Multimedia strategic crisis engagement:
An analysis of BP's enacted crisis response to the Deepwater Horizon Crisis in 2010

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Abstract

        With the explosion of the Deepwater Horizon oil well in the Gulf of Mexico on April 20, 2010 and until the well was officially 'killed' on September 19, 2010, British Petroleum (BP) did not merely experience a crisis but a five-month marathon of sustained, multi-media strategic engagement in an on-going crisis. Whereas traditional public relations theory teaches us that an organization should synchronize its messages across channels, little research has been conducted to analyze whether organizations in prolonged crises effectively coordinate their efforts. This is especially important in the new media environment where social media (e.g., Facebook and Twitter) are increasingly being used with traditional public relations tools (e.g., press releases) as a part of an organization's stakeholder engagement strategy. Because the channel is simply the delivery tool, the prolonged BP crisis also allows us to examine the image restoration strategies that an organization deploys to manage a complex set of related issues. The present study analyzes all of BP's press releases ($N = 126$), its Facebook posts ($N = 1,789$), and its Twitter tweets ($N = 2,730$) to identify its message synchronicity and important factors affecting the use of different strategies. Results indicate that while the press releases are at the core of the messaging strategy, the strategy is significantly influenced by the situation and channel. .

Rationale

On April 20, 2010 there was an explosion on the Deepwater Horizon drilling rig in the Gulf of Mexico killing 11 workers. This was the start of the largest oil spill in an ocean, more than a million more gallons compared to the next largest accidental spill — the Ixtoc 1 well off the coast of Mexico in 1979 (Black, 2010). Over the next five months, BP would have to manage its image in the face of an environmental catastrophe to a variety of multi-national stakeholders. As details emerged, it became clear that it was not merely an accident but an organizational transgression (Coombs & Holladay, 2002); one in a line of deadly BP transgressions within the last decade including explosions in Texas and Alaska (Maresh & Williams, 2007; Schwartz, 2006). The scope of the Gulf disaster meant that there was a significant focus on the situation and BP's response to it. In fact, from April 20 to July 28, 2010, the Pew Research Center's Project for Excellence in Journalism estimated that the oil spill received 22 percent of the US news coverage (Anonymous, 2010). One of the dominant themes was BP's poor public relations efforts, such as Tony Hayward's series of gaffes. Glenn DaGian, a retired BP public relations professional, summarized the point, "…The only time Tony Hayward opens his mouth was to change feet." (Shogren, 2011).

One positively identified aspect of BP's public relations response was its use of social media. Steve Marino, who worked for Ogilvy and Mather at the time, said of BP's social media strategy, "I think they did a great job, considering the pressure they were under on so many other fronts." (Shogren, 2011). Marino said BP used Facebook as a place for people to vent their frustrations and that Twitter allowed BP to get its news out quickly. The most important component of both was that these outlets created an opportunity for BP to engage stakeholders and counteract earlier PR failures (Shogren, 2011). However, Marino's trumpeting of BP's online strategy was not universally shared. Critics argued that the fundamental flaw in BP's social media push was that it failed to engage its stakeholders (Beal, 2010). In fact, Pew Research found that the spill story generated considerably less attention on blogs, Twitter, and YouTube, suggesting that BP's message did not go viral; an indicator of a failed social media strategy (Metzgar & Maruggi, 2009).

The BP crisis is best characterized as an organizational transgression involving megadamage (Coombs & Holladay, 2002; Diers & Tomaino, 2010; Pearson & Clair, 1998). This crisis is analytically and theoretically rich because as most longitudinal studies emphasize the image recovery process after a crisis (Reierson, Sellnow, & UImer, 2009; Seeger & Ulmer, 2002), this is an opportunity to examine the company's strategic engagement during a prolonged crisis. As such, we may better understand the complex environment surrounding crisis response. The importance of analyzing engagement during a crisis is demonstrated by Piotrowski and Guyette's (2010) analysis of the evolution of the Toyota recall, which identified the role of crisis response as significantly influencing the company's prospects for image renewal post-crisis.

Further, a thorough analysis of BP's message coordination during the crisis should be undertaken to evaluate the organization's social media use as a part of its broader public relations efforts. We must first ask whether BP exercised a clear and coordinated messaging strategy before we ask if it effectively engaged its stakeholders (Healy & Griffin, 2004; Stephens, Malone, & Bailey, 2005). Thus, this paper is important because as Massey (2001) argues, scientific research has failed to investigate the relationship between message consistency and

crisis management. As such, the present study evaluates BP's integrated crisis response strategy, building a more scientific tool for analyzing message synchronicity.

Ultimately, this case offers the opportunity to analyze BP's media synchronicity because BP actively pushed information across multiple organizational channels including press releases, Facebook, and Twitter helping researchers and practitioners begin to adapt existing theories (e.g., Situational Crisis Communication Theory and Image Restoration Theory) to an integrated media environment to better predict and evaluate the effectiveness of strategic crisis engagement.

Literature Review

In 1998, BP re-branded itself as an 'environmentally friendly' oil company, adopting the green and yellow flower logo and producing an integrated branding campaign (Durham & Hancock, 2003). Yet in the decade after, BP would face a series of crises focusing on issues of safety leading to the 2010 explosion in the Gulf, producing a five-million-gallon environmental catastrophe. The threat to BP's image and its strategic response to this crisis is grounded by its history of organizational transgressions, the channels it used to engage with stakeholders, as well as situational factors such as timing and issue management.

Media Synchronicity

Media synchronicity involves the coordination of an organization's messages across channels to produce a consistent strategy when responding to a crisis (Dennis, et al., 2008; Holladay, 2007; Massey, 2001). Synchronicity is important because it: establishes and builds credibility with audiences (Holladay, 2007; Massey, 2001); allows stakeholders to more effectively coordinate their behaviors (Dennis, et al., 2008); and ultimately helps organizations build (or rebuild) their legitimacy after a crisis (Massey, 2001). These elements allow a company in crisis to be able to drive its own narrative. If the narrative is consistent and credible, there is a greater likelihood that the messaging will be used as part of the media coverage of the situation (Veil & Ojeda, 2010) or even go viral (Metzgar & Maruggi, 2009). In either case, the company's perspective is more meaningfully reflected in conversations because synchronized messages have strong central themes that can vary depending on the channel or audience (Coombs & Holladay, 2009; Healy & Griffin, 2004). Yet in a study of the self-presentation of Whole Foods through its online press room, blog, and microblogging accounts, Gilpin (2010) found these channels overlapped on core themes, addressing different aspects of the organization's image. Gilpin's findings suggest that we should expect to see differences in messaging depending on channel.

Modern analyses of crisis communication ought to include social media channels because the impact of new media is undeniable (Moore, 2004). New media represent an interactive (or two-way) platform for organizations to manage both crises and the surrounding issues (Gonzalez-Herrero & Smith, 2008). However, while a majority of organizations have turned to the Internet to communicate with stakeholders during a crisis (Perry, Taylor, & Doerfel, 2003), they often prefer more traditional (or one-way) models of crisis communication. For example, press releases remain the central driving force for an organization's messaging (Bivins, 2011; Wilcox & Cameron, 2009). Previous research and analysis suggests that press releases are the driving force behind an organization's crisis response, yet there have been no explicit analyses of this phenomenon in crisis contexts; therefore, we pose the following research question:

Research Question 1: Is there evidence to suggest BP's press releases are driving the narrative across other channels (i.e., Facebook and Twitter)?

Though research on media synchronicity (e.g., Dennis, et al., 2008) emphasizes the importance of message consistency, previous findings analyzing messages in crisis and routine contexts (e.g., Gilpin, 2010) have found consistent variation, suggesting there are likely to be significant differences in the response strategies used by each channel. Therefore, we propose the following hypothesis:

Hypothesis 1: BP's messaging during the Gulf Crisis will significantly differ depending on channel (i.e., press releases, Facebook, and Twitter).

Message Strategies

Image Restoration Theory has been one of the two dominant theoretical perspectives in the crisis communication literature for the last decade. However, Image Restoration Theory is somewhat limited in its scope because its analysis only focuses on five response strategies: denial, image repair, evading responsibility, reducing the offensiveness of the act, and corrective action (Benoit & Henson, 2009). Yet the frame of image restoration, as a guiding metaphor for a crisis response, is critical to understanding what organizations in crisis are trying to accomplish. While a perfect list of strategies may not exist (Coombs, 2007), there is a strong body of research identifying more than 40 individual tactics encompassed by eight broad tactic categories (Diers & Tomaino, 2010), giving academics and practitioners a set of effective tactics on which to base analyses, identify strategies, and compare the emergence of those strategies across crises, industries and time (see Table 1). We argue that beginning analyses from the categories or 'list' of identified tactics is a much stronger way to approach an authentic analysis of crisis communication if we are to build more effective models for crisis response.

We could expect BP to employ one or more of the following strategies by pairing this heuristic with previous findings regarding crisis-prone organizations experiencing organizational transgressions (Coombs, 2004; Diers, 2009; Diers & Tomaino, 2010). First, crisis-prone organizations tend to focus on future-oriented strategies incorporating tactics like self-enhancement, excellence and renewal, or invoking interorganizational relationships. Second, organizations experiencing transgressions have focused on a variety of strategies such as Aggressive Strategies, which incorporate tactics like framing the crisis and anti-social or defensive; Defensive Strategies that use anti-social or defensive and accommodative tactics; and Affirming Amplification Strategies that focus on positive messages about the organization incorporating three or more tactics. In addition, these types of organizations have used Explanative Strategies (i.e., efforts to create good will while explaining the crisis characterized by openness, engagement, and an appearance that the organization is sympathetic) and Corrective Strategies (i.e., those emphasizing accommodative, excellence, and often invoking interorganizational relationships). However, the preponderance of research (Coombs & Holladay, 1996; Diers & Tomaino, 2010) suggests that organizations experiencing transgressions emphasize more pro-social or positive strategies rather than negative ones. Therefore, we propose the following hypothesis and research question:

Hypothesis 2: BP's central response strategy to the crisis in the Gulf of Mexico will employ positive/pro-social messaging.

Research Question 2: What combination of message strategies is used across the channels (i.e., press releases, Facebook, and Twitter) that BP employed during its crisis?

Contextual Factors Influencing Crisis Response Strategies

Neither of the previous factors discussed — channels and crisis response strategies — focus on how the situation may influence an organization's messaging, which Coombs (2007) argues is important in his advocacy for the Situational Crisis Communication Theory (SCCT).

SCCT focuses on factors like crisis responsibility, crisis response strategies, emotions, behavioral intentions, organizational reputation, crisis history, and prior relationship reputation (Coombs, 2007). While valuable, previous research (e.g., Carroll, 2009; Diers & Tomaino, 2010; de Brooks & Waymer, 2009) suggests that these are not the only contextual factors influencing crisis response. While previous research has identified several situational factors likely to influence the crisis response strategies an organization may employ, such as industry (de Brooks & Waymer, 2009), crisis type (Pearson & Mitroff, 1993), and nation of organizational origin (Chen, 2009), there is a dearth of research analyzing other factors such as the ways that an organization negotiates issues and the crisis environment, which could help us better understand crises, communication, and outcomes (Seeger, 2002).

Time. In their work, Gonzales-Herrero and Pratt (1996) argue it is important to examine crisis lifecycles because different communicative needs and strategies may emerge in different stages of a crisis. Further, other researchers (Heath & Millar, 2004; Malone & Coombs, 2009; Massey, 2001) suggest that research on crisis communication should be a longitudinal endeavor because crises are not static events. Previously, time was found to be significant, but had weak predictive power (see Diers & Tomaino, 2010); however, little previous research has tested the effects of time in long-lasting crises. Because the BP case spans five months, we can more effectively analyze the influence of time on crisis response strategies. As such, we propose the following hypothesis:

Hypothesis 3: Throughout the crisis life cycle, there will be changes in BP's crisis response strategies.

Issue Management. Several authors (e.g., Coombs, 2007; Coombs & Holladay, 1996; 2002; Hearit, 1999; Pearson & Mitroff, 1993; Seeger, 2002) maintain that the context for a crisis is of vital importance in determining appropriate organizational responses. Yet most research focuses broadly on type of crisis (e.g., organizational transgression) and fails to examine the complex issues emerging within a crisis. The concept of situation has long been operationalized in terms of SCCT, despite some authors (e.g., Seeger, 2002) arguing a host of factors might influence crisis response strategies. In a crisis, there is likely to be a web of issues to which the company must respond (de Brooks & Waymer, 2009) and previous research has not explicitly examined the role of issues management as a critical factor in crisis response strategy. For example, an organization like BP, when responding to the Gulf crisis, is going to manage an assortment of issues like its relations with government, environmental impacts, financial impacts, and attacks on the company's viability. It would make sense if BP's crisis response strategy was modified to address different issues differently, supporting Carroll's (2009) findings that crises are highly contextualized and complex. In fact, Carroll argues that it is important to distinguish between the 'crisis' and issues, which is consistent with the tradition of issues management in public relations. Issues are viewed as specific and contestable matters of fact, value, or policy influencing an organization's reputation (Heath, 2006). In issues management, an organization's goal is to identify issues that might affect it, prioritizing and proactively managing them to help protect the organization from harm. The context of a crisis does not dim the need for issues management; rather, it heightens the need for organizations to adapt their messaging to the external environment.

Thus, in order to identify the emergent issues in the BP crisis, we pose the following research question:

Research Question 3: What issues emerged throughout the BP Gulf crisis?

And to identify the influence that issues may have on an organization's choice of crisis response strategies and channels, we pose the following research questions:

Research Question 4: To what extent did channel influence the issues addressed by BP as it responded to the Gulf crisis?

Research Question 5: To what extent did issues influence the response strategies BP employed to manage the crisis in the Gulf of Mexico?

Methods

In the context of organizational crises and crisis response tactics, quantitative content analysis is a strong method to employ, particularly when selecting messages presented in both new and traditional outlets (Molleda, Connolly-Ahern, & Quinn, 2005). Consequently, analyzing traditional and new media sources that include crisis responses from the organization is a valuable and strategically grounded method for analyzing the proposed research questions and hypotheses (see, e.g., Andsager & Smiley, 1998; Molleda, et al., 2005).

The Study Sample

In order to analyze BP's response to the Gulf crisis, press releases, Facebook posts, and Twitter tweets were identified as the most viable sources of the overall BP strategy for several reasons. First, while BP has extensive website coverage for the crisis and branch websites for each of the states affected by the crisis, the number of unique messages was very low ($n = 26$) because information was duplicated. Second, BP launched an aggressive YouTube campaign in response to the Gulf (Shogren, 2011); however, these videos typically employed company leaders and as previous research suggests, the function and communicative messages from leaders during a crisis are substantially different from other public relations efforts during crises (Farmer & Tyedt, 2005; Griffin-Padgett & Allison, 2010; Hwang & Cameron, 2008; Lucero, Kwang, & Pang, 2009; Oliveira & Murphy, 2009; Pines, 2000; Sandler, 2009; Wesseling, 2008). Additionally, because this research focuses on BP's crisis responses, it was most appropriate to exclusively look at BP controlled messaging because the media typically select and frame the information (or direct quotations) that they use from organizations during crises to serve their commercial and/or political ends (Aalbert, van Aelst, & Curran, 2010; An & Gower, 2009; Andsager & Smiley, 1998; Berger, 2009; Crider, 2010; Duhe & Zoch, 1994; Iyengar & Curran, 2009). Thus, because our interest is in analyzing BP's audience-oriented crisis response strategies, it is most appropriate to analyze crisis responses from its press releases, Facebook posts and Twitter tweets. All press releases ($n = 126$), Facebook posts ($n = 1,789$), and Twitter tweets ($n = 2,730$) were collected and analyzed for this project.

Coding Scheme

The unit of analysis was operationalized as a single message (i.e., a single press release, post, or tweet) because previous studies of crisis response messages (e.g., Benoit & Czerwinski, 1997; Elsbach, 1994; Greer & Moreland, 2003; Genderson, 2003, Kauffman, 2001) emphasize that when studying crisis communication, examining the interplay of tactics within a message employed affords researchers more information about an organization's strategy.

The coding scheme was based on manifest content for each variable with operationalization reflected in Table 1 for crisis messages. Primary issues (i.e., those in the headline of a release or the primary focus of a post or tweet) and issues (i.e., any issue emerging in the body of the release, post, or tweet) were derived using a process of grounded theory causal coding, as described by Strauss and Corbin (1990): (a) looking for repeated patterns of issues in each of the sources of data and (b) comparing the patterns emerging in each of the sources to others in order to determine the thematic relationships. Issues emerging in BP's coverage were triangulated with those emerging in six online print media sources: three from the United States (i.e., *Fox News Online, The Houston Chronicle,* and *The Christian Science Monitor*) and three from the United Kingdom (i.e., *the BBC Online, The Sun,* and *The Guardian)* in order to ensure the issues coded effectively represented the issues BP had to manage during this crisis.

Thirty-three members of a graduate course in Organizational Communication coded portions of the data as a part of a class project. The coders were each assigned data from a single channel. Each coder received a codebook and a 50-minute training session with coding examples. Once trained, the coders independently coded the data and followed procedures to establish intercoder reliability as used by Molleda, et al. (2005). Coders noted whether each tactic (see Table 1) or each issue was present and then identified the primary issue based on the headline or dominant theme. Ten percent of the sample was randomly selected and independently coded by the project leader. An overall intercoder reliability analysis was conducted finding the coding scheme to be reliable (α = .83).

Analysis Methods

Because binary data can mathematically function as scale data without substantially violating the assumptions of ANOVAs, regression, and correlation tests, it was not necessary to perform logit or probit analyses. Therefore, in order to address Hypotheses 1 and 2, as well as Research Questions 2 and 4 identifying whether channel would influence message tactics and issues, ANOVAs with Scheffe post hoc analyses to identify homogeneous subsets were performed. Because the ANOVA identified significant differences in the tactics used based on channel for all tactics (see Table 2) and post hoc analyses revealed significant differences between the three channels on all but two tactics, in order to fully test Hypotheses 2 and 3, as well as Research Questions 1, 2, and 5, separate Factor Analyses with Varimax Rotation and Kaiser Normalization were conducted to identify strategies used for each of the BP communication channels. Factors emerging with an Eigenvalue greater than 1 were included as primary strategies communicated by BP for each source. Factor validity was evaluated by comparing the factors to the tactic correlations on each of the channels. Finally, correlations and hierarchical regression analyses were used to analyze the influence of time and issue on message strategies for each source using a two-part process. In part one, a correlation analysis was performed in order to identify the viable factors affecting each of the emergent strategies. This allowed us to minimize collinearity problems in the hierarchical multiple regressions by only testing those variables significantly correlated with the strategy.

Results

Overall, these data support previous research and reveal important information about the role of the press release as the hinge for BP's crisis response strategy. The data also supports the

influence of channel, time, and issue on BP's crisis response strategy explaining substantial amounts of variance. Though the BP case confirms many previous assumptions and assertions, it provides important new details about crisis response strategies for organizations experiencing transgressions and sustained crises.

Issues Management

The grounded theory analysis of the emergent issues during the Gulf of Mexico revealed 12 unique issues across the five-month crisis. First, Status Updates referred to updates on the status of the spill including technical issues, physical problems, progress, and any impact of weather, e.g., announcing delays, successes, or failures. Second, BP Response to Criticism referred to statements that directly responded to accusations, Gulf-related litigation, fines, rebukes, etc. directly related to the BP Gulf oil spill. Third, Spill Impacts on People referred to BP's responses addressing situations related to the economic, human, or social costs of the spill. Fourth, BP Leadership referred to BP's responses addressing criticism of the leaders or changes in company leadership. Fifth, Compensation for Those Affected referred to BP's responses directly addressing the financial compensation for people and businesses negatively affected by the Gulf spill. Sixth, Other BP Issues referred to BP responses unrelated to the Gulf oil spill, (e.g., if BP responded to the accusations surrounding its role in the release of the Lockerbie bomber, North Sea drilling, or old cases). Seventh, Bad PR referred to BP statements responding to criticisms of BP's public relations work in light of the Gulf spill. Eighth, Politics referred to BP statements framed in the context of American or British politics, (e.g., implications on elections, political leaders, or international diplomacy). Ninth, Government Response and Regulation referred to BP statements in the context of official government rebukes of BP, drilling bans, new regulation on the oil industry, and their own coordination with the US or British governments. Tenth, BP's Financial Cost of Clean Up referred to BP statements addressing how much the clean-up efforts have cost or will cost (e.g., cancelling dividends or selling oil interests in other places). Eleventh, Environmental Impacts referred to all BP statements in the context of the environmental damage, environmental research, or environmental recovery directly related to the Gulf spill. Finally, Congressional Hearings referred to all BP statements in the context of US Congressional Hearings or British Parliament inquiries.

Channel Influence on BP's Response

As a means of testing Hypothesis 1, as well as answering Research Question 4, these data reveal that channel significantly influenced both the messaging and issues addressed. Table 2 demonstrates that there are significant differences for all eight tactics based on the channel. The post hoc analyses reveal significant differences for each comparison except two. Where the Routine Communication tactics are used, Twitter and press releases do not significantly differ and where Anti-Social or Defensive are used, Facebook and Twitter do not significantly differ. This offers strong support confirming Hypothesis 1 that BP's messaging during the Gulf crisis will significantly differ depending on channel.

Research Question 4 asked to what extent channel influenced the issues addressed by BP during the Gulf crisis. Tables 3 and 4 demonstrate that channel significantly influences issues addressed. The primary issue addressed in a press release, post, or tweet, channel influenced 10

of the 12 emergent issues for BP. Only Compensation for Those Affected and BP's Financial Cost of Clean Up were not influenced by channel. The post hoc results indicate that across issues, Facebook and press releases were very similar with significant differences only on the issues of Environmental Impacts, which Facebook addressed significantly more often and press releases addressed BP Response to Criticism and Other BP issues significantly more often than Facebook. Facebook and Twitter had several significant differences with Facebook addressing issues of BP Leadership, Bad PR, and Government Response and Regulation significantly more often than Twitter and Twitter addressing Status Updates and Congressional Testimony significantly more often than Facebook. Finally, press releases and Twitter also had three significant differences based on issue with press releases addressing BP Responses to Criticism, Other BP Issues, and Bad PR significantly more often than Twitter.

Yet when we examine the additional issues addressed in press releases, posts, and tweets versus the primary issue, we found even more differences. There were significant differences for all 12 of the issues BP faced. The post hoc analyses reveal that in the body of messages, Facebook posts are typically addressing significantly more subjects than press releases. Further, when comparing Facebook to Twitter, aside from Status Updates, Facebook addressed a more diverse set of subjects within the posts than the tweets. Finally, the same is true of the comparison between press releases and tweets; releases addressed significantly more subjects.

BP's Crisis Response Messaging

Because of the significant differences previously discussed based on channel, strategies were identified for each of the three channels separately. Overall, these data confirm Hypothesis 2 — that BP's central response strategy to the Gulf crisis will employ positive messaging. In answering Research Question 1, asking whether press releases are the driving force behind BP's crisis messaging, these data suggest strategies used in press releases are the hinge for BP's crisis response approach. However, there are notable differences in the strategies emerging from the press releases, Facebook posts, and Twitter tweets.

Press releases. Three factors emerged from the factor analysis. The most dominant strategy emerging was an Affirming Amplification Strategy (Eigenvalue = 2.85, accounting for 35.57 percent of the variance) including self-enhancement (.79), framing the organization (.79), accommodative (.74), and excellence or renewal (.76). Additionally, two single-tactic strategies emerged including Routine Communication (Eigenvalue = 1.09 accounting for 13.58 percent of the variance) and Defensive (Eigenvalue = 1.07, accounting for 13.38 percent of the variance). In total, these three factors account for 62.53 percent of the variance in the tactics for press releases. These data generally support the trends emerging in the correlations between the response tactics (see Table 5). Of particular interest is the consistent relationship between the Invoking Interorganizational Relationships (IORs) and the tactics of the Affirming Amplification Strategy; however, IORs were not strong enough to load with the other tactics. This suggests it is still a useful component in the overall response strategy for press releases; therefore, this tactic was included in additional analyses as a single-tactic strategy to identify its role in the BP response approach to the crisis in the Gulf.

Facebook. Three factors also emerged from the Factor Analysis of Facebook ($n = 1,788$). The most dominant strategy emerging was an Image-Oriented Strategy (Eigenvalue = 1.63 and

accounting for 20.37 percent of the variance) including self-enhancement (.61) and frame the organization (.67) tactics. Additionally, two single-tactic strategies emerged with BP's communication on Facebook: an Accommodative Strategy (Eigenvalue = 1.32 accounting for 16.46 percent of the variance) and an Excellence Strategy (Eigenvalue = 1.21 accounting for 15.17 percent of the variance). In total, these factors account for 51.99 percent of the variance in the tactics on Facebook. These data generally support the trends emerging in the correlations between the response tactics (see Table 6).

Twitter. Four factors emerged for BP's response to the Gulf of Mexico crisis using Twitter. The most dominant factor was a Corrective Strategy (Eigenvalue 1.89, with 23.58 percent of the variance explained) including efforts to Frame the Organization (.64), Accommodative (.79), and Excellence (.61) tactics. Also emerging were three single-tactic strategies including Self-Enhancement (Eigenvalue = 1.19, with 14.81 percent of variance explained), Routine Communication (Eigenvalue = 1.05, with 13.12 percent of variance explained), and Defensive (Eigenvalue = 1.05, with 13.07 percent of variance explained). In total, these factors account for 64.58 percent of the variance in the tactics. These data generally support trends emerging in the correlations between the response tactics (see Table 7).

Situational Influence on BP's Crisis Response Strategies

Across each of the strategies emerging on all three channels, these data support the importance of time on crisis response, confirming Hypothesis 3. However, these data answer Research Question 5 indicating that issue management is a very important factor accounting for substantial variation in the crisis response strategies across channels.

Press releases. The four strategies identified for press releases – Affirming Amplification ($n = 106$, SD = .37), Routine Communication ($n = 3$, SD = .15), Defensive ($n = 28$, SD = .42), and Invoking IORs ($n = 72$, SD =.50) – accounted for an overlapping 119 percent of the total 126 messages supporting the validity of these strategies for this channel.

In examining the Affirmative Amplification Strategy, time and issue management significantly influenced BP's use of this strategy. There were significant correlations for time ($r = .30$), the primary issues of Status Updates ($r = -.35$) and Compensation for Those Affected ($r = .31$), and the issues of BP Response to Criticism ($r = .43$), Spill Impacts on People ($r = .47$), Compensation for Those Affected ($r = .41$), Bad PR ($r = .26$), Government Response and Regulation ($r = .23$), and Environmental Impacts ($r = .50$). These variables were entered into the regression in three models: Time, Primary Issue, and Subject. Table 8 demonstrates that time, primary issue, and issue all substantially influenced when the Affirming Amplification Strategy was used in BP's press releases. Of particular note is the high adjusted R^2 value of .43 indicating that these variables alone are accounting for a significant amount of variance in BP's strategic messaging.

The only significant correlation for the Defensive Strategy was in response to the issue of BP's Leadership ($r = .25$); therefore, a simple regression was run and was significant $b = .25$, $t(126) = 2.90$, $p < .001$, $R^2_{adj.} = .06$. Likewise, Routine Communication was also only used in response to the issue of BP's leadership ($r = .32$); therefore, a simple regression was run and was significant $b = .32$, $t(126) = 3.72$, $p < .001$, $R^2_{adj.} = .09$.

Finally, Invoking IORs was significantly correlated with time ($r = .26$), the primary issue of Status Updates ($r = -.20$), and issues of Status Updates ($r = -.20$), Spill Impacts on People ($r = .24$), Bad PR ($r = .27$), and Government Response and Regulation ($r = .25$). These variables were entered into the regression in three models: time, primary issue, and issue. Table 9 demonstrates that all three models were significant and that time, primary issue, and issues all substantially influenced when IOR's were invoked. Of particular note was the strong adjusted R^2 value of .14 suggesting an important amount of variance in when IORs are invoked is accounted for with these variables.

Facebook. The three strategies identified for Facebook – Image Oriented ($n = 851$, SD = .34), Accommodative ($n= 780$, SD = .50), and Excellence ($n = 324$, SD = .39) – account for an overlapping 109 percent of the posts on Facebook, supporting the validity of the strategies.

In examining the Image-Oriented Strategy, time, primary issues, and issues all influenced BP's use of this strategy. The significant correlations including time ($r = -.11$), the primary issues of Status Updates ($r = .15$), BP Leadership ($r = .05$), Compensation for Those Affected ($r = .05$), Government Response and Regulation ($r = -.11$), and Environmental Impacts ($r = -.18$); and the issues of Spill Impacts on People ($r = .06$), Compensation for Those Affected ($r = .08$), Government Response and Regulation ($r = -.14$), and Congressional Hearings ($r = .06$). These variables were entered into the regression in three models: time, primary issue, and issue. Table 10 demonstrates that while all of the models were significant, they only accounted for a low amount of the change ($R^2_{adj.} = .08$).

In examining the Accommodative Strategy, time, primary issues, and issues all influenced BP's use of this strategy. The significant correlations including time ($r = -.12$); the primary issues of Status Updates ($r = -.14$), Compensation for Those Affected ($r = .28$), Bad PR ($r = -.08$), and Government Response and Regulation ($r = -.07$); as well as the Issues of Spill Impacts on People ($r = .23$), Compensation for Those Affected ($r = .29$), Bad PR ($r = -.08$), BP's Cost of Clean Up ($r = .11$), and Congressional Hearings ($r = -.05$). These variables were entered into the regression in three models: time, primary issue, and issue. Table 11 demonstrates all of the models were significant with Model 3 accounting for a significant and important amount of change ($R^2_{adj.}= .17$).

Finally, in examining the Excellence strategy only issues influenced BP's use of this strategy. The significant correlations included the primary issues of Status Updates ($r = .14$), Spill Impacts on People ($r = -.08$), BP Leadership ($r = .07$), Other BP Issues ($r = -.06$), and Environmental Impacts ($r = -.14$) as well as issues of BP Leadership ($r = .07$), Compensation for Those Affected ($r = .09$), Other BP Issues ($r = .06$), BP's Cost of Clean Up ($r = .08$), and Environmental Impacts ($r = -.05$). These variables were entered into the regression in two models for primary issue and issue. Table 12 demonstrates both models were significant but the relatively small adjusted R^2 suggests issues were only a small part of the equation influencing BP's use of this strategy.

Twitter. The four strategies identified for Twitter including Corrective ($n = 968$, SD = .24), Self-Enhancement ($n = 251$, SD = .29), Routine Communication ($n = 194$, SD = .26), and Defensive ($n = 76$, SD = .17) only accounted for approximately 55 percent of the tweets from BP during the crisis suggesting a less coherent response strategy employed by BP through Twitter.

In examining the Corrective Strategy, time, primary issues, and issues all influenced BP's use of this strategy. There were significant correlations for: time ($r = .13$), the primary issues of

Status Updates ($r = -.27$), BP Response to Criticism ($r = .08$), Spill Impacts on People ($r = .15$), BP Leadership ($r = .05$), Compensation for Those Affected ($r = .25$), BP's Cost of Clean Up ($r = .10$), Environmental Impacts ($r = -.05$), and Congressional Testimony ($r = .04$), and the issues of Status Updates ($r = -.21$), Spill Impacts on People ($r = .17$), BP Leadership ($r = .05$), Compensation for Those Affected ($r = .27$), Government Response and Regulation ($r = .06$), BP's Cost of Clean Up ($r = .12$), and Congressional Hearings ($r = .08$). These variables were entered into the regression in three models. Table 13 demonstrates all of the models were significant with Model 3 accounting for a significant and important amount of change ($R^2_{adj.} = .15$).

In examining BP's use of the Self-Enhancement Strategy on Twitter, time, primary issues, and issues all influenced its use of this strategy. There were significant correlations for: time ($r = .21$); the primary issues of Status Updates ($r = -.17$), BP Response To Criticism ($r = -.04$), Spill Impacts on People ($r = .23$), Compensation for Those Affected ($r = -.06$), Bad PR ($r = .05$), Environmental Impacts ($r = .11$) and Congressional Testimony ($r = -.04$); as well as the issues of Status Updates ($r = -.19$), BP Response to Criticism ($r = -.05$), Spill Impacts on People ($r = .20$), Compensation for those Affected ($r = -.08$), Government Response and Regulation ($r = -.07$), Environmental Impacts ($r = .09$), and Congressional Testimony ($r = -.05$). These variables were entered into the regression in three models: time, primary subject, and subject. Table 14 demonstrates all of the models were significant with Model 3 accounting for a significant and moderate amount of change ($R^2_{adj.} = .11$).

In examining BP's use of Routine Communication on Twitter, only primary issues and issues influenced their use of this strategy during the Gulf crisis. There were significant correlations for the primary issues of Status Updates ($r = -.05$), Spill Impacts on People ($r = .05$), and Compensation for Those Affected ($r = .07$) as well as the issues of Spill Impacts on People ($r = .06$) and Compensation for Those Affected ($r = .08$). These variables were entered into the regression in two models: primary issue and issue. However, the second model was not significant; therefore, the primary issue was the only factor influencing routine communication $R^2_{adj.} = .01$ $F(3, 2719) = 7.49$, p < .001 suggesting that while significant, it does not account for an important amount of the difference in the use of Routine Communication.

In examining BP's use of the Defensive Strategy on Twitter time, primary issue, and issues all significantly influenced its use of the strategy. The significant correlations included: time ($r = -.07$); the primary issues of Status Updates ($r = -.10$), BP Response to Criticism ($r = .35$), Other BP Issues ($r = .10$), and Congressional Testimony ($r = .06$); as well as the issues of Status Updates ($r = -.07$), BP Response to Criticism ($r = .38$), Other BP Issues ($r = .08$), Government Response and Regulation ($r = -.21$), and Congressional Hearings ($r = .29$). These variables were entered into the regression in three models: time, primary issue, and issue. Table 15 demonstrates all three models were significant and Model 3 accounts for a significant and important amount of the variance in BP's use of the Defensive Strategy on Twitter ($R^2_{adj.} = .21$).

Discussion

The BP crisis did not disappoint. It is an analytically and theoretically rich case that helps practitioners and academics better understand the nature of crisis communication during a prolonged organizational transgression, confirming much of the previous research on the influence of crisis type and history. This case study also makes two significant contributions: (a) it demonstrates that media synchronization and effective use of channels over time are important

components of crisis response and (b) issue management is an essential factor in responding to a crisis.

Media Synchronization and Messaging

On the surface, the BP effort does not appear to be highly synchronized across its traditional and social media channels (see Tables 2, 3, and 4) because channel significantly influenced most of the tactics and issues measured. However, a closer examination of the message strategies (see Tables 5, 6, and 7) reveals those emerging in the press releases (i.e., Affirming Amplification, Routine Communication, Defensive, and Emphasizing IORs) served as the hinge for the strategies emerging on Facebook (i.e., Image-Oriented, Accommodative, and Excellence) and Twitter (i.e., Corrective, Self-Enhancement, Routine Communication, and Defensive).

The Affirming Amplification Strategy was dominant in press releases incorporating self-enhancement, framing the organization, accommodative, and excellence tactics. This future-oriented, positive or pro-social strategy confirms previous research on organizational transgressions. More importantly, components of this strategy were evident in the dominant strategies for Facebook and Twitter. Thus, while BP employed substantially different dominant response strategies on Facebook and Twitter, the dominant messaging pushed in the press releases holds them together. Further, each of the additional strategies emerging in Facebook and Twitter are consistent with other strategies used in press releases throughout the crisis. Taken together, this suggests BP's message strategies were well-synchronized.

Additionally, these data reveal that BP's crisis response developed substantially over the life of the crisis. As the hinge to BP's crisis response, press releases increasingly used their Affirming Amplification Strategy as the crisis progressed, accounting for eight percent of the change in that strategy's use. This suggests that as the crisis matured, BP began looking forward to the future with its messaging instead of focusing on the situation as it stood, which is consistent with previous research on crisis-prone organizations. Further, as a crisis progresses, a company should want to focus on what it is doing well in managing the transgression (Coombs, 2007; Diers & Tomaino, 2010). Though time was a significant predictor of the dominant strategies for Facebook and Twitter, because those strategies focused on present-oriented messaging (i.e., how BP is correcting the problem and BP's image), it also makes sense that they only account for between one and two percent of the variance in the strategies on Facebook and Twitter. As such, our evidence best supported a conclusion that time most influences crisis response strategies that focus on the future versus the present. Future research should further investigate the veracity of this finding in other crises. However, on Facebook we found a confounding influence of time. BP used Image-Oriented and Accommodative Strategies significantly less with only Excellence remaining consistent over time. This indicates that BP fell back to a comfortable narrative; BP is a company dedicated to safety, the environment, and such.

While important, the findings for time on Facebook seem to suggest that BP may not have used the channels as effectively as possible. While BP was credited by some for using Facebook as a place to vent and Twitter to get news out quickly (Shogren, 2011), these uses are not an accurate reflection of true social media engagement. Social media should engage in two-way conversations that build community with stakeholders who can, in turn, amplify the organization's messaging, improve its credibility, and help achieve its crisis response goals (Metzgar & Maruggi, 2009; Solis & Breakenridge, 2009).

Issue Management in Crises

Much of the work in crisis communication focuses on it as an exercise in command and control; where if we account for factors like history, crisis type, and industry and then make consistent recommendations using existing strategies (e.g., Benoit & Henson, 2009; Coombs, 2004; 2007), we can accurately predict the outcomes of crises. This metaphor suggests crises can be contained; however, previous research suggests crises are complex situations requiring message adaptation and customization, even in the midst of the crisis (de Brooks & Waymer, 2009; Seeger, 2002). As such, we view crisis communication as a central narrative with several diverging storylines, taking a page from issues management.

These data strongly support an issues management perspective is appropriate for crisis communication. In the grounded theory analysis of emergent issues, we identified 12 unique issues to which BP had to respond throughout the crisis, many of which should translate to other crises. For example, an organization that has committed a transgression should be expected to offer status updates, respond to criticism, address the impacts of the transgression, offer compensation, and deal with government scrutiny. Additionally, previous research suggests that in a crisis the company's leadership is likely to be an important factor in the crisis response (Griffin-Padgett & Allison, 2010). Taken together, future research should confirm the appropriateness of these core crisis issues and continue to analyze situation-specific issues.

More importantly, issues accounted for a substantial amount of the variance across channels and message strategies. For instance, time (approximately nine percent) and issues (approximately 34 percent) accounted for approximately 43 percent of the variance in BP's use of the Affirmative Amplification Strategy. This is a substantial finding. Knowing that press releases were driving the message, issues still accounted for between five and 17 percent of the variance in strategies used on Facebook and 11 to 21 percent of the strategy variance on Twitter. As a case study, the BP crisis already "controls" for crisis history and type and with findings like these for key issues, it suggests that issue management should be considered a critical variable in any crisis communication research.

Accounting for variance is theoretically and analytically useful, but approaching crisis communication with an issue management perspective better enables practitioners and academics to understand why organizations are making certain strategic choices. For example, BP's dominant strategy across all channels was positive; yet, a Defensive Strategy emerged in both press releases and Twitter. In the press releases, the Defensive Strategy was used surgically to address the constant critiques of BP's leadership in the face of the public relations gaffes made by Tony Hayward and other leaders. In the context of defending their leadership for public relations gaffes, defensive messages make sense. Similarly, BP used Twitter to defend itself against criticism, other BP issues (e.g., BP's part in the Lockerbie bomber release), and Congressional (Parliamentary) inquiries; yet actively avoided being defensive when updating their status or addressing issues of government regulation and response to the crisis. These suggest the company was strategic when it felt like a Defensive Strategy was appropriate. Without accounting for issues, the interpretation of BP's use of a Defensive Strategy could be explained as corporate arrogance, being out of touch, or even cultural differences in the British-owned company. In short, without accounting for the influence of issue management during a crisis, the interpretations of the research are likely to be flawed or inaccurate.

Conclusion

Analytically, the BP crisis revealed a model for strategic channel synchronization, indicating that organizations may use traditional public relations tools and approaches as the hinge holding their social media strategy together. Yet in practice we also identified that organizations must still use channels appropriately during a crisis in order to help their post-crisis recovery. Future research should test our findings to identify if a hinged model for crisis response is appropriate both to explain how organizations coordinate their multi-media strategies but also to identify whether this leads to positive stakeholder outcomes. Additionally we found that issues influenced the use of message strategies to such a significant degree that we believe issue management should be a critical component to the theoretical development of crisis communication. Further, it should be a key function of crisis response planning with further analyses to verify typical and situational issues and the strength of issue management across channels.

Further, the nature of this transgression and its duration suggest the BP crisis may be comparable to situations like the Toyota recall, ongoing international investigations of wrong-doing in the banking and financial services industries, and could even be applicable to the current public affairs challenges of nations like Greece whose internal policies are believed to have negatively affected other nations. As our models for crisis response to different crises emerge, we should continue to develop and test factors across types of crises and channels.

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Table 1

Taxonomy of Crisis Response Tactics Potentially Used By Organizations

Tactic Category	Strategy Description	Example Key Author(s)
Self-Enhancement	Emphasizes product/ company quality or provides information to make the organization look positive.	Heath (1994), Proto & Supino (1999), Scott & Lane (2000)
Routine Communication	Communication emphasizing organizational goals/ mentioning mission/ vision; reporting assets, liabilities, and interest in cooperation to increase market value	Fiol (1995), Heath (1994), Proto & Supino (1999)
Framing the Crisis	Development of dominant narrative, use of narrative to explain the problem; educating with the goal of increasing stakeholder empowerment; communicating the importance of the situation	Bennett (1998), Kauffman (2001), Martinelli & Briggs (1998), Massey (2001), Mohamed, et al. (1999), Rowan (1996) , Sellnow (1993), Slovic (1987), Williams & Olaniran (1998) Benoit (2004; 1997), Sturges (1994)
Framing the Organization	Efforts to create positive image by reminding stakeholders of past good works or qualities, presenting the organization as being highly competent in the face of the crisis; portraying the organization in a light to set the tone for the outcome of the crisis	Coombs & Schmidt (2000) Benoit & Czerwinski (1997), Benoit (2004), Coombs & Schmidt (2000), Kauffman (2001), Sellnow & Brand (2001), Henriques & Sadorsky (1999)
Anti-social or Defensive	The organization cannot/ does not choose to act; using explanations that might ward off negative implications to the image; indicating actions are driven by compliance; non-cooperation; de-emphasizing the role in blame or even shifting the blame; minimizing the situation	Benoit (2004; 1997), Benoit & Czerwinski (1997), Coombs & Holladay (2002), Coombs & Schmidt (2000), Henderson (2003), Ray (1999), Sellnow & Ulmer (1995)
Accommodative	Effort to 'correct' actions adversely affecting others. Can include announcements of recall or offers of compensation; Communication of contrition, admission of blame including remorse and requests for pardon, mortification; communicating concern for those affected; offering assurances	Benoit (2004; 1997), Benoit & Czerwinski (1997), Coombs & Holladay (2002), Coombs & Schmidt (2000), Henderson (2003), Martinelli & Briggs (1998), Mohamed, et al. (1999), Ray (1999)
Excellence/ Renewal	Emphasizing openness and willingness to engage about the issue; Portraying the organization as having integrity, social responsibility, moral worthiness; Engaging in actions to atone for transgression and persuade stakeholders of positive identity	Das & Teng (1998), Milliman, et al. (1994), Nielson & Bartenuk (1996), Williams & Olaniran (1998)
Interorganizational Relationships	Identifying either a positive or negative link to another; minimizing traits or accomplishments of a negatively linked other or bolstering the traits of a positively linked other; emphasizing a desire to work with others	Mohamed, et al. (1999), Sellnow & Brand (2001), Benoit & Czerwinski (1997), Coombs & Schmidt (2000), Henriques & Sadorsky (1999), Martinelli & Briggs (1998), Milliman, et al. (1994)

Table 2

ANOVA Comparison of BP's Use of Different Source Influence Response Tactics in the Gulf Crisis

Response Tactics	df	F	η^2	p	Post Hoc I	Post Hoc J	I-J	Sig.
Self Enhancement	2, 4625	117.74	.05	.00	Facebook	Twitter	.05	.00
						P.R.	-.39	.00
					Twitter	P.R.	-.44	.00
Routine Communication	2, 2625	6.41	.03	.00	Facebook	Twitter	.10	.00
						P.R.	.15	.00
					Twitter	P.R.	.05	.24
Frame the Crisis	2, 4625	190.52	.08	.00	Facebook	Twitter	-.27	.00
						P.R.	-.44	.00
					Twitter	P.R.	.17	.00
Frame the Organization	2.4625	535.16	.19	.00	Facebook	Twitter	.34	.00
						P.R.	-.35	.00
					Twitter	P.R.	-.69	.00
Anti-Social or Defensive	2, 4625	88.47	.04	.00	Facebook	Twitter	.00	.18
						P.R.	-.20	.00
					Twitter	P.R.	-.19	.00
Accommodative	2, 4625	53.45	.02	.00	Facebook	Twitter	.09	.00
						P.R.	-.30	.00
					Twitter	P.R.	-.39	.00
Excellence or Renewal	2, 4625	675.02	.23	.00	Facebook	Twitter	.39	.00
						P.R.	-.09	.02
					Twitter	P.R.	-.48	.00
Emphasizing Interorganizational Relationships	2, 4625	354.02	.13	.00	Facebook	Twitter	.16	.00
						P.R.	-.39	.00
					Twitter	P.R.	-.55	.00

Notes: P.R. represents Press Releases, the alpha for all tests was set at .05.

Table 3

ANOVA for the Influence of Channel on Primary Issue

Subject	df	F	η²	p	Post Hoc I	Post Hoc J	I-J	Sig.
Status Updates	2, 4641	46.71	.02	.02	Facebook	Twitter	-.15	.00
						P.R.	-.10	.09
					Twitter	P.R.	.04	.61
BP Response to Criticism	2, 4641	4.42	.01	.00	Facebook	Twitter	.00	.80
						P.R.	-.04	.03
					Twitter	P.R.	-.04	.01
Spill Impacts on People	2, 4641	3.24	.00	.04	Facebook	Twitter	.02	.13
						P.R.	.06	.16
					Twitter	P.R.	.04	.44
BP Leadership	2, 4641	6.77	.00	.00	Facebook	Twitter	.01	.00
						P.R.	.00	.99
					Twitter	P.R.	-.01	.55
Compensation for those affected	2, 4641	1.22	.00	.30				
Other BP Issues	2, 4641	53.90	.02	.00	Facebook	Twitter	.00	.10
						P.R.	-.06	.00
					Twitter	P.R.	-.07	.00
Bad PR	2, 4641	14.28	.01	.00	Facebook	Twitter	.02	.00
						P.R.	-.01	.43
					Twitter	P.R.	-.03	.01
Politics	2, 4641	3.90	.00	.02	Facebook	Twitter	.00	.12
						P.R.	.00	.36
					Twitter	P.R.	.00	.10
Government Response & Regulation	2, 4641	14.54	.01	.00	Facebook	Twitter	.03	.00
						P.R.	.00	.18
					Twitter	P.R.	.00	.99
BP's Financial Cost of Cleanup	2, 4641	.27	.00	.76				
Environmental Impacts	2, 4641	18.36	.01	.00	Facebook	Twitter	.05	.00
						P.R.	.15	.00
					Twitter	P.R.	.10	.01
Congressional Testimony	2, 4641	7.07	.00	.00	Facebook	Twitter	-.01	.00
						P.R.	.00	.93
					Twitter	P.R.	.01	.28

Notes: P.R. represents Press Releases, the alpha for all tests was set at .05.

Table 4

ANOVA for the Influence of Channel on Issue Within BP Messages

Subject	df	F	η²	p	Post Hoc I	Post Hoc J	I-J	Sig.
Status Updates	2, 4617	8.69	.00	.00	Facebook	Twitter	-.04	.02
						P.R.	-.16	.00
					Twitter	P.R.	-.12	.04
BP Response to Criticism	2, 4617	109.82	.05	.00	Facebook	Twitter	.03	.00
						P.R.	-.24	.00
					Twitter	P.R.	-.27	.00
Spill Impacts on People	2, 4617	98.38	.04	.00	Facebook	Twitter	.15	.00
						P.R.	-.13	.00
					Twitter	P.R.	-.28	.00
BP Leadership	2, 4617	33.91	.01	.00	Facebook	Twitter	.04	.00
						P.R.	-.01	.70
					Twitter	P.R.	-.05	.00
Compensation for those affected	2, 4617	39.91	.02	.00	Facebook	Twitter	.05	.00
						P.R.	-.20	.00
					Twitter	P.R.	-.24	.00
Other BP Issues	2, 4617	60.44	.03	.00	Facebook	Twitter	.00	.30
						P.R.	-.07	.00
					Twitter	P.R.	-.08	.00
Bad PR	2, 4617	91.93	.04	.00	Facebook	Twitter	.02	.00
						P.R.	-.14	.00
					Twitter	P.R.	-.17	.00
Politics	2, 4617	8.89	.00	.00	Facebook	Twitter	.01	.03
						P.R.	-.02	.03
					Twitter	P.R.	-.02	.00
Government Response & Regulation	2, 4617	118.27	.05	.00	Facebook	Twitter	.03	.00
						P.R.	-.34	.00
					Twitter	P.R.	-.38	.00
BP's Financial Cost of Cleanup	2, 4617	81.94	.03	.00	Facebook	Twitter	.02	.00
						P.R.	-.18	.00
					Twitter	P.R.	-.20	.00
Environmental Impacts	2, 4617	144.13	.06	.00	Facebook	Twitter	.22	.00
						P.R.	.07	.27
					Twitter	P.R.	-.16	.00
Congressional Testimony	2, 4617	13.84	.01	.00	Facebook	Twitter	-.02	.00
						P.R.	.00	.99
					Twitter	P.R.	.02	.28

Notes: P.R. represents Press Releases, the alpha for all tests was set at .05.

Table 5

Correlations for Tactics Used in Press Releases

Tactic	1	2	3	4	5	6	7	8
1 Self Enhancement	1	.15	.30**	.52**	.08	.44**	.61**	.22*
2 Routine Communication		1	-.04	.08	.04	-.08	.15	.03
3 Frame the Crisis			1	.23**	-.08	.39**	.23*	.04
4 Frame the Organization				1	.00	.53**	.52**	.33**
5 Anti-Social/ Defensive					1	-.01	-.11	.04
6 Accommodative						1	.37**	.25**
7 Excellence/ Renewal							1	.25**
8 Interorg. Relationships								1

Notes: N = 126, * = significant at the .05 level; ** = significant at the .01 level

Table 6

Correlations for Tactics Used on Facebook

Tactic	1	2	3	4	5	6	7	8
1 Self Enhancement	1	.08**	-.16**	.25**	-.01	.12**	.08**	-.12**
2 Routine Communication		1	-.17**	.10**	-.04	-..22**	-.02	-.17**
3 Frame the Crisis			1	-.34**	-.01	-.19**	-.12**	-.01
4 Frame the Organization				1	-.10**	.01	.20**	-.16**
5 Anti-Social/ Defensive					1	-.08**	-.10**	-.01
6 Accommodative						1	.24**	-.02
7 Excellence/ Renewal							1	-.12**
8 Interorg. Relationships								1

Notes: N = 1788, * = significant at the .05 level; ** = significant at the .01 level

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Table 7

Correlations for Tactics Used on Twitter

Tactic	1	2	3	4	5	6	7	8
1 Self Enhancement	1	-.07**	-.38**	.08**	-.05*	-.05**	.10**	.03
2 Routine Communication		1	-.16**	-.01	-.02	-.01	.06**	-.02
3 Frame the Crisis			1	-.29**	-.10**	-.56**	-.22**	-.08**
4 Frame the Organization				1	-.00	.26**	.27**	.07**
5 Anti-Social/ Defensive					1	.00	-.03	-.01
6 Accommodative						1	.15**	.06**
7 Excellence/ Renewal							1	-.00
8 Interorg. Relationships								1

Notes: N = 2728, * = significant at the .05 level; ** = significant at the .01 level

Table 8

Regression Model for Affirming Amplification Strategy in Press Releases

Regressor	Model 1			Model 2			Model 3		
	Beta	SE	*t*	Beta	SE	*t*	Beta	SE	*t*
Intercept	-75.02	21.89		-68.15	20.33		-50.25	22.27	
Message Date	.30	.00	3.50***	.27	.00	3.43***	.20	.00	2.29*
PI: Status Updates				-.25	.06	-2.94**	-.18	.06	-2.24*
PI: Compensation				.20	.10	2.28*	.10	.10	1.13
I: BP Response to Criticism							.12	.07	1.40
I: Spill Impacts on People							.06	.07	.62
I: Compensation							.12	.08	1.14
I: Bad PR							-.01	.08	-.15
I: Govt response & regulation							.03	.06	.32
I: BP Cost of Clean Up							.18	.08	1.95*
I: Environmental Impacts							.25	.07	2.72**
F	12.27***			12.24***			10.35***		
ΔF				11..22***			7.57***		
R^2	.09			.23			.47		
$R^2_{adj.}$	.08			.21			.43		
R^2 change				.14			.24		
df	1, 124			3, 122			10, 115		

Notes. * *p* < .05, ** *p* < .01, *** *p* < .001. PI denotes Primary Issue. I denotes Issue

Table 9

Regression Model for Invoking Interorganizational Relationships in Press Releases

Regressor	Model 1			Model 2			Model 3		
	Beta	SE	t	Beta	SE	t	Beta	SE	t
Intercept	-86.41	29.69		-82.53	29.30		-35.94	34.50	
Message Date	.26	.00	2.96**	.25	.00	2.88**	.11	.00	1.07
PI: Status Updates				-.19	.09	-2.20*	-.10	.11	-.97
I: Status Updates							-.05	.13	-.39
I: Spill Impacts on People							.15	.09	1.63
I: Bad PR							.15	.14	1.36
I: Govt response & regulation							.19	.09	2.11*
F	8.78**			6.94***			4.34***		
ΔF				4.84			2.84		
R^2	.07			.10			.18		
$R^2_{adj.}$	.06			.09			.14		
R^2 change				.04			.08		
df	1, 124			1, 123			4, 119		

Notes. * $p < .05$, ** $p < .01$, *** $p < .001$. PI denotes Primary Issue. I denotes Issue

Table 10

Regression Model for Image Oriented Strategy on Facebook

Regressor	Model 1 Beta	SE	t	Model 2 Beta	SE	t	Model 3 Beta	SE	t
Intercept	11.96	2.35		12.76	2.82		12.61	2.27	
Message Date	-.11	.00	-4.55***	-.12	.00	-5.00***	-.12	.00	-5.17***
PI: Status Updates				.09	.02	3.07**	.14	.02	4.21***
PI: BP Leadership				.05	.05	2.16*	.06	.05	2.55*
PI: Compensation				.05	.03	1.88	-.01	.04	
PI: Govt response & regulation				-.10	.04	-4.18***	-.10	.05	-.31
PI: Environment				-.14	.03	-5.02***	-.10	.03	-3.22***
I: Spill Impacts on People							.07	.02	2.51*
I: Compensation							.09	.04	2.25*
I: Govt response & regulation							-.12	.03	-4.04***
I: Congressional Hearings							-.06	.10	5.59**
F	20.68***			21.68***			16.74***		
ΔF				21.65			8.76		
R^2	.01			.07			.09		
$R^2_{adj.}$	.01			.07			.08		
R^2 change				.06			.02		
df	1, 1782			5, 1777			4, 1773		

Notes. * $p < .05$, ** $p < .01$, *** $p < .001$. PI denotes Primary Issue. I denotes Issue

Table 11

Regression Model for Accommodative Strategy on Facebook

Regressor	Model 1			Model 2			Model 3		
	Beta	SE	*t*	Beta	SE	*t*	Beta	SE	*t*
Intercept	51.10	10.22		42.83	9.89		44.40	9.62	
Message Date	-.12	.00	-4.87***	-.10	.00	-4.18***	-.10	.00	-4.56***
PI: Status Updates				-.09	.02	-3.70***	.01	.03	.47
PI: Compensation				.25	.04	10.25***	.18	.06	4.81***
PI: Bad PR				-.07	.07	-2.78**	.01	.15	.13
PI: Govt response & regulation				-.07	.06	-2.93**	-.02	.06	-1.06
I: Spill Impacts on People							.17	.03	7.31***
I: Compensation							.14	.05	3.77***
I: Bad PR							-.02	.14	-.45
I: BP's Cost of Clean-up							.08	.06	3.70***
I:Environmental Impacts							.17	.02	7.23***
I: Congressional Hearings							-.03	.14	-1.37
F	23.68***			40.73***			33.16		
ΔF				44.42			24.181		
R^2	.01			.10			.17		
$R^2_{adj.}$	.01			.10			.17		
R^2 change				.09			.07		
df	1, 1774			4, 1770			6, 1764		

Notes. * $p < .05$, ** $p < .01$, *** $p < .001$. PI denotes Primary Issue. I denotes Issue

Table 12

Regression Model for Excellence Strategy on Facebook

Regressor	Model 1			Model 2		
	Beta	SE	t	Beta	SE	t
Intercept	1.76	.22		1.17	.32	
PI: Status Updates	.08	.03	2.56*	.15	.04	4.22***
PI: Spill Impacts on People	-.07	.04	-2.63**	.03	.04	-1.16
PI: BP Leadership	.07	.08	2.67**	.07	.09	2.25*
PI: Other BP Issues	-.06	.14	-2.50*	-.07	.29	-1.50
PI: Environmental Impacts	-.11	.04	-3.90***	-.07	.05	-1.79
I: BP Leadership				.04	.07	1.30
I: Compensation				.11	.04	3.85***
I: Other BP Issues				.02	.30	.51
I:Politics				-.04	.14	-1.62
I: BP's Cost of Cleanup				.07	.06	3.09**
I: Environmental Impacts				.04	.02	1.26
F	14.56***			9.86***		
ΔF				5.75		
R^2	.04			.06		
$R^2_{adj.}$	.04			.05		
R^2 change				.02		
df	5, 1776			6 1770		

Notes. * $p < .05$, ** $p < .01$, *** $p < .001$. PI denotes Primary Issue. I denotes Issue

Table 13

Regression Model for Corrective Strategy on Twitter

Regressor	Model 1			Model 2			Model 3		
	Beta	SE	*t*	Beta	SE	*t*	Beta	SE	*t*
Intercept	-24.39	3.75		-22.31	3.65		-25.22	3.72	
Message Date	.13	.00	6.82***	.12	.00	6.23***	.13	.00	6.89***
PI: Status Updates				-.13	.03	-2.35*	-.07	.03	-1.10
PI: BP Response				.09	.04	3.76***	.08	.04	3.24***
PI: Spill Impacts				.10	.02	2.67**	.05	.04	.82
PI: BP Leadership				.04	.05	2.09*	-.04	.23	-.42
PI: Compensation				.21	.03	5.98***	.06	.05	1.04
PS: BP's Cost of Cleanup				.11	.04	4.85***	.02	.08	.45
PI: Environmental Impacts				-.05	.03	-1.28	-.02	.03	-.36
PI: Congressional Testimony				.05	.04	2.45*	.02	.05	.90
I: Status Updates							.01	.01	.43
I: Spill Impacts							.10	.03	2.60**
I: BP Leadership							.10	.22	1.04
I: Compensation							.19	.03	4.42***
I: Govt Response & Regulation							.04	.03	1.66
I: BP's Cost of Clean-up							.10	.06	2.67**
I: Congressional Hearings							.04	.04	1.27
F	46.48***			50.42***			31.40***		
ΔF				50.08			6.09		
R^2	.02			.14			.16		
$R^2_{adj.}$	.02			.14			.15		
R^2 change				.13			.01		
df	1, 2715			8, 2707			7, 2700		

Notes. * *p* < .05, ** *p* < .01, *** *p* < .001. PI denotes Primary Issue. I denotes Issue

Table 14

Regression Model for Self-Enhancement Strategy on Twitter

Regressor	Model 1			Model 2			Model 3		
	Beta	SE	*t*	Beta	SE	*t*	Beta	SE	*t*
Intercept	-49.15	4.49		-37.94	4.53		-37.85	4.59	
Message Date	.21	.00	11.19***	.16	.00	8.55***	.16	.00	8.51***
PI: Status Updates				-.05	.03	-1.05	.00	.03	.06
PI: BP Response				-.02	.04	-.77	.01	.06	.40
PI: Spill Impacts				.19	.03	5.83***	.17	.05	3.93***
PI: Compensation				-.05	.03	-1.68	.02	.05	.36
PI: Bad PR				.05	.07	2.39*	.02	.07	1.48
PI: Environmental Impacts				.10	.03	3.05**	.11	.05	1.99*
PI: Congressional Testimony				-.01	.05	-.54	-.02	.06	-.69
I: Status Updates							-.16	.02	-5.64***
I: BP Response							-.05	.05	-1.69
I: Spill Impacts							-.03	.03	-.63
I: Compensation							-.12	.04	-2.77**
I: Govt Response & Regulation							-.03	.03	-1.12
I: Environmental Impacts							-.04	.04	-.92
I: Congressional Hearings							.01	.05	.04
F	125.15***			39.18***			24.29***		
ΔF				25.76			6.61		
R^2	.04			.10			.12		
$R^2_{adj.}$	.04			.10			.11		
R^2 change				.06			.02		
df	1, 2715			7, 2708			7, 2701		

Notes. * $p < .05$, ** $p < .01$, *** $p < .001$. PI denotes Primary Issues. I denotes Issue

Table 15

Regression Model for Defensive Strategy on Twitter

Regressor	Model 1			Model 2			Model 3		
	Beta	SE	*t*	Beta	SE	*t*	Beta	SE	*t*
Intercept	10.91	2.61		4.37	2.49		-.39	2.44	
Message Date	-.07	.00	-3.79***	-.03	.00	-1.68	.01	.00	.28
PI: Status Updates				-.03	.01	-1.68	-.03	.01	-1.20
PI: BP Response				.35	.02	19.07***	.16	.03	6.18***
PI: Other BP Issues				.10	.07	5.46***	.10	.12	3.06**
PI: Congressional Testimony				.05	.03	2.97**	-.12	.03	-5.07***
I: Status Updates							.03	.01	1.21
I: BP Response							.19	.03	7.53***
I: Other BP Issues							-.04	.10	-1.36
I: Govt Response & Regulation							.03	.02	1.38
I: Congressional Hearings							.26	.03	9.95***
F	14.34***			89.21***			72.02***		
ΔF				107.37			47.24		
R^2	.01			.14			.21		
$R^2_{adj.}$	.01			.14			.21		
R^2 change				.14			.07		
df	1, 2723			4, 2719			5, 2714		

Notes. * $p < .05$, ** $p < .01$, *** $p < .001$. PI denotes Primary Issue. I denotes Issue