The NFL and Its Concussion Crisis: Adapting the Contingency Theory to Examine Shifts in Publics' Stances

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The National Football League (NFL) is immersed in a serious conflict involving a disease called Chronic Traumatic Encephalopathy (CTE), and conflict appears to have manifested into a crisis with the release of Sony Motion Picture's film *Concussion*. This study uses the contingency theory of conflict management, which explains how an organization adopts toward a given public. No research has been done to identify if various unorganized publics can develop stances like an organization. A quantitative content analysis of 1,035 tweets about the movie and the NLF concussion issue was done immediately before and after the movie's release. Findings revealed some initial evidence that publics can develop a stance. In particular, most of the publics favored the movie and assumed a hostile stance toward the NFL. Only the health community revealed a stance suitable for cooperating with the NFL on the issue.

Keywords: crisis communication, contingency theory of conflict management, public relations, sports communication

The release of the Sony Motion Picture's film, *Concussion* is a crisis tipping point in a serious long-term conflict facing the National Football League (NFL), American football, and the numerous industries it supports. The movie is highly critical of the NFL, highlighting the discovery of Chronic Traumatic Encephalopathy (CTE) in deceased NFL players. It negatively portrays the NFL's sub-optimal response to the conflict as nefarious. The ability of motion pictures and other forms of popular media to shape public opinion is well established (Turner, Foley, Kinsella, O'Callaghan, & Clarke, 2014). Magnifying the seriousness of the CTE crisis is that it threatens an entrenched American cultural institution and a very profitable industry. The NFL has over a hundred million fans of varying loyalties across the US and a growing global fan base (Associated Press, 2014). Thus, understanding the reaction of various publics to *Concussion* is vital for the NFL to understand in order to adopt the optimal stance toward them.

Literature Review

The NFL was founded in 1920 for American football and was composed of 32 US based teams. Controversy has accompanied prosperity as the NFL is perpetually plagued by player misconduct that garners outsized media attention. Hazing and homophobia are prevalent as the league seemingly ignores the problem

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(O'Mahoney, 2014). However, the NFL has managed to thrive despite these crises. Scholars have paid scant attention to the NFL despite the richness of communication phenomena the league generates.

Concussions and CTE

CTE is a progressive neurodegenerative disease that occurs in association with repetitive concussions (Stein, Alvarez, & McKee, 2014). It was discovered in 2009 by Bennet Omalu, the movie's protagonist represented by Will Smith, during the autopsy of retired NFL legend Mike Webster. It has since been discovered in athletes who played other contact sports and soldiers who survived explosions during combat. The prognosis for people with CTE is very grim given the lack of effective treatments and the current state of research (Mez, Stern, & McKee, 2013).

The only known treatment for CTE is prevention and some athletes and parents are choosing this option. Youth participation in football is declining nationwide and some states have even begun to regulate the conduct of high school football teams (Baker, 2016).

The CTE issue is not new for the NFL as it was officially recognized in 1994 with the formation of the Mild Traumatic Brain Injury Committee. It was headed by physicians with no expertise in head injuries. It was formed in response to the complaints of retired players filing disability claims (Keating, 2006). The crisis took on a new life with a 2009 exposure by *Gentleman's Quarterly*, which subsequently inspired the *Concussion* movie (Laskas, 2009). Subsequently, a number of retired players filed a class action lawsuit against the league for compensation in 2011, which was settled in 2015.

Crisis Communication and the Contingency Theory

A crisis is a significant event with negative outcomes that affects an organization, company, industry, public, or products and services (Fearn-Banks, 2002). A crisis creates a demand for information amongst various publics who will seek information out if it is not provided to them. Publics process this information to create knowledge, which they subsequently share with others (Coombs, Frandsen, Holladay, & Johansen, 2010). Conflict and controversy portrayed in the media can exert a profound influence on public opinion. This could exponentially complicate the public dialogue during a crisis (Ven-hwei, Ran, Hung-Yi, & Hsin-Ya, 2015). Public relations practitioners are in a unique position to shape publics' reactions to a crisis by providing them with relevant information in a timely manner.

The contingency theory of conflict management assumes that organizations must adapt their public relations activities to the reality of its situation (Cancel, Cameron, Sallot, & Mitrook, 1997). For instance, when faced with misinformation by antagonistic activists, an organization might adopt a purely advocative stance that is antithetical toward its opponents. A pure accommodative stance would be appropriate when compromising with opponent's demands is warranted by organizational malfeasance. Contingency theory acknowledges that an organization's chosen stance is determined by a mix of internal and external factors. Some of these factors, like regulatory constraints, are specific to organizations. However, other factors, like moral conviction, could apply to unorganized or semi-organized publics (Cameron, Cropp, & Reber, 2001). Some publics could feel compelled to adopt an advocative stance against the NFL on moral grounds (Cancel et al., 1997).

RQ (Research Question) 1: Did any of the unorganized or semi-organized publics, which might have a stake in or opinion toward the NFL concussion issue, adopt a clearly identifiable stance toward the NFL?

Twitter Usage During a Crisis

Research has demonstrated that Twitter is an effective communication tool used by a variety of people

during all kinds of crises. During a 2011 earthquake in Japan, the public leveraged Twitter to coordinate relief actions independent of the government (Cho, Jung, & Park, 2013). Thus, Twitter empowers publics to completely ignore and circumvent formal communication from government authorities, corporations, and other organizations. Twitter is essentially a micro blogging platform that allows users to send short messages of 140 characters or less, while also embedding hyperlinks and photographs. A researcher is able to analyze several aspects of the tweet. The source of the tweet can usually be determined by analyzing the profile of the Twitter user, unless they choose to be vague. In particular, the subject, valence, and any embedded links are accessible for analysis (Poynter, 2010). Thus, the following research questions are posed:

RQ 2: What is the specific subject or focus of tweets including the hashtag "#Concussion Movie" or the words "NFL" and "concussion"?

RQ 3: What is the valence—positive, negative, or neutral, toward the NFL or the *Concussion* movie of the tweets?

RQ 4: What types of links will members of various publics embed in their tweet to support their views on the NFL-CTE crisis?

Methodology

This study uses a quantitative content analysis to examine if any of relevant publics adopted an identifiable stance to the NFL-CTE crisis in the wake of the *Concussion* movie. Quantitative content analysis is an observational method employed to systematically analyze symbolic content of recorded communication (Wimmer & Dominick, 2011). Some subjective evaluation of the data by the researchers is necessary, but this is mitigated by standardizing codes, using multiple coders and testing reliability (Wrench, Thomas-Maddox, Richmond, & McCroskey, 2013).

The unit of analysis for this project was an individual tweet; responses from other Twitter users were ignored. The time frame for the sample collections was December 20, 2015 to January 1, 2016, a period of 13 days. The movie was released on the December 25; most of the sample was collected from the seven days after the movie's release. The researchers used Twitter advanced search to collect all tweets including the search terms: "concussion movie", "NFL concussions", "football concussions", and the hashtag "#Concussion Movie". A population of over 3,000 tweets was gathered and from these, a third of them were randomly selected sample size of (n = 1,035). Two coders were employed to code all tweets. Inter-coder reliability was calculated using Holsti's formula for 0.88 agreements.

Four coding categories were developed for this project: (1) public or source creating the tweet; (2) subject of tweet; (3) valence of tweet; and (4) the type of external link, if one was present. Some of the tweets had two subjects and two valences. The first category was the source of the tweet, which was determined by examining the tweet and the user's profile page. Publics were categorized into five publics categorized by their detectable stake in the NFL-CTE issue: journalists; lay public or private individuals; athletes; celebrities or influencers; lawyers and members of the health community. Members of the lay public were classified as such because no aspects of the user's revealed identity indicated that they had any personal stake (i.e., self-promotion, covering a news story, reviewing the *Concussion* movie, etc.) in the issue. Journalists included all types of journalists and support staff. The third public was the athletic community, which included current and former football players, coaches, parents of current athletes, and athletes from other sports (hockey and rugby, among others). This group has a personal stake in the concussion issue through their participation in sports that could cause

concussions. The fourth public was the health community including identifiable physicians, nurses, therapists, health advocacy organizations, charities, research companies, etc. The fifth public was classified as influencers as it included celebrities. Finally, some lawyers and law firms commented because of their involvement in related litigation.

The subject of the tweet was then coded. The first subject was the movie itself, which included tweets that mentioned Bennett Omalu (the M.D. who discovered CTE) and Will Smith (who played the role of Omalu in *Concussion*). The second subject was the NFL, which included specific mentions of teams, players, games, rules, and protocols. The third subject was the concussion issue and its role in sports. This ranged from discussion of CTE facts and research updates, comments from parents, etc. The valence of the tweet as it was directed toward the subject was the next coding category: positive, negative, or neutral. Finally, if the source included a link to an external site, the link was coded. The categories included links to: movie reviews, hard news stories (from professional news outlets), public relations and promotional material, blogs and related opinion-type websites, and health advocacy information.

Findings

The most common source of tweets was from the lay public at 44.5% of the sample. The health community came in second at 18.5%, followed closely by the journalist community at 18.1%. The athletic community represents 8.9%, while influencers were 6.6%. The legal community (3.5%) rounded out the sample. A chi-square test for independence of categorical values upon publics, subject, and valence, revealed significant with a calculated value ($X^2 = 214.514$, $p < 0.05$), as compared with the expected value of 207.223.

Research Question Two

Research question two asked: What are the subjects of the tweets? And these results are summarized in Figure 1. Examining this particular variable more closely, a separate chi-square goodness of fit test revealed ($X^2 = 125.675$, $p < 0.05$) which is a statistically significant difference among the movie, NFL, and the concussion issue. The *Concussion* movie was the topic of most tweets at 48.5%. It was clear that the dominant topic was for the lay public, journalists, athletes, and influencers. Its observed frequency was 502, which was higher than the expected frequency of 345.

The concussion issue (31.2%) and related safety and health concerns was the second most salient subject, but it occurred less frequently than statistical expectations ($F_o = 323$, $F_e = 345$). It was the dominant issue for the health community (67%) and the legal community (55.5%). For the athletic community (31.5%) and journalists (25.6%), the concussion issue merited more than one-quarter of their attention. The NFL (20.3%) received the least attention ($F_o = 210$, $F_e = 345$) from all of the publics sampled. Only the lay public (27.1%) and the influencers (23.5%) gave the NFL more than one-fifth of its attention.

Research Question Three

Research question three asked: What is the valance of these tweets? The results for valence are displayed in Figure 2 and matched against the subject of the tweet. In general terms, the *Concussion* movie received more (54%) positive tweets than negative (26.7%) ones. According to the chi-square test for independence of categorical values ($F_o = 288$, $F_e = 215$), the number of positive tweets about the movie exceeded statistical expectations. The influencers were the most positive about the movie, dedicating 45.5% of their tweets to make positive statements about it. The journalists (31%) and lay public (28.6%) followed in their admiration of the

movie. In contrast, the little attention that the NFL did receive was overwhelmingly negative (76.1%). Statistically, the NFL received far more negative tweets than expectations ($F_o = 160$, $F_e = 78$). The lay public (22.1%) and journalists (15%) had the most total negative tweets about the NFL. The broader issue of concussions and sports safety received a relatively equal mix of positive (39%), negative (28%), and neutral (32%).
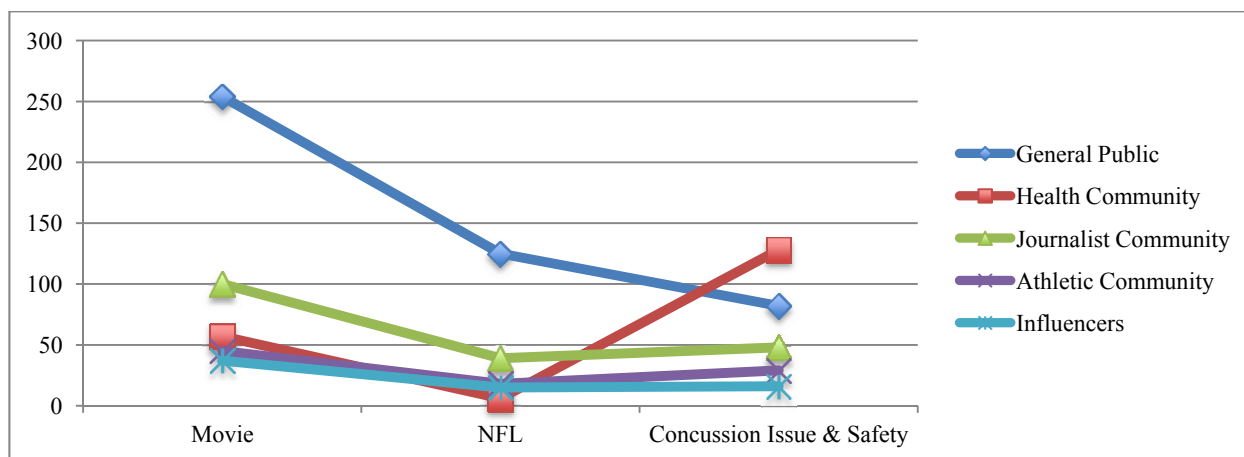

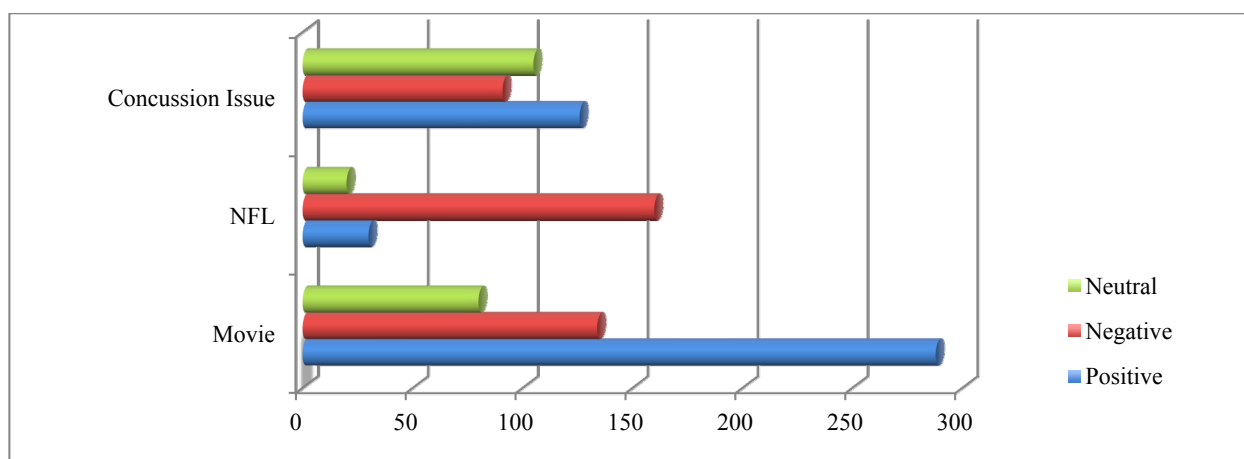*Figure 1.* Direction of sources tweets.

Figure 2. Subject and valence.

Research Question Four

Research question four asked: What types of links will members of various publics embed in their tweet about the NFL-CTE crisis? The health community embedded the most links ($n = 143$) in their tweets, followed by journalists ($n = 136$), the lay public ($n = 93$), and influencers ($n = 40$). Most of these links (34%) were to hard news articles or videos about the issue from journalists, although movie reviews from all sources were 18%. Unsurprisingly, journalists linked the most to news sites ($n = 51$) and to movie reviews ($n = 30$). The general public followed this pattern, linking to news ($n = 42$) and movie reviews ($n = 23$). Links to promotional material advocating for goods and services related to the issue composed 19% and blog posts about the topic were 11%. Health advocacy messages composed just 17% of links. The health community contributed 59% of these links while journalists contributed 15%.

Research Question One

Research question one asked: Did any of the publics adopt a clearly identifiable stance toward the NFL-CTE issue? Based on the data gathered from Twitter, four of the six publics appear to have an advocative stance against the NFL and the concussion problem. Of these four, the lay public was most clearly advocative against the NFL. This is inferred from the overwhelmingly positive response the movie has received. Since the movie is anti-NFL and essentially in competition with the NFL, public support might indicate hostility toward the NFL. When the overwhelmingly negative attention directed toward the NFL is considered, this stance becomes more probable.

The health community was the least hostile toward the NFL and appeared to have adopted a mildly accommodative stance. Judging from their links, they were concerned about disseminating health information. The valence of their tweets appeared to be linked with what the source was attempting to accomplish. If they were promoting CTE research, the tweet was generally positive. If the source was trying to issue a warning about the risks of concussion then it was generally negative. Finally, the legal community displayed an accommodation strategy with the most concern about the concussion issue while not establishing a firm stance toward either the movie or the NFL.

Discussions and Conclusions

The NFL continued to remain silent about the *Concussion* movie for several weeks after the study terminated. This is despite an admission by the NFL, via a panel of physicians, that the number of concussions increased during the 2015 regular season. It is highly probable that they are employing a public relations strategy of strategic ambiguity. Ambiguous messages have multiple meanings that are indistinct, incoherent, or fragmented. Thus, no single meaning offers an optimal coherent interpretation (Alvesson & Sveningsson, 2003). Strategic ambiguity is the intentional employment of ambiguous messaging to achieve strategic goals by individuals and organizations (Jarzabkowski, Sillince, & Shaw, 2010). Strategic ambiguity could afford the NFL a space in which multiple stakeholders could derive their own unique interpretations of the message.

Stances of Publics

The general stances of the publics analyzed here are represented in Figure 3. The stances of the lay publics, journalists, influencers, and athletes appear to range from arguing to contending. These positions are inferred from the trends analyzed above in the findings. For the NFL, this is not a good sign. The fact that journalists and influencers favor the movie might indicate that they will communicate their discontent with the NFL in news coverage of the issue. Influencers from within the entertainment industry might express their disapproval of the NFL in media content they help to produce.

Analyzing the lay public, it is very probable that *Concussion* will influence their beliefs about the CTE issue and the NFL. If these beliefs are reinforced with other similar media, the NFL may face a difficult challenge of maintaining their relationships with the general public. Furthermore, the lay public appears to be attentive to player misconduct that exacerbates the issue. Many negative tweets about the NFL were in reference to reckless aggression by Odell Beckham during a game and the NFL's minimal punishment of him. Dangerous aggression by other players was noted as well in similar tweets.

The study does reveal an opportunity for cooperation and collaboration with the health community over the concussion issue. The health community benefits from research funds allocated to CTE research and

concussion prevention. A number of tweets hostile to the NFL specified anger with a December 23 news story that the NFL was withdrawing from its commitment to fund a CTE study for Boston University (O'Keeffe, 2015). This stance does not imply that the health community approves of the NFL or football, but it does indicate a willingness to cooperate on the issue.
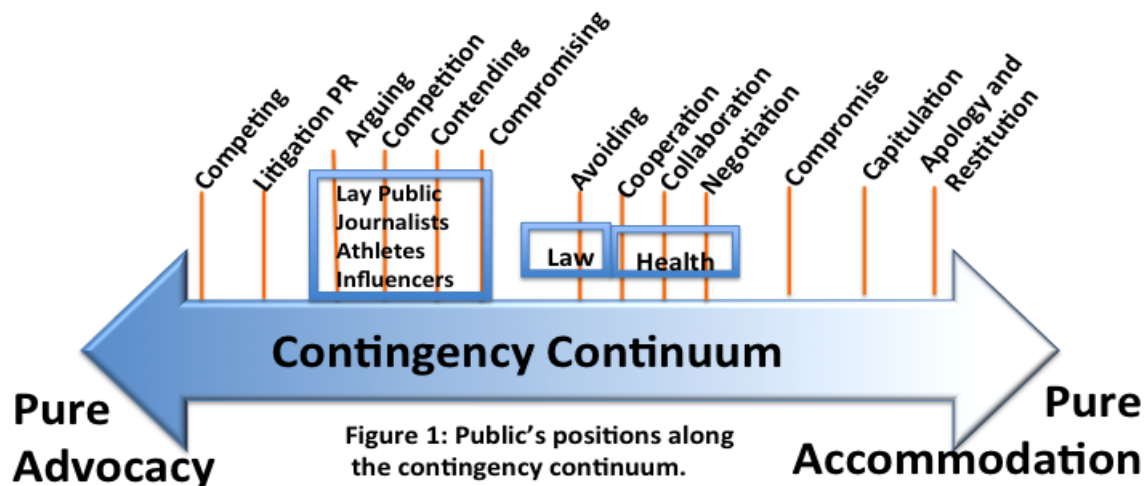

Figure 3. Public's positions along the contingency continuum.

Limitations

Ascertaining the stances adopted by various publics has proven to be difficult based upon the analysis of tweets collected in this study. Part of the difficulty lies with the diversity of opinions within unorganized and semi-organized publics. A single organization or industry that is unified can adopt an easily identifiable stance. Determining the stance of organized publics from social media is a process of inference from general trends. This is an imprecise process that cannot determine stance with the same precision as surveys or experimentation. Despite the limitations of this study, it is still possible to determine general attitudes of various publics.

Further complicating this study was the NFL's no comment policy on social media. The NFL simply did not engage the public on social media and there was no subsequent dialogue. If the NFL did engage the public in a dialogue, the study might have cultivated a much richer body of evidence; stances of the publics might have been more easily ascertained. Future studies should examine an actual and vibrant dialogue between an organization and its publics on social media. Surveys and experimentation might also provide evidence of unorganized and semi-organized publics adopting a stance.

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