooperative problem-solving strategies ($F(2,10) = 30.26, p < .001$) were the most successful, showing high level of agreement between the response message and strategy definition. The facilitative ($F(2,10) = 7.10, p = .01$) and promise and reward strategies ($F(2, 10) = 4.32, p = .05$) were also successful showing significance when testing agreement. The persuasive, bargaining, and threat and punishment strategies did not show significance, indicating that the three response messages used may not be obvious representations. The results may be due to the low number of participants used for the manipulation check. Despite the mixed findings, the decision was made to continue the experiment to gain a greater understanding of the public relations strategy taxonomy for future research use.

Results

Data Reduction

In order to discover the factor structure underlying participant response to the dependent measures, a principal components analysis with varimax rotation was conducted. Cronbach's alpha was used to assess the internal consistency of the multi-item indexes used to gauge the attitude and belief measures. The analysis yielded six components with eigenvalues greater than 1. Examination of items loadings revealed that two items did not load cleanly into any of the components and two items cross-loaded on two components. These were removed and the procedure was repeated, again yielding six components.

The results of the principal components analysis can be found in Table 2. Responses to items representing each factor were internally consistent. The first, termed *president attitude* (eigenvalue = 7.59, 39.9% variance explained, $\alpha = .97$), which explained the participants' attitude toward the president scenario in the stimuli, consisted of three items. The second, *university attitude* (eigenvalue = 2.56, 13.5% variance explained, $\alpha = .92$), which explained the participants' attitude toward the university featured in the stimuli, consisted of four items. The third, *dorm attitude* (eigenvalue = 1.61, 8.5% variance explained, $\alpha = .96$), which explained the participants' attitude toward the dorm scenario in the stimuli, consisted of three items. The fourth, *belief* (eigenvalue = 1.48, 7.8% variance explained, $\alpha = .87$), which explained the

participants' salient beliefs, consisted of three items. The fifth, *message attitude* (eigenvalue = 1.23, 6.5% variance explained, $\alpha = .79$), which explained the participants' attitude toward the messages' characteristics, consisted of three items. The sixth, *Facebook attitude* (eigenvalue = 1.04, 5.5% variance explained, $\alpha = .65$), which explained the participants' attitude toward the use of Facebook as the medium, consisted of three items.

Table 2

Item loadings for dependent measures

Item	President attitude	University attitude	Dorm attitude	Beliefs	Message attitude	Facebook attitude
Att pres favorable	.90					
Att pres positive	.86					
Att pres good	.89					
Att NSU favorable		.85				
Att NSU positive		.86				
Att NSU good		.86				
Att situations favorable		.57				
Att dorm favorable			.91			
Att dorm positive			.89			
Att dorm good			.89			
Believe in education				.86		
Believe in community				.89		
Believe in relation dept.				.89		
NSU msg informative					.74	
NSU msg trustworthy					.79	
NSU msg credible					.81	
Facebook easy						.69
Facebook use appropriate						.77
Facebook preferred medium						.79

Note: Items loading over .50 were kept.

Research Question 1

The first research question examined the relationship between the desirable message strategies and participant attitude. To test this relationship, a series of one-way ANOVAs were conducted. Results indicated that only one item was significant; the item measuring message attitude, $F(4, 163) = 3.84, p = .005, \eta^2_p = .09$. Results of the one-way ANOVA tests are shown in Table 3.

To examine specific differences in means among desirable strategies for the message attitude item, a post-hoc multiple comparisons test using Bonferroni's correction for family-wise error was consulted. The test indicated that participants who received no message type (e.g., the control group) reported more positive attitudes toward the message ($M = 5.46, SD = .93$) compared to those who received the facilitative strategy ($M = 4.61, SD = 1.07$) or cooperative problem-solving strategy ($M = 4.73, SD = .90$). However, the test found no difference between the other treatment groups.

These results suggest that desired public relations strategies disseminated over Facebook do not influence attitude except for attitudes toward the messages themselves. In fact, in some instances, the desirable message strategies may have diminished participant attitude toward the message.

Table 3

Analysis of Variance in Attitudes across Desired Public Relations Strategies

<i>Source</i>	<i>df</i>	<i>F</i>	η^2	<i>p</i>
Message attitude	4, 163	3.84	.09	.005
University attitude	4, 163	1.77	.04	.14
President attitude	4, 163	1.21	.03	.31
Dorm attitude	4, 163	1.41	.03	.23

Note: Significance at the $p < .05$ level.

Research Question 2

The second research question examined the relationship between undesirable message strategies and participant attitude. To test this relationship, a series of one-way ANOVAs were conducted. Results indicated that all items measuring attitude except dorm attitude were significant. Results of the one-way ANOVA tests are shown in Table 4.

To examine specific difference in means among undesirable strategies for the three items, a post-hoc multiple comparisons test using Bonferroni’s correction for family-wise error was consulted. The test indicated that those who received no message type (i.e. control group) reported more positive attitudes toward president ($M = 4.50, SD = .20$), message ($M = 5.46, SD = .93$) and university ($M = 4.92, SD = .20$) compared to those who received the bargain strategy ($M = 3.60, SD = .20; M = 4.36, SD = .20; M = 4.10, SD = .20$). For attitude toward message, there was a difference between the control group and those who received the threat and punishment strategy ($M = 4.70, SD = .20$). However, the test found no difference between the two treatment groups.

These results suggest that undesirable public relations strategies disseminated over Facebook influence attitude.

Table 4

Analysis of Variance in Attitude across Negative Public Relations Strategies

<i>Source</i>	<i>df</i>	<i>F</i>	η^2	<i>p</i>
Message attitude	2, 96	7.76	.14	.001
University attitude	2, 96	4.92	.09	.009
President attitude	2, 96	5.52	.10	.005
Dorm attitude	2, 96	2.91	.06	.06

Note: Significance at the $p < .05$ level.

Research Question 3

The third research question examined the relationship between the informative or neutral strategy and participant attitude. To test this relationship, a one-way ANOVA was conducted. Results indicate that all items measuring attitude were not significant. Results of the one-way ANOVA tests are shown in Table 5. These results suggest that informative strategies disseminated over Facebook do not have affect participant attitude.

Table 5

Analysis of Variance in Attitude across Neutral Public Relations Strategies

<i>Source</i>	<i>df</i>	<i>F</i>	η^2	<i>p</i>
Message attitude	1, 65	2.00	.03	.16
University attitude	1, 65	.01	.00	.92
President attitude	1, 65	1.87	.03	.18
Dorm attitude	1, 65	.47	.01	.50

Note: Significance at the $p < .05$ level.

Research Question 4

The fourth research question explored whether the use of Facebook as the message strategies dissemination portal affected public attitude. To test this research question, a one-way ANOVA was conducted. Results revealed that attitude regarding Facebook approached significance, $F(7, 260) = 1.944, p = .06, \eta^2_p = .05$.

An evaluation of mean scores indicated that the persuasive strategy ($M = 5.31, SD = 1.04$) provided the most positive agreement with participant attitude. The results suggest that the use of Facebook to disseminate message strategies does not affect participant attitude.

Discussion and Practical Implications

The expectations in this study were that the types of messages disseminated by an organization and the medium used would influence the participants' attitudes. Interestingly, positive and neutral messages did not have a significant effect on participant attitude, whereas negative messages did. Past research using message strategies derived from Hazelton and Long's (1988) public relations process model only utilized the desired message strategies as these are the ones most used by practitioners (Page & Hazleton, 1999; Page, 2000a). Results from these studies showed desirable message strategies yielding positive participant attitude. Therefore, the first research question examined the effects of the desirable message strategies disseminated over Facebook on attitude. The results revealed that for participants who were exposed to desirable messages, their attitude toward the message strategy was the only significant relationship.

One possible explanation is that the participants did not have an established relationship with the organization, therefore they did not care enough about the situations revealed in the stimulus to form a positive attitude. In other research contexts testing attitude formation with involvement levels, such as consumer behavior (e.g., Priluck & Till, 2004), studies have concluded that participants typically form more positive attitudes toward products or situations they are familiar with compared to newly-introduced situations.

The one significant result found in testing RQ1 was that message strategies influence attitude toward the strategy. This result supports previous research (Werder, 2003) that found individuals form attitudes toward the message type itself. And, it indicates that although participants may not care positively about the situation being communicated via Facebook, the context of message communicated does matter.

The results of RQ2 revealed that negative messages had a significant impact on participant attitude. In past research, because organizations use desired strategies most often, negative strategies were not examined (Page & Hazleton, 1999). This approach by practitioners may be misguided as the results of this study illustrate the impact negative messages have on attitude, especially through a social media channel. This result is not too surprising, however. Valenzuela, Park, and Kee (2009) discovered that the more participants use Facebook, the more trust participants have toward the message sender. And, the less someone is committed to a cause or organization, the more they will believe negative messaging about the organization (Ahluwalia, Burnkrant, & Unnava, 2000). Therefore, an undergraduate participant who is most likely a high-level Facebook user, will have a negative attitude toward a negative-toned message when the message is coming from an unfamiliar source. As practitioners utilize Facebook more, they should be aware of the language used in their messages because their publics may not receive it the way they intend.

This finding also suggests that practitioners should consider using negative messages, depending on the message content and audience targeted. For instance, if an organization wants to encourage its publics to think negatively about a competitor, disseminating a negative message through Facebook may be appropriate. Also, if an organization is trying to break into a new environment or audience segment, negative messaging may prove to be more persuasive given the fact that the new target public may not yet be committed to the organization,. And, specifically regarding a higher education setting, if students are the targeted public, negative messages may grab their attention more effectively.

RQ3 examined the relationship between the informative or neutral strategy and participant attitude. Based on the findings in this study, the informative strategy did not have a relationship with participant attitude. This finding may provide important guidance to organizations that want to use the informative strategy, which was mentioned in previous research as one of the most utilized strategy types (Page & Hazleton, 1999). Based on this finding, the informative message strategy may not be appropriate to use if an organization is trying to affect attitude through Facebook. By only stating facts and neutral language, participants may not feel that enough information is being provided to affect their attitude.

The result of the final research question revealed that participant attitude toward Facebook use was not significant, which is an important finding for practical implications. As more organizations utilize Facebook to disseminate messages, this study reveals that users do not view the medium as an impactful influencer on their attitude. This may not be surprising because the participants of this study were college students who are heavy Facebook users. For college

students, seeing a message on Facebook is most likely to be commonplace, therefore the medium in this case would not negatively or positively affect their attitude. If this study was conducted with a sample including novice Facebook users, the results may have been different. But, when communicating with college students, Facebook is accepted as a common tool to receive news and information.

Overall, this study provides evidence that when using Facebook, tailored messages are important. Depending on the message used and the public targeted, the message strategy should be paid close attention. Compared to similar studies testing message strategies over traditional channels (Werder 2006; Werder & Schuch, 2008), the results of this study provide support that messages must be tailored to fit the medium. Werder and Schuch (2008) discovered that desired message strategies were more influential on attitude through traditional media channels, while this study discovered that the negative messages were more influential on attitude via Facebook. Therefore, practitioners cannot create one message for all channels and assume it will impact the targeted publics the same.

Limitations

As with any study, this study is not free of limitations. One limitation stems from the instrumentation used to test the variables of interest. Using two messages usually decreases bias produced by a singular message, but testing them together is problematic. Even though the results of this study provide a preliminary understanding of the relationship between public relations message strategies on Facebook and public attitudes, future research should focus on developing and using valid and reliable multi-item scales for each of the measures used in this study. This would lead to a more accurate assessment of the effects of public relations strategies on public attitude.

Also, the instrumentation outlined a fictitious university that the participants did not have any previous affiliation with. Using a fictitious organization helped minimize pre-existing attitudes toward the organization, but the materials used may not have provided enough background and identity for the participants to form decisive attitude levels. And, due to the setup of the stimulus materials, the message strategies could not be separated from the organization's actions in the study. Specifically, the actions described in the messages are being tested just as much as the messages are. This is due to different groups seeing different actions described in the message.

The second limitation of this study stems from the sample selected. Participants of this study were appropriate in the sense that messages about a university are relevant to college students. But, because college students use Facebook more than any other demographic, the results regarding Facebook use may be skewed due to the nature of the participants. And, this overuse of the medium may have caused the users to not have an attitude toward the medium's use. Future research should sample participants who are not Facebook users or are Facebook novices to see if usage intensity plays a factor in shaping attitudes.

The overwhelmingly female composition of the sample is also problematic. Research has shown that a gender imbalance in experimental designs can hinder the assurance of equivalence of groups and contribute to bias associated with gender differences (Stout, Wirtz, Carbonari, & Del Boca, 1994). The large disparity in gender also affects the representativeness of the sample

compared to the overall population of college students. Although women do outnumber men who attend college (Francis, n.d.), the numbers are not as extreme as what is sampled in this study.

Presenting information to students about a university that does not impact them is another limitation. In other words, most college-aged students will not be invested in the events of another university. In fact, previous research has found that commitment is an important moderator in participant response to negative information. Specifically, participants who are less involved with the information are more likely to be influenced by negative messaging (Ahluwalia et al., 2000). Future research should sample participants that are about to enter college, such as high school seniors or parents of college-aged students.

Another limitation is the use of the self-report data collection method. Self-report is inherently subjective, and is therefore contingent on the mood, personality, and psychological state of the participant at the time of the study. The possibility that participants may have misunderstood the question or report socially desirable yet inaccurate responses exists.

The experimental nature of the study also poses a limitation. The fact that the posts were presented in a static nature and did not specifically populate within a feed could have caused bias. Facebook users are exposed to messages on their wall. The highlighted posts may not be something that users would see or pay attention normally.

Finally, the results of the manipulation check for strategy type suggest that the strategic response messages used in this study required further testing to ensure they adequately reflect the definitions articulated in Hazelton's (1993) taxonomy of public relations strategies. Further research should examine strategy use and types in a variety of settings using multiple methodologies to gain the appropriate amount of understanding of how message strategies contribute to the public relations process.

Conclusion

Despite its limitations, the results of this study expand upon existing research on the influence public relations strategies have on participant attitude. It also constitutes an important step in understanding the effect messages have when disseminated through Facebook. The findings of this study provide conflicting results from past research testing Hazelton's (1993) taxonomy, which indicates that practitioners must use caution when utilizing Facebook to disseminate messages. In past studies, desired and neutral message strategies showed a positive relationship with participant attitude, but this study did not produce the same result. Although the mean scores trended positive for these strategies, the impact was not significant. On the other hand, negative messages, which are typically not tested, did have a significant relationship with participant attitude. Due to these results, practitioners must be cognizant of the message's content and the situation it covers when using Facebook to communicate with key publics. medium; therefore, the strategy used to communicate the message is just as important as the content.

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