

2012

From the viewbook to Facebook: a content analysis of universities' Facebook posts to measure organization-public relationships

Aariel Roxanne Charbonnet

Louisiana State University and Agricultural and Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_theses



Part of the [Mass Communication Commons](#)

Recommended Citation

Charbonnet, Aariel Roxanne, "From the viewbook to Facebook: a content analysis of universities' Facebook posts to measure organization-public relationships" (2012). *LSU Master's Theses*. 842.
https://digitalcommons.lsu.edu/gradschool_theses/842

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

FROM THE VIEWBOOK TO FACEBOOK:
A CONTENT ANALYSIS OF UNIVERSITIES' FACEBOOK POSTS TO MEASURE
ORGANIZATION-PUBLIC RELATIONSHIPS

A Thesis

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

in

The Manship School of Mass Communication

by
Aariel Charbonnet
B.A., Hampton University, 2008
August 2012

DEDICATION

I dedicate this thesis to my family for their unconditional support and encouragement. Thank you for believing in me when I didn't always believe in myself.

For William and Roxanna Charbonnet, Kirsten Hudnall, and the late Robert Cuiellette.

ACKNOWLEDGEMENTS

I offer my sincerest gratitude to my committee members, Dr. Meghan Sanders, Dr. Lisa Lundy, and Dr. Nicole Dahmen, for their patience, insight, and guidance during this process. I would like to give special thanks to my chair, Dr. Sanders. You pushed me, and I needed to be pushed. Thank you. I am forever grateful for your advice, wealth of knowledge, and commitment to this project.

TABLE OF CONTENTS

DEDICATION.....	ii
ACKNOWLEDGEMENTS.....	iii
ABSTRACT.....	v
INTRODUCTION.....	1
REVIEW OF LITERATURE.....	6
METHODOLOGY.....	29
RESULTS.....	36
DISCUSSION.....	58
CONCLUSION.....	66
REFERENCES.....	67
APPENDIX	
A CODESHEET.....	72
B CODEBOOK.....	74
C VALID MEASURES OF HON AND GRUNIG'S RELATIONSHIP INDICATORS.....	78
D MEASURES FOR RELATIONSHIP INDICATORS.....	80
E OPERATIONALIZATION OF RELATIONSHIP INDICATORS (SUNG & YANG, 2008).....	81
VITA.....	82

ABSTRACT

This study examined StudentAdvisor.com's top 25 social media colleges to determine the ways in which these universities communicated with their various publics on Facebook. Using Hon and Grunig's relationship indicators and Grunig's models of public relations as frameworks, a quantitative content analysis was performed. The study considered each individual post on the universities' Facebook walls (n=709) over the course of a three-week period. The study's research questions were based on whether the posts promoted Hon and Grunig's relationship indicators, as well as what public relations models the posts resembled. Results indicated that posts were least likely to resemble the two-way symmetrical model and seldom promoted any of the relationship indicators. Theoretical and practical implications are discussed.

INTRODUCTION

By the numbers, enrollment at higher education institutions has reached an all-time high. In the last decade, college student enrollment climbed 38 percent, and nearly 70 percent of 2010 high school graduates were enrolled in American colleges or universities. In 2009, more than 40 percent of 18-24 year-olds were enrolled in a post-secondary institution, the highest level ever recorded. Moreover, the percentage of college students who are Hispanic, Asian/Pacific Islander, and Black has increased. From 1976 to 2009, the percentage of Hispanic students rose from 3 percent to 12 percent; the percentage of Asian/Pacific Islander students rose from 2 percent to 7 percent; and the percentage of Black students rose from 9 percent to 14 percent (U.S. Department of Education, 2011).

Behind the enrollment numbers, however, a different narrative reveals itself. Sharply rising college tuition expenses and increasing student debt characterize 21st century higher education. The cost of a college education at higher education institutions has tripled since 1980 in inflation-adjusted dollars. In the 2010-2011 academic year, the average full-time undergraduate student paid \$7,605 in tuition and fees at public four-year colleges and universities (before grant aid). The figure is even bleaker at private colleges and universities, where 2010-2011 average tuition and fees amounted to \$27,293 (Taylor et al., 2011).

To accommodate the skyrocketing cost of college tuition, more students than ever (60% of degree recipients in 2008) borrow to finance their education. The average four-year college student with an outstanding loan graduates with a record balance of \$23,000. Outstanding student loan debt now accounts for 5 percent of all outstanding debt in the household sector, more than double its share a decade ago (Taylor et al., 2011)

The perception of higher education in the United States has also waned. More than half (53%) of respondents in Pew's 2011 study "Is College Worth It?" said the higher education system does a fair or poor job providing value to students given the amount of money they pay for a college education. The nation's college and university presidents surveyed in the Pew study shared some of the public's underwhelming views of higher education. A sizable minority (38%) said the U.S. higher education system is headed in the wrong direction. In his 2009 State of the Union address, President Obama set an ambitious goal for the United States to lead the world by 2020 in the share of young adults who have a college degree. Nearly two-thirds of college presidents surveyed said that achieving this goal is unlikely.

To remain desirable to the steadily increasing prospective student population and improve their reputation in a competitive academic market (not to mention a dismal economic climate), today's higher education institutions are aggressively utilizing public relations strategies and tactics.

In public relations, a fundamental theory is Grunig's (2002) excellence theory. The theory suggests that positive, long-term relationships represent the value of public relations to organizations because these relationships are assumed to encourage supportive behaviors and prevent unsupportive behaviors. Organizations that communicate effectively with publics develop better relationships because they understand one another and are less likely to behave in ways that have negative consequences on the other's interests. The relationship that an organization cultivates with its publics, also called an organization-public relationship (OPR), therefore, forms the core of public relations.

In this study, several OPRs (university-student, university-alumni, university-faculty, etc.) are evaluated; however, the university-student relationship is the most crucial to a

university's livelihood. The relationship essentially generates student loyalty. Hennig-Thurau, Thorsten, Langer, & Hansen (2001) argued that a loyal student might continue to support his or her higher education institution even after graduating by providing financial support (donations, research projects), through word-of-mouth promotion to other students, and by offering cooperative services, such as student placements or visiting lectures.

Measuring the relationship outcomes or indicators of a positive OPR is critical. This study employs four of Hon and Grunig's (1999) six relationship indicators to evaluate the relationship between a university and its publics. They are as follows: control mutuality, trust, commitment, and satisfaction. Measuring an OPR assumes, however, that a two-way relationship indeed exists. In previous years, universities relied almost exclusively on one-way public relations and communication methods to engage its publics. Universities used brochures and viewbooks to attract, recruit, and retain students and faculty. The organizations strove to "push" information to its publics, rather than engage in dialogue with them.

The Internet changed everything. Starting in the late 1990s, email and websites allowed higher education institutions to use two-way communication methods. Administrators could promote universities on their websites and use email, online chat rooms, and discussion boards to engage in dialogue with their various audiences. The advent of social media in the 21st century has magnified universities' two-way communication methods significantly. Post-secondary institutions now tweet and post Facebook statuses to connect with their younger, more technologically-savvy publics. Universities' posts/tweets range from motivational messages (ex. Keep up the good work on midterms!) to informational content about campus life. This represents a drastic change from the days of one-way communication in the form of college viewbooks and brochures.

Social media create an environment of intimate interaction regardless of time and space, which fosters a connection between individuals and groups with organizations (Gilpin, Palazzolo, & Brode, 2010, p. 259). Moreover, social media allow “interpersonal dialogue between and among users and has offered new opportunities for both institutions and individuals to connect with stakeholders and each other” (Gilpin et al, 2010, p. 259). Because social media enable direct communication sans a gatekeeper, the online connection is “collaborative, participatory culture where users feel comfortable expressing themselves, creating and sharing their creations and communicating with a variety of people across the world” (Henderson & Bowley, 2010, p. 239.)

While the effect of social media on the business world has been addressed extensively, the impact of social media on higher education remains hazy. One fact is certain: social media, particularly Facebook, play an overwhelming role in college students’ lives. Between 85 and 99 percent of college students use Facebook (Hampton, Goulet, Rainie, & Purcell, 2011). It seems appropriate, then, to examine the social media public relations efforts of higher education institutions.

The objective of this study was to investigate how universities employed Facebook to communicate with their various publics, including current and prospective students, alumni, the general public, faculty/staff, and multiple audiences. Using Grunig’s models of public relations and Hon and Grunig’s organization-public relationship indicators as frameworks, the study measured the online relationship between 25 universities and their publics. More specifically, the study considered each post on the universities’ Facebook walls (n=709) over a three week period. A quantitative content analysis of the posts was conducted to determine: 1. the audience for

which the post was intended, 2. whether the posts resembled one or more models of public relations, and 3. whether the posts promoted one or more of the relationship indicators.

This study has important practical and theoretical implications. An effective, successful relationship between a university and its students promotes positive educational outcomes, such as student loyalty, increased student involvement, and positive communicative exchanges between students and other publics. These outcomes, in turn, contribute to higher enrollment, increased donor funding, and higher retention rates among students (Hartley & Morpew, 2008).

Moreover, universities must strive to remain relevant and attractive in order to recruit prospective students and retain current ones. New ways of marketing and innovative means of public relations should be welcomed. This statement is particularly meaningful in light of the less than favorable climate currently surrounding higher education and the virtually universal usage of social media among current and prospective college students. Using social media, then, to cultivate relationships and maximize universities' appeal to various publics is ideal. Institutions of higher learning would be remiss to disregard the power and reach of social media.

REVIEW OF LITERATURE

Public Relations and Social Media

Given the relative newness of social media, research examining the relationship between social networking sites and public relations (in the business, academic, and nonprofit sectors) is in its infancy. Waters, Burdett, Lamm, and Lucas (2009) examined more than 275 nonprofit organizations' Facebook profiles to determine how they were advancing their organization's mission and programs. The scholars found that most nonprofits did not use Facebook to distribute organizational news. They rarely posted multimedia files, press releases, or summaries of their campaign, and they did not provide methods for how supporters can get involved in the organization. "Nonprofit organizations recognized the rapid expansion of the social networking phenomenon, and they wanted to be on Facebook. However, they were not taking advantage of all the options the site had to offer their relationship cultivation efforts" (Waters et al., 2009, p. 105).

Sisco and McCorkindale (2010) conducted a content analysis of the Twitter and Facebook pages of the top 15 breast cancer charities and analyzed them according to Kang's (2010) credibility scale and Rawlins' (2009) transparency scale. The number of Facebook "likes" and posts, as well as the number of Twitter "tweets" and followers, were coded for each charity over a one-month span. Among other results, the scholars found that survey participants viewed organizations that tweeted more, had more "likes," more followers, and more tweets overall as more transparent and credible based on activity alone. Interestingly, Sisco and McCorkindale (2010) also concluded that merely maintaining a social media presence is not sufficient. High-quality interactions are necessary to retain individuals.

In the business world, most studies have focused on blogs. Cho and Huh (2007) found that only 37 out of 500 companies they examined maintained corporate blogs. Most blogs had interactive features incorporating different user-friendly navigation tools. They also provided comment functions and offered blog rolls.

McCorkindale (2010) analyzed the Facebook member and fan pages of 55 Fortune 500 companies and found that the organizations were not using Facebook for dissemination of information. More than three-quarters of Facebook pages did not have any recent news or updates in the mini-feeds. Results indicated that when Facebook pages did provide corporate information, the content was not in-depth. Additionally, the communication content of the Facebook pages was typically one-sided, in the public's favor. The companies rarely posted anything, opting not to take advantage of Facebook's two-way, relationship building capabilities.

In light of this study's higher education context, not only does the relationship between public relations and social media need to be examined but also the connection between college students and social media.

College Students and Social Media

The "Millennial Generation," also known as "Generation Y," "Generation Next," or the "Digital Natives," exhibits an array of traits that differ significantly from previous generations (Cao, 2010). Strong in numbers, with a population between 75 million and 100 million nationwide, this group embraces diversity more and is more global-centric, socially responsible, and civic-minded than other generations. Today's generation of college students, born anywhere between 1977 and 2003, prefers multi-tasking and bores easily. This cohort desires a fun, relaxed environment, as well as a relaxed dress code, team collaboration, and flexibility (Cao, 2010).

One of the most conspicuous traits of the “Millennial Generation” is its affinity towards social media. “They surf the Web instead of flipping through the pages of a newspaper; they download music instead of buying CDs; they Facebook instead of emailing; they even promote themselves and their ideas through personal blogs” (Barnes, 2010, p. 1). Facebook is the most popular social media website among college students, and research shows that anywhere between 85 and 99 percent of college students use the site (Hampton et al., 2011). Teens (ages 12-17) account for 73 percent of Facebook users (Hampton et al., 2011).

The numbers are even more pronounced among prospective and entering college students. The 2011 E-Expectations study, conducted by Noel Levitz, the National Center for College & University Admissions, and OmniUpdate, found that Facebook is the primary social media resource among prospective students. Eighty percent of the study’s respondents reported having a Facebook account, and 27 percent said they had viewed a college Facebook page. Moreover, the survey revealed that entering college students prefer social media in university communication, and social media, along with word-of-mouth, are the primary channels through which they have received information about school events and activities. One of the study’s final recommendations was noteworthy:

“Post content that invites students and parents to interact with you and draws them into your communications. Keep that content less formal and marketing-oriented so that it sounds more like a conversation than a sales pitch. Even better, consider creating your own social network where prospective students and parents can interact with current students, faculty, and admissions personnel. Three- quarters of students polled said they would join private social networks for campuses, so take advantage of that eagerness to network online” (Noel Levitz et al., 2011, p. 12).

College students' relationship with social media, particularly Facebook, for educational purposes has been met with mixed results. Mason and Rennie (2008) argued that social networking applications share many of the desirable traits of good, official education technologies. "The conversational, collaborative and communal qualities of social networking services are felt to mirror much of what we know to be good models of learning, in that they are collaborative and encourage an active participatory role for users" (Maloney, 2007, p. 26). Similarly, Bugeja (2006) argued that social networking offers the opportunity to re-engage individuals with learning and education, promoting a "critical thinking in learners," (p.1) which is one of the traditional objectives of education.

Conversely, scholars have also raised concerns about the detrimental effects of social media on educational prowess. Ziegler (2007) argued that social networking sites may encourage the intellectual and scholastic "de-powering of a 'Google generation' of learners incapable of independent critical thought" and accelerate the onset of the "mis-education of Generation M" (p.69). A 2012 Pew survey about the future of Internet found a fairly even split among technology experts and stakeholders regarding whether the younger generation's "always-on" connection to people and information will turn out to be a net positive or a net negative by the year 2020. Forty-two percent of respondents predicted that the impact of networked living on today's youth will contribute to people's desire for instant gratification, quick choices, and a lack of patience.

"I have seen a general decline in higher-order thinking skills in my students over the past decade. What I generally see is an over-dependence on technology, an emphasis on social technologies as opposed to what I'll call 'comprehension technologies,' and a general disconnect from deeper thinking. I'm not sure that I attribute this to the so-called 're-wiring' of teenage

brains, but rather to a deeper intellectual laziness that the Web has also made possible with the rise of more video-based information resources (as opposed to textual resources)” (Anderson & Rainie, 2012).

In his content analysis of Facebook pages, Selwyn (2009) analyzed the education-related interactions of undergraduate students. Five themes emerged from his data: recounting and reflecting on the university experience, exchange of practical information, exchange of academic information, displays of supplication and/or disengagement, and banter (exchanges of humor and nonsense). He concluded, “Yet whilst SNSs such as Facebook do not merit any particular laudation from educators, neither do they present any cause for moral panic ... If anything [this] data constitute[s] a case of ‘business as usual’ with students simply being students – albeit in a more visible and noisy manner than is apparent in the formal settings of their university education” (Selwyn, 2009, p. 173).

Given the tremendous usage of social media among college-aged students, both for leisure and educational purposes, higher education institutions have attempted to capitalize on these technological patterns of students to augment their public relations and marketing efforts. The following section provides an overview of higher education public relations efforts, ending with their 21st-century social media forays.

Higher Education Public Relations: From Viewbooks to Social Media

Since the 1980s, the viewbook, the multi-page brochure that colleges and universities send to prospective students annually, has served as a crucial medium by which higher education institutions entice students to matriculate (Hartley & Morpew, 2008). Viewbooks are significant because they provide prospective students with a “first look” at the school (Hartley & Morpew, 2008). In a public relations sense, the viewbook is often a university’s first opportunity to

“communicate” (i.e. share promotional information) with prospective students. Similarly, in the pre-Internet era, a university communicated with its other publics (alumni, faculty, general populace, etc.) via Q&A sessions, in-person visits, and brochures.

In their 2008 study, Hartley and Morphew conducted a content analysis of 48 four-year colleges and universities in order to classify the symbols and messages from their viewbooks. The scholars concluded,

“If prospective students were to define colleges and universities solely by what appears in viewbooks, they would quickly conclude that campuses are idyllic havens ... There are no disabled, obese, or depressed students ... The faculty are a mixture of Marie Curie, Mr. Chips, and Mr. Rogers, notable for their international scholarly reputations, commitment to teaching and nurturing attentiveness to each ‘special’ student in the academic neighborhood ...” (p. 677).

Higher education public relations tactics have transitioned from traditional print materials (documents that “pushed” content, such as viewbooks and brochures) to the online sector, where two-way communication strategies have been used more effectively. In the late 1990s at the peak of the World Wide Web craze, post-secondary institutions capitalized on the Internet’s capabilities. Institutions of higher learning have embraced the new technology of the Internet for a number of reasons. Given the technological habits of college-aged students, “Web sites have become the primary marketing tool for colleges and universities” (Herbig & Hale, 1997, p. 95). Mechitov, Moshkovich, Underwood, and Taylor (2001) stated that higher learning institutions interact with younger, computer-literate publics. Moreover, in today’s world of diminishing academic budgets and enrollments, the Internet has enabled university public relations

professionals to enjoy an innovative and competitive advantage via new educational programs, such as distance learning and online applications.

Research exploring the relationship between universities and the Internet has generally focused on the effectiveness of universities' websites. In their study, Mechitov et al. (2001) found that students emphasized overall entertainment value, ease of access to information, and certain stylistic design aspects, such as high quality images, uniformity, and school colors/logos, as most important. Similarly, Poock and Lefond (2001) administered a survey and conducted focus groups to determine what college-bound high school students considered most important on a university's website. They found that admission content and environmental content were the two frontrunners, followed by organization and architecture of the site.

Higher education public relations is now evolving from college websites to social media. Reuben (2008) found that of the 148 schools that she surveyed, just more than half had an official Facebook page for their school. Similarly, more than half had a presence on YouTube, and nearly 60 percent had some form of blog. Only about one-third had a Twitter account. In a nationwide telephone survey of the four-year accredited institutions in the University of Texas directory, Barnes (2010) found that 95 percent of college admission offices used at least one form of social media, with Facebook being the most popular. More than 50 percent of admissions officers surveyed in the study reported being "very familiar" with blogging. The study also revealed that blogs that do not facilitate engagement and conversation tend to lose their audience. In 2009, 18 percent of the schools surveyed did not accept blog comments.

With respect to social media and today's generation of college students, Barnes (2010) pointed out an ironic contradiction, one easily rectified with the adoption of social media by higher education administrators and faculty.

“It is said that this generation of students is one of the most connected yet hardest to reach audiences. That paradox is only true if one ignores the lessons in this paper; prospective students haven’t stopped paying attention, they have simply focused on the world of social networking. The sooner colleges and universities understand how to use this medium, the sooner they can be a part of that world – the student world” (p. 31).

With social media, college students, and higher education in mind, one must consider the most effective public relations strategies to reach universities’ publics. The measurement of organization-public relationships (in this case, university-public relationships) has been found to be one of the most effective means of determining the success of public relations strategies and tactics.

Organization-Public Relationships (OPRs)

Over the last 30 years, the foundation of public relations has transitioned from an emphasis on communication processes and outcomes to relationship management. Public relations scholars credit Ferguson (1984) as the first to emphasize the role of relationships between an organization and its key publics. The relationship management perspective, as it has come to be called, maintains that public relations balances the interests of the organization and its publics through the management of organization-public relationships or OPRs (Ledingham, 2003).

A fundamental goal of public relations is to build and enhance ongoing or long-term relationships with an organization’s key constituencies. It is important to measure relationships in order to answer the question: How can PR practitioners begin to pinpoint and document for senior management the overall value of public relations to the organization as a whole? Effective organizations choose and achieve appropriate goals because they develop relationships with their

constituencies, or publics. When organizations choose such goals, they minimize efforts of publics to interfere with organizational decisions and maximize support from them (Hon & Grunig, 1999).

When public relations helps the organization build relationships with key constituencies, it saves the organization money by reducing the costs of litigation, regulation, legislation, pressure campaigns, boycotts, or lost revenue that result from bad relationships. Public relations also helps the organization make money by cultivating relationships with donors, consumers, shareholders, and legislators who are needed to support organizational goals. Good relationships with employees also increase the likelihood that they will be satisfied with the organization and their jobs, which makes them more likely to support and less likely to interfere with the mission of the organization (Hon & Grunig, 1999).

Researchers, however, have yet to agree on the definition of an OPR. Ledingham and Brunig (1998) defined organization-public relationship as “the state which exists between an organization and its key publics, in which the actions of either can impact the economic, social, cultural, or political well-being of the other entity” (p. 62). In a postscript to their 1997 article, Broom, Casey, and Ritchey (2000) wrote that OPRs are “represented by patterns of interaction, transaction, exchange, and linkage between an organization and its publics” (p. 18). Hallahan (2008) proposed the following definition: a routinized, sustained pattern of behavior by an individual in conjunction with his or her involvement with an organization.

Several scholars have proposed multi-dimensional, multi-item scales to identify and operationalize the dimensions of an OPR. Ledingham and Brunig (1998) derived 17 components of organization-public relationships from the fields of interpersonal relationships, public relations, and marketing. They found that several factors, such as trust, openness, involvement,

investment, and commitment, which affected interpersonal relationships, also affected organization-public relationships.

The scholars then operationalized the dimensions. Trust was operationalized as an organization “doing what it says it will do;” openness as “sharing the organization’s plans for the future with public members;” involvement as “the organization being involved in the welfare of the community;” investment as “the organization investing in the welfare of the community;” and commitment as “the organization being committed to the welfare of the community” (p. 62). Ledingham and Brunig (1998) found that consumers who ranked an organization highly with regard to the five relationship dimensions were more likely to use that organization’s services when provided with a competitive choice. Based on those results, the scholars posited the following theory: “organizational involvement in and support of the community in which it operates can engender loyalty toward an organization among key publics when that involvement/support is known by key publics” (p. 63).

Hon and Grunig’s Relationship Indicators

Hon and Grunig (1999) focused on relationships as a part of measuring the effectiveness of public relations. They developed a set of relationship indicators that seek to answer the question, “How can PR practitioners begin to pinpoint and document for senior management the overall value of public relations to the organization as a whole?” (p. 2). The Hon and Grunig (1999) relationship measurement scale focuses on six relationship indicators: control mutuality, trust, satisfaction, commitment, exchange relationship, and communal relationship.

Scholars have operationalized the indicators in various ways in the offline and online sectors. **Control mutuality** measures the relationship of power between the organization and its publics. While an imbalance of power is natural, “stable relationships require that organizations

and publics each have some control over the other” (Hon & Grunig, 1999, p. 3). In the online world, scholars have defined control mutuality to refer to the various choices that organizations may provide that allow users to manage and share control of their online experience.

Relationship building is fostered when the choices provided instill a sense of empowerment, a feeling that users exercise control. “Interactivity represents the critical component of control mutuality in online communications,” and “lower-level forms of interactivity are also possible, such as responsive discourse and simple feedback” (Hallahan, 2008, p. 53). Hallahan (2008) also stated that “responsive discourse” must be “timely, pertinent, and authentic” (p. 53).

Trust involves the publics’ confidence in the organization and the willingness of that public to form a relationship with the organization. Trust comprises integrity, dependability, and competence on behalf of the organization (Hon & Grunig, 1999). The organization possesses integrity if the public considers the organization as fair and just. Dependability deals with the publics’ perception that the organization follows through with promises. The organization demonstrates competence if the public perceives the organization possesses the ability to accomplish what it sets out to do.

In the online world, scholars have defined trust as ensuring virtual communication that is easy, safe, authentic, and reliable. To be authentic, online communications must be consistent, responsive, truthful, accurate, genuine, and open. Organizations must also be willing to provide unexpected information that might expose an organization’s vulnerabilities (Hallahan, 2008). Park and Reber (2008) operationalized trust as “the conservation of visitors and usefulness of information” (p. 410).

Satisfaction is the “extent to which each party feels favorabl[y] toward the other because positive expectations about the relationship are reinforced” (Hon & Grunig, 1999, p. 3). The

benefits must outweigh the costs before a relationship can generate satisfaction. Organizations must ensure customer satisfaction in order to achieve effective OPRs. In the online realm, satisfaction exists when users seek personalized and customized information, which may contribute to satisfaction of users online (Hallahan, 2008). Park and Reber (2008) measured satisfaction with returned visits to corporate websites.

Commitment involves both parties devoting energy to “maintain and promote” the relationship (Hon & Grunig, 1999, p. 3). To exhibit commitment, both parties must believe that fostering a relationship warrants the expended energy to do so. Two dimensions of commitment are continuance commitment, which refers to a certain line of action, and affective commitment, which is an emotional orientation. Online commitment is demonstrated by using up-to-date software that is easy for publics to use and that provides relevant and useful information (Hallahan, 2008).

According to Hon and Grunig (1999), in an **exchange relationship**, one party supplies benefits to the other solely because the other party has provided benefits to the first party in the past or is expected to do so in the future. In the online sense, an exchange relationship reflects how much organizations share important information and their opinions about related issues with their publics. Therefore, the concept of exchange relationship was measured by usefulness of information and return visits (Park & Reber, 2008).

Alternatively, in a **communal relationship**, both parties provide benefits to each other because they are concerned with the welfare of the other. In a communal relationship, one party helps the other regardless of past or future benefits produced by the other party. According to Hon and Grunig (1999), public relations practitioners should strive to form communal relationships. Park and Reber (2008) measured an online communal relationship by examining

organizational good will or favorable deeds, corporate citizenship, concern about society, and received awards.

For each relationship indicator, Hon and Grunig (1999) devised a series of agree/disagree statements pertaining to the relationship (Appendix C). Respondents are then asked to use a 1-to-9 scale to indicate the extent to which they agree or disagree with each statement.

In the higher education sector, Hon and Grunig's relationship indicators have been used to gauge the relationship between universities and students. Hon and Brunner (2002) conducted a survey among undergraduate students (n=463) to measure resident students' perception of their relationship with the University of Florida (UF). The scholars adapted each indicator's operationalization to suit the university-student context (Appendix D). Each relationship outcome was measured using a 7-point Likert scale.

Responses for the items measuring control mutuality indicated that respondents were, on average, ambivalent about the balance of power in their relationship with the university. Hon and Brunner (2002) found that the satisfaction index was the strongest indicator of relationship quality. Students were also more likely to designate the relationship as exchange rather than communal. Students tended to agree that the university takes care of students who are likely to benefit the institution, such as athletes and national merit scholars. Responses to the communal relationship items showed that students tended to feel neutral. They neither agreed nor disagreed that the university had a communal relationship with students or other groups.

In interviews with UF administrators, the researchers learned several important features of UF's student-university relationship. Several administrators said that students' involvement at UF is a key relationship outcome because students are happier when they have built connections to the university. Involvement, one administrator said, not only contributes to greater happiness

and success but also a sense of ownership in the university. Moreover, administrators said that in order to build and maintain good relationships with students, the administration must be fair and caring.

“There has to be a sense of spirit, a genuine act of caring that goes on every day for students to feel like this is their place, they have an investment in it, they believe in it, they can be proud of it and it has treated them fairly” (Hon & Brunner, 2002, p. 234).

The scholars introduced an interesting point in their study. They reasoned that students seemed somewhat ambivalent about commitment in their relationship with the university due to the large number of freshmen students in the sample. “It seems logical that commitment to an institution needs time to develop and grow,” (Hon & Brunner, 2001, p. 235). They also point out that it might be the case that students’ commitment to the university is measured most meaningfully after students have graduated and had time to reflect upon and/or experience first-hand whether the investment in their relationship with the university led to achieving professional and life goals.

Other studies have employed Hon and Grunig’s relationship index to measure university-student relationships. Jo, Hon, and Brunner (2004) examined the perception of student-university relationships using the Hon and Grunig scale. The six factors were found to be valid and reliable (0.86 for 6-item trust, 0.85 for 4-item control mutuality, 0.84 for 4-item commitment, 0.88 for 4-item satisfaction, 0.70 for 4-item exchange, 0.64 for 2-item communal). The authors pointed out that the four relationship outcomes (control mutuality, trust, commitment, and satisfaction) closely resemble each other, bringing discriminant validity into play. One possible explanation for this high correlation is that an antecedent-successor relationship exists among some of the indicators. In other words, trust may precede satisfaction in evaluating the relationship.

Similarly, commitment logically manifests after one party becomes satisfied with the relationship.

In their study, Ki and Hon (2007) sought to 1. develop reliable and valid measures of the outcomes of quality relationships and 2. test the connection between organization-public relationships, attitudes, and behavioral intentions in a membership organization. Using factor analysis, the scholars found that 28 items should be included in the final relationship scales. They also found support for their proposed path model, in which the influential order of relationship indicators is as follows: satisfaction precedes trust, and trust precedes commitment. In other words, a “satisfied” student is more likely to trust a university, and a “trusting” student is more likely to be committed to a university.

Sung and Yang (2008) examined the relationship between students’ supportive behavioral intentions toward a university, a university’s reputation, and the relational outcomes a student has with a university (operationalized as Hon and Grunig’s relationship indicators). The researchers found that four variables determine students’ supportive intentions: 1. the level of active communication with students, 2. perceived quality of educational experience with the institution, 3. perceived quality of relationships with the university, and 4. perceived reputation of the university. The researchers found that students’ active communication behavior with the university significantly affects their evaluations of relational outcomes with the university and perceived university reputation. Moreover, they found that students’ perception of their educational experience significantly influences their evaluations of relational outcomes with the university.

Sung and Yang (2008)’s operationalized Hon and Grunig’s relationship indicators as a series of statements using a Likert-scale (Appendix E). Sung and Yang (2008) concluded,

“A relationship-cultivating strategy that involves active student participation and communication would therefore seem to be the most appropriate. Students’ willingness to support their alma mater depends on their satisfaction with their education, including relationships, reputation, communication, and quality of educational experience. This makes a good case for the development of active communication programs with student publics” (p. 805).

Organization-public relationships are better understood through the lens of dialogic communication theory. This framework has been used to explore the link between public relations’ website and social media efforts, as well as organizations’ connection to their stakeholders.

Dialogic Communication Theory

Dialogic communication can be used to understand the strategic ways in which the Internet, particularly social networking sites such as Facebook, builds relationships with the public. Kent and Taylor (1998) defined dialogic communication as an orientation that features mutuality, or the recognition of organization-public relationships; propinquity, or the temporality and spontaneity of interactions with publics; empathy, or the supportiveness and confirmation of public goals and interests; risk, or the willingness to interact with individuals and publics on their own terms; and commitment, or the extent to which an organization gives itself over to dialogue, interpretation, and understanding in its interactions with publics.

The scholars applied dialogic communication to the Internet. Public relations, they argued, is grounded in relationship building. As such, the Internet may be viewed as a tool that provides public relations practitioners with an opportunity to create vibrant relationships with

their audiences. In order to accomplish this relationship building, dialogue or “dialogic loops” must be incorporated into the Internet (Kent & Taylor, 1998, p. 326).

The authors outlined five principles for the successful integration of dialogic public relations and the World Wide Web, specifically websites. First, dialogic communication allows publics to probe organizations, thereby providing organizations with the opportunity to respond to questions and concerns. Second, informational content should make up the majority of an effective website, not high-tech graphics and audio-visuals. Third, websites must employ interactive strategies, such as question and answer formats, regularly updated information and available online experts. Fourth, a website’s design and interface should be easily navigable, text-driven and well-organized. Finally, website administrators should include only essential links with clear paths for visitors to return to the original site (Kent & Taylor, 1998).

Waters et al. (2009) argued that three strategies, derived from Kent and Taylor’s research, have been particularly insightful in online relationship cultivation. The first is disclosure. For full disclosure, organizations must provide a detailed description of the organization and its history, use hyperlinks to connect to the organization’s website, provide logos and visual indicators, and list the individuals who are responsible for the social networking site’s upkeep. The second is message dissemination, which includes posting links to external news items about the organization or its causes, posting photographs and/or video from the organization and its supporters, and using the message board or discussion wall to post announcements and answer questions. The third is interactivity. Interactivity was found to be essential to organizations’ efforts to develop relationships with their stakeholders.

In the realm of online relationship cultivation, dialogic communication has, arguably, become easier and even more expected with the influx of social media avenues. Bortree and

Seltzer (2009) used Kent and Taylor's (1998) application of dialogic communication in their study. The scholars analyzed 50 environmental advocacy groups' Facebook profiles in order to determine which dialogic strategies were being employed. Content categories included Kent and Taylor's dialogic strategies, as well as items suited for social networking sites, such as number of user posts on profile and number of organization posts in response to user inquiries. They found that generation of return visits was significantly correlated with number of user responses to others, and conservation of visitors demonstrated a reciprocal relationship with network growth and organization response to users. In general, Bortree and Seltzer concluded that the organizations were generally not taking full advantage of the dialogic strategies afforded by social networking sites.

In another study, Briones, Kuch, Liu, & Jin (2011) found that the American Red Cross' social media efforts contributed to the organization's development of a two-way dialogue with younger constituents, the media, and the community. The researchers conducted 40 interviews with Red Cross employees in order to examine how social media tools were used to build online relationships. One respondent stated, "[Social media is] actually better. We get more response from our posting on Facebook and Twitter than our more traditional – even from the chapter's main website" (Briones et al., 2010, p. 39). Another interviewee commented on social media's ability to generate news coverage. She said, "Media follow our Twitter stream, and someone had a story idea from there. They saw how many fires I was posting. 'Gee, are there that many fires? Let me look. Last year, we had half as many fires.' We got a story out of that" (Briones et al., 2010, p. 40).

The authors argued that the American Red Cross demonstrates the success of using social media dialogically, using Kent and Taylor's (1998) principles of actively responding to posts and

allowing the organization to gain ideas from its publics. “By having a two-way dialogue through social media, the American Red Cross reports providing faster service for the community, generating more media coverage, and receiving positive and negative feedback from stakeholders to improve the organization” (Briones et al., 2010, p. 41).

This trio of studies uses dialogic communication theory as a key foundation in the relationship building component of public relations. As Kent and Taylor (1998) argued, employing dialogic strategies in the new media environment allows public relations professionals to create mutually beneficial relationships between their organizations and the public. Moreover, Bortree and Seltzer’s (2009) study emphasizes the important role of social media in public relations practices. Their results suggested that using these strategies may produce positive outcomes, such as increasing the number of stakeholders who interact with the organization by growing its social network. This may also apply to universities. Institutions of higher learning are organizations with several key publics, particularly students. Moreover, universities are now operating in a heavily competitive market for students (Hartley & Morphew, 2008). Any additional means of attracting prospective students and retaining current ones is ideal.

Just as measuring the relationship between a university and its publics is an effective means of gauging a university’s public relations efforts, it’s also helpful to analyze Grunig’s models of public relations in order to classify the type of communication techniques employed by higher education institutions.

Grunig’s Four Models of Public Relations

Grunig’s four models of public relations include press agentry/publicity, public information, two-way asymmetrical, and two-way symmetrical communication (Grunig & Hunt,

1984). Both the press agency/publicity and public information models are asymmetric in nature, attempting to highlight the good aspects of the organization (Grunig, 1992). The press agency/publicity model practices one-way, persuasive communication from the organization to its publics with the absence of research or feedback. Practitioners use this model when they are only interested in positive publicity. For instance, higher education administrators may write, “If you want to live on the most beautiful college campus in the South, apply to our school, and see our one-of-a-kind campus for yourself!” in promotional material to prospective students. The public information model provides one-way communication but does not focus on persuasion. This model uses straightforward, relatively objective information. For example, a university public relations officer may mail an informational packet about his or her school to prospective students with demographic, location, and tuition information.

Both the two-way asymmetrical and two-way symmetrical models represent more sophisticated models of strategic public relations (Grunig, 1992). The two-way asymmetrical model involves two-way, persuasive communication but only for the sake of the organization. This model uses research “to produce the support of publics without having to change the behavior of the organization” (Grunig, 1992, p. 31). For instance, college administrators may tweet, “Who’s headed to our women’s basketball game tonight?” The university, in this case, will not change its behavior as a result of responses. Although the tweet encourages dialogue, it is only meant to create support for the university’s athletics. The two-way symmetrical model involves two-way communication to benefit both the organization and its publics. This model employs research in order to form long-term, mutually beneficial relationships with publics and “uses communication to manage conflict and improve understanding with strategic publics” (Grunig, 1992, p. 41). Higher education administrators may, for instance, send out a student

satisfaction survey to discern if students are pleased with the library's latest computer policy changes. In this case, the university intends to react to students' responses, taking them into consideration. The four models are not mutually exclusive in nature, so some overlap naturally occurs between them.

Alternative models, particularly the relational and accommodation approaches to public relations, have emerged that have challenged Grunig's four models of public relations. The relational approach, discussed in detail earlier in this literature review, situates relationship building (and, hence, dialogic communication) as the fundamental public relations activity. Toth (2000) argued that relational communication in public relations was being overlooked in favor of public relations as a management function. Ledingham and Brunig (1998) characterized the dialogic or relationship perspective as "serv[ing] as a platform for developing public relations initiatives that generate benefit for organizations and for the publics they serve" (p. 16).

Alternatively, the accommodation and contingency frameworks cultivate dialogic relationships because they address critical questions regarding the pragmatics and limitations of symmetrical communication. Cancel, Cameron, Sallot, and Mitrook (1997) created a continuum of factors that influence decisions made by practitioners by focusing on the actual practices of public relations. The scholars have demonstrated that relationships form the basis of public relations; however, public relations is also dependent on certain contingency factors, such as the organization's culture, as well as the degree of political and social support of the organization.

In response to the commentary about symmetrical communication as the normative and positive model for ethical public relations, Grunig recognized the model's limitations.

"It is time to move on from the four (or more) models of public relations to

develop a comprehensive theory that goes beyond the typology represented by the four models ... I believe my colleagues and I moved toward such a theory in developing the new two-way model of excellent, or dialogic, public relations” (p. 29).

Dialogue, or dialogic public relations, has become an integral feature of the symmetrical model. In light of public relations’ newfound emphasis on relationship building, dialogue has the potential to supersede the concept of symmetry as the norm in public relations theory building (Kent & Taylor, 1998). This transition to dialogue is founded on an interpersonal model of ethical and effective communication.

Currently, scant literature exists that connects the models of public relations to higher education marketing tactics in the online realm. Edman (2010) used the models to analyze the tweets of Fortune 500 companies. She coded each tweet for propaganda (press agency); general, direct information (public information); solicitation (two-way asymmetrical); and/or a desire to build long-term, mutually beneficial relationships (two-way symmetrical). This study will adopt a similar approach.

Given the literature reviewed on social media, college students, and higher education marketing, and using both Grunig’s public relations models and Hon and Grunig’s relationship indicators as frameworks, this study investigated the relationships between 25 universities and their publics on Facebook through a quantitative content analysis of the schools’ Facebook posts over a three-week period. The study proposed the following research questions:

RQ1: How do universities use Facebook to engage and communicate with their publics (prospective and current students, faculty/staff, alumni, public, multiple audiences)?

RQ2: According to Grunig's four models of public relations, do universities' Facebook posts resemble the press agentry/publicity, public information, two-way asymmetrical, or two-way symmetrical model of public relations?

RQ3: According to Hon and Grunig's (1999) relationship indicators, do universities' Facebook posts promote trust, satisfaction, commitment, and control mutuality between the universities and their publics (prospective and current students, faculty/staff, alumni, public, multiple audiences) on Facebook?

METHODOLOGY

This study employed a quantitative content analysis. Neuendorf (2002) defined content analysis as “a summarizing, quantitative analysis of messages that relies on the scientific method and is not limited to the types of variables that may be measured or the context in which the messages are created or presented” (p. 10). The quantitative content analysis measured frequencies and interpretive statistics of universities’ Facebook posts defined by predetermined categories.

Twenty-five universities were included in the study. Table 1 lists the institutions. The sampling frame consisted of StudentAdvisor.com’s “Top 100 Social Media Colleges” list. The top 25 schools on the list comprised the study’s sample. Hence, this study could be viewed as a “Best Practices Guide” for post-secondary institutions, as the researcher used a purposive sampling technique.

Published in the fall of 2011, the “Top 100 Social Media Colleges” list compares more than 6,000 federally recognized colleges and universities and post-secondary schools in the United States in terms of their mastery of public social media methods, tools, and websites. The StudentAdvisor.com research team collects information on how active and effective each school is at engaging their audiences on Twitter, Facebook, YouTube, and other social media tools, such as iTunes and podcasts. The ranking methodology also takes into account the size of each school's population, as well as other metrics, to gauge overall reach and effectiveness. The team then produces a strictly quantitative score for each school based on this information and updates the findings regularly (Tsouvalas, 2012).

Table 1.
List of Universities in Sample

Name of Institution
Johns Hopkins University
Harvard University
University of Notre Dame
Ohio State University – Main Campus
Columbia University in the City of New York
University of Kentucky
Stanford University
Louisiana State University and Agricultural & Mechanical College
United States Military Academy
Emerson College
University of Florida
University of Oregon
Dartmouth College
University of Washington- Seattle Campus
Princeton University
Butler University
Carnegie Mellon University
Yale University
University of Miami
Spelman College
Texas A&M College
Auburn University – Main Campus
Berklee College of Music
Brown University

The coding scheme was created from a combination of three sources. Hallahan (2008), Park and Reber (2008), and Edman (2010) each measured online organization-public relationships. The researcher adapted their variables and coding methods to suit the university-public context of this study. (See Appendices A-B for codebook and codesheet).

Coders recorded the name of the university, the university's number of "likes," the time and date of each post, the exact text of each post, and the post's intended audience. Coders chose one or more of six categories of audiences: prospective students, current students, general public, alumni, faculty/staff, and multiple audiences. Coders identified the audience as prospective students when the content of the post seemed helpful or useful to students who could potentially attend the university. A post intended for current students featured information that appeared beneficial to students presently enrolled at the university, such as campus news. Coders identified the audience as general public when the content of the post appeared all-purposeful in nature. This included a wide range of information regarding local events, university activities, and school-pride posts, for instance.

Coders indicated alumni as the targeted audience when the post contained information about the school's happenings and alumni-specific news. A post intended for faculty/staff included information about the academic and administrative concerns of the university. Coders identified multiple audiences as the post's intended audience when the information contained in the post appeared to apply to one or more of the aforementioned audiences.

Four categories examined the presence or absence of the four models of public relations. Coders did not choose the model that best suited the post. In other words, a post could be deemed as representing more than one model. The press agency/publicity model was designated when posts tried to persuade others to buy or use a product or service of the university or persuade

students to apply to the university or a certain program. It could also demonstrate obvious publicity of the university using biased language such as “the best in town.” LSU, for instance, posted “GEAUX TIGERS!!!” Posts were designated as public information posts when they used one-way communication with direct, objective language (i.e. just the facts). A public information post extended information without using biased language. For instance, Carnegie Mellon posted “Carnegie Mellon welcomes Bernard Franklin, keynote speaker, as we celebrate MLK day. See all MLK events.”

The two-way asymmetrical model described posts that advocated feedback or posed questions to students. With this model, however, the university did not intend to use feedback to change its behavior. One of West Point’s Facebook posts, for instance, was “Tomorrow night marks the Class of 2013’s 500th night, what were some of your expectations and memories from this milestone in your cadet career?” Two-way symmetrical posts featured a university’s desire to fix a problem a student may have, give advice on how to do something, direct students to information, and/or engage in casual conversations with students. It is two-way communication that managed conflicts and promoted better understanding between the university and students. Harvard University, for instance, posted the following: “International students interested in Harvard College – here’s a list of frequently asked questions for you.” The post provided useful information and promoted a better understanding between the university and prospective international students. The university may have also used language that encouraged a response from students. For instance, West Point posted “We want to know what you think about the Pointer View, Black Jack has filled out his survey, have you? Let your voice be heard.”

The final coding section examined Hon and Grunig’s relationship indicators. Two of the relationship indicators, communal and exchange relationships, were not examined in this study.

The remaining four indicators – control mutuality, commitment, satisfaction (and dissatisfaction), and trust – were examined. Researchers coded each indicator separately to identify the presence or absence of the indicator. Each post could exhibit zero, one, or several indicators. Control mutuality was selected when posts demonstrated a desire to create a conversation around the university, the students, or something academically-related to the students. For instance, the University of Kentucky posted, “Tell us. How do you like your classes this semester?”

Posts that showed commitment demonstrated a desire to foster a long-term relationship with students. They provided answers to questions, tips, useful information, attempts to make the experience with the university better, and affirmations. For example, Berklee College of Music posted, “Happy first day of classes! What are you taking?” Posts that exhibited satisfaction included attempts to correct university mistakes or point the student to the correct place for feedback. This was *the university’s* desire for satisfaction. For example, an Emerson College student posted, “Not sure how closely this page is monitored. Anyone know if Emerson will be offering textbooks on iTunes U? ...” Emerson responded, “hmmm not sure Dave. I’ll see what I can find out and get back to you.” This exchange demonstrated Emerson’s desire for satisfaction. Similarly, posts that showed satisfaction were those where positive expectations about the university were reinforced. This represented satisfaction for the *user-public*. For instance, the University of Kentucky shared the following status from one of its students: “I love being at UK! I don’t think I could have picked a better school, thanks University of Kentucky Admissions.” Posts that showed trust demonstrated the university’s desire to extend useful information, be transparent, and portray the competence, dependability, and integrity of the university. They included positive, casual conversations. For example, Butler University posted “STUDENTS!

BIG announcement about a very special event coming to Clowes. Be sure to watch your email for details!”

The study considered each individual post on the universities’ Facebook walls (n=709) from 8 p.m. on Jan. 23, 2012 to 8 p.m. on Feb. 13, 2012. Each Facebook post acted as one unit of analysis. In completing the study’s content analysis, three coders, including the researcher, participated in data collection. The researcher first conducted three informal coder training sessions with peers in order to fine-tune the study’s coding system. The codebook was revised multiple times based on the initial training sessions. Thereafter, the researcher conducted multiple training sessions with the coders. Fifteen percent of the content (106 posts) was used to calculate intercoder reliability statistics. Table 2 lists the intercoder reliability for each variable, which ranged from .64 to 1 (using Scott’s pi). Given the nature of the study (construct and discriminant validity concerns have been found in previous research for satisfaction and trust operationalizations), the lower Scott’s pi values were deemed acceptable.

Table 2. Intercoder Data for Each Variable

Variable	Scott’s pi
University likes	1
Prospective students	.90
Current students	.99
General public	.90
Alumni	.89
Faculty/staff	.99
Multiple audiences	.99
Press agency/publicity	.74
Public information	.75
Two-way asymmetrical	.71

Table 2 Continued. Intercoder Data for Each Variable

Two-way symmetrical	.96
Control Mutuality	.81
Commitment	.79
Satisfaction	.68
Dissatisfaction	.87
Trust	.64

RESULTS

This section details the research findings from a content analysis conducted for 25 universities' Facebook profiles. Posts generated by the respective universities between 8 p.m. on January 23, 2012 and 8 p.m. on February 13, 2012 were coded. The communicative nature (in the form of public relations models and Hon and Grunig's relationship indicators) of the universities' relationships with various audiences was examined via a content analysis of their Facebook posts. Results are presented according to the study's three research questions.

RQ1: How do universities use Facebook to engage and communicate with their publics (current and prospective students, faculty/staff, alumni, general public, and multiple audiences)?

In total, 709 posts were coded. Of the 25 universities included in the sample, Louisiana State University (LSU) had the most number of posts ($n=58$) during the three-week time span, forming 8.2% of the sample. Carnegie Mellon University only trailed LSU slightly in its number of posts. The university claimed 53 posts in the sample, forming 7.5% of the sample. Emerson College and the University of Washington were the universities with the fewest posts. Each university had 7 posts. Together, posts from the two institutions made up 2% of the total sample. (See Table 3 for full summary.)

The frequencies and percentages of posts that targeted the study's six audiences and exhibited the models of public relations, as well as the relationship indicators, are presented in entirety in Tables 4-9. A common theme among all of the universities sampled is a gross lack of the two-way symmetrical model. For instance, among posts targeting prospective students, neither Notre Dame, Columbia, Stanford, LSU, Texas, Oregon, Washington, Princeton, Yale, Miami, Spelman, nor Texas A&M used this model in their posts.

Table 3. Frequency of Posts per University

Name of Institution	N	%
Emerson College	7	1.0%
University of Washington	7	1.0%
Texas	13	1.8%
University of Florida	13	1.8%
University of Oregon	13	1.8%
University of Notre Dame	14	2.0%
Princeton University	16	2.3%
Yale University	16	2.3%
Brown University	18	2.5%
Texas A&M College	18	2.5%
Auburn University	18	2.5%
Butler University	19	2.7%
Stanford University	19	2.7%
University of Miami	27	3.8%
Berklee College of Music	29	4.1%
West Point	35	4.9%
Harvard University	38	5.4%
Johns Hopkins University	39	5.5%
Spelman College	40	5.6%
University of Kentucky	47	6.6%
Ohio State University	48	6.8%
Columbia University	52	7.3%
Dartmouth College	52	7.3%
Carnegie Mellon University	53	7.5%
LSU	58	8.2%
Total	709	100.0%

Another common theme among the universities sampled is a tendency to use the press agency and public information models of public relations. Among posts directed at alumni, for instance, several universities displayed high frequencies of the press agency model (82.7% of Columbia's posts; 91.1% of Kentucky's posts; 100.0% of Texas' posts; 70.6% of Butler's posts.) When current students were the targeted audience, Auburn (100.0%), Texas A&M (100.0%), LSU (82.8%), and Johns Hopkins (84.6%) all used the public information model in high numbers.

Posts that promoted Hon and Grunig's relationship indicators varied in frequency according to the university. Spelman and Berklee, for instance, displayed very different frequencies for posts targeting the general public. Control mutuality was present in 12.5% of Spelman's posts but absent in all of Berklee's posts. Trust was promoted in 22.5% of Spelman's posts but in only 6.2% of Berklee's posts. One notable frequency trend among the universities samples was the lack of control mutuality in posts. Among posts intended for faculty/staff, for instance, Notre Dame, Texas, Washington, Princeton, Butler, and Texas A&M did not promote control mutuality to any degree.

Tables 10-12 provide frequencies of universities' posts according to audience, model of public relations, and relationship indicator. For each of the six audiences, the public information model is used in more than half of the posts analyzed (56.7%-58.6%), and the two-way symmetrical model is used the least (3.6%-3.9%). Moreover, posts were more likely to promote commitment (48.4%-49%) and satisfaction (46.6%-48%) among posts intended for all six audience types. Based on percentages, control mutuality was utilized the least across all six audiences (10.9%-11.7%). So, posts seemed to use multiple models and various relationship-building strategies, simultaneously.

Table 4. Summary of Posts Per School, Audience (General Public and Prospective Students) and Model of Public Relations

	General Public				Prospective Students			
	Press Agency	Public Information	Two-way Asymm.	Two-way Symm.	Press Agency	Public Information	Two-way Asymm.	Two-way Symm.
John Hopkins	10(25.6%)	33(84.6%)	5(12.8%)	2(5.1%)	10(26.3%)	32(84.2%)	5(13.2%)	2(5.3%)
Harvard	20(52.6%)	23(60.5%)	10(26.3%)	3(7.9%)	19(52.8%)	21(58.3%)	9(25.0%)	3(8.3%)
Notre Dame	10(71.4%)	6(42.9%)	3(21.4%)	0(0.0%)	9(81.8%)	3(27.3%)	3(27.3%)	0(0.0%)
Ohio State	29(61.7%)	19(40.4%)	8(17.0%)	3(6.4%)	29(63.0%)	18(39.1%)	7(15.2%)	2(4.3%)
Columbia	43(82.7%)	26(50.0%)	10(19.2%)	0(0.0%)	43(82.7%)	26(50.0%)	10(19.2%)	0(0.0%)
Kentucky	41(91.1%)	12(26.7%)	12(26.7%)	0(0.0%)	42(89.4%)	14(29.8%)	12(25.5%)	0(0.0%)
Stanford	15(78.9%)	5(26.3%)	2(10.5%)	2(10.5%)	14(77.8%)	5(27.8%)	2(11.1%)	2(11.1%)
LSU	34(60.7%)	47(83.9%)	24(42.9%)	0(0.0%)	35(60.3%)	48(82.8%)	25(43.1%)	0(0.0%)
West Point	24(70.6%)	11(32.4%)	10(29.4%)	2(5.9%)	25(71.4%)	12(34.3%)	10(28.6%)	2(5.7%)
Texas	13(100.0%)	1(7.7%)	2(15.4%)	0(0.0%)	13(100.0%)	1(7.7%)	2(15.4%)	0(0.0%)
Emerson	4(57.1%)	3(42.9%)	1(14.3%)	3(42.9%)	4(57.1%)	3(42.9%)	1(14.3%)	3(42.9%)
Florida	3(27.3%)	3(27.3%)	6(54.5%)	3(27.3%)	3(25.0%)	3(25.0%)	6(50%)	4(33.3%)
Oregon	2(16.7%)	8(66.7%)	3(25.0%)	0(0.0%)	2(20.0%)	6(60.0%)	3(30.0%)	0(0.0%)
Dartmouth	22(42.3%)	33(63.5%)	6(11.5%)	2(3.8%)	22(42.3%)	33(63.5%)	6(11.5%)	2(3.8%)

Table 4. Continued

	General Public				Prospective Students			
	Press Agency	Public Information	Two-way Asymm.	Two-way Symm.	Press Agency	Public Information	Two-way Asymm.	Two-way Symm.
Washington	3(42.9%)	3(42.9%)	2(28.6%)	0(0.0%)	3(42.9%)	3(42.9%)	2(28.6%)	0(0.0%)
Princeton	9(56.2%)	6(37.5%)	2(12.5%)	0(0.0%)	9(56.2%)	6(37.5%)	2(12.5%)	0(0.0%)
Butler	12(70.6%)	4(23.5%)	4(23.5%)	1(5.9%)	14(73.7%)	4(21.1%)	5(26.3%)	1(5.3%)
Carnegie Mellon	23(43.4%)	28(52.8%)	10(18.9%)	1(1.9%)	23(43.4%)	28(52.8%)	10(18.9%)	1(1.9%)
Yale	5(31.2%)	11(68.8%)	8(50.0%)	0(0.0%)	5(31.2%)	11(68.8%)	8(50.0%)	0(0.0%)
Miami	7(25.9%)	19(70.4%)	5(18.5%)	0(0.0%)	7(25.9%)	19(70.4%)	5(18.5%)	0(0.0%)
Spelman	9(22.5%)	32(80.0%)	12(30.0%)	0(0.0%)	9(22.5%)	32(80.0%)	12(30.0%)	0(0.0%)
Texas A&M	2(11.1%)	18(100.0%)	1(5.6%)	0(0.0%)	1(5.9%)	17(100%)	1(5.9%)	0(0.0%)
Auburn	0(0.0%)	18(100.0%)	0(0.0%)	1(5.6%)	2(7.1%)	18(100.0%)	18(100.0%)	1(5.6%)
Berklee	2(12.5%)	14(87.5%)	12(92.3%)	1(6.2%)	2(12.5%)	16(57.1%)	14(50.0%)	2(7.1%)
Brown	0(0.0%)	14(82.4%)	4(23.5%)	2(11.8%)	1(5.9%)	14(82.4%)	4(23.5%)	2(11.8%)

Table 5. Summary of Posts Per School, Audience (Current Students and Faculty/Staff) and Model of Public Relations

	Current Students				Faculty/Staff			
	Press Agency	Public Information	Two-way Asymm.	Two-way Symm.	Press Agency	Public Information	Two-way Asymm.	Two-way Symm.
Johns Hopkins	10(25.6%)	33(84.6%)	5(12.8%)	2(5.1%)	10(25.6%)	33(84.6%)	5(12.8%)	2(5.1%)
Harvard	20(54.1%)	23(62.2%)	9(24.3%)	2(5.4%)	20(52.6%)	23(60.5%)	10(26.3%)	3(7.9%)
Notre Dame	10(71.4%)	6(42.9%)	3(21.4%)	0(0.0%)	10(71.4%)	6(42.9%)	3(21.4%)	0(0.0%)
Ohio State	30(62.5%)	19(39.6%)	8(16.7%)	3(6.2%)	29(61.7%)	19(40.4%)	8(17.0%)	3(6.4%)
Columbia	43(82.7%)	26(50.0%)	10(19.2%)	0(0.0%)	43(82.7%)	26(50.0%)	10(19.2%)	0(0.0%)
Kentucky	41(91.1%)	12(26.7%)	12(26.7%)	0(0.0%)	42(89.4%)	14(29.8%)	12(25.5%)	0(0.0%)
Stanford	15(78.9%)	5(26.3%)	2(10.5%)	2(10.5%)	15(78.9%)	5(26.3%)	2(10.5%)	2(10.5%)
LSU	35(60.3%)	48(82.8%)	25(43.1%)	0(0.0%)	34(59.6%)	48(84.2%)	25(43.9%)	0(0.0%)
West Point	25(71.4%)	12(34.3%)	10(28.6%)	2(5.7%)	25(71.4%)	12(34.3%)	10(28.6%)	2(5.7%)
Texas	13(100.0%)	1(7.7%)	2(15.4%)	0(0.0%)	13(100.0%)	1(7.7%)	2(15.4%)	0(0.0%)
Emerson	4(57.1%)	3(42.9%)	1(14.3%)	3(42.9%)	4(57.1%)	3(42.9%)	1(14.3%)	3(42.9%)
Florida	4(30.8%)	4(30.8%)	6(46.2%)	4(30.8%)	3(27.3%)	3(27.3%)	6(54.5%)	3(27.3%)
Oregon	2(15.4%)	8(61.5%)	4(30.8%)	0(0.0%)	2(16.7%)	8(66.7%)	3(25.0%)	0(0.0%)
Dartmouth	22(42.3%)	33(63.5%)	6(11.5%)	2(3.8%)	22(42.3%)	33(42.3%)	6(11.5%)	2(3.8%)

Table 5. Continued

	Current Students				Faculty/Staff			
	Press Agentry	Public Information	Two-way Asymm.	Two-way Symm.	Press Agentry	Public Information	Two-way Asymm.	Two-way Symm.
Washington	3(42.9%)	3(42.9%)	2(28.6%)	0(0.0%)	3(42.9%)	3(42.9%)	2(28.6%)	0(0.0%)
Princeton	9(56.2%)	6(37.5%)	2(12.5%)	0(0.0%)	9(56.2%)	6(37.5%)	2(12.5%)	0(0.0%)
Butler	12(70.6%)	3(17.6%)	5(29.4%)	0(0.0%)	13(72.2%)	4(22.2%)	4(22.2%)	1(5.6%)
Carnegie Mellon	23(44.2%)	28(53.8%)	9(17.3%)	1(1.9%)	23(43.4%)	28(52.8%)	10(18.9%)	1(1.9%)
Yale	5(31.2%)	11(68.8%)	8(50.0%)	0(0.0%)	5(31.2%)	11(68.8%)	8(50.0%)	0(0.0%)
Miami	7(25.9%)	19(70.4%)	5(18.5%)	0(0.0%)	7(25.9%)	19(70.4%)	5(18.5%)	0(0.0%)
Spelman	9(22.5%)	32(80.0%)	12(30.0%)	0(0.0%)	9(22.5%)	32(80.0%)	12(30.0%)	0(0.0%)
Texas A&M	2(11.1%)	18(100.0%)	1(5.6%)	0(0.0%)	2(11.1%)	18(100.0%)	1(5.6%)	0(0.0%)
Auburn	0(0.0%)	18(100.0%)	0(0.0%)	1(5.6%)	0(0.0%)	18(100.0%)	0(0.0%)	1(5.6%)
Berklee	2(7.1%)	15(53.6%)	14(50.0%)	2(7.1%)	2(6.9%)	16(55.2%)	15(51.7%)	2(6.9%)
Brown	0(0.0%)	14(77.8%)	5(27.8%)	2(11.1%)	0(0.0%)	14(77.8%)	5(27.8%)	2(11.1%)

Table 6. Summary of Posts Per School, Audience (Alumni and Multiple Audiences) and Model of Public Relations

	Alumni				Multiple Audiences			
	Press Agentry	Public Information	Two-way Asymm.	Two-way Symm.	Press Agentry	Public Information	Two-way Asymm.	Two-way Symm.
Johns Hopkins	10(25.6%)	33(84.6%)	5(12.8%)	2(5.1%)	10(25.6%)	33(84.6%)	5(12.8%)	2(5.1%)
Harvard	20(52.6%)	23(60.5%)	10(26.3%)	3(7.9%)	20(54.1%)	23(62.2%)	9(24.3%)	2(5.4%)
Notre Dame	10(71.4%)	6(42.9%)	3(21.4%)	0(0.0%)	10(71.4%)	6(42.9%)	3(21.4%)	0(0.0%)
Ohio State	28(60.9%)	19(41.3%)	8(17.4%)	3(6.5%)	29(61.7%)	19(40.4%)	8(17.0%)	3(6.4%)
Columbia	43(82.7%)	26(50.0%)	10(19.2%)	0(0.0%)	43(82.7%)	26(50.0%)	10(19.2%)	0(0.0%)
Kentucky	41(91.1%)	13(28.9%)	11(24.4%)	0(0.0%)	42(91.3%)	13(28.3%)	12(26.1%)	0(0.0%)
Stanford	15(78.9%)	5(26.3%)	2(10.5%)	2(10.5%)	15(78.9%)	5(26.3%)	2(10.5%)	2(10.5%)
LSU	34(60.7%)	47(83.9%)	24(42.9%)	0(0.0%)	34(60.7%)	47(83.9%)	23(41.1%)	0(0.0%)
West Point	23(71.9%)	11(34.4%)	8(25.0%)	1(31.1%)	24(70.6%)	12(35.3%)	9(26.5%)	2(5.9%)
Texas	13(100.0%)	1(7.7%)	2(15.2%)	0(0.0%)	13(100.0%)	1(7.7%)	2(15.4%)	0(0.0%)
Emerson	4(57.1%)	3(42.9%)	1(14.3%)	3(42.9%)	4(57.1%)	3(42.9%)	1(14.3%)	3(42.9%)
Florida	4(33.3%)	3(25.0%)	6(50.0%)	3(25.0%)	4(33.3%)	3(25.0%)	6(50.0%)	3(25.0%)
Oregon	2(16.7%)	8(66.7%)	3(25.0%)	0(0.0%)	2(16.7%)	8(66.7%)	3(25.0%)	0(0.0%)
Dartmouth	21(42.0%)	33(66.0%)	5(10.0%)	1(2.0%)	22(42.3%)	33(63.5%)	6(11.5%)	2(3.8%)

Table 6. Continued

	Alumni				Multiple Audiences			
	Press Agentry	Public Information	Two-way Asymm.	Two-way Symm.	Press Agentry	Public Information	Two-way Asymm.	Two-way Symm.
Washington	2(33.3%)	3(50.0%)	2(33.3%)	0(0.0%)	3(42.9%)	3(42.9%)	2(28.6%)	0(0.0%)
Princeton	9(56.2%)	6(37.5%)	2(12.5%)	0(0.0%)	9(56.2%)	6(37.5%)	2(12.5%)	0(0.0%)
Butler	12(70.6%)	4(23.5%)	4(23.5%)	1(5.9%)	13(72.2%)	4(22.2%)	4(22.2%)	1(5.6%)
Carnegie Mellon	23(43.4%)	28(52.8%)	10(18.9%)	1(1.9%)	21(41.2%)	28(54.9%)	10(19.6%)	1(2.0%)
Yale	5(31.2%)	11(68.8%)	8(50.0%)	0(0.0%)	3(21.4%)	11(78.6%)	8(57.1%)	0(0.0%)
Miami	7(25.9%)	19(70.4%)	5(18.5%)	0(0.0%)	7(25.9%)	19(70.4%)	5(18.5%)	0(0.0%)
Spelman	8(21.1%)	31(81.6%)	10(26.3%)	0(0.0%)	8(20.5%)	32(82.1%)	12(30.8%)	0(0.0%)
Texas A&M	2(11.1%)	18(100.0%)	1(5.6%)	0(0.0%)	2(11.1%)	18(100%)	1(5.6%)	0(0.0%)
Auburn	0(0.0%)	18(100.0%)	0(0.0%)	1(5.6%)	0(0.0%)	18(100%)	0(0.0%)	1(5.6%)
Berklee	2(13.3%)	13(86.7%)	2(13.3%)	1(6.7%)	2(7.1%)	15(53.6%)	14(50.0%)	2(7.1%)
Brown	0(0.0%)	14(82.4%)	4(23.5%)	2(11.8%)	0(0.0%)	14(77.8%)	5(27.8%)	2(11.1%)

Table 7. Summary of Posts Per School, Audience (Prospective and Current Students) and Relationship Indicator

	Prospective Students					Current Students				
	Control Mutuality	Commit.	Satis.	Dissatis.	Trust	Control Mutuality	Commit.	Satis.	Dissatis.	Trust
Johns Hopkins	3(7.9%)	23(54.3%)	17(44.7%)	2(4.3%)	17(43.6%)	3(7.7%)	20(51.3%)	17(43.6%)	2(5.1%)	17(43.6%)
Harvard	2(5.6%)	18(53.2%)	23(63.9%)	12(33.4%)	15(39.3%)	1(2.7%)	16(43.2%)	25(67.6%)	12(32.4%)	14(37.8%)
Notre Dame	0(0.0%)	9(64.3%)	9(81.8%)	0(0.0%)	3(13.6%)	0(0.0%)	9(64.3%)	11(78.6%)	0%	2(14.3%)
Ohio State	1(2.2%)	35(76.7%)	38(82.6%)	10(18.9%)	12(25.0%)	1(2.1%)	32(66.7%)	40(83.3%)	8(16.7%)	12(25.0%)
Columbia	5(9.6%)	14(26.8%)	21(40.4%)	2(4.8%)	9(18.2%)	5(9.6%)	13(25.0%)	21(40.4%)	3(5.8%)	11(21.2%)
Kentucky	5(10.6%)	18(41.2%)	36(76.6%)	6(12.2%)	11(24.5%)	4(8.9%)	19(42.2%)	35(77.8%)	5(11.1%)	11(24.4%)
Stanford	2(11.1%)	6(31.4%)	17(94.4%)	2(10.5%)	4(21.3%)	2(10.5%)	6(31.6%)	18(94.7%)	2(10.5%)	4(21.1%)
LSU	27(46.6%)	58(96.9%)	14(24.1%)	7(9.6%)	22(32.6%)	27(46.6%)	56(96.6%)	14(24.1%)	5(8.6%)	21(36.2%)
West Point	7(20.0%)	12(40.2%)	24(68.6%)	5(10.6%)	9(24.69%)	7(20.0%)	14(40.0%)	24(68.6%)	3(8.6%)	8(22.9%)
Texas	0(0.0%)	4(31.8%)	6(46.2%)	3(13.4%)	2(4.5%)	0(0.0%)	4(30.8%)	6(46.2%)	2(15.4%)	0(0.0%)
Emerson	1(14.3%)	5(48.7%)	5(71.4%)	0(0.0%)	3(6.0%)	1(14.3%)	3(42.9%)	5(71.4%)	0(0.0%)	0(0.0%)
Florida	4(33.3%)	8(60.1%)	11(91.7%)	0(0.0%)	6(41.4%)	4(30.8%)	8(61.5%)	12(92.3%)	5(38.5%)	4(30.8%)
Oregon	1(10.0%)	6(50.2%)	7(70.0%)	0(0.0%)	3(23.1%)	1(7.7%)	7(53.8%)	10(76.9%)	0(0.0%)	3(23.1%)
Dartmouth	4(7.7%)	25(48.4%)	21(40.4%)	2(3.8%)	4(8.6%)	4(7.7%)	27(51.9%)	21(40.4%)	2(3.8%)	5(9.6%)

Table 7. Continued

	Prospective Students					Current Students				
	Control Mutuality	Commit.	Satis.	Dissatis.	Trust	Control Mutuality	Commit.	Satis.	Dissatis.	Trust
Washington	0(0.0%)	5(59.1%)	4(57.1%)	0(0.0%)	1(14.2%)	0(0.0%)	4(51.9%)	4(57.1%)	0(0.0%)	1(14.3%)
Princeton	0(0.0%)	10(57.2%)	7(43.8%)	3(16.5%)	1(6.1%)	0(0.0%)	8(50.0%)	7(43.8%)	2(12.5%)	1(6.2%)
Butler	0(0.0%)	5(29.4%)	5(26.3%)	0(0.0%)	2(16.6%)	0(0.0%)	5(29.4%)	5(29.4%)	0(0.0%)	3(17.6%)
Carnegie Mellon	5(9.4%)	22(35.5%)	17(32.1%)	3(5.8%)	14(26.9%)	5(9.6%)	20(38.5%)	17(32.7%)	3(5.8%)	14(26.9%)
Yale	1(6.2%)	7(48.8%)	10(62.5%)	2(12.5%)	5(44.2%)	1(6.2%)	7(43.8%)	10(62.5%)	2(12.5%)	5(31.2%)
Miami	3(11.1%)	13(48.4%)	9(33.3%)	0(0.0%)	5(13.7%)	3(11.1%)	13(48.1%)	9(33.3%)	1(3.7%)	5(18.5%)
Spelman	5(12.5%)	21(52.5%)	8(20.0%)	3(3.5%)	9(22.5%)	5(12.5%)	21(52.5%)	8(20.0%)	1(2.5%)	9(22.5%)
Texas A&M	0(0.0%)	1(5.6%)	1(5.9%)	1(5.6%)	1(5.6%)	1(6.2%)	1(5.6%)	2(11.1%)	1(5.6%)	1(5.6%)
Auburn	2(11.1%)	9(50.0%)	0(0.0%)	0(0.0%)	4(22.2%)	2(11.1%)	9(50.0%)	0(0.0%)	0(0.0%)	4(22.2%)
Berklee	2(7.1%)	12(44.7%)	13(46.4%)	1(5.6%)	1(5.1%)	2(7.1%)	10(35.7%)	14(50.0%)	0(0.0%)	2(7.1%)
Brown	1(5.9%)	11(58.6%)	2(11.8%)	0(0.0%)	6(33.3%)	1(5.6%)	10(55.6%)	2(11.1%)	1(5.6%)	6(33.3%)

Table 8. Summary of Posts Per School, Audience (General Public and Faculty/Staff) and Relationship Indicator

	General Public					Faculty/Staff				
	Control Mutuality	Commit.	Satis.	Dissatis.	Trust	Control Mutuality	Commit.	Satis.	Dissatis.	Trust
Johns Hopkins	3(7.7%)	20(51.3%)	17(43.6%)	2(5.1%)	17(43.6%)	3(7.7%)	20(51.3%)	17(43.6%)	2(5.1%)	17(43.6%)
Harvard	2(5.3%)	17(44.7%)	25(65.8%)	13(34.2%)	15(39.5%)	2(5.3%)	17(44.7%)	25(65.8%)	13(34.2%)	15(39.5%)
Notre Dame	0(0.0%)	9(64.3%)	11(78.6%)	0(0.0%)	2(14.3%)	0(0.0%)	9(64.3%)	11(78.6%)	0(0.0%)	2(14.3%)
Ohio State	1(2.1%)	31(66.0%)	39(83.0%)	8(17.0%)	12(25.5%)	1(2.1%)	31(66.0%)	39(83.0%)	8(17.0%)	12(25.5%)
Columbia	5(9.6%)	13(25.0%)	21(40.4%)	3(5.8%)	11(21.2%)	5(9.6%)	13(25.0%)	21(40.4%)	3(5.8%)	11(21.2%)
Kentucky	4(8.9%)	19(42.2%)	35(77.8%)	5(11.1%)	11(24.4%)	5(10.6%)	20(42.6%)	36(76.6%)	5(10.6%)	12(25.5%)
Stanford	2(10.5%)	6(31.6%)	18(94.7%)	2(10.5%)	4(21.1%)	2(10.5%)	6(31.6%)	18(94.7%)	2(10.5%)	4(21.1%)
LSU	27(48.2%)	54(96.4%)	14(25.0%)	5(8.9%)	20(35.7%)	27(47.4%)	55(96.5%)	14(24.6%)	5(8.8%)	21(36.8%)
West Point	7(20.6%)	14(41.2%)	23(67.6%)	3(8.8%)	8(23.5%)	7(20.0%)	14(40.0%)	24(68.6%)	3(8.6%)	8(22.9%)
Texas	0(0.0%)	4(30.8%)	6(46.2%)	2(15.4%)	0(0.0%)	0(0.0%)	4(30.8%)	6(46.2%)	2(15.4%)	0(0.0%)
Emerson	1(14.3%)	3(42.9%)	5(71.4%)	0(0.0%)	0(0.0%)	1(14.3%)	3(42.9%)	5(71.4%)	0(0.0%)	0(0.0%)
Florida	3(27.3%)	6(54.5%)	10(90.9%)	4(36.4%)	3(27.3%)	3(27.3%)	6(54.5%)	10(90.9%)	4(36.4%)	3(27.3%)
Oregon	1(8.3%)	6(50.0%)	9(75.0%)	0(0.0%)	3(25.0%)	1(8.3%)	6(50.0%)	9(75.0%)	0(0.0%)	3(25.0%)
Dartmouth	4(7.7%)	27(51.9%)	21(40.4%)	2(3.8%)	5(9.6%)	4(7.7%)	27(51.9%)	21(40.4%)	2(3.8%)	5(9.6%)

Table 8. Continued

	General Public					Faculty/Staff				
	Control Mutuality	Commit.	Satis.	Dissatis.	Trust	Control Mutuality	Commit.	Satis.	Dissatis.	Trust
Washington	0(0.0%)	4(57.1%)	4(57.1%)	0(0.0%)	1(14.3%)	0(0.0%)	4(57.1%)	4(57.1%)	0(0.0%)	1(14.3%)
Princeton	0(0.0%)	8(50.0%)	7(43.8%)	2(12.5%)	1(6.2%)	0(0.0%)	8(50.0%)	7(43.8%)	2(12.5%)	1(6.2%)
Butler	0(0.0%)	4(23.5%)	5(29.4%)	0(0.0%)	2(11.8%)	0(0.0%)	4(22.2%)	5(27.8%)	0(0.0%)	3(16.7%)
Carnegie Mellon	5(9.4%)	21(39.6%)	17(32.1%)	3(5.7%)	14(26.4%)	5(9.4%)	21(39.6%)	17(32.1%)	3(5.7%)	14(26.4%)
Yale	1(6.2%)	7(43.8%)	10(62.5%)	2(12.5%)	5(31.2%)	1(6.2%)	7(43.8%)	10(62.5%)	2(12.5%)	5(31.2%)
Miami	3(11.1%)	13(48.1%)	9(33.3%)	1(3.7%)	5(18.5%)	3(11.1%)	13(48.1%)	9(33.3%)	1(3.7%)	5(18.5%)
Spelman	5(12.5%)	21(52.5%)	8(20.0%)	1(2.5%)	9(22.5%)	5(12.5%)	21(52.5%)	8(20.0%)	1(2.5%)	9(22.5%)
Texas A&M	0(0.0%)	1(5.6%)	2(11.1%)	1(5.6%)	1(5.6%)	0(0.0%)	1(5.6%)	2(11.1%)	1(5.6%)	1(5.6%)
Auburn	2(11.1%)	9(50.0%)	0(0.0%)	0(0.0%)	4(22.2%)	2(11.1%)	9(50.0%)	0(0.0%)	0(0.0%)	4(22.2%)
Berklee	1(6.2%)	9(56.2%)	2(12.5%)	0(0.0%)	1(6.2%)	2(6.9%)	11(37.9%)	14(48.3%)	0(0.0%)	2(6.9%)
Brown	1(%)	9(52.9%)	2(11.8%)	1(5.9%)	6(35.3%)	1(5.6%)	10(55.6%)	2(11.1%)	1(5.6%)	6(33.3%)

Table 9. Summary of Posts Per School, Audience (Alumni and Multiple Audiences) and Relationship Indicator

	Alumni					Multiple Audiences				
	Control Mutuality	Commit.	Satis.	Dissatis.	Trust	Control Mutuality	Commit.	Satis.	Dissatis.	Trust
Johns Hopkins	4(6.7%)	21(56.3%)	18(44.6%)	2(5.1%)	17(44.6%)	3(7.7%)	20(51.3%)	17(43.6%)	2(5.1%)	17(43.6%)
Harvard	3(6.7%)	16(49.4%)	27(69.1%)	11(31.4%)	18(47.8%)	1(2.7%)	16(43.2%)	25(67.6%)	12(32.4%)	14(37.8%)
Notre Dame	1(2.4%)	8(54.4%)	10(71.6%)	0(0.0%)	2(12.6%)	0(0.0%)	9(64.3%)	11(78.6%)	0(0.0%)	2(14.3%)
Ohio State	1(2.3%)	33(67.8%)	34(73.5%)	8(16.3%)	13(27.5%)	1(2.1%)	31(66.0%)	39(83.0%)	8(17.0%)	12(25.5%)
Columbia	6(9.9%)	12(25.2%)	20(40.1%)	2(5.4%)	10(19.6%)	5(9.6%)	13(25.0%)	21(40.4%)	3(5.8%)	11(21.2%)
Kentucky	6(9.7%)	19(41.5%)	39(77.3%)	5(10.7%)	11(23.8%)	4(8.7%)	19(41.3%)	36(78.3%)	5(10.9%)	11(23.9%)
Stanford	3(11.2%)	6(37.6%)	21(96.7%)	2(9.1%)	4(21.1%)	2(10.5%)	6(31.6%)	18(94.7%)	2(10.5%)	4(21.1%)
LSU	28(48.6%)	57(97.1%)	13(22.2%)	8(7.9%)	23(39.5%)	27(48.2%)	54(96.4%)	13(23.2%)	5(8.9%)	20(35.7%)
West Point	7(15.6%)	13(39.2%)	20(61.2%)	3(8.5%)	7(24.6%)	6(17.6%)	13(38.2%)	23(67.6%)	3(8.8%)	7(20.6%)
Texas	0(0.0%)	5(31.4%)	6(44.2%)	3(13.3%)	0(0.0%)	0(0.0%)	4(30.8%)	6(46.2%)	2(15.4%)	0(0.0%)
Emerson	0(0.0%)	3(40.2%)	5(71.8%)	1(1.3%)	1(1.6%)	1(14.3%)	3(42.9%)	5(71.4%)	0(0.0%)	0(0.0%)
Florida	6(41.3%)	7(58.9%)	10(89.7%)	0(0.0%)	3(27.9%)	3(25.0%)	7(58.3%)	11(91.7%)	5(41.7)	3(25.0%)
Oregon	1(7.5%)	7(47.6%)	11(77.1%)	0(0.0%)	3(24.1%)	1(8.3%)	6(50.0%)	9(75.0%)	0(0.0%)	3(25.0%)
Dartmouth	4(7.8%)	25(53.9%)	23(42.4%)	2(3.4%)	6(10.6%)	4(7.7%)	27(51.9%)	21(40.4%)	2(3.8%)	5(9.6%)

Table 9. Continued

	Alumni					Multiple Audiences				
	Control Mutuality	Commit.	Satis.	Dissatis.	Trust	Control Mutuality	Commit.	Satis.	Dissatis.	Trust
Washington	0(0.0%)	4(57.2%)	4(57.2%)	0(0.0%)	2(24.5%)	0(0.0%)	4(57.1%)	4(57.1%)	0(0.0%)	1(14.3%)
Princeton	0(0.0%)	4(50.0%)	7(45.4%)	2(22.5%)	2(6.2%)	0(0.0%)	8(50.0%)	7(43.8%)	2(12.5%)	1(6.2%)
Butler	0(0.0%)	4(22.2%)	5(27.4%)	0(0.0%)	5(26.7%)	0(0.0%)	4(22.2%)	5(27.8%)	0(0.0%)	3(16.7%)
Carnegie Mellon	5(9.4%)	22(42.2%)	27(55.5%)	5(5.9%)	25(25.5%)	5(9.8%)	21(41.2%)	17(33.3%)	3(5.9%)	13(25.5%)
Yale	2(7.2%)	7(50.0%)	20(72.4%)	2(24.5%)	5(55.7%)	1(7.1%)	7(50.0%)	10(71.4%)	2(14.3%)	5(35.7%)
Miami	5(22.2%)	25(44.2%)	9(55.5%)	2(5.7%)	5(24.5%)	3(11.1%)	13(48.1%)	9(33.3%)	1(3.7%)	5(18.5%)
Spelman	5(22.4%)	22(55.4%)	4(20.5%)	2(2.6%)	9(25.2%)	5(12.8%)	21(53.8%)	8(20.5%)	1(2.6%)	9(23.1%)
Texas A&M	0(0.0%)	2(5.6%)	2(22.2%)	2(5.6%)	2(5.6%)	0(0.0%)	1(5.6%)	2(11.1%)	1(5.6%)	1(5.6%)
Auburn	2(22.2%)	9(50.0%)	0(0.0%)	0(0.0%)	4(22.2%)	2(11.1%)	9(50.0%)	0(0.0%)	0(0.0%)	4(22.2%)
Berklee	2(7.2%)	20(55.7%)	24(50.0%)	0(0.0%)	2(7.2%)	2(7.1%)	10(35.7%)	14(50.0%)	0(0.0%)	2(7.1%)
Brown	2(5.6%)	20(55.6%)	2(22.2%)	2(5.6%)	6(55.5%)	1(5.6%)	10(55.6%)	2(11.1%)	1(5.6%)	6(33.3%)

Table 10. Summary of Posts Per Audience and Model of Public Relations

	Press Agentry	Public Information	Two-way Asymmetrical	Two-way Symmetrical
Prospective Students	343(49.5%)	393(56.7%)	164(23.7%)	27(3.9%)
Current Students	346(49.3%)	400(57.0%)	166(23.6%)	26(3.7%)
General Public	342(50.0%)	397(58.0%)	153(22.4%)	26(3.8%)
Alumni	338(50.0%)	396(58.6%)	146(21.6%)	24(3.6%)
Faculty/Staff	345(49.1%)	403(57.3%)	167(23.8%)	27(3.8%)
Multiple Audiences	340(49.0%)	400(57.6%)	162(23.3%)	26(3.7%)

Table 11. Summary of Posts Per Audience and Relationship Indicator

	Control Mutuality	Commitment	Satisfaction	Dissatisfaction	Trust
Prospective Students	81(11.7%)	337(48.6%)	325(46.9%)	58(8.4%)	163(23.5%)
Current Students	79(11.3%)	342(48.7%)	337(48.0%)	60(8.5%)	163(23.2%)
General Public	78(11.4%)	335(49.0%)	320(46.8%)	60(8.8%)	160(23.4%)
Alumni	74(10.9%)	329(48.7%)	315(46.6%)	60(8.5%)	157(23.2%)
Faculty/Staff	80(11.4%)	340(48.4%)	334(47.5%)	59(8.7%)	164(23.3%)
Multiple Audiences	77(11.1%)	336(48.4%)	333(48.0%)	60(8.6%)	159(22.9%)

The next series of analyses were designed to examine in more detail the differences in the use of models and relationship indicators within each target audience. Only statistically significant results are discussed.

RQ2: According to Grunig's four models of public relations, do universities' Facebook posts resemble the press agency/publicity, public information, two-way asymmetrical, or two-way symmetrical model of public relations?

The study used a one-sample chi-square test to measure the relationship between the models of public relations (press agency/publicity, public information, two-way asymmetrical, two-way symmetrical) and universities' various audiences (prospective and current students, general public, faculty/staff, alumni, multiple audiences) on Facebook.

When universities' Facebook posts targeted current students, posts were less likely to feature the two-way symmetrical model of public relations, $\chi^2(1, N=26)=11.299$, $p<.001$, Cramer's $V=.126$. Only 3.7% of universities' posts targeting current students exhibited this model, compared to 96.3% that did not..

When universities' posts targeted the general public, posts were equally likely to feature the press agency model of public relations. Half of these posts (50.0%) demonstrated the press agency model and 50.0% did not. However, when the target was not the general public, only 28% of posts used the press agency model. Results were significant, $\chi^2(1, N=342)=4.670$, $p<.05$, Cramer's $V=.081$. On the other hand, when universities' Facebook posts targeted the general public, posts were more likely to feature the public information model of public relations $\chi^2(1, N=397)=8.879$, $p<.01$, Cramer's $V=.112$. Fifty-eight percent of posts targeting the general public exhibited this model, compared to 42% that did not.

Statistically significant results were also found when examining posts aimed at the general public and the two-way asymmetrical model of public relations. Universities' posts were less likely to exhibit the two-way asymmetrical model, $\chi^2(1, N=153)=23.025$, $p<.001$, Cramer's $V=.180$. When posts targeted the general public, less than a quarter (22.4%) featured this model,

compared to 77.6% that did. When the general public was not identified as the target audience, 64% of posts employed the two-way asymmetrical model. When posts targeted faculty/staff, they were more likely (57.3%) to exhibit the public information model than not (42.7%). Results were significant, $\chi^2(1, N=403)=4.012$, $p<.05$, Cramer's $V=.075$. Among posts unintended for faculty/staff, only 16.7% used the public information model.

Moreover, statistically significant results were generated between alumni and three of the four models of public relations. When universities' Facebook posts targeted alumni, posts were significantly more likely to demonstrate a presence of the public information model, $\chi^2(1, N=396)=15.134$, $p<.001$, Cramer's $V=.146$. More than half of posts (58.6%) directed at alumni featured the public information model, compared to 41.4% that did not. Among posts that were not targeted towards alumni, only 24.2% used the public information model. Conversely, posts were less likely to feature the two-way asymmetrical model of public relations when targeting alumni, $\chi^2(1, N=146)=40.096$, $p<.001$, Cramer's $V=.238$. When posts targeted alumni, only 21.6% used the two-way asymmetrical model, compared to 79.4% that did not. Interestingly, when alumni were not the intended audience, 69.7% of posts used this model. Results for posts aimed at alumni using the two-way symmetrical model of public relations also favored an absence of the model. When universities' Facebook posts targeted alumni, posts were less likely to feature the two-way symmetrical model of public relations, $\chi^2(1, N=24)=6.093$, $p<.01$, Cramer's $V=.093$. Only 3.6% of universities' posts targeting alumni exhibited this model, compared to 96.4% that did not. When alumni were not the targeted audience, 12.1% of posts used the two-way symmetrical model.

Results were also significant between posts directed at multiple audiences regarding the public information model, $\chi^2(1, N=400)=5.745$, $p<.05$, Cramer's $V=.090$. When universities'

posts targeted multiple audiences, posts were more likely (57.6%) to feature this model than not (42.4%). When posts did not target multiple audiences (i.e. all other audiences were analyzed), only 26.7% of posts used the public information model. When Facebook posts directed at multiple audiences were analyzed, results indicated that they were significantly less likely to use the two-way asymmetrical model of public relations, $\chi^2(1, N=162)=4.400, p<.05$, Cramer's $V=.079$. Only 23.3% of posts targeting multiple audiences used this model, compared to 76.7% that did..

Based on the results presented above, universities' Facebook posts were more likely, overall, to resemble the public information model of public relations. Statistically significant results for the public information model were obtained in posts that targeted four of the six audiences (general public, faculty/staff, alumni, multiple audiences) identified. In posts targeting three of the six audiences identified (general public, alumni, and multiple), the two-way asymmetrical model of public relations was used significantly less frequently, than when other audiences were targeted. When the intended audiences were current students and alumni, posts were significantly less likely to resemble the two-way symmetrical model. Although none of the findings in relation to prospective students were significant, an interesting result (when examining percentages) was that more than half (56.7%) posts aimed at prospective students displayed features of the public information model. Yet, only 3.9% of posts intended for prospective students used the two-way symmetrical model. (See Table 12 for full summary).

Table 12. Chi Square Analysis of University Posts: Audience and Model of Public Relations

		Prospective Students	Current Students	General Public	Faculty/Staff	Alumni	Multiple Audiences
Press Agency	N	343	346	342	345	338	340
	%	49.5%	49.3%	50.0%	49.1%	50.0%	49.0%
	χ^2	.900	.115	4.670*	.737	3.497	.712

Table 12 Continued. Chi Square Analysis of University Posts: Audience and Model of Public Relations

	Cramer's V	.036	.013	.081	.032	.070	.032
Public Information	N	393	400	397	403	396	400
	%	56.7%	57.0%	58.0%	57.3%	58.6%	57.6%
	χ^2	.925	.000	8.879**	4.012*	15.134***	5.745*
	Cramer's V	.036	.000	.112	.075	.146	.090
Two-way Asymmetrical	N	164	166	153	167	146	162
	%	23.7%	23.6%	22.4%	23.8%	21.6	23.3%
	χ^2	.496	1.409	23.025***	.301	40.096***	4.400*
	Cramer's V	.026	.045	.180	.021	.238	.079
Two-way Symmetrical	N	27	26	26	27	24	26
	%	3.9%	3.7%	3.8%	3.8%	3.6%	3.7%
	χ^2	.228	11.299***	1.121	2.580	6.093**	3.558
	Cramer's V	.018	.126	.040	.060	.093	.071

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

RQ3: According to Hon and Grunig's (1999) relationship indicators, do universities'

Facebook posts promote trust, satisfaction, commitment, and control mutuality between the universities and their publics (students, faculty/staff, alumni, public) on Facebook?

The study used a one-sample chi-square test to evaluate the relationship between Hon and Grunig's relationship indicators (control mutuality, commitment, satisfaction/dissatisfaction, trust) and universities' various audiences (prospective and current students, general public, faculty/staff, alumni, multiple audiences) on Facebook.

Among posts directed at prospective students, less than half (48.6%) demonstrated satisfaction. When prospective students were not the intended audience, 81.2% of posts indicated signs of satisfaction, $\chi^2(1, N=325)=7.398$, $p<.01$, Cramer's $V=.102$. When universities' posts were directed at the general public, fewer posts promoted satisfaction, $\chi^2(1, N=320)=6.148$,

$p < .01$, Cramer's $V = .093$. Less than half (46.8%) of posts demonstrated satisfaction between the university and the general public, whereas 53.2% of these posts did not promote satisfaction. When the general public was not the targeted audience, 72% of posts demonstrated satisfaction. Similarly, when universities' Facebook posts targeted faculty/staff, posts were significantly less likely to promote the commitment relationship indicator, $\chi^2(1, N=340) = 6.349$, $p < .01$, Cramer's $V = .095$. Only 48.4% of posts demonstrated commitment between the university and faculty/staff, whereas 51.6% of these posts lacked commitment. Among posts that did not target faculty/staff, 100% of posts promoted commitment.

The chi square analysis of alumni and satisfaction also revealed significant results, $\chi^2(1, N=315) = 6.730$, $p < .01$, Cramer's $V = .097$. When Facebook posts targeted alumni, more than half (53.4%) of posts did not promote satisfaction, compared to 46.6% of posts that did. Among posts not directed at alumni, 69.7% promoted satisfaction. Moreover, when posts directed at multiple audiences were examined for the presence or absence of trust, results were significant, $\chi^2(1, N=159) = 4.621$, $p < .05$, Cramer's $V = .081$. Whereas 22.9% of posts promoted trust in posts aimed at multiple audiences, a significant majority (77.1%) of posts did not.

Results Summary

Based on the results presented above, universities' Facebook posts were significantly less likely to promote: satisfaction among posts targeting prospective students, the general public, and alumni; commitment among posts targeting faculty/staff; and trust among posts targeting multiple audiences. Although results of the chi square analysis did not produce significant statistics for posts measuring the other relationship indicators (control mutuality, dissatisfaction) and remaining audience (current students), a few percentage comparisons were noteworthy. In posts intended for current students, only 11.3% promoted control mutuality. The control

mutuality statistic is similar for the other audiences as well (11.4% among general public posts; 11.4% among faculty/staff posts; 10.9% among alumni posts; and 11.1% among multiple audience posts). Moreover, dissatisfaction was coded for in less than 10% of posts targeting each audience. (See Table 13 for full summary.)

Table 13. Chi Square Analysis of University Posts: Audience and Relationship Indicator

		Prospective Students	Current Students	General Public	Faculty/Staff	Alumni	Multiple Audiences
Control Mutuality	N	81	79	78	80	74	77
	%	11.7%	11.3%	11.4%	11.4%	10.9%	11.1%
	χ^2	2.111	2.054	.008	.164	3.277	3.518
	Cramer's V	.055	.054	.003	.015	.068	.070
Commitment	N	337	342	335	340	329	336
	%	48.6%	48.7%	49.0%	48.4%	48.7%	48.4%
	χ^2	.364	.197	.239	6.349**	.102	1.958
	Cramer's V	.023	.017	.018	.095	.012	.053
Satisfaction	N	325	337	320	334	315	333
	%	46.9%	48.0%	46.8%	47.5%	46.6%	48.0%
	χ^2	7.398**	3.159	6.148**	.875	6.730**	1.263
	Cramer's V	.102	.067	.093	.035	.097	.042
Dissatisfaction	N	58	60	60	60	59	60
	%	8.4%	8.5%	8.8%	8.5%	8.7	8.6%
	χ^2	2.143	.290	.698	.500	.285	.073
	Cramer's V	.055	.020	.031	.027	.020	.010
Trust	N	163	163	160	164	157	159
	%	23.5%	23.2	23.4%	23.3%	23.2%	22.9%
	χ^2	.199	1.491	.005	.332	.288	4.621*
	Cramer's V	.017	.046	.003	.022	.020	.081

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

DISCUSSION

In light of the fact that this study's sample of universities included the top ranked 25 social media higher education institutions, the findings were very surprising. These universities, assuming that they strive to be effective organizations, are not taking full advantage of the potential of Facebook as a public relations power tool. Based on existing research, institutions of higher learning should be doing everything in their power to harness the power of social media. Facebook is the primary social media resource among prospective college students. Moreover, between 85 and 99 percent of college students use the social medium. The universities included in this study are doing a disservice to themselves by failing to harness this power.

The most conspicuous trend in this study was the gross scarcity of the two-way symmetrical model of public relations among the universities sampled. When universities' Facebook posts targeted current students and alumni, posts were less likely to use the two-way symmetrical model of public relations. In posts targeting every single audience type (current and prospective students, faculty, alumni, public, multiple audiences), the two-way symmetrical model was used in less than 5% of posts. In fact, the Scott's pi value (.96) for this model was noticeably higher than other models and indicators because coders could easily discern the model, as it occurred very rarely.

In public relations, the two-way symmetrical model is the holy grail of an effective organization-public relationship (Grunig, 2002). Grunig's excellence theory suggests that positive, long-term relationships represent the value of public relations to organizations because these relationships are assumed to encourage supportive behaviors and prevent unsupportive behaviors. Better relationships are created because organizations are able to communicate effectively with their publics, understand each other, and are less likely to behave in ways that

will negatively affect the other party's interests. Enduring, mutually beneficial relationships are established with publics as a result of this model. Therefore, the significant lack of two-way symmetrical communication between the universities sampled and their publics was alarming.

Based on the excellence theory, these universities' publics (particularly students) will be more likely to engage in unsupportive behaviors. In other words, Hennig-Thurau et al.'s (2001) "loyal student" premise may not be fully realized. The scholars argued that a loyal student might continue to support his or her higher education institution even after graduating by providing financial support (donations, research projects), through word-of-mouth promotion to other students, and by offering cooperative services, such as student placements or visiting lectures. The lack of two-way symmetrical communication on Facebook between students and universities may signify a disinterest in university affairs and campus life among students. If this is the case, universities should take heed. Without loyal students who support and promote their university, the school may suffer a backlash of unsupportive behavior among publics. Students may, for instance, dissuade peers from attending the university, thereby curbing enrollment, tarnishing its reputation, and preventing funding from private and government donors.

The schools in this study are overlooking an ideal opportunity to build mutually beneficial relationships with their publics by failing to effectively employ the full spectrum of dialogic strategies that social media offer. Dialogic communication theory is an orientation that highlights the extent to which an organization lends itself to dialogue, interpretation, and understanding in its interactions with publics (Kent & Taylor, 1998). In online relationship cultivation, dialogic communication has arguably become easier with and more expected with the influx of social media. This is not the case in the current study.

In fact, this study's results seemingly contradict the logical progression of online relationship cultivation research. For instance, results of Bortree and Seltzer's (2009) study suggested that social media dialogic strategies increased and enhanced the number of stakeholders who interacted with the environmental advocacy groups they studied. Similarly, in Briones et al.'s (2011) findings, results indicated that an organization's development of two-way dialogue contributed to the organization's social media efforts. Both groups of researchers documented success stories of the ways in which actively responding to Facebook posts and allowing the organizations to gain ideas from the public fostered positive outcomes. Moreover, in Sisco and McCorkindale's (2010) study, results indicated that the most social media-savvy organizations (the organizations with the most "likes," "followers," posts, tweets, and comments) were viewed as more transparent and credible. In this study, however, the universities sampled represented the top 25 social media colleges, yet their Facebook posts significantly lacked the features of two-way communication.

In failing to take advantage of Facebook's dialogic communication powers, the universities sampled here risk loss of students, especially prospective students. Students want to feel supported, encouraged, and appreciated by their university. Facebook is a perfect medium for this sort of communication. If universities continue to push information onto their audiences, rather than engage in dialogue and conversation with its publics, excellence and dialogic communication theories state that the relationships cultivated will not be as vibrant, effective, or enduring.

Instead of employing the two-way symmetrical model of public relations, results indicated that the universities sampled tended to use the public information model of public relations. For instance, when universities' posts targeted the general public, posts were more

likely to feature the public information model of public relations. Moreover, statistically significant results for the public information model were obtained in posts that targeted four of the six audiences (general public, faculty/staff, alumni, multiple audiences) identified. Posts demonstrating public information models presented one-way, objective, unbiased information. For instance, the University of Texas at Austin posted the following: “Huge Impact: Researchers have devised a simple test using mutant worms for identifying drugs that may help people with Parkinson’s disease.” In another example, Dartmouth posted “A friendly reminder that Cathy M. Davidson will discuss her book ... and explore implications for Dartmouth and higher education at 4 p.m. in Filene Auditorium.”

The aforementioned finding is not surprising. The universities included in the sample took advantage of social media in this regard, as they used their posts to share information with their publics. Practically, therefore, using the public information model is not faux-pas. Distributing information is undoubtedly a necessary and effective usage of Facebook’s communicative power. However, it seems better suited to have more of a hybrid of public information posts and two-way communication posts. Because of the participatory, collaborative nature of Facebook, universities are again neglecting an opportunity to cultivate relationships, a fundamental goal of public relations.

Although not statistically significant, it should be noted that the press agency model was used in approximately half of posts targeted at each of the six audiences. The press agency model used biased, persuasive language in the posts sampled in this study. For example, LSU posted, “Your mission, if you choose to accept it, is to love purple and live gold.” For posts directed at current students, this finding seems appropriate (and positive), contrary to literature about the press agency model. The LSU post, for instance, ideally suits current students because

it clearly attempts to create student loyalty, school spirit, and supportive behavioral intentions among students (Sung & Yang, 2008). Moreover, for other publics, such as prospective students, the press agency model also seems appropriate. Butler, for example, posted “Our English department is super cool. Come check us out in the writing lab.” Prospective students may see this post and be immediately intrigued. Therefore, the press agency model, although it’s generally perceived as negative in public relations, actually appears to be a positive communicative strategy for universities. Nevertheless, using the press agency model to communicate is arguably questionable. If universities’ posts are not high quality, conversational, or useful, is the communication actually generating “excellent” relationships that create loyal, supportive students? Moreover, universities’ reliance on the press agency and public information models of public relations in Facebook communication to students is reminiscent of the traditional viewbook as a communication tool. Both methods of outreach “push” content onto universities’ publics. Thus, a dependence on these one-way communication techniques is regressive.

Another trend among posts in the sample was a lack of relationship indicators. Universities’ Facebook posts were significantly less likely to promote satisfaction among prospective students, the general public, and alumni. Similarly, the posts were less likely to promote commitment among posts targeting faculty/staff. The percentage of posts that demonstrated control mutuality was the bleakest. In posts directed at each of the 6 audiences, this relationship indicator was only detected about 11% of the time.

The presence of Hon and Grunig’s relationship indicators have been found to represent effective (positive, long lasting, mutually beneficial) organization-public relationships. The absence of these indicators in the majority of posts in this study’s sample, therefore, paints a less

than favorable picture of the relationships that these universities have with their publics. Given the fact that posts that demonstrated control mutuality, for example, were characterized as demonstrating a desire to foster long-term relationships with students, these universities should modify their social media strategy to incorporate more of these posts.

On a relatively positive note, posts that demonstrated commitment numbered close to 50% for each of the six audiences identified. Although these results were not significant, it is a noteworthy finding. Commitment posts were designated when universities expressed an affirmation or attempted to make the university experience better. Hence, these posts ranged from Berklee's "Happy first day of classes!" to Ohio State's "Share your pride!"

Both practically and theoretically, this study has important implications. Theoretically, previous scholarship suggests that an effective, long-lasting relationship between an organization and its publics promotes positive outcomes, such as increased support from stakeholders. Both the excellence theory and dialogic communication theory emphasize the role of mutuality and dialogue in communicative exchanges between an organization and its publics. The universities in this study did not demonstrate an effective use of these important theoretical considerations. This has significant practical implications. Universities' public relations practitioners and social media officers need more education about how to conduct successful public relations in the social media stratosphere. In light of the dismal economic climate surrounding higher education (budget cuts, tuition spikes, alarming student debt rates), it is imperative that universities recruit and retain high quality students, as well as remain relevant and reputable to their other publics (alumni, general public, faculty/staff, etc.) Effective communication and two-way public relations, particularly with regard to social media, is an ideal way of accomplishing this need.

Limitations and Future Research

This study had some limitations. It was the first to use Hon and Grunig's relationship indicators in a content analysis to measure university-public online relationships. Previous research involving the relationship indicators in a higher education setting employed survey methodology to measure the indicators. Previous research examining online organization-public relationships in the form of a content analysis has yet to focus on universities. Therefore, the lack of precedent made it difficult to operationalize each relationship indicator to suit an online, university context.

Moreover, when previous literature did operationalize the relationship indicators to reflect the Web, there seemed to be a disconnect between Hon and Grunig's original definitions of the relationship indicators and the operationalizations used by scholars. For example, Hon and Grunig (1999) defined trust as the public's confidence in the organization and the willingness of the public to form a relationship with the organization. Trust comprises integrity, dependability, and competence on behalf of the organization. Park and Reber (2008) adapted the aforementioned definition to reflect a trusting online relationship. They operationalized trust as the conservation of visitors and the usefulness of information. This does not appear to accurately describe trust, as Hon and Grunig intended. It was challenging, then, to incorporate previous scholars' interpretations of the relationship indicators in the current study.

Consistent with the aforementioned concern, the study was limited in its operationalizations of the indicators. Posts demonstrating commitment, satisfaction, and trust oftentimes blended together. Therefore, construct and discriminant validity were concerns. Distinctions were difficult for coders to discern among these three indicators. This was reflected in the lower intercoder reliability statistics for commitment (.79), satisfaction (.68), and trust

(.64). Future research should be more innovative in its approach to operationalizing the relationship indicators, particularly to suit social media.

Another limitation is that this study is not generalizable to the entire population of higher education institutions' Facebook pages. The researcher used purposive sampling to select the top 25 social media colleges based on StudentAdvisor.com's rankings. Also, the three-week time frame of this study makes generalizing the study's results impractical. Results of this study should not be used to stereotype the relationships that universities cultivate with their publics on Facebook.

Additionally, this study did not closely examine (except in regards to the satisfaction indicator) Facebook users' comments, nor did it measure posts' number of likes and shares. Future research should account for these variables. It would be interesting to explore the relationship between a university's posts and comments from users, particularly for the universities that actually respond to user comments. Perhaps, stronger relationship indicators would be present in those exchanges.

Finally, future research may also incorporate an examination of universities' social media policies to determine their presence and guidelines. Additionally, a triangulation of methods to more extensively gauge the university-public relationship, as portrayed on Facebook, would be helpful. Researchers, for instance, may carry out a case study for a select group of universities' Facebook pages. They may then interview public relations administrators from those universities to obtain more qualitative data about the importance/triviality of Facebook in the school's recruitment and retention efforts. As a final method, researchers may conduct a content analysis of Facebook posts, including comments to measure relationship indicators, as well as models of public relations.

CONCLUSION

Today's higher education institutions face a competitive academic market and a dismal economic climate. Universities must aggressively employ public relations strategies in order to build and cultivate relationships with their publics. This, in turn, contributes to higher enrollment, increased funding, and student loyalty (Sung & Yang, 2008). With the virtual ubiquity of social media among college students, it is ideal for universities to employ public relations tactics via social networking sites, such as Facebook and Twitter, to remain attractive to students, alumni, faculty, and the general public.

Based on the findings presented in this study, it is evident that the top 25 social media colleges are, in fact, generating relationships with its various publics on Facebook. However, the gross shortage of two-way communication methods was surprising. These universities are not capitalizing on the dialogic power of Facebook to build relationships. Even more astonishing was the lack of relationship indicators in the posts sampled and the surprisingly positive use of the press agency model of public relations in a large number of posts.

From the viewbooks of universities' early years to their 21st century Facebook forays, higher education institutions have never ceased to find innovative ways of remaining relevant. Nevertheless, the results of this study signify that these institutions still have a lot of work to do in the world of social media if they want to attain long-term, positive relationships with their publics.

REFERENCES

- Anderson, J., & Rainie, L. (2012). *Millenials will benefit and suffer due to their hyperconnected lives*. Retrieved from Pew Research Center, Pew Internet & American Life Project website:
http://pewinternet.org/~media/Files/Reports/2012/PIP_Future_of_Internet_2012_Young_brains_PDF.pdf
- Barnes, N.G. (2010). *Reaching the wired generation: How social media is changing college admission*. National Association for College Admission Counseling: Retrieved from http://apps.carleton.edu/trustees/assets/6_SocialMediaDiscussionPaper.pdf
- Bortree, D., & Seltzer, T. (2009). Dialogic strategies and outcomes: An analysis of environmental advocacy groups' Facebook profiles. *Public Relations Review*, 35, 317-319.
- Briones, R. L., Kuch, B., Liu, B. F., & Jin, Y. (2011). Keeping up with the digital age: How the American Red Cross uses social media to build relationships. *Public Relations Review*, 37, 37-43.
- Broom, G. M., Casey, S., & Ritchey, J. (2000). Toward a concept and theory of organization–public relationships: An update. In J. A. Ledingham & S. D. Bruning (Eds.), *Public relations as relationship management: A relational approach to the study and practice of public relations* (pp. 3–22). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Bruning, S. D. (2002). Relationship building as a retention strategy: Linking relationship attitudes and satisfaction evaluations to behavioral outcomes. *Public Relations Review*, 28, 39–48.
- Bruning, S. D., & Hatfield, M. (2002). Linking organization–public relationships attitudes and satisfaction outcomes: Communication strategies to build relationships and enhance satisfaction. *Journal of Promotion Management*, 8, 3–19.
- Bugeja, M. J. (2006). Facing the Facebook. *Chronicle of Higher Education*, 52(21), C1.
- Cancel, A. E., Cameron, G. T., Sallot, L. M., & Mitrook, M. A. (1997). It depends: A contingency theory of accommodation in public relations. *Journal of Public Relations Research*, 9, 31–64.
- Cao, Y. (2010, November). *Meeting the millennial college students: Examining their social media usage and establishing effective strategies*. Paper presented at the 35th Annual Conference: California Association for Institutional Research, San Diego, CA. Retrieved from http://www.cair.org/conferences/cair2010/pres/SocialMediaandCollegeStrategy_Posting.pdf

- Cho, S., & Huh, J. (2007). Corporate blogs as a public relations tool: A content analysis applying the relational maintenance framework. *Corporate Communications: An International Journal*, 15(1), 30-48.
- Cutlip, S., Center, A., & Broom, G. (1994). *Effective public relations*. Englewood Cliffs, NJ: Prentice Hall.
- Edman, H. (2010). *Twittering to the top: A content analysis of corporate tweets to measure organization-public relationships* (Master's thesis). Retrieved from <http://etd.lsu.edu/docs/available/etd-04292010-162453/unrestricted/edmanthesis.pdf>
- Falci, C., & McNeely, C. (2009). Too many friends: Social integration, network cohesion and adolescent depressive symptoms. *Social Forces*, 87, 2031-2061.
- Ferguson, M. A. (1984, August). *Building theory in public relations: Interorganizational relationships*. Paper presented at the Association for Education in Journalism and Mass Communication, Gainesville, FL.
- Grunig, J. E., & White, J. (1992). The effect of worldviews on public relations theory and practice. In J. E. Grunig (Ed.), *Excellence in public relations and communications management*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Grunig, L. A., Grunig, J. E., & Dozier, D. M. (2002). *Excellent public relations and effective organizations, A study of communication management in three countries*. Mahwah, NJ: Erlbaum.
- Grunig, J.E., & Hunt, T. (1984). *Managing public relations*. New York, NY: Holt, Reinhart and Winston.
- Hallahan, K. (2008) Organizational-Public Relationships in Cyberspace. In T. Hansen-Horn & B. Dostal Neff (Eds.), *Public relations: From theory to practice*, (pp. 46-63). Boston, MA: Pearson.
- Hampton, K., Goulet, L., Rainie, L., & Purcell, K. (2011). *Social networking sites and our lives: How people's trust, personal relationships, and civic and political involvement are connected to their use of social networking sites and other technologies*. Retrieved from Pew Research Center, Pew Internet & American Life Project website: <http://www.pewinternet.org/~media/Files/Reports/2011/PIP%20-%20Social%20networking%20sites%20and%20our%20lives.pdf>
- Hartley, M., & Morphew, C. (2008). What's being sold and to what end? A content analysis of college viewbooks. *The Journal of Higher Education*, 79(6), 671-691.
- Henderson, A., & Bowley, R. (2010). Authentic dialogue? The role of "friendship" in a social media recruitment campaign. *Journal of Communication Management*, 14(3), 237-257.

- Hennig-Thurau, T., Thorsten, M., Langer, F., & Hansen, U. (2001). Modeling and managing student loyalty: An approach based on the concept of relationship quality. *Journal of Service Research*, 3(4), 331-344.
- Herbig, P., & Hale, B. (1997). Internet: The marketing challenge of the 20th century. *Internet Research*, 7(2), 95-100.
- Hon, L. C., & Brunner, B. (2002). Measuring public relationships among students and administrators at the University of Florida. *Journal of Communication Management*, 6, 227-238.
- Hon, L., & Grunig, J.E. (1999). *Guidelines for measuring relationships in public relations*. Gainesville, FL: Institute for Public Relations.
- Jo, S., Hon, L., & Brunner, B. (2004, August). Organization-public relationships: Measurement validation in a university setting. *Journal of Communication Management*, 9(1), 14-27.
- Kent, M., & Taylor, M. (1998). Building dialogic relationships through the world wide web. *Public Relations Review*, 24(3), 321-334.
- Ki, E., & Hon, L. (2007). Testing the linkages among the organization–public relationship and attitude and behavioral intentions. *Journal of Public Relations Research*, 19(1), 1-23.
- Ledingham, J. A. (2003). Explicating relationship management as a general theory of public relations. *Journal of Public Relations Research*, 15, 181-198.
- Ledingham, J. A., & Bruning, S. D. (1998). Relationship management in public relations: Dimensions of an organization–public relationship. *Public Relations Review*, 24, 55-65.
- Maloney, E. (2007). What Web 2.0 can teach us about learning. *Chronicle of Higher Education*, 25(18), B26.
- Mason, R., & Rennie, F. (2008). *E-learning and social networking handbook*. New York: Routledge.
- McCorkindale, T. (2010). Can you see the writing on my wall? A content analysis of the Fortune 50's Facebook social networking sites. *Public Relations Journal*, 4(3), Retrieved from http://www.prsa.org/Intelligence/PRJournal/Documents/content_analysis_of_the_fortune_50s_facebook.pdf
- Mechitov, A., Moshkovich, H., Underwood, S., & Taylor, R.G. (2001). Comparative analysis of academic web sites. *Education*, 121(4), 652-66.
- Middleton, I., McConnell, M., & Davidson, G. (1999). *Journal of Information Science*, 25(3), 219-227.
- Neuendor, K. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage Publications,

Inc.

- Noel-Levitz, National Center for College & University Admissions, & OmniUpdate. (2011). *2011 E-Expectations Report: The online expectations of prospective college students and their parents*. Retrieved from https://www.noellevitz.com/documents/shared/Papers_and_Research/2011/2011_E-Expectations.pdf
- Park, H., & Reber, B. (2008). Relationship building and the use of web sites: How fortune 500 corporations use their web sites to build relationships. *Public Relations Review*, 34(4), 409-411.
- Poock, M., & Lefond, D. (2001). How college-bound prospects perceive university web sites: Findings, implications, and turning browsers into applicants. *College & University Journal*, 77(1), 15-21.
- Reuben, R. (2008). The use of social media in higher education for marketing and communications: A guide for professionals in higher education. Retrieved from http://ustanet.usta.edu.co/file.php/112/textos/textos_didacticos/social-media-in-higher-education.pdf
- Selwyn, N. (2009). Faceworking: Exploring students' education-related use of facebook. *Learning, Media and Technology*, 34(2), 157–174.
- Sisco, H., & McCorkindale, T. (2011). *Communicating pink: An analysis of the communication strategies, transparency, and credibility of breast cancer social media sites*. Unpublished manuscript, Quinnipiac University, Hamden, Connecticut; Appalachian State University, Boone, North Carolina.
- Sung, M., & Yang, S-U. (2008). Toward the model of university image: The influence of brand personality, external prestige, and reputation. *Journal of Public Relations Research*, 20(4), 357–376.
- Taylor, P., Parker, K., Fry, R., Cohn, D., Wang, W., Velasco, G., & Dockterman, D. (2011). *Is college worth it? College presidents, public assess value, quality and mission of higher education*. Retrieved from the Pew Research Center, Social and Demographic Trends website: <http://www.pewsocialtrends.org/files/2011/05/higher-ed-report.pdf>
- Thurlow, M. (2002). Positive educational results for all students. *Remedial and Special Education*, 23, 195–202.
- Tinto, V. (1997). Classrooms as communities. *Journal of Higher Education*, 68(6), 599–623.
- Toth, E. L. (2000). From personal influence to interpersonal influence: A model for relationship

- management. In J. A. Ledingham & S. D. Bruning (Eds.), *Public relations as relationship management: A relational approach to the study and practice of public relations*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Tsouvalas, D. (2012). StudentAdvisor.com's *top 100 social media colleges*. Retrieved from <http://www.studentadvisor.com/top-100-social-media-colleges>
- Waters, R.D., Burdett, E., Lamm, A., & Lucas, J. (2009). Engaging stakeholders through social networking: How nonprofit organizations are using Facebook. *Public Relations Review*, 35(2), 102-106.
- Wehlage, G., Rutter, R., Smith, G., Lesko, N., & Fernandez, R. (1989). *Reducing the risk: Schools as communities of support*. London: Falmer.
- Will, E., & Callison, C. (2006). Web presence of universities: Is higher education sending the right message online? *Public Relations Review*, 32, 180-183.
- U.S. Department of Education, National Center for Education Statistics. (2011). *The condition of education (2011)*. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=51>
- Ziegler, S. (2007). The (mis)education of Generation M. *Learning, Media and Technology*, 32(1), 69-81.

APPENDIX A: CODESHEET

Code Sheet

Use this code sheet (and refer to code book for detailed instructions) for each individual post made by the university between 8 p.m. on January 23, 2012 and 8 p.m. on February 13, 2012.

1. Name of university
2. Number of likes on the university's profile (only needs to be done for the first post of each university)
3. Time (if present) and Date of Post
4. Exact text of post (copy and paste/first few words will suffice)

5. Post number

Intended Audience

1. Prospective students
 - a. Yes or No
2. Current students
 - a. Yes or No
3. General public
 - a. Yes or No
4. Alumni
 - a. Yes or No
5. Faculty/Staff
 - a. Yes or No
6. Multiple Audiences
 - a. Yes or No

Four Models of Public Relations

1. Press Agency/Publicity (one-way)
 - a. Yes or No
2. Public Information (one-way)
 - a. Yes or No
3. Two-way Asymmetrical (two-way)
 - a. Yes or No
4. Two-way Symmetrical (two-way)
 - a. Yes or No

Relationship Indicators

1. Demonstrates *control mutuality*

- a. Yes or No
- 2. Demonstrates *commitment*
 - a. Yes or No
- 3. Expressed/Desired *satisfaction*
 - a. Yes or No
- 4. Expressed Dissatisfaction
 - a. Yes or No
- 5. Attempts to achieve student *trust*
 - a. Yes or No

APPENDIX B: CODEBOOK

Code Book

Use this code book as a guide to code (on the corresponding code sheet) each individual post made by the university between 8 p.m. on January 23, 2012 and 8 p.m. on February 13, 2012.

1. Name of University
 - a. Write in name of university being coded.
2. Number of likes (only needs to be done for first post of each university).
3. Time and Date of Post
 - a. Write in the time (followed by a.m. or p.m.) and date (MM/DD/YY) of each post
4. Exact text of post.
 - a. Write the exact text of post here.

Four Models of Public Relations:

Researchers will identify whether the post fits in one of the four models (press agency/publicity, public information, two-way asymmetrical, and two-way symmetrical). Since the models can overlap, it is okay if more than one model fits each post. Try to narrow it down to one model, if possible. Answer yes if the post corresponds to the model and no if it does not. The press agency/publicity and public information models use one-way communication. One-way communication refers to communication moving directly from the organization to the public without evidence that the organization wants or uses feedback from the public. The two-way asymmetrical and two-way symmetrical models use two-way communication. Two-way communication refers to communication moving back and forth from an organization to its publics. Two-way communication shows that the organization solicits and uses feedback from its publics.

1. Press Agency/Publicity – Type Yes or No
 - a. One-way communication, using persuasive language: A press agency/publicity post will usually try to persuade others to buy or use a product or service of the university or persuade students to apply to the university or a certain program. It can also demonstrate obvious publicity of the university using biased language such as “the best in town.” This type of post does not try to communicate with others. While students or other users may comment/ reply to the university’s post, the university will not reply to the comments.
 - i. Ex. “We’re now accepting applications. Apply now!”
 - ii. Ex. “Our engineering department rocks!”
 - iii. Ex. “Join our one-of-a-kind writing program this summer!”
2. Public Information – Type Yes or No

- a. One-way communication, using direct, objective language; just the facts: A public information post will extend information without using biased language. This can include scores from a game, directions to the airport, delayed flights, current events, etc. Even if the post is about the university posting the information, it can still fit under this model if it lacks biased language. While students or other users may comment/ reply to the university's post, the university will not reply to the comments.
 - b. Ex. "Check out these pictures from last night's awards ceremony."
 - i. Ex. "Did you know ... ?" (or any myth buster, interesting, "fact of the day" content)
 - ii. Ex. "Tigers beat Alabama 10-8 last night!"
3. Two-way Asymmetrical– Type Yes or No
 - a. Two-way communication that advocates feedback or poses questions to students. Two-way asymmetrical posts communicate with publics to focus on overall university goals, ignoring the needs of the public in general. While most of the posts may be extracurricular in nature (i.e. relating to sports, campus news), the posts may also be academically oriented (i.e. relating to classes, deadlines, etc.). The university uses language that encourages a response from students, but the university does not respond themselves.
 - i. Ex. "What did you think of last night's game?"
 - ii. Ex. "Tweet your pics of the library today."
 - iii. Ex. "Who's headed to the game tonight?"
4. Two-way Symmetrical– Type Yes or No
 - a. Two-way communication that manages conflicts and promotes better understanding between the university and students (will nearly always include a response to post or comment from a student). A dialogue between the university and the students exists. Unlike the other models (where students post comments, and the university does not respond), in this model, the university responds with help, assistance, empathy, etc. Two-way symmetrical posts will demonstrate a desire to build long-term, mutually-beneficial relationships with students. These posts can include a university's desire to fix a problem a student may have, give advice on how to do something, direct students to information, and having casual conversations.
 - i. Ex. Post from student: "How do I register for classes if I missed the deadline?" --- Post from university: "Visit [www._____](#) for more information."
 - ii. Ex. Post from student: "How do I get my degree if I've moved out of state since graduation?" --- Post from university: "Here's the number to the registrar. Let us know if we can help with anything else."

- iii. Ex. “We’ve received a lot of inquiries about where good late-night study places are for students. Here’s a list: ____.”

Relationship Indicators

Researchers will identify whether the post demonstrates the following relationship indicators (control mutuality, commitment, satisfaction, and trust). Answer yes if the post corresponds to the indicator and no if it does not. Posts can fit under zero, one, two, three, or four indicators. The indicators are not mutually exclusive and sometimes will fit under more than one category. If the university provides a comment or response to a student’s post or comment, then it will most likely demonstrate these indicators. If the post is one-way, these relationship indicators will not be present.

1. Demonstrates Control Mutuality– Type Yes or No

- a. Posts that demonstrate control mutuality will show a desire to create a conversation around the university or the students or something academically/higher education-related to the students. Control mutuality includes timely, pertinent, and authentic responsive discourse. Posts that solicit ideas, information, or other feedback about the university or its services to students will also fit under this category because this gives the student an opportunity to make their experience with the university better. Random posts or comments dealing with nothing that is remotely close to what the university is or provides will constitute a “no” answer under control mutuality. This is, essentially, the two-way symmetrical model.
 - i. Ex. Post from student: “How do I get my degree if I’ve moved out of state since graduation?” --- Post from university: “Here’s the number to the registrar. Let us know if we can help with anything else.”
 - ii. Ex. “We’ve received a lot of inquiries about where good late-night study places are for students. Here’s a list: ____.”

2. Demonstrates Commitment– Type Yes or No

- a. Posts that show commitment will demonstrate a desire to foster a long-term relationship with students. Committed posts can also try to provide useful information to other Facebook users so that they will continue to build relationships with the university. Commitment posts can be answers to questions, tips, useful information, attempts to make the experience with the university better, affirmations that the university enjoys conversing with students/Facebook users, etc. Emotional responses expressing appreciation, connection, or care also fit under commitment.
 - i. Ex: “Thanks to all SU athletic fans for showing support!”
 - ii. Ex. “You can do it. Finish this semester strong!”
 - iii. Ex. “Happy Monday!”

- iv. Ex. “Here are the hours of campus dining during the intersession for students staying on campus.”
- 3. Evidence of: Expressed Student Satisfaction (Yes or No); Desired Student Satisfaction (Yes or No) or Expressed Dissatisfaction (Yes or No)
 - a. Researchers will code for satisfaction by looking at posts that reveal that Facebook student users let the university know they are satisfied with it. (Must look at other students’ posts and/or comments on the universities’ pages to determine this) Posts that show satisfaction will be those where positive expectations about the relationship are reinforced. Posts that are “shared” or posts that originated from other Facebook users shared by the university can demonstrate student satisfaction and fall under the category of satisfaction. Attempts to correct university mistakes or pointing the student to the correct place for feedback will demonstrate a desire for satisfaction. If posts are obvious remarks of dissatisfaction and the university did not try to help that student, then type dissatisfaction.
 - i. Ex. “We (the university) want to know if you’re happy with the new registration system.”
 - ii. Refer to two-way symmetrical and control mutuality for other examples.
- 4. Attempts to Achieve Trust – Type Yes or No
 - i. Posts that show trust will demonstrate the university’s desire to extend useful information to students (the information does not have to always associate with the university). These posts will show the competence, dependability, and integrity of the university. Posts that also include positive, casual conversations with students (can be unrelated to the university) demonstrate its attempt at achieving trust. Attempting to correct university mishaps or report a delay, infraction, recall, etc. will also demonstrate trust because this shows the university’s willingness to be transparent.
 - ii. Ex. “Maine St. will be closed from 9-11 a.m. today due to construction. Here are some alternate routes to campus.”
 - iii. Ex. “Students, don’t forget to take advantage of the 24-hour student campus services center.

APPENDIX C: VALID MEASURES OF HON AND GRUNIG'S RELATIONSHIP INDICATORS

Control mutuality:

1. This organization and people like me are attentive to what each other say.
2. This organization believes the opinions of people like me are legitimate.
3. In dealing with people like me, this organization has a tendency to throw its weight around. (Reversed)
4. This organization really listens to what people like me have to say.
5. The management of this organization gives people like me enough say in the decision-making process.

Trust:

1. This organization treats people like me fairly and justly.
2. Whenever this organization makes an important decision, I know it will be concerned about people like me.
3. This organization can be relied on to keep its promises.
4. I believe that this organization takes the opinions of people like me into account when making decision.
5. I feel very confident about this organization's skills.
6. This organization has the ability to accomplish what it says it will do.

Commitment:

1. I feel this organization is trying to maintain a long-term commitment to people like me.
2. I can see that this organization wants to maintain a relationship with people like me.
3. There is a long-lasting bond between this organization and people like me.
4. Compared to other organizations, I value my relationship with this organization more.
5. I would rather work with this organization than not.

Satisfaction:

1. I am happy with this organization.
2. Both the organization and people like me benefit from the relationship.
3. Most people like me are happy in their interactions with this organization.
4. Generally speaking, I am pleased with the relationship this organization has established with people like me.
5. Most people enjoy dealing with this organization.

Exchange relationship:

1. Whenever this relationship gives or offers something to people like me, it generally expects something in return.
2. Even though people like me have had a relationship with this organization for a long time, it still expects nothing in return whenever it offers us a favor.
3. This organization will compromise with people like me when it knows that it will gain something.
4. This organization takes care of people, who are likely to reward the organization.

Communal relationship:

1. This organization does not especially enjoy giving others aid. (Reversed)
2. This organization is very concerned about the welfare of people like me.
3. I feel that this organization takes advantage of people who are vulnerable. (Reversed)
4. I think that this organization succeeds by stepping on other people. (Reversed)
5. This organization helps people like me without expecting anything in return.

APPENDIX D: MEASURES FOR RELATIONSHIP INDICATORS

Control mutuality:

1. UF really listens to what students like me have to say.
2. UF believes the opinions of students like me are legitimate.
3. UF and students like me are attentive to what each other say.
4. I feel that students like me must stand up for themselves to be treated fairly by UF.

Trust:

1. UF treats students like me fairly.
2. Whenever UF makes an important decision, I know it will be concerned about students like me.
3. UF can be relied on to keep its promises.
4. I feel very confident about UF's ability to achieve its mission.
5. UF has the ability to accomplish what it says it will do.
6. I believe that UF takes opinions of students like me into account when making decisions.

Satisfaction:

1. Generally speaking, I am pleased with the relationship UF has established with students like me.
2. Most students like me are happy in their interactions with UF.
3. Students like me are very important to UF.
4. I am happy with UF.
5. Both UF and students like me benefit from their relationship.

Commitment:

1. I can see that UF wants to maintain a relationship with students like me.
2. Compared to other universities, I value my relationship with UF more.
3. I feel that UF is trying to maintain a long-term commitment to students like me.
4. There is a long-lasting bond between UF and students like me.

Exchange relationship:

1. UF will make exception for students like me when it knows that it will gain something.
2. UF takes care of students who are likely to benefit it.
3. Even though students like me have had a relationship with UF for a long time, it still expects something in return whenever it wants a favor.
4. Whenever UF gives or offers something to students like me, it generally expects something in return.

Communal relationship:

1. I think UF succeeds with little consideration of students like me.
2. UF is very concerned about the welfare of students like me.
3. UF does not especially enjoy giving help to other organizations and groups.
4. UF has a tendency to ignore students like me.

APPENDIX E: OPERATIONALIZATION OF RELATIONSHIP INDICATORS (SUNG & YANG, 2008)

Control mutuality:

1. This university and students are attentive to what each other say.
2. This university believes students' opinions are legitimate.
3. In dealing with students, this university has a tendency to throw its weight around (Reversed)
4. This university really listens to what students have to say.

Commitment:

1. I feel that this university is trying to maintain a long-term commitment to its students.
2. There is a long-lasting bond between this university and students.
3. Compared to other organizations, I value my relationship with this university more.

Relational satisfaction:

1. I am happy with this university.
2. Both the university and students benefit from the relationship.
3. Most students are happy in interactions with this university.

Relational trust:

1. This university treats students fairly.
2. Whenever this university makes an important decision, I know it will be concerned about students.
3. This university can be relied on to keep its promise.
4. I believe that this university takes students' opinions into account when making decision.
5. This university has the ability to accomplish what it says it will do.

VITA

Aariel Charbonnet is a native of New Orleans, Louisiana. She earned a bachelor's degree in print journalism with a minor in political science in May 2008 from Hampton University in Hampton, Virginia. Shortly thereafter, she began graduate school at the Manship School of Mass Communication at Louisiana State University. Aariel intends to pursue a Ph.D. in higher education administration following her master's degree program.