This study looks at the extent to which Fortune 500 companies are engaging in dialogue on Twitter and its effects on stakeholder relationships. The researcher developed a coding scheme for Twitter based on Kent and Taylor’s (2002) five dialogic principles and four of Hon and Grunig’s (1999) relational outcomes. The results showed that organizations’ Dialogic Behavior was positively associated with Relational Effects among their stakeholder. Best practices, such as conversational banter, were found to increase the strength of the relationship.

In an ad hoc analysis, social network analysis was used to explore concepts of dialogue and familiarize the field of public relations with new methods conducive to social media.

INDEX WORDS: Twitter Engagement, Corporate Communication, Social Media, Public Relations, Network Analysis
MAPPING AND MEASURING TWITTER ENGAGEMENT: FORTUNE 500 COMPANIES
MAKE GOOD ON A DIALOGIC PROMISE

by

KERIE ANN KERSTETTER
B.A., The University of Alabama, 2008

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment
of the Requirements for the Degree

MASTER OF ARTS

ATHENS, GEORGIA
2014
MAPPING AND MEASURING TWITTER ENGAGEMENT: FORTUNE 500 COMPANIES
MAKE GOOD ON A DIALOGIC PROMISE

by

KERIE ANN KERSTETTER

Major Professor: Kaye Sweetser
Committee: Bryan Reber
Itai Himelboim

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
May 2014
ACKNOWLEDGEMENTS

I’d like to thank Kaye Sweetser for her direction and patience. Without you, this grand document could never have been possible. You are an incredible person and a badass; I don’t know how you do it. I’d like to thank Bryan Reber for his level-headed advice throughout. Also, to Bryan Reber, for acting like he was excited when I handed him the final 120-page printed document. I’d like to extend a thank you to Itai Himelboim for meeting with me at odd hours and on short notice to solve my data “crises.” We all know that by ‘perfectionist’ you really meant ‘neurotic,’ but I will never hold that against you. Finally, I’d like to thank Michael MacBride and Holly Simpson for being so incredibly awesome (i.e., coding tweets when no one else would). You guys are true friends. In your honor, I’ll be naming my first-born boy and girl, Miguel and Hollis.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iv</td>
</tr>
<tr>
<td><strong>CHAPTER</strong></td>
<td></td>
</tr>
<tr>
<td>1 INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Dialogic Theory</td>
<td>2</td>
</tr>
<tr>
<td>Purpose</td>
<td>3</td>
</tr>
<tr>
<td>Current Study</td>
<td>4</td>
</tr>
<tr>
<td>2 LITERATURE REVIEW</td>
<td>6</td>
</tr>
<tr>
<td>Ethical Foundations of Dialogic Theory</td>
<td>6</td>
</tr>
<tr>
<td>Tenets of Dialogic Theory</td>
<td>8</td>
</tr>
<tr>
<td>Dialogic Communication Online</td>
<td>11</td>
</tr>
<tr>
<td>Twitter as a Tool for Dialogic Communication</td>
<td>24</td>
</tr>
<tr>
<td>Social Network Analysis</td>
<td>25</td>
</tr>
<tr>
<td>A Study of Dialogic Communication and Effects</td>
<td>29</td>
</tr>
<tr>
<td>3 METHOD</td>
<td>31</td>
</tr>
<tr>
<td>Content Analysis (Tweet Analysis)</td>
<td>31</td>
</tr>
<tr>
<td>Social Network Analysis</td>
<td>35</td>
</tr>
<tr>
<td>4 RESULTS</td>
<td>37</td>
</tr>
<tr>
<td>Organization Tweets</td>
<td>37</td>
</tr>
</tbody>
</table>
Stakeholder Tweets.................................................................39
Hypothesis 1 ........................................................................41
Research Question 1 .............................................................42
Research Question 2 .............................................................42
Additional Results...............................................................43
Ad Hoc Analysis ..................................................................44

5 DISCUSSION ..........................................................................49
Developing & Validating a Tool ............................................50
Dialogic Principles: Fulfilling the Dialogic Promise ..............51
Relational Outcomes: Measuring Effects .............................57
Best Practices ......................................................................63

6 CONCLUSION ......................................................................76

REFERENCES ........................................................................80

APPENDICES ........................................................................89

A Organization Tweet Code Book .....................................89
B Stakeholder Tweet Code Book .........................................106
CHAPTER 1

INTRODUCTION

For the past 25 years, public relations scholars have been asking two fundamental questions: “How do you measure the effects of public relations?” and “How do you show the value of public relations to an organization and to society?” (p. 6, Hon & Grunig, 1999)

Almost 15 years later, and PR scholars and practitioners are facing the same two challenges as outlined by Hon and Grunig (1999). The recurrence of these questions—how to measure effects and how to show value—is not for lack of academic or professional advancement in the field; rather, they characterize an on-going traction between the demand for ROI and what it is that public relations strives to build and maintain: long-term relationships.

The world today speaks in numbers, which is a system that is hardly conducive to measuring the quality of relationships between an organization and its publics. Regardless, PR professionals must be able to measure and communicate their value if they hope to play a role in organizational management. In 1999, Hon and Grunig created an instrument for measuring several aspects of relationships (i.e., relational outcomes) that has since become the primary means for evaluating organization-public relationships, generally in the form of a stakeholder survey. Likely, what Hon and Grunig did not foresee was the recent advances in communication technology (e.g., the rise of Web 2.0 and social media), which now offer new and exciting
applications for their relational framework—not to mention, a significant shift in professional approaches to public relations.

The last decade has seen the rise and popularization of blogs and social networking sites—a development that has largely democratized mass communication in the sense that it gives organizations and stakeholders equal ability to broadcast their thoughts and opinions. Nowadays, nearly two-thirds of consumers on social media report that they use it to learn more about brands, products, and services, while an even larger number (70%) are using social media to hear about other customers’ experiences (Nielsen, 2012). As a result, the field of public relations has begun to adopt a more interpersonal approach—one that moves the focus from “managing communication” to using communication as a tool for building and maintaining relationships (Kent & Taylor, 2002; Kelleher, 2007). This change in approach mirrors a much larger paradigm shift, which can be characterized by the dialogic theory.

**Dialogic Theory**

As explicated by Kent and Taylor (2002), dialogic theory suggests that two-way, symmetric dialogue is the vehicle through which all genuine organization-public relationships are founded, as well as the basis for ethical practice. Philosopher Martin Buber (1970), and later Pearson (1989), reasoned that without dialogue there was no means for an organization to negotiate competing interests with its publics. To guide both understanding and application, Kent and Taylor (2002) outlined five principles of a dialogic orientation—*mutuality, propinquity, empathy, risk,* and *commitment*—as well as guidelines for developing dialogic platforms (Kent and Taylor, 1998). Early application of dialogic theory online examined the relationship-building
capacity of organizational websites, finding that the majority failed to use dialogic features to their full potential (Taylor, Kent, & White, 2001; Kent, Taylor, & White, 2003; Reber & Kim, 2006; Kang & Norton, 2006; McAllister-Spooner & Taylor, 2007; Park & Reber, 2008; Kim, Nam & Kang, 2010). However, social media has proven an exciting new area of study for PR scholars, as the conversational interface of blogs and social networking sites provides a direct link between an organization and its publics. A number of studies have begun to demonstrate the relationship-building value of blogs, showing positive correlations between dialogic practices and relational outcomes (Kelleher & Miller, 2006; Sweetser & Metzgar, 2007; Kelleher, 2009; Lim & Yang, 2009). Given the newness of social networking sites, the field of public relations has only begun to scratch the surface in assessing the possible contributions to relationship-building. In a review of PR industry literature, Taylor and Kent (2010) reported “a gap in what the field is saying about the potential of social media and the evidence provided to prove the argument” (p. 212). The need for empirical research, they concluded, was more important than ever in order to truly understand the strengths and limitations of social media in public relations.

**Purpose**

Of the studies that have examined the use of dialogic communication on social networking sites, few have answered the call for effects-based research. Furthermore, the dialogic theory as outlined by Kent and Taylor (2002) has yet to be successfully operationalized for social media. The field of public relations is in need of a tool with which organizations’ use of dialogic strategies can be evaluated and the effects of those strategies measured. Such a framework is overdue and, therefore, the first objective of this study. With the content analysis of tweets (tweet analysis), this study aims to create a coding scheme capable of (a) evaluating
organizations’ use of dialogic communication and (b) measuring the effects on organization-public relationships.

The second objective of the current research is exploratory—and an important step toward theory advancement, this study will argue—as it invokes the use of a method called social network analysis (SNA), which is largely unfamiliar to PR research. Given the “relational focus” of public relations, the way in which PR scholars study relationships must advance with communication technology. Currently, relationships are studied as dyadic ties, and as Saffer, Sommerfeldt, and Taylor (2013) expressed, “To date, no valid measure can fully determine the amount of interaction an [organization] has with other users” (p. 214). Yet, with the data that social networking sites provide, a more comprehensive examination of organizational relationships is now attainable with SNA. Stakeholder relationships, as Rowley (1997) explained, “do not occur in a vacuum of dyadic ties, but rather in a network of influences,” which includes a number of direct relationships between the stakeholders themselves (p. 890). Only when the big picture is visible, can researchers truly understand the influences at work on organization-public relationships. Thus, SNA will be integrated into the discussion to demonstrate how a network approach will be important to understanding the effects of social media going forward.

**Current Study**

By analyzing the Twitter networks of 25 Fortune 500 companies, this study hopes to work towards developing and standardizing effects-based measures on social media. This study will operationalize Kent and Taylor’s (2002) tenets of dialogic theory (independent variables)
and Hon and Grunig’s (1999) relational outcomes (dependent variables) for tweet analysis in an attempt to measure the use of dialogic communication and its effects on relationships. Each of the 25 organizations will be ranked along a continuum according to their use of dialogic communication. The discussion will explore the findings and use SNA to demonstrate organizations and stakeholders’ use of dialogue. Ultimately, this study hopes to provide the field with a dialogic framework for social media, as well as introduce SNA as a viable method for relational research in public relations.
CHAPTER 2

LITERATURE REVIEW

This literature review begins by examining the origins of dialogic theory and traces its application throughout public relations and Internet research to the present. The characteristics of Twitter and its relationship-building potential are discussed, as are past methods for conducting effects-based research; these areas demonstrate a need in the current literature for a workable coding scheme. This section concludes with hypotheses and research questions to guide analysis and discussion.

Ethical Foundations of Dialogic Theory

The origins of dialogic theory can be traced back to a number of disciplines, among them rhetoric, philosophy, psychology, and relational communication (Kent & Taylor, 2002). Contemporary notions of dialogue are often credited to the work of philosopher Martin Buber (1970), who suggested that dialogue is the basis of any relationship. According to Buber, dialogue is the intersubjective means by which parties come to a relationship of mutuality, openness, and respect—one in which the other party is not regarded as a means to an end, but rather an end in itself (Buber, 1970; Kent & Taylor, 2002).

In his client-centered approach to psychology, Rogers (1957) similarly stressed the importance of each party maintaining an open orientation. A therapist, for example, must experience and convey “unconditional positive regard” toward the client’s situation, and in
return, the client must perceive such acceptance and empathy. Only on these terms can genuine and constructive communication take place (Rogers, 1957).

Within relational communications, Johannesen (1990) pulled from several schools of thought in outlining his five characteristics of dialogue: genuine accurate empathetic understanding, unconditional positive regard, presentness, spirit of mutual equality, and a supportive psychological climate (Johannesen, 1990, as cited in Kent & Taylor 2002). Kent and Taylor (2002) would later reference Johannesen’s characteristics of dialogue in their explication of dialogic theory.

Ferguson (1984) was among the first to bring attention to ideas of mutuality and relationships in public relations. In a 1984 conference paper, Ferguson suggested a shift in PR’s theoretical focus to organization-public relationships—an idea that would soon become central to ethics of PR practice. Pearson (1989) later argued that dialogue was the basis of ethical behavior in public relations, because without dialogue, there was no means of mediating competing interests between an organization and its publics. In his doctoral dissertation, Pearson asserted that it was “morally right to establish and maintain communication relationships with all publics affected by organizational action and, by implication, morally wrong not to do so” (p. 329, as cited in Kent & Taylor 2002).

In a review of the literature on organization-public relationships, Ledingham and Bruning (1998) identified a paradigm shift within the field of public relations—one that moved the emphasis from “persuading publics” to reaching a mutually beneficial position. Grunig’s (1984) model of two-way, symmetric communication serves as a normative foundation for the new
paradigm, as it champions empathy and dialogue over traditional models of one-way communication. According to Grunig (1984), if persuasion occurs, “the public should be just as likely to persuade the organization’s management to change attitudes or behavior as the organization is likely to change the public’s attitudes and behavior” (p. 23). Communication from publics comes as feedback, which an organization uses to better understand and mediate public interests with its own (Grunig, 1984). This approach to relational dialogue forms the basis of dialogic theory.

Although the end goal of dialogue is to reach mutual satisfaction, Kent and Taylor (2002) note that agreement between dialogic partners is often unrealistic. Rather, one’s willingness to reach a mutually satisfying position is what lays the foundation for effective communication and ethical behavior.

**Tenets of Dialogic Theory**

When it comes to organizational communication, dialogue manifests itself as a “stance or orientation” to communication, rather than as a “specific method or technique” (Botan, 1997). Therefore, organizations that strive to uphold two-way, symmetric communication are said to assume a dialogic orientation.

In their explicative article on dialogic theory, Kent and Taylor (2002) undertook an extensive literature review on the concept of “dialogue.” They arrived at five tenets or principles that characterize a dialogic orientation. The principles are as follows:

- **Mutuality** is the recognition of organization-public relationships. According to Kent and Taylor (2002), a mutual orientation is the “acknowledgement that organizations and publics are
inextricably tied together” (p. 25). Two features comprise mutuality: (1) a collaborative orientation, and (2) a spirit of mutual equality, in which stakeholders are viewed as equal persons (as opposed to objects).

- **Propinquity** is the temporality and spontaneity of interactions with stakeholders. At the most basic level, Kent and Taylor (2002) explain, propinquity advocates for a type of rhetorical exchange—one in which the organization is willing to consult the public in matters that influence them, and one in which stakeholders are willing to articulate their stance. Propinquity is characterized by three features: (1) **immediacy of presence**, meaning publics are involved in discussions about organizational issues, (2) **temporal flow**, in which dialogue builds on past communication and conveys an eye toward future relationships, and (3) **engagement**, in which both organizations and publics are accessible to each other when it comes to discussion.

- **Empathy** is the supportiveness and confirmation of public goals and interests. Kent and Taylor (2002) note that, throughout literature, empathy is associated with “sympathy” or the common feelings shared between two parties. Three features comprise the principle of empathy: (1) **supportiveness**, in which participation in dialogue is encouraged and facilitated, (2) a communal orientation, in which organizations and publics take a community-building approach toward dialogue, and (3) **confirmation**, meaning that the input and value of each party is confirmed by the other.

- **Risk** is the willingness of organizations and publics to interact on the other’s terms. For organizations, Kent and Taylor (2002) explain, communicating with stakeholders on their own terms can pose a number of risks, yet is also presents the opportunity for great rewards. Risk can
be characterized by three features: (1) **vulnerability**, or the sharing of information and personal beliefs, (2) **unanticipated consequences**, meaning that each party communicates in a way that is unscripted and spontaneous (taking part in conversations that emerge through the process of dialogue), and (3) the **recognition of strange otherness**, or the acknowledgement that others may hold varying opinions and beliefs.

- **Commitment** is the extent to which organizations and stakeholders give themselves over to interpretation and understanding in the process of dialogue. According to Kent and Taylor (2002), the previous four principles are what create the foundation for commitment. The tenet of commitment is characterized by three elements: (1) **genuineness**, which means being honest and forthright by “revealing one’s position...in spite of the possible value that deception or nondisclosure might have” (p. 29), (2) **commitment to conversation**, or working together toward a common understanding, and (3) **commitment to interpretation**, meaning a commitment to eventually reaching a mutually satisfying position.

Kent and Taylor (2002) thought it important to note that just because an organization is interactive or has dialogic structures in place, does not necessarily mean that it is actualizing a dialogic orientation—a case that will be demonstrated in the following sections. Nor, they note, does every situation allow for the use of dialogic communication. Sometimes public relations calls for communication that is “necessarily reactive,” in which a practitioner lacks the time or freedom to invoke cooperative practices (Kent & Taylor, 2002). Such might be intermittently true for the Fortune 500 companies this study will analyze. However, even in the case of one-way messages (e.g., corporate announcements), elements of a dialogic orientation can be discernible. For example, an organization may convey **mutuality** by acknowledging the impact of an
announcement on its stakeholders or display commitment by communicating important information in an honest and timely fashion. Given the nature of corporate communications, this study will also take into account the more implicit elements of a message when coding for dialogic strategies.

**Dialogic Communication Online**

Public relations scholars were quick to recognize the interactive potential of online platforms. In one of the earliest examinations of public relations and the Internet, Kent and Taylor (1998) suggested that the use of technology does not have to create distance between an organization and its publics. Rather, the Internet, with the ability to foster direct connections between users, is inherently capable of delivering the “personal touch” intrinsic to public relations (Kent & Taylor, 1998; Heath, 1999).

**Organizational Websites**

With the rise of the Internet and early organizational websites, many scholars predicted a significant change within the field of public relations (Kent & Taylor, 1998; Wright, 1998, 2001). According to Wright (1998, 2001), websites provided a link for organizations to engage directly with their publics, which held great potential for carrying out relationship-building tactics. As a result, Wright posited that stakeholders’ reliance on media outlets would decline, and he emphasized the increasing importance for organizations to maintain a credible, well-designed website (2001).
Measuring Dialogic Potential. Website design and structure was an early focus in PR research online; particularly, scholars were interested in how websites could be built to best foster dialogue with publics.

Kent and Taylor (1998) provided the field of public relations with a framework for evaluating the dialogic potential of online platforms. They outlined five elements of a dialogic interface: useful information, generation of return visits, ease of the interface, conservation of visitors, and dialogic loop (incorporation of feedback) (Kent & Taylor, 1998). Organizations that incorporated the above elements into their website structure were considered to have the necessary tools in place for fostering dialogue with their publics.

Esrock and Leichty (1999, 2000) were among the first to survey organizations’ use of the Internet and the extent to which companies were embracing the new platform for communication. They found that many corporations were in fact using websites to address multiple publics, and, overall, websites were designed to be both accessible and easily navigable (Esrock & Leichty, 1999, 2000). Taylor and Perry (2003, 2005) looked at how organizations were incorporating the Internet into crisis communication efforts, finding that many had begun to integrate the use of websites alongside traditional tactics. Among best practices, they suggested, were organizations’ efforts to establish dialogue with website visitors by encouraging them to share their thoughts and opinions with the company (Taylor & Perry, 2005). Jo and Kim (2003) demonstrated that this type of interactivity on corporate websites was positively correlated with stakeholder perceptions of trust, satisfaction, commitment, control mutuality, communal relationships, and exchange relationships. These early studies held great promise for the use of websites in organizational communication. In addition, Jo and Kim’s (2003) experimental design
would later lay the foundation for effects-based research in social media (Kelleher & Miller, 2006; Kelleher, 2009; Sweetser, 2010; Saffer et al., 2013).

**Falling Short of Dialogic Communication.** Across several studies, the application of Kent and Taylor’s (1998) framework indicated that many organizational websites supported a dialogic structure (i.e. useful information, easy-to-use interface, etc.). The same studies, however, indicated that organizations generally did a poor job using these “dialogic tools” to engage and build relationships with their publics (Kent, Taylor, & White, 2001, 2003; Reber & Kim, 2006; Kang & Norton, 2006; McAllister-Spooner & Taylor, 2007; Park & Reber, 2008; Kim, Nan & Kang, 2010).

Kent, Taylor, and White (2001, 2003), and later Reber and Kim (2006), explored the interactivity and responsiveness of activist organization websites. Each found that organizations generally had the technical and design aspects in place, but failed to use the interface to engage in two-way communication with their publics (Kent, Taylor, & White, 2001, 2003; Reber & Kim, 2006). Research on college and university websites came across much of the same conclusion (Kang & Norton, 2006; McAllister-Spooner & Taylor, 2007). In their sample of the 129 best national universities (as determined by *US News and World Report*), Kang and Norton (2006) found that universities scored highly on the usability of their websites, but low on their use of relational communication. Among university websites, they found that the presence and use of a *dialogic loop* (as outlined in Kent and Taylor’s framework) was greatly lacking. Similarly, in an examination of community college websites, McAllister-Spooner and Taylor (2007) found that dialogic structures were in place, albeit greatly underutilized.
In applying the framework to corporate communication, Park and Reber (2008) undertook a content analysis of 100 Fortune 500 companies’ websites; they coded for Kent and Taylor’s (1998) elements of a dialogic interface and eight dimensions of relationships (control mutuality, trust, satisfaction, commitment, openness, exchange relationship, communal relationship, and intimacy). Again, while the majority of corporate websites supported a dialogic structure, Park and Reber found that certain relational elements—namely trust, commitment, and exchange relationships—were unattainable when corporations failed to maintain repetitive interactions with their publics (2008). Kim, Nam and Kang (2010) echoed these findings on an international level, showing that North American, Asian and European organizations varied little in their failure to take advantage of websites for relational communication.

In a literature review on the use of dialogic principles, McAllister-Spooner (2012) followed this trend throughout a decade of online research. Organizational websites, she concluded, generally had the proper dialogic tools in place (e.g., easy-to-use interface, conservation of visitors, etc.), but failed to use these features to foster dialogue and, ultimately, to build relationships. As Mitrook and Seltzer (2007) explained of websites, “[the presence of] a dialogic loop means little if the organization fails to act on real opportunities to communicate” (p. 229).

**Blogs**

With the birth of social media, PR scholars extended research on relationship-building to weblogs (i.e., blogs), which they generally found to be better facilitators of dialogue than early organizational websites. In a study comparing the two platforms, Mitrook and Seltzer (2007) found that several of Kent and Taylor’s (1998) dialogic principles appeared more frequently
throughout blogs than on websites, but also that blogs were twice as likely to respond to
information requests. Furthermore, with the study of blogs, scholars began to shift their focus
from measuring dialogic potential to evaluating relational effects.

**Relational Advantages of Blogs.** When used as a public relations tool, blogs have a
number of characteristics that are particularly conducive to dialogic communication. According
to Yang and Lim (2009), blogs embody a *salience of narrative structure* that lends to the more
intimate, conversational nature of the platform (as compared to traditional media outlets and
websites). They identify four narrative aspects that are advantageous to relational
communication: (1) informal tone, (2) story frames, (3) chronology, and (4) projected audience
(Yang & Lim, 2009).

First, as Doostdar (2004) pointed out, blogs generally adopt an informal and personal
tone, “in part because of a perceived immediacy and intimacy in the relationship between the
blogger and his or her visitors” (p. 654, as cited by Yang and Lim 2009). In turn, scholars have
found that using a “conversational, human voice” is an effective strategy for relationship-
building online. Both Kelleher (2009) and Kelleher and Miller (2006) have demonstrated that the
use of a conversational human voice correlates positively with relational outcomes, such as *trust, satisfaction, commitment,* and *control mutuality*. Furthermore, in an experiment manipulating the
valence and arousal of corporate blog messages, Ji and Kiousis (2012) found that a more
subjective tone and the use of emotional words had a positive effect on organizational reputation.

Secondly, bloggers often frame their experiences in the form of stories, which makes the
content more accessible to readers (Yang & Lim, 2009). When it comes to the dialogic nature of
blogs, the idea of story-telling goes hand-in-hand with a personal tone. From a public relations
perspective, Kent (2008) points out that these narrative elements foster a sense of identification, which is powerful in persuasion and ideal for PR functions such as issue-framing.

The third narrative aspect of blogs, chronology, is a natural extension of the story format—the idea that content is created over time and displayed in reverse-chronological order, much like a timeline that begins with the most recent event and works backwards (Yang & Lim, 2009). An important advantage of chronology is that blog content and reader comments are displayed in a dialogic format, allowing anyone to go back and read the posts and conversations in the order that they occurred.

Finally, in creation of their narrative, bloggers must always be imagining who their audience is. According to Yang and Lim (2009), “the ability to imagine significant audiences and to investigate which individuals and groups are prominent among them” is what constitutes effective blog-mediated communication. Similarly, Kent (2008) points out the important research function that blogs serve through the act of environmental scanning, but also through the process of anticipating the thoughts, feelings, and reactions of one’s publics.

**Achieving Relational Outcomes.** Research on blogs paints a promising picture for the platform’s capacity to assist in developing organization-public relationships. For one, in their examination of environmental activist blogs, Mitrook and Seltzer (2007) found that blogs were twice as responsive when it came to answering information requests, as compared to websites. Furthermore, a number of studies demonstrated that the use dialogic communication on blogs resulted in several relationship-building advantages for organizations (Kelleher & Miller, 2006; Kelleher, 2009; Sweetser & Metzgar, 2007).
Using an experimental design to measure relational outcomes, Kelleher and Miller (2006) manipulated the use of relationship maintenance strategies across blog messages. Relationship maintenance strategies, which consist of the above-mentioned “conversational human voice” and “communicated relational commitment” (i.e., an organization expressing its commitment to build and maintain relationships), provide a framework that parallels the principles of dialogic theory. Kelleher and Miller (2006) found that the use of each strategy correlated positively with key relational outcomes (trust, satisfaction, commitment, control mutuality). In 2009, Kelleher replicated these findings by surveying members of their original data pool (via email invitation). With a survey designed to measure the interaction between relationship maintenance strategies and stakeholder perceptions, Kelleher (2009) again found that the use of “conversational human voice” and “communicated relational commitment” correlated positively with relational outcomes.

In their posttest only experiment, Sweetser and Metzgar (2007) attempted to understand the impact and value of blogs in crisis situations. Given the nature of blogs posts being “short, frequent, and personal,” they suggested that blogs would ideally lend themselves to communicating during a crisis. Sweetser and Metzgar (2007) found that organizational blogs were more successful in communicating a conversational human voice (as compared to personal blogs and a control group). More importantly, however, was that those who received information from organizational blogs perceived a lower level of crisis than those who did not—a finding that holds much promise for blogs as effective tools for crisis management (Sweetser & Metzgar, 2007).
Furthermore, Yang and Lim (2009) found that a blog’s *dialogic self*—a term they used to describe a blog’s personality or “self,” created through its interactions with its readers—contributed to organization-public interactivity and eventually led to relational trust. Yet, while there are clear advantages to the use of blogs in public relations, scholars have also presented a number of criticisms.

**Criticisms of Blog-Mediated PR.** Although a seemingly ideal tool for facilitating dialogue and relationships, blogs also carry their own set of risks when it comes to organizational communication. In 2008, Kent undertook a critical analysis of the platform, finding that while blogs served important research and rhetorical functions (e.g., environmental scanning, issue-framing), the current literature had failed to account for aspects that might not lend as well to PR communications. Among them, Kent (2008) cited the issue of *blog credibility* and the *exaggerated prevalence* of blogging.

**Blogger Credibility.** The effectiveness of blog-mediated communication relies heavily on blogger credibility, which is not always easily gained. While blogs allow a direct link between organization and publics, Kent (2008) suggested that “most bloggers lack the credibility, training, and objectivity that most media outlets posses” (p. 38). Sweetser, Porter, Chung, and Kim (2008) found that those who assigned more credibility to blogs were the heavy users, which fails to account for a large segment of the population. Furthermore, the rise of deceptive blogging practices by organizations only serves to decrease source trust and credibility. As with the well-known case of the fake blog “Wal-Marting Across America,” the organization failed to disclose it was behind the popular blog that others perceived to belong to loyal Wal-Mart customers (Martin...
& Smith, 2008, as cited by Sweetser 2010). Such cases are interpreted by stakeholders as “unethical,” and have been found to damage organization-public relationships (Sweetser, 2010).

**Exaggerated Prevalence of Blogs.** Kent (2008) also suggested that the prevalence and significance of blogs is often exaggerated. He cites instances where industry leaders herald the power of blogs with little empirical evidence, paying even less attention to the communicative risks they present for organizations (Kent, 2008). Furthermore, Kent (2008) suggested that the readership of blogs was often “fanatic” and hardly representative of an organization’s publics—whether this is still true five years later has yet to be determined, as the rise of social networking sites have given blogs a new context within the mix of PR tools online.

**Social Networking Sites**

In principle, social networking sites possess the most dialogic potential when it comes to building stakeholder relationships. Social networking platforms allow realtime communication between organization and stakeholder with the ability to *post, comment, like, share, pin, favorite, mention* and *retweet* (Facebook, 2013; Twitter, 2013; Instagram, 2013; YouTube, 2013; Pinterest, 2013). The interface is conversational as well as public, allowing user interactions to be organized in time order and viewed by anyone. The ability to integrate pictures and multimedia allows organizations to spark interest and incite dialogue with followers. Hashtags denote relevant topics and can increase the reach of organizational content (Facebook, 2013; Twitter, 2013; Instagram, 2013). Online social networks form around organizations—whether in support on in spite—allowing like-minded stakeholders to connect and share in thoughts and opinions.
Early research of social networking sites, however, has begun to paint a picture similar to that of organizational websites: the dialogic frameworks are in place (in this case they are given), yet organizations are failing to use them to their full, relationship-building potential (Bortree & Seltzer, 2009; Rybalko & Seltzer, 2010; Linvill, Hicks, & McGee, 2012; Lovejoy, Waters, & Saxton, 2012). Given the increasing prevalence of social networking sites among organizations—77% of Fortune 500 companies are now on Twitter, 70% on Facebook—there is a great need for effects-based research in this area (Barnes, Lescault, & Wright, 2013).

**Current Body of Research.** Research on social networking sites has focused most heavily on adapting Kent & Taylor’s (1998) elements of a dialogic interface—*useful information, generation of return visits, ease of the interface, conservation of visitors,* and *dialogic loop*—in assessing organizations’ use of dialogic communications. Only a few studies have focused on relational effects.

In their examination of Fortune 500 companies on Twitter, Rybalko and Seltzer (2010) adapted Kent and Taylor’s (1998) dialogic features for the content analysis of tweets. They examined 93 corporate Twitter profiles to see how companies were invoking dialogic communication. *Conservation of visitors* was found to be one of the key dialogic strategies used by corporations; furthermore, 60% of companies responded to user comments, suggesting the presence of a *dialogic loop* throughout a number of profiles (Rybalko & Seltzer, 2010). However, their attempt classify dialogic vs. non-dialogic organizations was somewhat underdeveloped (discussed in next sub-section).
Linvill, McGee, and Hicks (2012) used Rybalko and Seltzer’s (2010) coding scheme to assess the use of Twitter by colleges and universities; they coded a sample of 1,130 tweets for the presence of dialogic features, finding that colleges and universities generally provided useful information (84%) and employed tactics to generate return visits (56%). Similarly, Lovejoy, Waters, and Saxton (2012) undertook a content analysis of nonprofit organizations on Twitter. They found, however, that nonprofit use of dialogic features was significantly less than for-profit organizations: less than 20% of sampled tweets demonstrated a conversation between organization and stakeholders (Lovejoy, Waters, & Saxton, 2012). Both studies concluded that, overall, organizations were not employing Twitter for two-way, symmetric communication (Linvill, McGee, & Hicks, 2012; Lovejoy, Waters, & Saxton, 2012). The effects on relationship-building were not examined; however, these studies provided descriptive information on how organizations were using Twitter.

Bortree and Seltzer (2009) looked at the use of dialogic strategies on Facebook to see what engagement outcomes were present throughout an organization’s network. They found that Kent and Taylor’s (1998) dialogic features positively correlated with increases in network activity, network growth, number of user posts, etc. Overall, however, they concluded that the majority of organizations were merely settling for having an interactive space and failing to use the full gambit of dialogic strategies provided by social networking sites (Bortree & Seltzer, 2009).

**Oversimplifying Dialogic Communication.** Among these and other studies, attempts to operationalize dialogic communication for social networking sites have fallen short of Kent and Taylor’s (2002) explication of the theory. A true dialogic orientation embodies five tenets;
dialogic organizations practice *mutuality, propinquity, empathy, risk, and commitment* in communicating with their publics. While some simplification of the theory is necessary in creating social media frameworks, relegating dialogic communication to a single response metric is hardly feasible.

In their attempt to classify dialogic and non-dialogic organizations, Rybalko and Seltzer (2010) used a responsiveness variable, which was determined by the *number of replies* an organization had with its follower and the *number of questions posed* by the organization. Within a sample of ten tweets, one occurrence of either (a reply or a question) merited a “dialogic” classification (Rybalko & Seltzer, 2010). Another study by Saffer et al. (2013) correlated organizational responsiveness on Twitter with increases in relational outcomes—an important contribution to relationship-building research. However, Wigley and Lewis (2012) have demonstrated that a responsiveness variable does not always indicate two-way, symmetric behavior.

In a content analysis of corporations on Twitter, Wigley and Lewis (2012) found that just because an organization was “highly responsive” did not mean it was necessarily *listening* to followers’ feedback or responding thoughtfully. The researchers found a correlation between number of replies on Twitter and a decrease in negative mentions, but only for those organizations engaging in *dialogic* communications (Wigley & Lewis, 2012). This notion of organizational responsiveness, or what Saffer et al. (2013) defined as *contingency interactivity*, is certainly worthy of study, particularly in an effects-based design that attempts to determined the impact on organization-public relationships. Although, for the purposes of this study, the concept of organizational responsiveness (number of replies) can only be considered a starting point in
operationalizing dialogic communication on Twitter. Of the five principles of dialogic orientations, “number of replies” really only touches on the first two at best—*mutuality* and *propinquity*. Whether an organization embodies the remaining three (*risk, empathy* and *commitment*) requires a more holistic examination.

**Choosing Between Dialogic Frameworks.** Finally, this study has chosen to use Kent and Taylor’s (2002) *tenets of a dialogic orientation* as opposed to their *elements of a dialogic interface* (1998) (i.e., useful information, generation of return visits, ease of the interface, conservation of visitors, dialogic loop), which have been applied more frequently throughout PR research on the Internet. In 1998, Kent and Taylor developed the latter framework for measuring the dialogic potential of online platforms, which served as the cornerstone of early research on websites. However, unlike websites, a dialogic interface comes standard across most social networking sites. For example, each user has the opportunity to *reply* or *mention* to other users (dialogic loop), and each user enjoys the same intuitive features when navigating the platform or composing tweets (ease of interface). Although some studies have attempted to adapt these features to social networking sites, the original framework developed by Kent and Taylor (1998) is no longer relevant in the context of social media. To update these dialogic features for social media is essentially what this study will do, yet under the theoretical umbrella of Kent and Taylor’s (2002) *tenets of dialogue*—*mutuality, propinquity, empathy, risk, and commitment*. As the literature review showed, these tenets are rooted in the theoretical notions of dialogue across various academic fields, and thus, an appropriate theoretical frame for the current research.
Twitter as a Tool for Dialogic Communication

This study has chosen to examine the activity surrounding Fortune 500 companies on Twitter. From various social media outlets, Twitter was chosen given its place as the leading platform among Fortune 500 companies. According to a 2013 report, 77% of Fortune 500 companies now maintain active Twitter accounts—a number that has more than doubled since 2009 (Barnes et al., 2013).

Founded in 2006, Twitter is a micro-blogging platform that allows users (both organizations and stakeholders) to update their accounts in short messages called “tweets,” which are limited to 140 characters or less. Like an RSS feed, users can subscribe to other accounts in order to receive their tweets. The use of replies, mentions and retweets allows users to share information and carry on conversations, while hashtags (indicated by #) organize users and dialogue around specific topics (Twitter, 2013). Thus, Twitter allows for the timely exchange of information, as well as provides a conversational interface with which organizations and stakeholders can interact.

Needless to say, the environment on Twitter is different than that of traditional communications. No longer are organizations the only ones with the capability to express thoughts and opinions to a wide-ranging audience; rather, that power has been extended to any stakeholder with computer access. These changes have introduced a new era of accountability for organizations—one in which they are expected to humanize the corporate voice and communicate on stakeholders’ terms to reach a mutually beneficial position. In discussion of their findings, Wigley and Lewis (2012) touched on how organizations that fail to engage with
their publics leave others to speculate, “providing a vacuum that must be filled with information from their audience” (p. 166). The importance of a dialogic orientation—one that genuinely pursues two-way, symmetric communication in the interest of strengthening relationships—has become more salient than ever. Given the prevalence of social media use among organizations, the public relations field must now focus on substantiating dialogic practices and their effect on organization-public relationships.

**Social Network Analysis**

A **Theoretical Approach.** In addition to studying individual-level relationships, it becomes increasingly important to study effects within the context of a broader environment. Rarely does a social entity—in this case, an organization—ever exist on its own. Rather, organizations are embedded in a web of relational ties, connected to members of various publics (e.g., customers, shareholders, interest groups, other organizations). Given the nature and complexity of an organization’s surroundings, a network approach provides a large-scale visualization of relationships and a logical way to conceptualize the environment in which PR practitioners operate everyday.

While network analysis has been around for many years (applied as early as the 1930s in the fields of psychology, anthropology, and mathematics), the method has found a fresh application in the context of social media and mass communication research (Scott, 1991; Himelboim, 2011, 2010; Lei, 2012; Himelboim & Han, 2014). With SNA, vast amounts of social network data can be graphed in terms of the relational ties that connect users, which in the case of this study are defined as conversations on Twitter. SNA allows for communication between an
organization and its stakeholders to be visualized and quantified. This concept of “relational networks,” which has long been intangible to PR scholars by way of traditional methods, is now accessible, and the field of public relations is beginning to recognize the value of SNA in expanding research beyond the study of dyadic ties (Himelboim, Golan, Suto, & Moon, in press).

**SNA Graphs and Visualization.** A SNA graph is comprised of vertices and edges (also called *nodes* and *links*, or in visual terms, *dots* and *arrows*). A vertex represents the unit of study, while edges symbolize the “relationships” between them (see Figure 1). As mentioned above, edges can be defined any number of ways; for the purposes of this study, they represent directed communication taking place between two users (with use of Twitter’s “@mention” feature). For example, if a tweet by Stakeholder A mentions Organization B (see Figure 2, following page), then the SNA relationship would show vertex A connected to vertex B by an arrow (or edge), indicating the direction of communication. However, if Organization B then responds to Stakeholder A (Figure 3), the arrow will also point back to the stakeholder, indicating a mutual relationship. When such interactions are represented on a large scale, researchers can run quantitative analytics and undertake a more holistic examination of organizational networks on social media.
Standardizing the Method. A 2014 report by the Social Media Research Foundation (in collaboration with the Pew Research Center) took some of the first steps in standardizing the application of SNA (Smith, Rainie, Shneiderman, & Himelboim, 2014). The researchers used NodeXL to identify six distinct shapes that take form during Twitter conversations (Figure 4).

**Polarized**: two dense clusters with little interconnection

**Tight**: few disconnected isolates, many connections
Their classifications reflect relational activities between users, which can be applied to research or business strategy as a way to better understand the social media environment in which we operate (Smith et al., 2014). In an ad hoc analysis, the implications of broadcast and support structures will be discussed in the context of dialogic communication on Twitter.
A Study of Dialogic Communication and Effects

Part One: Developing and Validating a Tool. The new and intricate nature of social media necessitates a more complex measure to understand how organizations are fostering dialogic communication with their publics. In addition, a means for assessing the effects of dialogic communication is also needed. With such frameworks, the profession can begin to substantiate normative PR theories on social media—namely that the use of two-way, symmetric communication produces desired relational outcomes.

In sum of the literature review, principles of dialogic theory have yet to be successfully operationalized for social media. Measures of organizational responsiveness or contingency interactivity (number of replies and/or questions posed) fall short in their evaluation of dialogic orientations on Twitter as outlined by Kent and Taylor (2002). For this reason, the current study uses content analysis to create a tool that measures an organization’s orientation toward the five dialogic principles: mutuality, propinquity, empathy, risk, and commitment. For each organization, a single score of Dialogic Behavior will be calculated by averaging the five principles. Additionally, this study has adapted four of Hon and Grunig’s (1999) relational outcomes for the content analysis of stakeholder tweets; the purpose is to measure the effects of each dialogic principle on trust, satisfaction, commitment, and control mutuality (dependent variables). For each organization, the four relational outcomes will be averaged to calculate a score of Relational Effects. The hypothesis and research questions are as follows:

- **H1**: Organizations’ Dialogic Behavior will be positively associated with their stakeholders’ Relational Effects.
• **RQ1**: Which individual dialogic principles (mutuality / propinquity / empathy / risk / commitment) are the best predictors of relational outcomes (trust / satisfaction / commitment / control mutuality)?

In addition to relational outcomes, this study will code sentiment within stakeholder tweets. Staying consistent with prior social media studies (Himelboim, Lariscy, Tinkham, Sweetser, 2012), sentiment has been operationalized as a single variable measuring the stakeholder’s tone toward the organization (i.e., positive, negative, or neutral), which is expressed either directly through the message or indirectly through word choice. Given the often implicit nature of social media, this study is curious as to what kind of relationship may exist between Dialogic Behavior and sentiment, and whether it could be a measure for gauging the effects of dialogic communication.

• **RQ2**: What kind of relationship exists between Dialogic Behavior and the sentiment expressed in stakeholder tweets?

**Part Two: Applying SNA.** In an ad hoc analysis, this study will use SNA to examine concepts and best practices identified throughout Part One. A select number of organizational Twitter networks will be explored. This study hopes to take additional steps in familiarizing researchers and practitioners with SNA by demonstrating potential applications for both scholarship and practice.
CHAPTER 3

METHOD

This study proposes two phases with which to investigate the above hypotheses and research questions: content analysis and social network analysis.

Content Analysis (Tweet Analysis)

Rather than attempt to simulate organization-stakeholder communication in an experimental setting, the current research elected to study existing organic interactions as they occurred on Twitter. Relevant tweets were imported straight from Twitter, and content analysis was selected as the best method for analyzing conversations between organizations and publics.

This study has adopted Berelson’s (1952) approach to examining the manifest content of communication. As a methodology, content analysis strives to be objective, systematic, and quantitative (Berelson, 1952; Kaid & Wadsworth, 1989). The purpose, Berelson (1952) said, is to describe the characteristics of content, but also to make inferences about cause and effect. According to Weber (1985), content analysis uses a set of procedures to make valid inferences from the text. Thus, this study will examine the manifest content of organization-stakeholder tweets in order to objectively, systematically, and quantitatively describe the content and make calculated inferences about its meaning.

A key strength of content analysis is that it allows researchers to analyze large amounts of data with little intrusion. Given the rise of social networking sites, the scope and quantity of
workable data is now virtually limitless. According to Holsti (1969), content analysis must also be generalizable if the research is to have any significant theoretical contributions. Simply describing or categorizing information is useless without an application to theory (Holsti, 1969). The above hypothesis and research questions serve as the theoretical focus for this study; they present the relationships between dialogic communication and relational outcomes that are to be examined.

Kaid and Wadsworth (1989) have suggested seven steps in the application of content analysis:

1. Formulate the hypotheses or research question to be answered
2. Select the sample to be analyzed
3. Define the categories to be applied
4. Outline the coding process and train the coders
5. Implement the coding process
6. Determine reliability and validity
7. Analyze the results from the coding process

Since the hypotheses and research questions have been outlined above, this section will focus on the sample, coding categories, coder training and process, methods for determining coder reliability and validity, and analysis of results.

Sample

To ensure enough data for statistic and social network analysis, the list of Fortune 500 companies was initially filtered down to 75 based on the activity level of the organization and its stakeholders on Twitter (i.e., the population was limited to those companies tweeting at least five times a day and receiving at least 15 mentions [using the “@” symbol] in return). From the list of 75 active organizations, 25 were randomly selected for the study. By setting a baseline for daily
tweets, this study aimed to define the population by those organizations maintaining an active Twitter presence, as well as ensure large enough data sets for quantitative analysis.

For each organization, two separate samples were drawn: organization tweets and stakeholder tweets. All data and was collected and analyzed in the winter of 2013/2014.

**Organization Tweets.** Organization tweets were sampled directly from the organization’s Twitter profile over a five-day period (Monday-Friday). Coders analyzed 50 tweets or 20% per organization (whichever was larger). In the case that an organization had less than 50 tweets to code, all tweets were coded.

**Stakeholder Tweets.** Stakeholder tweets were collected using NodeXL (an open-source, network analysis template for Microsoft Excel) and aggregated using direct mentions (e.g., @Allstate). For each organization, stakeholder tweets were randomly sampled from three 24-hour, weekday time periods. Coders analyzed 50 tweets or 3% (whichever was larger).

**Coding Categories**

Items on the code book and code sheet were developed based on Kent and Taylor’s (2002) dialogic principles (independent variables) and Hon and Grunig’s (1999) relational outcomes (dependent variables).

**Independent Variables: Dialogic Principles.** As discussed in the literature review above, Kent and Taylor (2002) surveyed the theoretical history of dialogue to develop five overarching principles of a dialogic orientation: *mutuality, propinquity, empathy, risk,* and *commitment.* For this study, each principle was then operationalized as a series of items on the code sheet (Appendix A).
Kent and Taylor (2002) used various sub-level features to explain each principle, which were accounted for in operationalizing the concepts. For example, the tenant of *propinquity* was characterized by three features—*immediacy of presence, temporal flow* and *engagement*; in the code book, each sub-level feature has been defined in terms of manifest content on Twitter and given an example of a tweet that demonstrates its use (see Appendix A). The purpose of breaking down each principle was to increase understanding and limit interpretation. That a tweet include each sub-level feature was not required for positive coding; rather, the presence of either *immediacy of presence, temporal flow, or engagement* would be sufficient for coding *propinquity* as present (various examples provided in Appendix A).

**Dependent Variables: Relational Outcomes.** As the purpose of this study was to measure the effects of dialogic principles on relationships, a series of relational factors were operationalized for content analysis (Appendix B). In 1999, Hon and Grunig outlined the components of mutually beneficial relationships (relational outcomes), which organizations and practitioners could use to assess the quality of their ties to key constituencies. A number of Hon and Grunig’s (1999) relational outcomes—namely *trust, satisfaction, commitment,* and *control mutuality*—have been used to measure the effectiveness of relationship-building strategies across various PR platforms and research designs (Jo & Kim, 2003; Kelleher & Miller, 2006; Sweetser & Metzgar, 2007; Kelleher, 2009; Saffer et al., 2013). Hon and Grunig’s (1999) original instrument was developed in the form of a stakeholder survey, which included multiple items/questions for measuring each stakeholder’s level of *trust, satisfaction,* and *commitment* toward the organization, as well as their perceptions of *control mutuality* (i.e., the degree to which parties agree who has influence over one another). Those questions have been used to outline
each of the four relational outcomes in the codebook and are meant to guide the coder in
determining whether each one is present or absent.

In addition to the dialogic principles and relational outcomes, the code sheet includes
items that measure various message characteristics, such as sentiment (i.e., positive, negative,
neutral), contents of tweets (e.g., customer service, conversational banter, etc.), multimedia
content (e.g., hyperlink, picture, video), and type of stakeholder (e.g., consumer, reporter, interest
group, etc.). For a comprehensive list of the items coded, see Appendix A and B.

Coding Process

Three trained, graduate-level coders were used to content analyze tweets from December
2013 to February 2014. Each coder was familiar with Twitter and the organizations being coded.
Coders were trained by the researcher in using the code books and entering information into a
Web-based code sheet. Each coder was given a sample of tweets. Any pictures, videos, or
hyperlinks were included for coders to assess as part of the message. Intercoder reliability was
calculated using Holsti’s formula; the percentage of agreement was measured during coder
training and throughout the coding process.

Social Network Analysis

While the tweet analysis phase was designed to fill a research gap, the use of social
network analysis (SNA) is focused on advancing future research and the study of relationships.
Changes in the way people communicate must be followed by changes in the way
communication is studied (Williams, Rice, & Rogers, 1988). Thus, this study proposes SNA as a
new approach to defining, visualizing, and understanding the interactions between an organization and its publics.

**Data and Analysis**

For this study, SNA is used to (1) provide context to discussion of the tweet analysis and (2) demonstrate its application to future research in social media and PR. Following the tweet analysis, select organizational networks were chosen to illustrate concepts of dialogue. Data was collected with NodeXL using mentions (e.g., @WholeFoods). The data was filtered to include only “mentions” and “replies” in the Relationship column, then graphed. The “Group by Cluster” function was run to organize tweets into identifiable subgroups. Additional groups were created using keyword search within the adjoining spreadsheet. The SNA graphs were formatted to highlight network relationships. Labels and screenshots were added to provide examples from the discussion. The Best Practices section guides readers through the NodeXL program and draws implications for both research and practice.
CHAPTER 4

RESULTS

This study applied two research methodologies—content analysis and social network analysis. For the content analysis portion, a total of 3,106 tweets from 25 Fortune 500 companies were analyzed for this study: 1431 organization tweets and 1675 stakeholder tweets.

Organization Tweets

For each organization, tweets were randomly sampled from the company’s Twitter page over a five-day period (Monday-Friday). This study examined the manifest content of organization tweets to code for each dialogic principle, which was operationalized from Kent and Taylor (2002). Below, Figure 5 provides an example of the checklist format, which was used to determine whether each principle was present or absent (in this case, all present). For the Organization Tweet Code Book, see Appendix A.

- **Mutuality** (addresses stakeholder directly)
- **Propinquity** (conveys accessibility both directly and indirectly through conversational human voice)
- **Empathy** (recognizes the value of stakeholder input)
- **Risk** (communicates in a way that is unscripted, responding to conversations as they arise through dialogue)
- **Commitment** (demonstrates a commitment to engaging in dialogue with the stakeholder by replying)

Figure 5. Coding dialogic principles
Of the 1431 organization tweets, the frequencies of occurrence for the five dialogic principles are as follows: mutuality (90.4%), propinquity (82.7%), empathy (71.6%), risk (67.7%), commitment (85.1%) (see Table 1). For each organization, a final score for Dialogic Behavior was calculated by averaging the dialogic principles; scores for Dialogic Behavior were ranked along a continuum (see Table 2). An internal reliability measure for the composite score was conducted using Cronbach’s Alpha, which indicated high reliability among the independent variables ($\alpha = .94$).

Intercoder reliability for the Organization Tweet Code Book (Appendix A) was calculated at .96 using Holsti’s formula. For the dialogic principles, intercoder reliability was .89 [mutuality (.90), propinquity (.86), empathy (.88), risk (.96), and commitment (.86)].

**Table 1. Overall frequencies of dialogic principles**

<table>
<thead>
<tr>
<th>Organization Average</th>
<th>Mutuality</th>
<th>Propinquity</th>
<th>Empathy</th>
<th>Risk</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 1431</td>
<td>90.4</td>
<td>82.7</td>
<td>71.6</td>
<td>67.7</td>
<td>85.1</td>
</tr>
</tbody>
</table>

**Table 2. Dialogic Behavior (ranked)**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Dialogic Behavior (Organization)</th>
<th>Mutuality</th>
<th>Propinquity</th>
<th>Empathy</th>
<th>Risk</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Foods</td>
<td>98.18</td>
<td>100</td>
<td>99.1</td>
<td>95.9</td>
<td>95.9</td>
<td>100</td>
</tr>
<tr>
<td>Kohls</td>
<td>98.18</td>
<td>100</td>
<td>100</td>
<td>96.1</td>
<td>98.7</td>
<td>96.1</td>
</tr>
<tr>
<td>Staples</td>
<td>98.02</td>
<td>100</td>
<td>100</td>
<td>96.3</td>
<td>96.3</td>
<td>97.5</td>
</tr>
<tr>
<td>Nordstrom</td>
<td>97.56</td>
<td>99.2</td>
<td>98.5</td>
<td>96.2</td>
<td>96.2</td>
<td>97.7</td>
</tr>
<tr>
<td>Southwest</td>
<td>94.88</td>
<td>98</td>
<td>98</td>
<td>94.1</td>
<td>90.2</td>
<td>94.1</td>
</tr>
<tr>
<td>Gap</td>
<td>94.80</td>
<td>96</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>96</td>
</tr>
<tr>
<td>ATT</td>
<td>94.44</td>
<td>97.2</td>
<td>96.3</td>
<td>92.6</td>
<td>91.7</td>
<td>94.4</td>
</tr>
<tr>
<td>Hewlett Packard</td>
<td>93.22</td>
<td>98.2</td>
<td>98.2</td>
<td>89.3</td>
<td>87.5</td>
<td>92.9</td>
</tr>
<tr>
<td>Fifth Third</td>
<td>86.00</td>
<td>100</td>
<td>100</td>
<td>70</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>Autozone</td>
<td>85.00</td>
<td>95.5</td>
<td>84.1</td>
<td>84.1</td>
<td>81.8</td>
<td>79.5</td>
</tr>
<tr>
<td>Nike</td>
<td>80.52</td>
<td>100</td>
<td>100</td>
<td>66.7</td>
<td>66.7</td>
<td>69.2</td>
</tr>
</tbody>
</table>
Stakeholder Tweets

For each organization, tweets were aggregated by those that mentioned the organization using Twitter’s “@mention” feature. This study examined the manifest content of stakeholder tweets to code for each relational outcome, which was operationalized from Hon and Grunig (1999). Below, Figure 6 provides an example of the checklist format, which was used to determine whether each outcome was present or absent (in this case, all present). For the Stakeholder Tweet Code Book, see Appendix B.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Trust</th>
<th>Satisfaction</th>
<th>Commitment</th>
<th>Control Mutuality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Digital</td>
<td>96</td>
<td>94</td>
<td>64</td>
<td>62</td>
</tr>
<tr>
<td>Allstate</td>
<td>96</td>
<td>70.6</td>
<td>58.8</td>
<td>86.3</td>
</tr>
<tr>
<td>UPS</td>
<td>94</td>
<td>34</td>
<td>24</td>
<td>96</td>
</tr>
<tr>
<td>Chevron</td>
<td>62</td>
<td>48</td>
<td>38</td>
<td>96</td>
</tr>
<tr>
<td>Dillards</td>
<td>60.00</td>
<td>42.9</td>
<td>33.3</td>
<td>57.1</td>
</tr>
<tr>
<td>Principal Financial</td>
<td>58.40</td>
<td>48</td>
<td>38</td>
<td>96</td>
</tr>
<tr>
<td>Oracle</td>
<td>56.20</td>
<td>23.8</td>
<td>9.5</td>
<td>100</td>
</tr>
<tr>
<td>DirecTV</td>
<td>50.00</td>
<td>23.1</td>
<td>23.1</td>
<td>36.5</td>
</tr>
<tr>
<td>Texas Instruments</td>
<td>49.20</td>
<td>18</td>
<td>16</td>
<td>68</td>
</tr>
<tr>
<td>AECOM</td>
<td>41.68</td>
<td>29.2</td>
<td>18.8</td>
<td>64.6</td>
</tr>
<tr>
<td>General Motors</td>
<td>35.02</td>
<td>17.9</td>
<td>17.9</td>
<td>39.3</td>
</tr>
<tr>
<td>Enbridge Energy</td>
<td>31.10</td>
<td>22.2</td>
<td>3.7</td>
<td>70.4</td>
</tr>
<tr>
<td>Goldman Sachs</td>
<td>18.90</td>
<td>22.2</td>
<td>5.6</td>
<td>27.8</td>
</tr>
<tr>
<td>Ralph Lauren</td>
<td>8.00</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 6. Coding relational outcomes
Of the 1675 stakeholder tweets, the frequencies of occurrence for the four relational outcomes are as follows: trust (1.9%), satisfaction (12.7%), commitment (5.0%), and control mutuality (7.8%; Table 4). For each organization, a final score for Relational Effects was calculated by averaging the four relational outcomes; scores for Relational Effects were ranked along a continuum (see Table 5). An internal reliability measure for the composite score was conducted using Cronbach’s Alpha ($\alpha = .86$). While internal reliability for Relational Effects fell within acceptable standards, it was lower than that of Dialogic Behavior so an exploratory factor analysis was conducted (Table 3). A component matrix revealed high correlation between Dialogic Behavior and each of the relational outcomes with the exception of trust. Therefore, an adjusted score for Relational Effect was calculated, removing trust and averaging just satisfaction, commitment, and control mutuality (see Table 5). Both distributions, Relational Effects and Adjusted Relational Effects (No Trust), were slightly skewed and normalized before hypothesis testing using natural logarithm functions.

**Table 3. Exploratory factor analysis (relational outcomes)**

<table>
<thead>
<tr>
<th>Relational Outcomes</th>
<th>M</th>
<th>SD</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>2.02</td>
<td>3.64</td>
<td>0.437</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>11.41</td>
<td>9.97</td>
<td>0.967</td>
</tr>
<tr>
<td>Commitment</td>
<td>4.16</td>
<td>6.43</td>
<td>0.970</td>
</tr>
<tr>
<td>Control Mutuality</td>
<td>6.44</td>
<td>9.50</td>
<td>0.922</td>
</tr>
</tbody>
</table>

Intercoder reliability for the Stakeholder Tweet Code Book was calculated at .90 using Holsti’s formula. For the relational outcomes, intercoder reliability was .90 [trust (.98), satisfaction (.86), commitment (.86), control mutuality (.88)].
Table 4. Overall frequencies of relational outcomes

<table>
<thead>
<tr>
<th>Stakeholder Average</th>
<th>Trust</th>
<th>Satisfaction</th>
<th>Commitment</th>
<th>Control Mutuality</th>
<th>Sentiment (Positive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 1675</td>
<td>1.9</td>
<td>12.7</td>
<td>5.0</td>
<td>7.8</td>
<td>43.5</td>
</tr>
</tbody>
</table>

Table 5. Relational Effects (ranked)

<table>
<thead>
<tr>
<th>Organization</th>
<th>Relational Effects (Stakeholders)</th>
<th>Trust</th>
<th>Satisfaction</th>
<th>Commitment</th>
<th>Control Mutuality</th>
<th>Adjusted Relational Effects (No Trust)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Foods</td>
<td>30.25</td>
<td>0</td>
<td>46.8</td>
<td>28.2</td>
<td>46</td>
<td>40.33</td>
</tr>
<tr>
<td>Allstate</td>
<td>19.00</td>
<td>16</td>
<td>30</td>
<td>16</td>
<td>14</td>
<td>20.00</td>
</tr>
<tr>
<td>Southwest</td>
<td>15.80</td>
<td>7.4</td>
<td>25</td>
<td>13.2</td>
<td>17.6</td>
<td>18.60</td>
</tr>
<tr>
<td>Nordstrom</td>
<td>7.58</td>
<td>1.1</td>
<td>15.7</td>
<td>3.4</td>
<td>10.1</td>
<td>9.73</td>
</tr>
<tr>
<td>Kohls</td>
<td>6.95</td>
<td>0</td>
<td>12.5</td>
<td>2.8</td>
<td>12.5</td>
<td>9.27</td>
</tr>
<tr>
<td>General Motors</td>
<td>6.55</td>
<td>8.2</td>
<td>13.1</td>
<td>1.6</td>
<td>3.3</td>
<td>8.67</td>
</tr>
<tr>
<td>Autozone</td>
<td>6.50</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8.00</td>
</tr>
<tr>
<td>Western Digital</td>
<td>6.50</td>
<td>0</td>
<td>14</td>
<td>6</td>
<td>6</td>
<td>6.80</td>
</tr>
<tr>
<td>Nike</td>
<td>5.28</td>
<td>0.7</td>
<td>14.8</td>
<td>2.8</td>
<td>2.8</td>
<td>6.00</td>
</tr>
<tr>
<td>Staples</td>
<td>4.50</td>
<td>0</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>6.00</td>
</tr>
<tr>
<td>AECOM</td>
<td>4.50</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>4</td>
<td>6.00</td>
</tr>
<tr>
<td>Goldman Sachs</td>
<td>4.00</td>
<td>0</td>
<td>10</td>
<td>4</td>
<td>2</td>
<td>5.33</td>
</tr>
<tr>
<td>Enbridge Energy</td>
<td>3.50</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>4.67</td>
</tr>
<tr>
<td>Hewlett Packard</td>
<td>3.50</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>8</td>
<td>4.00</td>
</tr>
<tr>
<td>Gap</td>
<td>3.50</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>4</td>
<td>3.33</td>
</tr>
<tr>
<td>ATT</td>
<td>2.80</td>
<td>1.9</td>
<td>3.7</td>
<td>2.8</td>
<td>2.8</td>
<td>3.33</td>
</tr>
<tr>
<td>Principal Financial</td>
<td>2.50</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>3.33</td>
</tr>
<tr>
<td>Ralph Lauren</td>
<td>2.50</td>
<td>0</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>3.33</td>
</tr>
<tr>
<td>Dillards</td>
<td>2.50</td>
<td>2</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>3.33</td>
</tr>
<tr>
<td>Oracle</td>
<td>2.50</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>3.10</td>
</tr>
<tr>
<td>Fifth Third</td>
<td>2.50</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>2.67</td>
</tr>
<tr>
<td>Texas Instruments</td>
<td>2.50</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>2.67</td>
</tr>
<tr>
<td>DirecTV</td>
<td>2.50</td>
<td>2</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>2.67</td>
</tr>
<tr>
<td>UPS</td>
<td>2.00</td>
<td>1.2</td>
<td>3.7</td>
<td>1.2</td>
<td>1.9</td>
<td>2.27</td>
</tr>
<tr>
<td>Chevron</td>
<td>0.00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Hypothesis 1

Hypothesis 1 stated that organizations’ Dialogic Behavior would be associated with Relational Effects. With organizations being ranked along a continuum for both variables, a
Pearson Correlation was used to test associations between the two. Hypothesis 1 was tested twice, once with the original Relational Effects score and once with the score for Adjusted Relational Effects (No Trust).

Testing Hypothesis 1 with the original Relational Effects score produced a weak correlation, which was not significant \( (r = .378, n = 25, p = .062, r^2 = .014) \). Therefore, Hypothesis 1 (calculated with the original Relational Effects score) was rejected. However, testing Hypothesis 1 with the score for Adjusted Relational Effects (No Trust) produced a moderate significant correlation \( (r = .402, n = 25, p \leq .05, r^2 = .162) \). Therefore, Hypothesis 1 (calculated with Adjusted Relational Effects) was accepted. From here on, the use of “Relational Effects” refers to the adjusted score (no trust).

**Research Question 1**

Research Question 1 asked which individual dialogic principles (mutuality / propinquity / empathy / risk / commitment) were the best predictors of relational outcomes (trust / satisfaction / commitment / control mutuality). Using a Pearson Correlation, two significant correlations were found: empathy and control mutuality \( (r = .506, n = .25, p \leq .01, r^2 = .256) \), risk and control mutuality \( (r = .522, n = 25, p \leq .01, r^2 = .272) \).

**Research Question 2**

Research Question 2 asked whether a relationship exists between Dialogic Behavior and the sentiment expressed in stakeholder tweets. Sentiment was operationalized as a single variable, coding tweets as either positive, negative, or neutral. Positive sentiment was separated out as a dummy variable so that each organization ended up with a score (expressed as a percent)
representing the frequency at which positive sentiment was identified (Table 5). Using a Pearson Correlation, significant correlations were found between Dialogic Behavior and positive sentiment \((r = .463, n = 25, p \leq .05, r^2 = .214)\). Given that positive sentiment and Relational Effects correlated at a similar strength with Dialogic Behavior, a Pearson Correlation between the two was run. There was a significant correlation between Relational Effects and positive sentiment \((r = .504, n = 25, p \leq .01, r^2 = .254)\).

**Additional Results**

For the organization tweets, an item examining the contents of tweets revealed (1) that 37.1\% of all organization Twitter replies were customer-service related and (2) that 52.8\% of organization replies employed conversational banter (i.e., the use of a playful, human voice; see Appendix A). Customer service (i.e., the willingness to discuss customer-service issues with stakeholders) correlated significantly with Dialogic Behavior \((r = .610, n = 25, p \leq .01, r^2 = .372)\), while organizations' use of conversational banter correlated with both Dialogic Behavior \((r = .565, n = 25, p \leq .01, r^2 = .319)\) and Relational Effects \((r = .601, n = 25, p \leq .01, r^2 = .361)\).

Furthermore, a hierarchical regression revealed that conversational banter significantly strengthened the relationship between Dialogic Behavior and Relational Effects, accounting for a .184 change in Adjusted R\(^2\) (see Table 6).

*Table 6. Hierarchical regression for Dialogic Behavior and conversational banter*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE B</th>
<th>(\beta)</th>
<th>R(^2) (adj)</th>
<th>(\Delta R^2) (adj)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dialogic Behavior</td>
<td>0.012</td>
<td>0.006</td>
<td>0.402</td>
<td>0.125</td>
<td></td>
</tr>
<tr>
<td>2. Conversational Banter</td>
<td>0.016</td>
<td>0.006</td>
<td>0.549</td>
<td>0.309</td>
<td>0.184</td>
</tr>
</tbody>
</table>
Ad Hoc Analysis

This study used social network analysis (SNA) to demonstrate some of the concepts and findings presented above (see Figures 7, 8, 9 and 10). Implications for the graphs are discussed in depth in the Best Practices section.

Data Aggregation and Network Concepts. As with the content analysis, data was aggregated by Twitter mentions (e.g., @Nordstrom, @RalphLauren). The vertices or dots represent Twitter users (stakeholders), and the edges or arrows each represent a mention, reply, or retweet relationship. Bold, colored arrows have been formatted by the researcher to represent an instance where the organization has responded. Within each graph, the organization is central to a network of initiated conversations (referred to as an ego network), and SNA allows the researcher to visualize the extent to which those connections are reciprocated.

Figure 7 and 8 compare two organizations from this study: Nordstrom, which ranked high on the continuum with a Dialogic Behavior score of 97.56 and Ralph Lauren, which ranked at the bottom with a score of 8. Figure 11 (on the following page) has been excerpted from the Nordstrom graph to demonstrate a mention, retweet, and reply relationship:

A. Stakeholder mentions @Nordstrom; also mentions @AlderwoodMall. Two arrows pointing from @Rebeksy indicate the direction of communication.

B. Nordstrom replies. The arrow points back at the stakeholder, indicating a reciprocated connection.

C. A third party retweets the stakeholder, mentioning @Nordstrom and @AlderwoodMall in the process. Thus, arrows extend from @LasVegas_Places to each vertex.
Figure 11 represents a small-scale interaction or conversation between four Twitter users. Larger clusters within a graph represent larger conversations; yet, each can be broken down to demonstrate similar relationships between organization and stakeholder. Each graph will be discussed in depth in the Best Practices section of the Discussion.
Figure 7. Nordstrom stakeholder mentions. Data aggregated using NodeXL, March 22, 2014, 15:10 to 19:00 EST.

Figure 8. Ralph Lauren stakeholder mentions. Data aggregated using NodeXL, Dec. 9, 2014, 18:00 to Dec. 10, 10:50 EST.

**Graph Notes:** Nodes or dots represent Twitter users (organization at center). Gray arrows represent stakeholder mentions. Bolded, blue arrows indicate an organizational response.
Figure 9. Whole Foods stakeholder mentions. Data aggregated using NodeXL, March 21, 2014, 09:45 to 11:10 EST.

Graph Notes: Nodes or dots represent Twitter users (organization at center). Gray arrows represent stakeholder mentions. Bolded, green arrows indicate an organizational response.
Figure 10. Southwest Airlines stakeholder mentions. Data aggregated using NodeXL, March 20, 2014, 11:00 to 19:00 EST.

**Graph Notes:** Nodes or dots represent Twitter users (organization at center). Gray arrows represent stakeholder mentions. Bolded, red arrows indicate an organizational response.
CHAPTER 5

DISCUSSION

In the past, academic disciplines have been slow to open up to new methods of measurement and analysis—a stigma that the field of public relations (and other mass communication disciplines) must overcome given the fast-changing social media environment. The way people are communicating (both with each other and with organizations) is rapidly changing; therefore, changes in the way we study those interactions must stay apace.

With the rise of social media, organizations and practitioners have returned to more interpersonal models of communication, which value dialogue as a vehicle for building and maintaining relationships. Interactive approaches to social media have become widely practiced—so much so, that stakeholders have come to expect organizations to respond to comments and issues in realtime. Despite the prevalence of this approach, Taylor and Kent (2010) have identified a significant need for evidentiary support after finding a gap between “what the field is saying about the potential of social media and the evidence provided to prove the argument” (p. 212). With the work of Saffer et al. (2013), the field has just begun to test the effects of a dialogic approach to Twitter, as they established a relationship between interactivity and relational outcomes. Yet, in order to understand this relationship or draw implications for practice, more information is needed about the interactions taking place. The purpose of this study has been to develop a tool with descriptive power, which not only measures the effects of dialogue but allows for a deeper understanding of organization-public interaction on Twitter.
Developing & Validating a Tool

This study used the dialogic theory as a normative measure with which to gauge organizational action on Twitter. As it was explicated by Kent & Taylor (2002), the theory suggests that two-way, symmetric communication is the vehicle through which all genuine organization-public relationships are founded. This study was the first to adapt Kent and Taylor’s (2002) five dialogic principles—mutuality, propinquity, empathy, risk, and commitment—to a coding scheme for social media, as the literature review has established the irrelevance of previous guidelines and metrics (Kent & Taylor, 1998; Rybalko & Seltzer, 2010). Furthermore, this study was also among the first to adapt Hon and Grunig’s (1999) relational outcomes—trust, satisfaction, commitment, and control mutuality—from survey form, which had both advantages and drawbacks.

The great advantage to content analysis is that it capitalizes on the public nature of social media. With platforms like Twitter, a vast network of organization-public interactions (which have never before been available) are now accessible to researchers and practitioners alike. Therefore, noninvasive methods like tweet analysis can be both inexpensive and richly insightful with the examination of publicly available tweets. Of course, there are drawbacks to adapting the measurement of relational outcomes from survey form, mainly that a 140-character message does not allow researchers to explore relational dimensions at the same depth. Instead, they must rely on the manifest content offered up by stakeholders in their daily communications on Twitter. The results of this study suggest that tweet analysis can be used to effectively measure some relational outcomes (e.g., satisfaction, commitment, control mutuality), while others (e.g., trust)
Dialogic Principles: Fulfilling the Dialogic Promise

In 2009, McAllister-Spooner conducted a comprehensive literature review of dialogic theory, concluding that organizations were failing to take advantage of the Internet’s dialogic promise. Indeed, early research of Twitter and other social networking sites have continued to cast the Internet as the land of missed opportunities (Bortree & Seltzer, 2009; Rybalko & Seltzer, 2010; Linvill, Hicks, & McGee, 2012; Lovejoy, Waters, & Saxton, 2012). The results of this study, however, suggest that times may be changing.

Overall, Fortune 500 companies on Twitter were found to be highly dialogic, meaning they employed Kent and Taylor’s (2002) dialogic principles quite frequently (see Table 2). More than half the organizations (13 of 25) ended up with Dialogic Behavior scores above 70, which meant that the average frequency at which they employed dialogic principles was above 70%. Still, scores for Dialogic Behavior ranged from 8 to 98.18 ($M = 68.34$, $SD = 26.92$), which made it clear that some organizations were more dialogic than others on Twitter.

A key finding, this study holds, was the overall prevalence of dialogic principles, which ranged from 67.7% to 90.4% (see Table 1). Even the principle with the lowest prevalence (i.e., risk) was detected in more than two-thirds of the 1431 organizational tweets. The implications for each principle are discussed below:

Mutuality. Mutuality, or the recognition of organization-public relationships, was employed by organizations most frequently, present within 90.4% of tweets. Beyond addressing
stakeholders directly, organizations expressed mutuality indirectly by using second-person pronouns or imperative sentence structure—any indication that they acknowledged stakeholders as the audience of their tweets.

![Mutuality: absent](image1.png) ![Mutuality: present](image2.png)

*Figure 12. Mutuality*

Granted, the presence of mutuality did not always guarantee the presence of the other four principles; it indicated that organizations were recognizing stakeholders as the target of communication and, ideally, as their dialogic partners. Based on Kent and Taylor’s (2002) idea that organizations and publics are inextricably tied together, mutuality is the foundational element of dialogue, which proved highly prevalent throughout organization tweets at more than 90%.

**Propinquity.** Propinquity, or the accessibility and willingness to engage, was present within 82.7% of organization tweets. At the most basic level, Kent and Taylor (2002) explained, propinquity advocates for a type of rhetorical exchange. Replies to stakeholders and direct invitations to engage were considered examples of propinquity, yet this study established that propinquity could be conveyed indirectly as well. As with blogs, the informal and conversational nature of Twitter allows organizations to create what Yang and Lim (2009) referred to as a *dialogic self*, or a personality developed through the interactions with stakeholders. Therefore,
organizations’ attempts to humanize the corporate voice using conversational banter, humor, or rhetorical questions were considered organizational attempts to engage and convey accessibility (see below).

![Image](image_url)

**Propinquity:** present, direct  
(welcomes engagement by asking stakeholders a question)

**Propinquity:** present, indirect  
(conveys accessibility through conversational human voice and humor)

*Figure 13. Propinquity*

At more than 80%, high values for propinquity indicate that the majority of organizations are opening themselves up to conversation on Twitter and inviting engagement with stakeholders.

**Empathy.** Empathy, or the supportiveness and confirmation of public goals and interests, was found within organization tweets 71.6% of the time. While closely related to propinquity, empathy goes a step further; empathetic organizations acknowledge the value of receiving their stakeholders’ input and/or provide direct venues for facilitating public discussion. Furthermore, Kent and Taylor (2002) also explicated empathy as taking a communal orientation toward organizational actions and initiatives, which includes recognizing different stakeholder groups and the value of their contribution.
While empathy builds on both propinquity and mutuality, the construct on its own focuses less on message structure and more on content, making it a powerful indicator of genuine dialogic behavior. Whereas even promotional messages can embody mutuality and propinquity, empathy goes beyond recognizing stakeholders or conveying accessibility to valuing the dialogue that follows. Thus, that more than 70% of tweets displayed empathy is an important finding; it suggests that seven times out of 10, Fortune 500 companies are communicating in a way that strives to recognize, share, and/or understand the needs and interests of their stakeholders.

**Risk.** Risk, or the willingness to interact on stakeholders’ terms, was the least prevalent of the dialogic principles at 67.7%. As both Kent and Taylor (2002) and Leitch and Neilson (2001) explained, genuine dialogue is in many ways “dangerous” to organizations, as it opens them up to unpredictable responses and outcomes. The understanding, however, is that with great risk comes great rewards—in this case, rewards are in the form of stakeholder relationships. Based on the idea that organizations should be both vulnerable and dynamic in their interactions with stakeholders, risk was coded as present anytime organizations opened themselves up to receiving different viewpoints or communicated in a way that was unscripted (i.e., responding to stakeholders’ comments and concerns as they arose through dialogue).
For a discipline that has long strived to “minimize risk,” Kent and Taylor’s (2002) notion of *dialogic risk* is a difficult concept to grasp. Yet, given the rise of social media and the return to more interpersonal models of communication, a dynamic approach to organizational communication has not only become an ideal but a necessity. In the Best Practices section, this study will discuss the prevalence of customer service and conversational banter—two practices which require a great assumption of dialogic risk, yet also seem to produce the greatest rewards. Despite risk occurring least frequently, this study still detected use of the principle in more than two-thirds of organizational tweets, suggesting that Fortune 500 organizations are attempting to open themselves up to the fluid nature of dialogue and conversation on Twitter.

**Commitment.** Commitment is the extent to which an organization gives itself over to dialogue, interpretation, and understanding; it was the second most prevalent principle at 85.1%. Based on the idea that dialogue should be the vehicle for reaching mutually satisfying positions, Kent and Taylor (2002) explicated the principle of commitment in a number of different ways:

1. Commitment embodies “genuineness,” or the truthful and timely disclosure of important information (despite the draw that nondisclosure might have). While this tenet of PR applies equally to new platforms, the notion of “timely” has certainly changed. Nowadays, companies
are expected to address stakeholder concerns almost immediately—an expectation that will be discussed in the next section. (2) An organization should be “committed to conversation” (p. 29, Kent & Taylor, 2002). This was identified when organizations took the time to respond to stakeholder comments on Twitter in a way that attempted to mediate the problem or build a personal relationship. (3) An organization should be “committed to interpretation” (p. 29, Kent & Taylor, 2002). This was identified when organizations acted on reaching a mutually satisfying position, which included everything from resolving customer service issues to establishing loyalty or scholarship programs to sharing blog posts containing helpful information for their stakeholders (see Appendix B).

These notions of commitment are hardly new to public relations, and if anything, they epitomize several core tenets: truthful and timely disclosure, mutually beneficial actions, etc (PRSA, 2000). This study found that more than 85% of tweets demonstrated these core values of public relations, suggesting that traditional tenets are indeed transferring over to new platforms.

Reiterated by the above discussion, prior measures for dialogic communication fall short of describing the interactive process—that is, how organizations are engaging with their stakeholders on social media. With this kind of descriptive approach, it is difficult to draw a line
(as past studies have done) and say that organizations above the line are *dialogic* and those that fall below are *non-dialogic*, for an orientation toward dialogue is hardly black and white. Ranking organizations along a continuum allows them to be compared in relation to one another. Even so, we see evidence of organizations on Twitter fulfilling a dialogic promise, as was lamented by McAllister-Spooner (2009). While there is no hard-and-fast line by which to classify, scores for Dialogic Behavior (and the five component frequencies) give an idea of how often dialogic principles are being employed.

**Best Predictors.** Research Question 1 asked which individual dialogic principles are the best predictors of relational outcomes, the two strongest relationships being empathy and control mutuality \( r = .506, n = .25, p \leq .010, r^2 = .256 \), and risk and control mutuality \( r = .522, n = 25, p \leq .007, r^2 = .272 \). This finding reiterates the importance of empathy and risk in influencing perceptions of organizational attentiveness and concern. That there are not more individual relationships between principles and outcomes adheres to Kent & Taylor’s (2002) explication of dialogic theory: a dialogic orientation embodies all five tenets. Therefore, it follows that Dialogic Behavior (i.e., the composite score for all five principles) was more strongly associated with relational outcomes.

**Relational Outcomes: Measuring Effects**

Coding for relational outcomes required coders to identify statements from Hon and Grunig’s (1999) survey within the manifest content of stakeholder tweets (see Appendix B). For example, for satisfaction to be present, a stakeholder tweet had to express a statement analogous to “I’m happy with the organization” or “Most people enjoy dealing with the organization,” etc.
(see Figure 17 for example). Hon and Grunig (1999) developed five to six items or statements for measuring each relational outcome. For this study, a relational outcome was coded as present when at least one statement was identified.

Scores for Relational Effects fell mostly between 0 and 8.00, with a few high scores skewing the distribution slightly right (Whole Foods = 40.33, Allstate = 20.00, Southwest = 18.60). As was detailed in the Results section, a score of Relational Effects was calculated both with and without trust—the latter correlated with increases in Dialogic Behavior. Barring trust, these findings replicate Saffer et al.’s (2013) relationship between Twitter interactivity and relational outcomes.

Overall, relational outcomes showed low frequencies of occurrence throughout the 1675 stakeholder tweets, ranging from 1.9% to 12.7% (see Table 4). Given the laconic nature of the medium (140 characters or fewer), low frequencies were expected; and yet, three of the four relational outcomes still proved to be reliably identifiable. Positive customer service or product experiences were among the most common expressions of relational outcomes, discussed in depth in the Best Practices section.

**Satisfaction.** Satisfaction was associated with stakeholders’ general happiness toward the organization and their positive feelings toward the relationship; it was expressed most frequently
at 12.7%. Satisfaction was generally the bottom-line for relational outcomes, meaning that the presence of trust, commitment, or control mutuality was usually accompanied by satisfaction. This relationship was logical, given that stakeholders who express trust or commitment towards an organization are likely to also be “happy with the organization.” Control mutuality was sometimes an exception to this rule.

Control Mutuality. Control mutuality, or the extent to which stakeholders believed the organization was attentive to their thoughts and opinions, occurred second-most frequently at 7.8%.

The relational outcome was present when stakeholders made statements about the organization’s attentiveness (see Figures 6 and 20), or when they made suggestions or asked questions in a way that expected a response from the organization (see Figure 18). In the case of the latter, control mutuality was not always accompanied by satisfaction, as stakeholders could voice suggestions or questions without expressing direct “happiness” with the organization (see Figure 19).
Commitment. Commitment occurred within 5.0% of stakeholder tweets and is conducive to stakeholder loyalty or preference (i.e., the belief that the relationship is worth spending the energy to maintain). Commitment was expressed by statements analogous to “I would rather work together with this organization than not” or “I can see that this organization wants to maintain a relationship with people like me.”

Trust. Trust occurred least frequently at 1.9%. Trust was characterized by expressions of confidence in the organization or the belief that the organization is “fair and just” (see Figure 20). Besides being rather elusive, trust also appeared to be measuring something different than intended. An exploratory factor analysis revealed that the relational outcome had no correlation to Dialogic Behavior and was poorly related to the other three (see Table 3). This may indicate that the concept of trust failed to translate from Hon and Grunig’s (1999) original survey and/or that the relational outcome was simply too complex to measure on Twitter. Indeed, statements like “The organization treats people like me fairly and justly” or “I believe this organization takes people like me into account when making decisions” are not as common to everyday conversations as statements of general happiness (i.e., satisfaction). However, a small N size may have also contributed to weak interrelations between trust and other relational outcomes. The complexity and elusiveness of trust presents researchers with a
familiar quandary as they attempt to standardize effects-based measures for social media platforms.

**Role of Sentiment.** Sentiment, or stakeholders’ tone toward the organization (i.e., positive, negative, neutral), was coded in addition to relational outcomes. While positive sentiment is conceptually quite similar to satisfaction (the expression of stakeholder happiness), it differs in that it also considers indirect cues such as word choice and tone. As a result, positive sentiment was detected more frequently than satisfaction throughout the 1675 stakeholder tweets (43.5% versus 12.7%).

Given the elliptical nature of Twitter, this study asked whether a more implicit measure might be useful in gauging the effects of dialogic communication. The results revealed that not only was sentiment positively associated with Dialogic Behavior ($r = .463$, $n = 25$, $p \leq .05$, $r^2 = .214$), but positive sentiment was also correlated with Relational Effects ($r = .504$, $n = 25$, $p \leq .01$, $r^2 = .254$). Thus, not only was positive sentiment a significant measure on its own, but it was also associated with relational outcomes and detected more frequently throughout stakeholder tweets.

While sentiment may fall short of measuring the gamut of relationship-building effects, this study suggests that the variable could be a reliable measure for stakeholder happiness. As organization-public interactions are limited to 140 characters or less, researchers must be privy to the value that more implicit measures may have in gauging the effects of dialogic communication.
Standardizing Relational Measures for Social Media

How should we measure relational effects on social media? When it comes to depth, content analysis will always fall short of survey or interview methods in understanding multidimensional relational outcomes; yet, there are more advantages to tweet analysis than its breadth.

The great value of social media is the window it provides into organization-public interactions, which has never before been available. With platforms like Twitter, what used to be private communication between organization and stakeholder is now public, and the stream of data is seemingly endless. Tweet analysis is both noninvasive and inexpensive; it also produces data that is measurable, as well as qualitatively insightful. Normative theories of PR can be operationalized for new platforms, as this study has done with dialogic theory on Twitter. What results are descriptive tools for measurement, which are important for understanding how PR theory translates to new platforms. Yet, without a way to measure effects, these descriptive tools have little value.

This study was the first to adapt Hon and Grunig’s (1999) relational outcomes from survey form to tweet analysis. The goal was to see whether Hon and Grunig’s (1999) concepts could be coded from the manifest content of tweets to gauge relationship-building effects. Barring trust, this study was able to replicate with tweet analysis what Saffer et al. (2013) found in their pretest-posttest survey experiment—that is, a positive relationship between Dialogic Behavior (interactivity) and Relational Effects (satisfaction, commitment, and control mutuality). This suggests that (1) the attempt to operationalize relational outcomes for tweet analysis was
warranted and (2) that the candid nature of social media my be conducive to measuring relational effects using methods other than stakeholder surveys.

This study has also brought attention to more implicit variables that take into account word choice and tone. With 140 characters or fewer, words are at a premium, and how a message is said may be just as important as what is being said. This study found that positive sentiment was not only associated with Dialogic Behavior, but it was highly interrelated with the relational outcome of satisfaction. This opens the inquiry to whether the relationship rings true for other datasets and whether other implicit variables may serve as a valid gauge on relational effects.

Finally, new forms of measurement are going to have to take into account the context of the greater social media environment. It has long been known that organization-stakeholder communication does not occur in a vacuum, which is even more true for social media. Stakeholders have the power to broadcast thoughts and opinions, and their followers have the power to reply and retweet. Likewise, any organizational response (or lack there of) is now visible and subject to viral word of mouth. With this in mind, it will be important to also look beyond the individual interactions to understand their effects within a greater organizational network. This is where methods like social network analysis (SNA) are particularly adept, and its application will be demonstrated in the following section.

**Best Practices**

Several best practices, which were identified throughout the course of this study, will be illustrated using social network analysis. This study hopes to take additional steps in
familiarizing researchers and practitioners with SNA by demonstrating potential applications for both scholarship and practice.

This section expands upon the Ad Hoc Analysis (presented in Results), using SNA to illustrate concepts of organizational dialogue that have been central to this study. First, this section will approach SNA from a researcher’s perspective to illustrate how it can be applied to evaluate dialogic behavior and demonstrate best practices. The second subsection takes a practitioner’s perspective, showing how SNA can be used to understand the stakeholder environment and draw implications for practice.

A Researcher’s Perspective: Understanding Organizational Dialogue

Visualizing Dialogue. As introduced in the Results, this study examines organizational ego networks, meaning that the network is centered around one user (the organization) to whom most other users are connected. In the context of this study, a “connection” (indicated by the arrows) represents a mention relationship, which includes both retweets and replies (using the “@” symbol). As with the content analysis, data was aggregated using “mentions” with the implication that stakeholders who mentioned an organization were opening the channel for dialogue. Thus, the organization is central to a network of initiated conversations, and SNA allows us to visualize the extent to which those connections are reciprocated.

Using Smith et al.’s (2014) classifications (Figure 4), we can conceptualize dialogic behavior for network analysis. For this study, organizations fall somewhere between a support network and a broadcast network, depending on their responsiveness; both networks form a hub-and-spoke structure. In a broadcast network, the organization or the “hub” is mentioned or
retweeted many times, yet seldom responds. This is represented by many incoming edges (gray arrows) and few outgoing edges (blue arrows), as seen in Figure 8, the Ralph Lauren graph. 

Alternately, a support network has a hub that is highly active, indicated by many outgoing edges and few incoming. Thus, a dialogic network would fall somewhere in between—one in which the incoming and outgoing edges are more balanced, indicating a “give and take” in conversation.

In glancing at Figure 7 and 8, we see a visual depiction of each organization’s reciprocity (the percent of stakeholder mentions that were reciprocated):

Table 7. Reciprocity for Figures 7 and 8

<table>
<thead>
<tr>
<th></th>
<th>Mentions Received</th>
<th>Organization Replies</th>
<th>Reciprocity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nordstrom</td>
<td>131</td>
<td>50</td>
<td>38%</td>
</tr>
<tr>
<td>Ralph Lauren</td>
<td>198</td>
<td>2</td>
<td>1%</td>
</tr>
</tbody>
</table>

Nordstrom issues a reply for every 2.6 mentions it receives, whereas Ralph Lauren issues one for every 99; the SNA graphs reveal a vast discrepancy in their orientation to dialogue. Yet, as this study has held, a measure of reciprocity alone is insufficient for understanding the interactions taking place. What SNA provides is an aerial view—an excellent starting point—for exploring organization-stakeholder interaction.

Within the NodeXL interface, simply clicking on a vertex or edge will reveal the interaction it represents (two of which have been provided in Figure 7). Next, we will begin to
examine some of the conversations and relationships represented by a SNA graph in our
discussion of best practices, which were identified from the content analysis phase of the study.

**Mapping Best Practices.** There were two major findings when it came to best practices: (1) more than one-third of all organizational replies were customer-service related, and (2) more than half of all organizational replies identified as *conversational banter* (i.e., the use of playful, human voice). Both customer service and conversational banter correlated positively with Dialogic Behavior, while conversational banter also proved a strong predictor of Relational Effects.

In Figure 9, SNA is used to explore the organizational network of Whole Foods (ranked at the top of the continuum for Dialogic Behavior, 98.18, and Relational Effects, 40.33). Again, each gray arrow or line extending to the central vertex (@WholeFoods) represents a stakeholder mention. Each green arrow indicates an organizational response.

As with the Nordstrom graph (Figure 7), Whole Foods’ high level interactivity is visually apparent with SNA. Green edges or arrows branch out into the various clusters, indicating that the organization is taking part in conversations with stakeholder groups. Labels indicate conversation topics for the three largest groups at the time the data was aggregated (see Figure 9). Beyond the large groups, we see many green arrows extending to single vertices or dots, meaning that the organization has taken the time to respond to individual stakeholder tweets or inquiries. Some of these replies have been excerpted to provide examples of customer service and conversational banter.
Customer Service. As the results revealed, customer service responses accounted for 37.1% of all organization replies, correlating with an organization’s Dialogic Behavior ($r = .610$, $n = 25$, $p \leq .01$, $r^2 = .372$). This suggests that dialogic organizations were more likely to address customer service-related issues on Twitter. Among the highest ranked organizations for Dialogic Behavior, it was a common customer-service practice to apologize for any negative experience and offer a remedial action to address the problem (as shown by Whole Foods in Figure 9). Some organizations even monitored Twitter conversations for negative sentiment (using keywords) and offered customer service assistance without the stakeholder making the initial contact (see Figure 21). The effectiveness of such interventions will be a key area of future research—whether and when the interaction succeeds in altering stakeholder attitudes or resolving the issue.

Perhaps more important was the finding that stakeholders are turning to Twitter to resolve their customer service needs. For this study, one out of every 10 stakeholder tweets (11.5%) was a direct request for customer service assistance. This ranged from requesting information on serving sizes or return policies to sharing a negative experience and asking the organization to make it right. Figure 22 typifies an instance where a stakeholder provided her tracking number, requesting from the organization a personalized response on when the package would arrive.

Whatever the request, organizations ranking high for Dialogic Behavior were generally intent
on meeting their customers needs. This study observed many interactions where the organization was able to completely resolve an issue through Twitter alone (see Figure 23). Oftentimes, however, customer service issues required the participation of other corporate departments or individual store locations, as shown in the Whole Foods examples in Figure 9. This emphasizes the importance of corporate social media teams being integrated across departments, regional offices, local stores, etc. The rise in customer service on platforms like Twitter necessitates a system that can defer issues and requests to the proper source and return a response in realtime—because that is what stakeholders have come to expect.

As Jeff Boron, Digital Media Director at Pepsi Corporation explains, social media cannot be viewed as an isolated department or as merely a channel of communication; rather, it is becoming the glue that ties everything together (J. Boron, personal communication, March 11, 2014). Increasingly, social media is an interface for environmental scanning, media relations, marketing campaigns, and in general, organization-stakeholder interaction. Corporations that fail to accommodate their stakeholders’ expectations through dialogue will likely fail to achieve the relational effects that lead to long-term partnerships—a normative notion that the results of this study have upheld.

Figure 23. Stakeholder customer service inquiry
Conversational Banter. Within the content analysis, conversational banter was present when an organization appealed to stakeholders with a playful, friendly tone or humor. Similar to Kelleher (2009) and Kelleher and Miller’s (2006) concept of conversational human voice, conversational banter involved a personification of the corporate voice and a willingness to engage in light-hearted conversations with stakeholders. Examples have been provided in the Whole Foods graph (Figure 9).

As it conveys accessibility, examples of conversational banter were often coded positively for propinquity, yet it was common for the other four dialogic principles to follow (see examples in Appendix A). The use of conversational banter correlated with Dialogic Behavior (r = .565, n = 25, p ≤ .01, r² = .319), reiterating that it was a common practice among dialogic organizations. Companies such as Whole Foods and Southwest Airlines employed conversational banter in more than 75% of their tweets (75.1% and 78.4%, respectively). Again, it was common for some of the top-ranking organizations to monitor Twitter conversations using keywords and join in with some light-hearted commentary of their own (see Figure 24).

Most importantly, however, the use of conversational banter correlated significantly with Relational Effects (r = .601, n = 25, p ≤ .01, r² = .372). This study found that, for dialogic organizations, conversational banter was often an extra step in their interactions with
stakeholders—one that truly humanized the corporate tone and created a personality, in a sense, for the organization on Twitter (similar to Yang & Lim’s [2009] notion of dialogic self). The value of conversational banter was confirmed by linear regression, as it significantly enhanced the relationship between Dialogic Behavior and Relational Effects (see Table 6 in Results). This is perhaps the most important finding of this study: organizations that employed conversational banter as part of a dialogic orientation on Twitter produced the greatest Relational Effects. Future research would do well to further explore the use and implications of conversational banter, which, for this study, has proven a powerful element of relationship-building on social media.

Creating Dialogic Opportunities. Social network analysis illustrates other best practices, which were identified throughout the current study. In addition to responding to stakeholder mentions, dialogic organizations also created their own engagement opportunities by inviting feedback or posing questions. In Figure 9, the orange-colored cluster in the top right represents the stakeholder responses to a question posed by @WholeFoods: “How do you pick a good mango? [blog link]” (see original tweet in Figure 9). Applying the principles of dialogue that have been central to this study, the organization’s tweet qualifies for all five: (1) it directed interested stakeholders to a non-promotional blog post with tips and recipes (mutuality, commitment), and (2) it posed a question—inviting stakeholder input and opening the floor for discussion (propinquity, empathy, risk). This is a textbook example to show that dialogic organizations create their own opportunities for dialogue, which this study observed through both content analysis and SNA. Green arrows pointing back toward the large, orange cluster illustrate that Whole Foods capitalized on those opportunities for stakeholder engagement, an example of which has been provided in Figure 9 (see tweet example, top right). Dialogic
organizations, this study found, were not only reactive, but proactive—that is, they sought out interactions with stakeholders as an opportunity for relationship-building. SNA allows us to visualize those interactions and study them within the context of an organization’s environment.

**A Practitioner’s Perspective: Understanding the Stakeholder Environment**

This subsection assumes the perspective of the organization itself (or the practitioner). While it may be helpful to visualize the amount of mentions being reciprocated, an examination of the stakeholder environment (i.e., layout, conversation topics, sentiment, etc.) is perhaps more conducive to daily practice. In the case of Fortune 500 companies, some organizations are receiving hundreds of mentions a day. Practitioners need a way to organize big data and prioritize organizational responses if they hope to capitalize on relationship-building opportunities. Again, SNA allows an excellent starting point with which to visualize and understand the stakeholder environment on Twitter.

**Basic Concepts.** Figure 10 shows a network of stakeholder mentions for Southwest Airlines, which ranked high on the continuum with a Dialogic Behavior score of 94.88 (i.e., the organization employed dialogic principles nearly 95% of the time) and a Relational Effects score of 18.60. As mentioned above, the data was collected using mentions (tweets containing “@SouthwestAir”); however, NodeXL allows data to be aggregated using any keyword phrase. Again, the dots or vertices represent stakeholders, the lines or arrows illustrate various tweet relationships (as demonstrated in Figure 11). Red arrows indicate an organizational response.

When visually laid out, we can see that the organization is relatively dialogic. Red arrows extend to large groups, as well as to single dots or vertices, indicating that Southwest is both
taking part in major conversations and responding to individual stakeholders. Yet, we also see many smaller conversation groups without an organizational reply. With 369 mentions in an 8-hour time period, this is the largest network we have examined thus far—one that is a daily reality for organizations like Southwest Airlines. The sheer number of stakeholder mentions necessitates a system for organizing and prioritizing, which SNA has provided (Figure 10). To show how we arrived at Figure 10, we will explore the various groups and discuss their implications for practitioners.

**Identifying Groups.** Groups allow us to identify the “who” and “what” of an organizational network: *who* is talking about the organization and *what* are they saying.

The NodeXL program has an automated feature called “Group by Cluster,” which identifies clusters of users that are connected by conversation and separates them into groups. While some of the larger groups appear to be very complex, they can actually be interpreted quite easily. For example, Figure 25 has been excerpted from the graph to demonstrate how the star-shaped cluster often represents a single tweet, which has been retweeted several times. The stakeholder (@SSpakeESPN) sits at the center of the group (original tweet has been provided in Figure

---

**Figure 25.** Stakeholder tweet (retweeted several times)
25). Each successive retweet mentions both @SSpakeESPN and @SouthwestAir, which is why each vertex in the cluster has a line extending to the stakeholder and also to the organization. This example demonstrates how certain shapes (such as the “star shape”) are associated with specific relational actions, which allows practitioners to quickly interpret network elements.

Of course, other automated groups are more complex. The group labeled “Competitor Mentions” in Figure 10 is visibly more difficult to interpret as it lacks a clear central vertex or user. However, with the NodeXL program, simply rolling the cursor over any dot or vertex will display the username and tweet it represents. By this practice, we were quickly able to identify that the group was comprised of competitor mentions—that is, stakeholders who had mentioned both @SouthwestAir and another airline in the same tweet. Throughout the graph, the smaller clusters (shaded in gray) represent small-scale conversations similar to that in Figure 10; the large circular cluster immediately surrounding @SouthwestAir consists of all the individual mentions or stakeholders, who are not part of a conversation group.

Environmental Scanning. Other groups (e.g., Positive/Negative Sentiment, Customer Service, On-Flight Wifi) were filtered out manually through keyword search—a useful feature for environmental scanning. As mentioned, NodeXL reads tweet data from a Microsoft Excel spreadsheet, meaning that any filtering or grouping performed within the spreadsheet can be visualized in the graph pane. For example, if Southwest Airlines was curious about the sentiment surrounding its new on-flight Internet, a quick query of “wifi” or “Internet” separates out a small cluster of tweets (Figure 10, “On-Flight Wifi”). A few tweets have been provided in the graph, and we find that the sentiment is generally negative (e.g., “@SouthwestAir wifi is no longer a luxury on flights. It is the norm On my 3rd or 4th flight this week that it isn’t working!!"
Yet, notice how each of the group’s vertices stand alone—they are not interconnected, nor do they branch off into larger groups. The single gray line connecting each of the vertices to @SouthwestAir represents their original tweet to the organization, which has not been retweeted nor replied by other stakeholders. From an environmental scanning perspective, this cluster of tweets (“On-Flight Wifi”) poses a low threat; however, the preceding discussion of best practices would suggest that Southwest Airlines should reply, perhaps to acknowledge the problem and offer an apology. Yet, while responding to every stakeholder tweet would be ideal, we know that it is not always possible—this is where SNA can assist in prioritizing. When it comes to environmental scanning, the value of SNA is its ability to identify potential issues or conversation topics among stakeholder groups. Issues such as “malfunctioning wifi” can be brought to the organization’s attention and ideally addressed; conversation topics can be monitored for growth or changes in sentiment. These are all ways in which SNA can be employed for environmental scanning.

**Joining the Conversation.** Compare the “On-Flight Wifi” group to Figure 26 (excerpted from the graph)—a negative tweet that has received a little more attention. Visually, we can see that more vertices or stakeholders are involved, creating a conversation around the original tweet.

*Figure 26. Stakeholder tweet, inciting conversation*
tweet. Should the organization respond? If so, how? The user description (automatically downloaded with the data) reveals that the original tweeter (@Brodiesmith21) is a “professional Ultimate Frisbee player,” which explains the frisbee references in the replies. Again, best practices identified throughout this study would suggest that the organization should address the customer service issue. Given Southwest Airline’s playful organizational voice, can the organization join in on the joke? A response along the lines of the following would both address the customer service issue and employ conversational banter:

@SouthwestAir: “We apologize about your bag @Brodiesmith21.

We’ll have it back to you as soon as we finish our game of frisbee!”

Of course, the appropriateness of this reply would vary by organization and industry. Southwest Airlines, like Whole Foods, has a unique corporate voice that allows for conversational banter to be employed quite liberally (as mentioned, both organizations used conversational banter in more than 75% of their tweets). However, the process of identifying groups and prioritizing conversations is widely applicable. SNA allows organizations and practitioners to approach their Twitter environment visually and understand which stakeholders and conversations are attracting the most attention. From there, NodeXL provides practitioners with the interface to explore their network in-depth and determine which stakeholder interactions might lead to relationship-building opportunities.
CHAPTER 6

CONCLUSION

While this study has confirmed the value of dialogue, maintaining a dialogic orientation is no easy task, particularly for Fortune 500 companies. Stakeholders have come to expect both human-like engagement and customer service on Twitter, which requires great coordination and integration among corporate departments. Furthermore, the public nature of social media platforms makes interactions widely visible, compounding the risk assumed by organizations that attempt to engage in dialogue of any kind. Yet, as Kent and Taylor (2002) have reminded us, with great risk comes great rewards.

These rewards are in the form of organization-stakeholder relationships, and for organizations that are genuine and willing to engage, social media holds great “dialogic promise” (a reference to McAllister-Spooner, 2009). Not only has this study shown that Dialogic Behavior (mutuality, propinquity, empathy, risk, and commitment) strengthens the link to Relational Effects (satisfaction, commitment, control mutuality), but that Dialogic Behavior is indeed practiced on Twitter by some of the world’s top companies. A recent South By Southwest panel (assembling some of the top corporate social media directors from companies like Whole Foods, McDonalds and Dell) cited the paradox which governs their social media strategy: as our capabilities, data insights, and reach have become greater, our conversations are getting smaller (Lepitak, 2014). The public relations profession is returning to models of interpersonal
communication, which remain the time-tested foundation for building relationships—a notion that this study has upheld for corporations on Twitter.

Future researchers must take into account new methods that are conducive to the complex nature of social media and capitalize on the rich data it makes available. Social network analysis has been introduced as one such method which accounts for the relational effects of social media interactions. Likewise, practitioners must be open to new strategies when it comes to social media—strategies that humanize the corporate voice (e.g., conversational banter) and open the organization up to the risks associated with a dialogic orientation. By drawing such implications for practice, this study has begun to bridge “a gap in what the field is saying about the potential of social media and the evidence provided to prove the argument” (p. 212, Taylor & Kent, 2010). Indeed, future research will need to be driven by a practical focus and regard for effects if it is to have application or meaning beyond the academic world.

Whether Martin Buber, the “father of dialogue,” would laud Twitter for its dialogic potential, we will never know. But this study can say with certainty that social media holds more “dialogic promise” than any platform before it. The results of this study suggest a turning point in the literature—one in which corporations are making good on the dialogic promise of social media and reaping the relational benefits that follow.

**Future Research and Limitations.** This study leaves the door wide open for future research. Going forward, it will be important for the relationship between dialogue and relational outcomes to be replicated across data sets and expanded to new platforms. Additionally, the current research has highlighted the importance of several best practices on Twitter (e.g., a
customer-service approach, conversational banter), the effectiveness of which should be tested across different types of industries and organizations. The Best Practices section focused primarily on companies within the consumer goods and service industries, as the majority of organizations in this study (particularly the top-ranking organizations) fell into this category; however, a practice like conversational banter may not be as pertinent to organizations in industries of finance or oil and gas, for example. The decision of this study to focus on depth and not breadth resulted in a small N size, which limited the analysis within and across industry categories. Future research is encouraged to extend this study to specific industries and types of organizations (other than corporations) in seeking best practices for new platforms.

Further, the general limitations of content analysis apply—a reliance on coder interpretation, an inability to assess causality, etc.—particularly for a study that has attempted to operationalize a survey tool for the first time. However, this study was thorough in its analysis of the factors, removing concepts (e.g., trust) that could not be reliably measured. Again, future research would do well to test the tools this study has developed across data sets, refining measures as platforms and practice evolve.

For this study, social network analysis (SNA) was used in a qualitative capacity to illustrate concepts of dialogue and explore the stakeholder environment. The purpose was introductory—to familiarize the field with SNA and demonstrate how the method could be applied going forward in both research and practice. Yet, SNA also has the capacity for various types of quantitative analysis (e.g., centrality and density measures), which this study did not incorporate given the nature of an ego network. Going forward, the field of public relations is encouraged to further explore the capabilities of SNA in relational research—either as a primary
method or a supplement—as it allows a more realistic approach to organization-stakeholder interaction.

Finally, the aggregation of data for stakeholder tweets and network analysis (using NodeXL) was subject to the flaws of keyword search. The current research controlled for irrelevant content by filtering the data and removing extraneous tweets; however, it cannot account for relevant tweets that fall outside the range of the search query. As methods of keyword aggregation become more prevalent for social media, researchers should take care to construct keyword phrases carefully and methodically; it is recommended that researchers test various search term combinations to identify those most relevant and inclusive, and then filter data as necessary.
REFERENCES


APPENDICES

A. Organization Tweet Code Book

Last updated April 2, 2014, Final Draft

UNITS OF ANALYSIS: There are two types of units of analysis for this study: organization tweets and stakeholder tweets.

This code book explains the process for coding organization tweets—it will walk through each item on the Organization Code Sheet, step by step. Please see the Stakeholder Tweet Code Book for the process on coding stakeholder tweets.

Project author: Kerie Kerstetter

Organization Tweets

Coder: select your name to indicate that you are the one coding the item

Organization ID: type assigned organization ID number

Tweet ID: type the assigned sample number of the tweet

Date: select date of tweet (month, day, year) from drop-down menu

Time: select time of tweet (hour, minute, AM/PM) from drop-down menu

Type of Communication: (mutually exclusive)

  Mention(s): a mention uses “@” symbol to directly communicate with or tag another user

  * e.g. @Kroger: We’re excited to announce that @Hans889 is the winner of our Facebook contest!
Reply: a reply is a mention in direct response to another user’s tweets (indicated by the text “view conversation” at the bottom, left-hand corner of a tweet)

- e.g. @HomeDepot: Thanks for the shout-out @Chrissy88. Keep us updated on your progress!

Retweet: a retweet is a mention or reply followed by a quote, usually indicated by “RT” or “MT” (modified tweet)

- e.g. @Kohls: RT @ShoezzNmore7: “Loving the Christmas décor in your stores!”

None: select if the tweet does not include a mention, reply, or retweet

Note on Mutual Exclusivity: By selecting reply or retweet, it is inferred that the communication is also a mention

Target of Mention(s) / Reply / Retweet: the user(s) being mentioned / replied to / retweeted (may select multiple)

Individual: select if it appears to be the personal account of a single person (i.e., customer, shareholder, community member, etc.)

Business: select if account belongs to another business

Charitable Organization: select if account belongs to a charitable organization

Interest Group: select if account belongs to any type of voluntary association that seeks to publically promote or gain an advantage for its cause

Affiliate Account (Same Organization): select if account belongs to a branch or employee within the same organization

- e.g. @DirecTVSports, @DirecTVService

- e.g. @CEOMikeJackson (CEO of Auto Nation)

- e.g. @AllstateDeanna (service employee for Allstate)

Media: select if account belongs to a reporter or news outlet

Public Figure: select if account belongs to a well-known public figure (e.g., actor/actress, musician, professional athlete, politician, etc.)
N/A: select if the tweet contains NO mentions, replies, or retweets

NOTE: If tweet is a **mention**, select all items above that are mentioned (may select multiple, e.g. Individual, Business, Affiliate Account, etc. – see Example A, below). If tweet is a **reply** or **retweet**, select only the type of account being replied or retweeted (see Example B, C). If tweet is not a mention, reply, retweet (i.e., answered “None” in the previous item), select N/A.

- (A) @TXInstruments: VP @TIdaveheacok sits down with @WiredMagazine to talk about new developments at our Silicon Valley plant [article link] (**Mention**: select Affiliate Account, Media)
- (B) @WholeFoods: Thanks for the heads up @JessieGabe3, we’ll be sure to let our friends at @WholeFoodsChicago know that needs to be fixed (**Reply**: select Individual only)
- (C) @Macys: RT @KatyPerry: “My perfume goes on sale @Macys today! 5% of proceeds going to @StJude” (**Retweet**: select Celebrity only)

**Contents of Tweet**: (*may select multiple categories for each tweet*)

**Product / Service**: select if tweet references a product or service

- e.g. @JNJCares: Introducing our new line of eco-friendly cleaning supplies [link]
- e.g. @DirecTV: We apologize for any disruption in cable service that the storms have caused. We’re working around the clock to fix it

**Customers / Clients**: select if tweet celebrates or solicits information about customers or clients (does not pertain to individual replies; applicable for tweets addressing a broad stakeholder audience)

- e.g. @Staples: We’re loving what this Staples customer did with his box of 100 ct. paper clips! [picture]
- e.g. @FifthThird: Have you or someone you know battled cancer? Share your stories here, together we can work towards a cure [link] #kickcancer
- e.g. @LibertyMutual: How are we doing? Share your feedback so we can make your experience with us even better [survey link]

**News Article / Interview / Media Placement**: select if tweet shares a news article or journalistic blog link (may include relevant industry news or media placements)

- e.g. @GM: Check out the interview with CEO Mary Barra in @Forbes [link]
**Organization / Employee Achievement:** select if tweet references an achievement by the organization or its employees

- e.g. @Kroger: Proud to announce that we’re now the #1 grocery store chain in the Southeast [link]
- e.g. @Ford: Congrats to Operations Manager Mark Smith for being voted employee of the year at our Bethesda plant

**Charitable Cause / Community Involvement / Social Responsibility:** select if tweet references a charitable cause or a philanthropic effort; select if tweet demonstrate social responsibility

- e.g. @AllState: Last Friday was our annual “All Hands On Deck”—10,000 Allstate employees helped out in their local communities [link]
- e.g. @Enbridge: [picture] Enbridge employees present a $1.1 million check to @UnitedWay of Colorado!
- e.g. @Chevron: Thanks to your fill-ups, students at Kipp Ways Academy in Atlanta work w/ new science materials [link]

**Contest / Promotion / Discount / Coupon:** select if the tweet references a contest, promotion, discount, or coupon

- e.g. @WholeFoods: Congrats to the winner of our recipe contest, @Ashley68!
- e.g. @Gap: Buy two sweaters, get one free #EarlyBirdSpecial
- e.g. @Kohls: RT for 15% off your next purchase [link]

**Financial News & Information:** select if tweet references organization’s profits, earnings, financial outlook, etc.

- e.g. @PrincipalFinancial: Our Q2 profits have seen a 2% increase over the previous quarter
- e.g. @GM: “At Buick, the brand is on track for its best year since 2005,” -McNeil VP US Sales #GMsalesTalk

**Personalized Customer Service Response:** select if tweet includes a personalized customer service response to an individual (usually a reply). Includes an organization’s response to an information request.

- e.g. @McDonalds: Hi @Stacy_99, we’re sorry to hear about your experience. Please DM (direct message) us for a coupon
• e.g. @Nordstrom: Oh no @JeffJ_smooth, not what we like to hear! Please send your order information to Service@nordstrom.com so I can assist ^AR

• e.g. @WholeFoods: Hi @BaileyG67, we no longer carry that product at our Brooklyn store. Feel free to place a request with your local store manager

Conversational Banter: select if tweet employs a friendly, playful tone or makes a light-hearted attempt to engage. Includes, but not limited to, the use of conversational humor, interesting facts, or rhetorical questions. Exclamations, emoticons, and questions posed to stakeholder often indicate the existence of conversational banter (see examples below)

• e.g. @Publix: RT if you’re the coupon clipper in your house!

• e.g. @Kohls: We’re loving your new skirt @Sherry33, thanks for sharing! Looking foxy ;)

• e.g. @Staples: Raised your hand in a meeting and forgot your point #officelife

• e.g. @Dillards: @Jfive321 thx for joining us - what are you shopping for today?

Event: select if tweet references an event, either specific to the organization or affiliated in some way (does not include specific sales or promotions; does include online events with the exception of Twitter Live Chats—see separate option below)

• @HP: Swing by our tent this weekend at @SXSW, we’ll be demoing our new tablet – here’s how to find us: [link]

• @GoldmanSachs: Register here for our Jan.5th Financial Webinar on the advantages of ESOPs [link]

Live Chat: select if tweet references or is part of a live chat on Twitter, usually indicated by #hashtags

• e.g. @ThePrincipal: Q4. How do you help your client prepare for retirement? #AdvisorsTalk

Blog / Online Publication: select if tweet shares blog links or information from non-journalistic sources (e.g., organizational blogs, newsletters, white papers, stakeholder blogs, etc.)

• e.g. @Nordstrom: Not sure what to wear to your holiday party this year? Designer @JasonWu shows you how to spice up your little black dress [blog link]

Sponsorship: select if tweet references an organizational sponsorship

• e.g. @Allstate: Allstate is a proud sponsor of the 2013 #SECchampionship. We’ll be giving away tickets to 100 lucky fans
• e.g. @RalphLauren: Meet our RL brand ambassadors for the 2014 Winter Olympics! (we don’t think you’ll be disappointed) [link]

Industry News / Issues: select if tweet references discussion of industry trends, practices, or news

• e.g. @AECOM: @GreenBuildNews shares “Ten Ways to Make Your Business More Sustainable” [article link]

Multimedia Content: select type of content included in tweet (present or absent)

Text: select present if tweet contains text (most all tweets will qualify)

Link: select present if tweet includes a link to another web address

Photo: select present if tweet includes an embedded photo

Video: select present if tweet includes an embedded video

Number of Times Favorited: type number, indicated in bottom left-hand corner of tweet

Number of Times Retweeted: type number, indicated in bottom left-hand corner of tweet

Dialogic Principles: use the following checklist to determine whether each principle is present or absent:

Mutuality
Recognizes the existence of organization-public relationships

☐ Addresses stakeholders either directly or indirectly
☐ Uses words like “we” or “your”
☐ Uses imperative sentences (e.g., “Come join us!”)
☐ Promotes or shares a collaborative activity

(Examples)

@HomeDepot: Looking for a cool way to upgrade your room? A new chandelier would be a great place to start – [link]
(uses “your”)

@ExxonMobil: Learn about the trends that will shape #energy supply & demand over the coming decades using our data center [link]
(imperative sentence)

@WholeFoods: Does your favorite recipe need a healthy makeover? Share it with us… We’ll choose a handful to rework and publish! [link]
(collaborative activity)
Addresses stakeholders as equal persons

**any of the above elements are sufficient for mutuality**

Propinquity

Consults publics in matters that influence them; demonstrates accessibility and willingness to engage

- Welcomes conversation about organizational decisions, performances, or events
- Involves publics in discussion of organizational issues and initiatives—can be specific to the organization (e.g., employee benefits) or of broader relevance (e.g., global warming)
- References past conversations with publics
- Displays intent to maintain future communication/relationships
- Conveys accessibility directly by inviting questions and comments
- Conveys accessibility indirectly through tone (i.e., conversational human voice, rhetorical questions, humor)
- Shares engaging content (e.g., humorous photos or helpful videos designed to engage stakeholders)

**any of the above elements are sufficient for propinquity**

Empathy

Supports and confirms public goals and interests; opens itself up to stakeholders’ input

- Provides direct, easy-to-use venues for facilitating engagement and understanding
- Recognizes a specific group, community, or

@HomeDepot: Sounds like there are lots of Christmas lists being planned out there already! #LetsDoThis What is on your list?
(addresses stakeholders as equal persons)

@Ford: We’re excited to announce that Ford has acquired @LivioRadio! We’ll be taking questions using the hashtag #FordLivio [link]
(welcoming conversation about organizational decisions)

@GM (General Motors): Join us for a Google+ hangout w/ Dr. Ekquarzel & Jasper Jung at 3pm on lowering your carbon footprint & saving money [link]
(discussion of organizational initiatives)

@Target: You’ve been asking for #MoreJT. So here it is—an exclusive performance from the man himself: [link]
(references past conversations)

@HomeDepot: Hey @jennynelly! That looks like a great accent wall in the making. Curious to see what’s up your sleeve. Keep us posted!
#DIY
(intent to maintain future communication/relationships)

@Ford: Tweet your comments and questions for ‘Design with a Purpose: Built Ford Tough’ using the #FordArchitecture hashtag [link]
(conveys accessibility directly)

@Walmart: Need to spice up your dinner tonight? Give this enchilada recipe a try: [link]
(conversational human voice & rhetorical question)

@Target: Fummer. Sall. We don’t know what to call this season, but we like it.
(conversational human voice & humor)

@FifthThird: Our employees shared their touching #cancer stories. Honor your loved one & add to the inspiration: [link]
(provides venue for engagement and understanding of stakeholders)

@JNJcares (Johnson & Johnson): Thanks to the dedicated teachers around the globe who nurture our kids. Happy #WorldTeachersDay!
(recognizing specific group)
individual within the organizations’ public (i.e., demographic, professional, religious, etc.)

- Takes a communal orientation towards organizational initiatives
- Acknowledges the value of stakeholders’ input

**any of the above elements are sufficient for empathy**

---

**Risk**

Willing to interact on stakeholders’ terms

- Expresses an organization’s personal (or potentially controversial) beliefs
- Communicates in a way that is unscripted and spontaneous (often includes replies to stakeholders)
- Opens itself up to receiving different viewpoints (often includes tweets that ask for stakeholder input)
- Recognizes the value of different viewpoints, beliefs, and practices

**any of the above elements are sufficient for risk**

---

**Commitment**

Devoted to achieving understanding and mutual satisfaction with stakeholders; displays commitment to developing relationships of mutual benefit

- Discloses organizational information in a truthful and timely manner
- Shares helpful information (i.e., value-added content) with the purpose of improving the lives of its stakeholders
- Shares non-promotional information that helps you better understand the organization, its mission, its purpose, its employees, etc.

---

@Walmart: How are you passing on your traditions to your kids?
#HispanicHeritageMonth
(recognizing specific group)

@Chevron: Happy
#InternationalVolunteerDay! See how Chevron employees give back to their communities worldwide: [link]

@JNJCares (Johnson & Johnson): Thanks to @LATISM @riteaid & of course all of YOU for joining the Twitter party tonight!
(acknowledging the value of stakeholders’ input)

---

@Starbucks: We are respectfully requesting that customers not bring weapons into our stores. Here’s why: [link]
(expressing personal beliefs)

@GM (General Motors): No shame in that!
Looking good! RT @JenasCorner: “Shameless #selfie with the new #CorvetteStingray [picture]
(unscripted, spontaneous communication)

@LibertyMutual: Let us know how we can improve! Your feedback is important to us [survey link]
(open to different viewpoints)

@Walmart: What are some of your favorite meals inspired by your own culture?
(valuing different viewpoints, beliefs, practices)

---

@Chobani: New info: we’ve ID’ed the mold in our recalled product as Mucor Circinelloides. Please find more here, updated in real time: [link]
(timely & truthful information)

@Safeway: Don’t let a busy fall schedule knock you down. Here are a few ways to protect against the flu & stay well: [link]
(helpful information for improving lives)

@StateFarm: You can’t prevent child curiosity but you can familiarize yourself with the electrical outlet safety tools out there [link]
(helpful information for improving lives)
Demonstrates a commitment to social responsibility

Displays organizational actions, initiatives, or intent to mutually benefit all parties (e.g. loyalty programs, customer service promises, charitable contributions, community involvement, etc.)

Exhibits a commitment to dialogue as a vehicle for relationship-building

**any of the above elements are sufficient for commitment**

@Enbridge: Learn how Enbridge made pipelines safer in 2013. Annual #CSR Report: [link] (social responsibility)

@Macys: It’s Breast Cancer Awareness Month! Get your pin & support a great cause, plus save 20% [link] (organizational action benefiting multiple parties)

@GM: Congrats to Julie Peng and Jeremiah Parsons, 2013 Buick Achievers Scholarship winners! [picture] (organizational initiative benefiting multiple parties)

@Chobani: You deserve nothing less than a perfect cup. Every time. If yours doesn’t stack up, please read here: [link] (organizational intent, customer service promise)

@HomeDepot: Looks great @JefferyNeman_4! We always love to see what you’re up to. Carry on! (dialogue as a vehicle for relationship-building)

Common Examples

Stakeholder Replies

By principle, stakeholder replies often qualify for all five dialogic principles. When an organization responds to a stakeholder, it is:

1. Recognizing the existence of an organization-public relationship (mutuality)
2. Demonstrating accessibility and a willingness to engage (propinquity)
3. Acknowledging the value of stakeholder input (empathy)
4. Acting on the stakeholder’s terms; communicating in a way that is unscripted (risk)
5. [Likely] devoted to understanding, mutual satisfaction, and/or building a relationship (commitment)

Regardless, a coder should always use the Dialogic Principles Checklist for every tweet. See examples below (the original stakeholder tweets have been included for context):
Conversational Banter

Conversational banter most frequently occurs in the context of a stakeholder reply; when it does, it often qualifies for all five dialogic principles. Organizational tweets (non-replies) that use conversational banter will almost always qualify for mutuality (acknowledges stakeholders) and propinquity (engages stakeholders). See examples below (some explanation has been provided):
Promotional vs. Value-Added Content

Promotional tweets generally tout an organization’s products, services, or sales. Depending on the appeal, promotional tweets may qualify for mutuality (acknowledge stakeholders) and propinquity (engage stakeholders), but rarely will they qualify for empathy, risk, or commitment. On the other hand, value-added tweets share helpful information that is designed to improve the lives of its stakeholders. Many organizations have blogs for sharing value-added content. See examples below (some explanation has been provided):
Promotional
(links to products on website)

- Mutuality (acknowledges stakeholders with imperative sentence structure, “Stay home and save”)
- Propinquity (does not demonstrate willingness to engage with stakeholders)
- Empathy (does not recognize value of stakeholder input)
- Risk (does not indicate a willingness to act on stakeholders terms; scripted)
- Commitment (does not show commitment to achieving mutual understanding; promotional)

Value-Added Content
(links to organizational blog)

- Mutuality (acknowledges stakeholders with words like “your”)
- Propinquity (does not demonstrate accessibility; simply states blog’s title)
- Empathy (does not recognize value of stakeholder input)
- Risk (does not indicate a willingness to act on stakeholders terms; scripted)
- Commitment (shares helpful information with its stakeholders; not promotional)

Value-Added Content
(links to organizational blog)

- Mutuality (acknowledges stakeholders with imperative sentence structure, “Listen up”)
- Propinquity (demonstrates accessibility through tone, conversational human voice)
- Empathy (does not recognize value of stakeholder input)
- Risk (does not indicate a willingness to act on stakeholders terms; scripted)
- Commitment (shares helpful information with its stakeholders; not promotional)
Retweets

For retweets, dialogic principles will vary based on (a) who is being retweeted, and (b) the content of the tweet. Coders should focus most heavily on the organization’s purpose for retweeting.

Retweets of individual stakeholders will generally qualify for all five dialogic principles, as the act of retweeting:

○ Acknowledges a stakeholder (mutuality)

○ Demonstrates accessibility and engagement through the act of retweeting (propinquity)

○ Acknowledges the value of stakeholder input by sharing with other stakeholders (empathy)

○ Recognizes others’ viewpoints; not scripted (risk)

○ Displays a commitment to developing the stakeholder relationship; the act of retweeting a form of dialogue/feedback (commitment)

In this context, a retweet can be considered an act of dialogue. However, when an organization retweets a media outlet or a vendor, it may be for a different purpose. Coders should make use of the Dialogic Principles Checklist for every retweet. See examples below (some explanations have been provided):

<table>
<thead>
<tr>
<th>Individual Stakeholder</th>
<th>(Dillards)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutuality</td>
<td>☑</td>
</tr>
<tr>
<td>Propinquity</td>
<td>☑</td>
</tr>
<tr>
<td>Empathy</td>
<td>☑</td>
</tr>
<tr>
<td>Risk</td>
<td>☑</td>
</tr>
<tr>
<td>Commitment</td>
<td>☑</td>
</tr>
</tbody>
</table>
Charitable Organization
(General Motors)

- **Mutuality** (recognizes stakeholders, employees)
- **Propinquity** (demonstrates accessibility by sharing engaging content and humanizing the corporate voice with photo of employees)
- **Empathy** (recognizes stakeholder value, groups within the community; communal approach)
- **Risk** (message is unscripted)
- **Commitment** (demonstrates organizational initiative benefiting multiple parties)

Media Placement / Recognized Accomplishment
(Kroger)

- **Mutuality**
- **Propinquity**
- **Empathy**
- **Risk**
- **Commitment**
Media Placement / Organizational Initiative
(Starbucks)

- **Mutuality** (recognizes veterans among their stakeholder community [through content, not structure])
- **Propinquity** (does not convey accessibility or engagement; declarative statement)
- **Empathy** (supports and confirms the public interest, takes a communal approach toward organizational initiatives)
- **Risk** (expresses organizational belief; could open organization to receiving different viewpoints from others)
- **Commitment** (exhibits an organizational act of mutual benefit)

Store Vendor [designer]
(Gap)

- **Mutuality**
- **Propinquity**
- **Empathy**
- **Risk**
- **Commitment**

Industry News
(Home Depot)

- **Mutuality** (does not acknowledge stakeholders with language; simply states article title)
- **Propinquity** (shares engaging article and photo for stakeholders’ interest)
- **Empathy** (does not recognize value of stakeholder input)
- **Risk** (does not open the organization up to vulnerability or solicit different viewpoints; message not ‘risky’ or spontaneous)
- **Commitment** (in this case, purpose of sharing is not to improve the lives of stakeholders, but rather to share engaging content for stakeholders’)

Live Chats

Live chats on Twitter allow multiple users to organize around a hashtag (e.g. #AdvisorsTalk or #ATTconference) to collectively discuss a topic. Live chats are dialogic by nature and often qualify for all five dialogic principles, as organizations:

- Acknowledge stakeholders (mutuality)
- Demonstrate accessibility and engagement by inviting discussion (propinquity)
- Acknowledge the value of stakeholder input; provide a direct, easy-to-use venue for collaborating (empathy)
- Open themselves up to receive different viewpoints; promote unscripted, conversational discussion (risk)
- Increase understanding among stakeholder; display a commitment to dialogue as a means for relationship-building (commitment)

Within a live chat, organizations usually invite stakeholders to join the discussion. They often pose questions, retweet stakeholder comments, thank stakeholders for their participation, request feedback, etc. Regardless, coders should always use the Dialogic Principles Checklist for every tweet. See examples below:

---

AECOM @AECOM

Get a question for @CSO_AECOM or @MicheleFerenz about the Food-Energy-Water-Security Nexus? Ask them using #AECOMchat

---

The Principal @ThePrincipal

Q5 What tips do you have for getting your foot in the door with attorneys, TPA, CPAs, etc.? #advisortalk

---

Mutuality
- Propinquity
- Empathy
- Risk
- Commitment
Mission, Purpose, Social Responsibility

The difference between promotional tweets and value-added content was discussed above, the former being the act of directly promoting one’s products or services. However, sometimes organizations share information about themselves with the purpose of increasing stakeholder understanding of what they do, what they stand for, how they are being socially responsible, etc.

The difference between promotional tweets and value-driven tweets is that organizations are sharing with stakeholders what is important to them and increasing understanding about what they can offer their customers and their community.

These types of tweets generally qualify for commitment, as their purpose is to increase mutual understanding between organization and its stakeholders. Other dialogic principles will vary depending on the appeal that is used. As always, coders should use the Dialogic Principles Checklist for every tweet. See examples below:

- **Mutuality** (from the nature of content, it is inferred that the organization is speaking to stakeholders)
- **Propinquity** (demonstrates accessibility and engagement through rhetorical question, video)
- **Empathy** (does not recognize value of stakeholder input)
- **Risk** (does not invite different viewpoints; scripted)
- **Commitment** (increases mutual understanding about the type of value the organization can offer its stakeholders)
B. Stakeholder Tweet Code Book
Last updated April 2, 2014, Final Draft

UNITS OF ANALYSIS: There are two types of units of analysis for this study: organization tweets and stakeholder tweets.

This code book explains the process for coding stakeholder tweets—it will walk through each item on the Stakeholder Code Sheet, step by step. Please see the Organization Tweet Code Book for the process on coding organization tweets.

Project author: Kerie Kerstetter

Stakeholder Tweets

Coder: select your name to indicate that you are the one coding the item

Organization ID: type assigned organization ID number

Tweet ID: type the assigned sample number of the tweet

Date: select the date of the tweet (month, day, year) from drop-down menu

Time: select the time of the tweet (hour, minute, AM/PM) from drop-down menu

Who is Tweeting? select the type of Twitter account; may require clicking into user profiles

Individual: select if it appears to be the personal account of a single person (i.e., customer, shareholder, community member, etc.)

Employee: select if individual identifies as an employee of the organization

Business: select if account belongs to another business
Charitable Organization: select if account belongs to a charitable organization

Interest Group: select if account belongs to any type of voluntary association that seeks to publically promote or gain an advantage for its cause

Affiliate Account (Same Organization): select if account belongs to a branch or affiliate account within the same organization (e.g., customer service account)

Media: select if account belongs to a reporter or news outlet

Blog: select if account belongs to a blog or non-journalistic, online publication (e.g., lifestyle magazines)

Public Figure: select if account belongs to a well-known public figure (e.g. actor/actress, musician, professional athlete, politician, etc.)

Contents of Tweet: (*may select multiple categories for each tweet)

Product / Service: select if tweet references a specific product or service

• e.g. @Biggiboi: Loving @Nike’s new air force ones!

• e.g. @Uknowuluvme: Been waiting three hours for the @Comcast guy to show

Brand / Organization: select if tweet references the brand, the organization itself, or its employees

• e.g. @Organicgrl77: @WholeFoods is the BEST grocery store on earth!

• e.g. @BethAnnHarris: Appreciate @Ford employees and the work they do in our community

News Article / Media Placement: select if tweet shares a news article or blog post about the organization

• e.g. @Jwebb_920: Interesting article on @Nike’s approach to global marketing [article link]

Organization / Employee Achievement: select if tweet references an achievement by the organization or its employees

• e.g. @NixtonJB: Congrats to @Publix for opening their 200th store. I’m damn sure glad it’s here in Jackson!
Charitable Cause / Community Involvement / Social Responsibility: select if tweet references a charitable cause or philanthropic effort; select if tweet demonstrates social responsibility

• e.g. @Couponqueenie: Shop @Gap this weekend! 5% of all proceeds go to the Susan G. Komen Foundation [link]

• e.g. @AspenOrg: A shoutout to @Enbridge for making the homes and lives of our veterans more sustainable

Contest / Promotion / Discount / Coupon: select if tweet references a contest or promotion being held by the organization

• e.g. @Moxiemm5: I wanna win so bad!! RT@Marriott: “Enter for a chance to win a 3-night stay at our new Bermuda location [link]”

• e.g. @Blogginma2: Why didn’t anyone tell me @Gap has buy-one, get-one on sweaters this weekend??

Financial News / Information: select if tweet references financial news or information

• e.g. @UptonHMD: Hope I don’t regret my stock in @GM – company profits down 3% this quarter [link]

Customer Service Inquiry: select if tweet asks for the organization’s assistance in solving a product or customer service issue

• e.g. @Jebnetos33: @Microsoft I’m trying to load Microsoft Office & I keep getting this message [picture]. Little help?

Conversational Banter: select if tweet attempts to engage the organization in conversational banter

• e.g. @Hannahbananz: Haha got to hand it to you @Progressive, funniest commercial I’ve seen in a while!

• e.g. @YuJung_67: I love you @Pepsi! Please follow me!

Event: select if tweet references an event, either specific to the organization or affiliated in some way (does not include specific sales or promotions; does include online events with the exception of Twitter Live Chats—see separate option below)

• @Koko_555: Happy to be back at @WesternDigital’s #engdgtSF conference. Fingers crossed I score a tablet this year!
• @Will_Janson2: RT@GoldmanSachs: “Register here for our Jan.5th Financial Webinar on the advantages of ESOPs [link]”

**Live Chat**: select if tweet references or is part of a live chat on Twitter, usually indicated by #hashtags
• e.g. @JennaJohnsonB: My spicy chex mix is always a fan favorite! RT@Kohls: “What’s you go-to holiday recipe? #HolidaySwap”

**Blog / Online Publication**: select if tweet shares blog links or information from non-journalistic sources (e.g., organizational blogs, newsletters, white papers, stakeholder blogs, etc.)
• e.g. @Manny_Yung: Thanks for the tips @StateFarm RT: “4 Dangerous Holiday Traditions to Avoid [link]”

**Sponsorship**: select if tweet references an organizational sponsorship
• e.g. @Johntheman_89: Just got tickets to the @Allstate Sugar Bowl… I’m NOLA bound!

**Industry News / Issues**: select if tweet references discussion of industry trends, practices, or news
• e.g. @DanJackson_TI: RT@GoldmanSachs: “VIDEO: Advisors tune into @BloombergTV for the 2014 financial outlook [link]”

**Rant / Petition / Protest**: select if tweet expresses strong negative feelings toward the company or its practices
• @Greenandlove: Hey @Chevron, how bout you start looking into alternative forms of energy and stop killing the earth
• @EqualityInc.: @Autozone supports dirt bag Rush Limbaugh. Don’t support autozone #boycott

**Foursquare**: select if tweet is linked to Foursquare, the location-based mobile app. The format will include the location in parentheses and a link, which may or may not be accompanied by commentary
• @Erikka4S: (I’m at Nordstrom) [link]
• @Jeannadean: Good to be back! (I’m at Whole Foods) [link]
**Retweet:** (present or absent) select “present” any time a stakeholder repeats or quotes an organization’s tweet, whether word-for-word or just certain parts of it. Retweets will generally be indicated by “RT” or “MT” followed by a quote of the organization’s tweet

- e.g. @Jessilayy: RT @Dillards: “Check out our crazy low #cybermonday deals, click here: [link]”

**Added Commentary:** (present or absent) select “present” any time the stakeholder has added text or commentary to a retweet. If retweet (above) was “absent,” select “absent” for this item as well

- e.g. @KellieNashM7: Great article RT @GM: “Check out @Forbe’s interview with CEO Mary Barra [link]”

**Who is being Retweeted?**

- **Organization:** select if the organization itself is being retweeted

- **Individual:** select if it appears to be the personal account of a single person (i.e., customer, shareholder, community member, etc.)

- **Employee:** select if individual identifies as an employee of the organization

- **Business:** select if account belongs to another business

- **Charitable Organization:** select if account belongs to a charitable organization

- **Interest Group:** select if account belongs to any type of voluntary association that seeks to publicly promote or gain an advantage for its cause

- **Affiliate Account (Same Organization):** select if account belongs to a branch or affiliate account within the same organization

- **Media:** select if account belongs to a reporter or news outlet

- **Blog:** select if account belongs to a blog or non-journalistic, online publication (e.g., lifestyle magazines)

- **Public Figure:** select if account belongs to a well-known public figure (e.g., actor/actress, musician, professional athlete, politician, etc.)

- **N/A:** select if this question is not applicable (i.e., Retweet was “absent”)


Tweet Directed to Organization? (Yes or No) select “yes” if tweet directly addresses the organization. Select “no” if it does not

- e.g. @Gracie_11: I ordered jeans from @Kohls 3 weeks ago, and they still haven’t shipped #nothappy

- e.g. @FranmanBam: Hi @Kohls, I’m still waiting on my packages. I’d appreciate an update on my order status, #77846

Multimedia Content: select type of content included in tweet (present or absent)

Text: select present if tweet contains text (most all tweets will qualify)

Link: select present if tweet includes a link to another web address

Photo: select present if tweet includes an embedded photo

Video: select present if tweet includes an embedded video

Relational Outcomes: use the following checklist to determine whether each relational outcome is present or absent:

Trust

Conveys a level of confidence in and willingness to open oneself up to the organization

Which of the following statements characterize the stakeholder’s message?

☐ The organization treats people like me fairly and justly.

☐ Whenever the organization makes an important decision, I know it will be concerned about people like me.

☐ The organization can be relied on to keep its promises.

☐ I believe this organization takes people like me

(Examples)

@MelDewey: Glad to see a company finally keeping its word on e-cycling. Thanx for caring about our planet
@Staples #CEAGreen [link]

@MeliMeliSosa: You can always count on @FedEx #thankyou

@CoastalForPets: Who says big businesses don’t care? Not us!
@Walmart and @Target fill up our van with supplies weekly

@UnitedWayPeel: Thanks to @DuPont for over 17 years of support
into account when making decisions.

☐ I feel confident in this organization’s skills.
☐ The organization has the ability to accomplish what it says it will do.

**any of the above are sufficient for trust

Satisfaction

Conveys positive feelings toward the organization; reinforces positive expectations about the relationship

Which of the following statements characterize the stakeholder’s message?

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

**any of the above are sufficient for satisfaction

Commitment

Conveys the belief or feeling that the relationship is worth spending energy to maintain and promote

Which of the following statements characterize the stakeholder’s message?

☐ I feel that the organization is trying to maintain long-term commitment to people like me.
☐ I can see that this organization wants to maintain a relationship with people like me.
☐ There is a long-lasting bond between this organization and people like me.
☐ Compared to other organizations, I value my

@Lindsay_67: Thanks @CostcoTweets, you make party food so much easier
@ChildrensColo: Thank you @Walgreen employees & customers in CO & WY for the incredible $401,885 donation to our hospital! [picture]
@JTbergeron: A brand new @Sonicare_US is always a great start to the day. Thanks @CostcoTweets for the great deal!
@RyanMelinda: Just had an amazing experience with @Delta customer service! I received a full refund!! THANK YOU @DeltaAssist
@Blakeamick: I love working for a company like this: @Kohls Gives Away $1 Million in Dream Receipts
@Alig8er: was sad to hear @Dominicks by my building was leaving until I found out it’s being replaced by @WholeFoods! Rejoice Rejoice!
@Laurenhawk: @WholeFoods I love attentive social media customer service – well done
@HD_Herlizke: Why is @HomeDepot so much better than @Lowes (present for Home Depot)
@Hbizzle252: @Ford when I make it BIG I will $pend a LOT of $$ with your company!!
@Vibeszz: they know me by my first name at @Starbucks
relationship with this organization more.

☐ I would rather work together with this organization than not.

**any of the above are sufficient for commitment**

Control Mutuality

Conveys the belief that the organization is attentive to stakeholder thoughts and opinions

Which of the following statements characterize the stakeholder’s message?

☑ The organization and people like me are attentive to what each other say (may include conversational attempts to engage with the organization)

☑ The organization believes the opinions of people like me are legitimate.

☑ In dealing with people like me, the organization is unlikely to throw its weight around.

☑ The organization really listens to what people like me have to say.

☑ The management of this organization gives people like me enough to say in the decision-making process.

**any of the above are sufficient for control mutuality**

Sentiment

Positive: select if the tone of the tweet conveys positive feelings toward the organization

○ e.g. @Snappy189: Thank you @Publix for carrying @graeters ice cream. A little taste of home in South Carolina!

○ e.g. @CompareMyMobile: Amazing work from @Staples and some pretty big goals set when it comes to recycling electronics [link]

Negative: select if the tone of the tweet conveys negative feelings toward the organization

○ e.g. @Sungoddess34: Exposed! Kohls was discovered selling real fur as faux. Ask them to go #furfree [link]
○ e.g. @LisaFla: Okay @Staples I’m signing off now 25:55 minutes on hold. One less in your very busy queue. Good Night.

○ e.g. @GinetSosemito: @FifthThird perhaps a notification of Fifth Third Bank closing its office in New York would have been a good idea..

**Neutral**: select if the tone of the tweet conveys neither positive nor negative feelings toward the organization

○ e.g. @RedArmyHooligan: @Nike to release new cross-trainer on Jan. 4 [link]

○ e.g. @Bizdrett: You can find my review of @HP’s Slate 7 Plus tablet on my blog: [link]

**Note**: Foursquare Check-ins and Retweets are generally “Neutral” unless they are accompanied with commentary:

○ (Foursquare, Neutral) e.g. @Tweeter: (I’m at @Publix) [link]

○ (Foursquare, Positive) e.g. @Tweeter: Back at my favorite place on earth! (I’m at @Publix) [link]

**Common Examples**

Positive coding for relational outcomes requires the coder to be able to match the tweet’s message with one or more of the statements listed in the Relational Outcomes Checklist (above). Below are some examples. Corresponding statements from the checklist have been included for the relational outcomes that are present. In some cases, the organization’s original tweet has been provided for context. Sentiment towards the organization has been indicated as well:
Trust (I feel confident in this organization’s skills)

Satisfaction (I am happy with the organization; I am pleased with the relationship this organization has established with people like me)

Commitment (I would rather work with this organization than not)

Control Mutuality (The organization and people like me are attentive to what each other say; the organization is unlikely to throw its weight around)

Sentiment: Positive

Trust

Satisfaction (I enjoy dealing with the organization)

Commitment (I can see the organization wants to maintain a relationship with people like me; I would rather work with this organization than not)

Control Mutuality

Sentiment: Positive
Trust
Satisfaction (I am happy with the organization)
Commitment
Control Mutuality (The organization really listens to what people like me have to say)

Sentiment: Positive

Trust
Satisfaction (I am happy with the organization)
Commitment
Control Mutuality (The organization really listens to what people like me have to say; the organization believes the opinions of people like me are legitimate)

Sentiment: Positive

Trust
Satisfaction
Commitment
Control Mutuality (The organization is attentive to what I have to say)

Sentiment: Neutral
Retweets

Stakeholder retweets are taken as direct quotes. Thus, retweets can express relational outcomes (i.e., if the original tweet or added commentary expresses relational outcomes).

In the first two examples below, the original tweets (pictured) have been coded positively for relational outcomes, and any direct retweets would be coded the same. In the third example, a stakeholder has added commentary (expressing satisfaction and positive sentiment) to an otherwise neutral tweet.

**Direct Retweet**

(the tweet pictured was retweeted by 2 other users)

- Trust
- **Satisfaction** (Most people like me are happy in their interactions with this organization)
- Commitment
- Control Mutuality

Sentiment: Positive

**Direct Retweet**

(the tweet pictured was retweeted by 1,703 other users)

- Trust
- **Satisfaction** (Most people like me are happy in their interactions with this organization)
- Commitment (I would rather work with this organization than not)
- **Control Mutuality** (the organization and people like me are attentive to what each other say)

Sentiment: Positive
Many stakeholder tweets are positive without expressing relational outcomes (examples below). Coders should use their Relational Outcome Checklist for every tweet. Remember that in order for a tweet to be coded positively for relational outcomes, it must match one or more of the statements on the checklist. Keep in mind that sentiment refers to the tone of the tweet toward the organization.

**Positive Without Relational Outcomes**

---

Retweet with Added Commentary

- Trust
- Satisfaction (I am happy with the organization)
- Commitment
- Control Mutuality

**Sentiment:** Positive

---

**Sentiment:** Positive

---
“@WholeFoods: We’ll be starting in 50 minutes to chat about Holiday Delights! // Join us! #WFMdish” I adore #holiday #baked goods!

Sentiment: Positive