A strategic approach to sports crisis management

Assessing the NFL concussion crisis from marketing and public relations perspectives

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Abstract

Purpose – Using the National Football League (NFL) concussion crisis context, the purpose of this paper is to provide sports marketers with a strategic approach to sports crisis management through consideration of crisis media coverage and organizational reputation.

Design/methodology/approach – An online experiment assessed the impact of two crisis response strategies, fan involvement and exposure to crisis media coverage on emotional response, corporate message credibility, crisis perception and perceived corporate reputation.

Findings – The accident response strategy was associated with more favorable perceptions of the NFL and corporate message credibility. Sports fan involvement facilitated more favorable perceptions of the NFL's reputation, while exposure to media coverage of the NFL's crisis created negative perceptions of the NFL's reputation. Exposure to media coverage of the NFL concussion crisis increased feelings of anger, which in turn decreased perceptions of corporate message credibility.

Research limitations/implications – A limitation for this study is the specific crisis scenario that was used. The NFL concussion crisis is different from other crisis types in that it does not directly impact the audience's well-being, but instead affects their perceptions of an iconic institution.

Practical implications – In light of study findings, it is suggested that sports marketers consider the following when dealing with crises: carefully determine proper framing methods when crafting a crisis response as different response types affect consumers in different ways; leverage public relations (PR) practices by engaging in media monitoring to inform an appropriate crisis response to control the narrative; and examine forces external of the organization that influence consumer emotions, paying special attention to feelings of anger as anger negatively impacts consumer perceptions of corporate credibility.

Originality/value – This paper addresses sports crisis strategy from both marketing and public relations perspectives. It describes how strategic efforts protect a sports organization's reputation, thus increasing marketing effectiveness.

Keywords Emotion, Media, Sports marketing, Reputation, Crisis communication

Paper type Research paper

Executive summary

The National Football League (NFL) continues to experience significant conflict and pushback from key audiences including sports fans, parents of children playing contact sports and the media. These crisis situations include Colin Kaepernick's protest of the National Anthem, which has negatively impacted the NFL's marketing efforts (McCarthy, 2016, para. 2), and the continuously evolving issue of concussions among NFL players. *Fortune* has declared NFL

concussions an "existential crisis for America's most popular sport" (Huddleston, 2017, para. 2) and Orr (2015) claimed it a "marketing nightmare" (p. 1735).

This specific crisis situation of NFL player concussions provided a unique opportunity to theoretically and practically assess factors that influence audience crisis perceptions, as well as the NFL's reputation. The purpose of this paper was to test different crisis response strategies and understand how emotional response affects evaluations of message credibility and organizational reputation, among other variables. Ultimately, this study sought to inform sports marketers of a more comprehensive marketing approach during times of crises that incorporates best practices from public relations (PR) perspectives to strategically support marketing efforts.

This study was informed by the Integrated Crisis Mapping (ICM) model, which accounts for emotional response from audiences to inform a crisis management strategy (Jin *et al.*, 2010). A web-based experiment assessed the impact of two crisis response strategies (accident message vs equipment failure message), sports fan involvement and exposure to crisis media coverage on emotional response, perceived organizational engagement, corporate message credibility, crisis perception and perceived corporate reputation. A total of 304 participants were part of the study and regression analyses assessed the influence of the independent variables on the dependent variables.

Findings revealed that sports fan involvement facilitates positive perceptions of the NFL's reputation, while audience exposure to media coverage of the NFL concussion issue is negatively associated with perceptions of the NFL's reputation. Additionally, exposure to media messages while a crisis is unfolding can enhance certain emotions among audiences, which then affect how they perceive a corporation involved in a crisis. In this case, exposure to media coverage of the crisis enhanced peoples' feelings of anger, which negatively impacted how they perceived the organization's crisis response.

It is suggested that sports marketers leverage PR practices by engaging in media monitoring to assess how a crisis situation is being covered by the media, as well as audience's emotional response to sports crisis situations. Taking emotional reactions into account can inform a strong crisis management strategy in order to protect organizational reputation and increase effectiveness of marketing efforts.

Introduction
The NFL is an American institution valued at more than \$60bn (Gaines, 2015), with the world's most valuable sports team being the NFL's Dallas Cowboys, valued at \$4.8bn (Forbes, 2018). The NFL continues to experience crises that have garnered significant media attention, including the Ray Rice domestic violence scandal, which was described as a mismanaged crisis by the NFL (Richards *et al.*, 2017) and the National Anthem protest, which the NFL has chosen to officially ignore (Barca, 2018, para. 1).

Although the NFL has, in many cases, been unsuccessful in managing crisis situations, its marketing efforts appear to positively influence consumers. For example, Ioakimidis (2010) found that the NFL utilized new media marketing tactics, including video, interactive websites and social media, far more than any other professional sports league. These efforts facilitate positive relationships with fans by providing valuable content. Cause-related marketing, such as the NFL's Pink Campaign to support the American Cancer Society, provides fans an opportunity to engage with the NFL on a more personal, meaningful level (Nichols *et al.*, 2016). Additionally, unique marketing tactics to engage youth include branded virtual worlds and advergames that produce longtime loyal fans particularly valuable to the NFL (Montez de Oca *et al.*, 2016).

The issue that arises here is that despite successful marketing efforts, crisis situations, such as those previously discussed, put the success of those strategies in jeopardy. In fact, these crises have negatively impacted the NFL's marketing efforts (McCarthy, 2016, para. 2).

A dangerous and lingering crisis (Heinze and Di, 2017) – one that has potential negative implications on the NFL's economic viability – is that of player concussions.

Orr (2015) suggests that marketing strategies should be inacted to mitigate the negative financial impact this issue will have on the NFL and the sport of football as a whole. Due to consumers' and media's increasing critical focus on concussions in football and the issue's potential economic and financial impact, there is an opportunity to learn from this situation through rigorous marketing and PR academic lenses by assessing reactions to and perceptions of the NFL in light of this controversy. The crisis situation of NFL player concussions serves as a unique case to apply in academic research because it is very dynamic, dating back to 1994, when the Mild Traumatic Brain Injury Committee was created by NFL Commissioner Paul Tagliabue (CNN, 2018). Since then, the issue has continued to develop and evolve: in 2007, scientific research showed concussed NFL players have a risk of depression and the NFL responded by hosting a concussion summit; in 2009, scientists hold a press conference, where sports reporters gathered for the Super Bowl, and announce new cases of CTE in former NFL players; the NFL sees a rise in concussions by 14 percent in 2012 (Ezell, 2013); in 2013, the NFL announced new concussion safety measures and agree to a $765m settlement over lawsuits among retired NFL players and their families (Associated Press, 2013); the issue was brought to the forefront of public and media attention with the release of the major motion picture concussion, starring Will Smith, in 2015. Most recent developments to prevent traumative head injuries include new kickoff rules and revised hemlet regulations implemented in 2018 (Seifert, 2018).

Emotions are at the foundation of interpretations of crisis situations (Jin *et al.*, 2010). Jin *et al.* (2007) developed the ICM model to guide professionals as they account for audience emotions during a crisis. The ICM model has been used retrospectively to examine where crisis cases are categorized within each of its four quadrants based on interpretations of emotional responses and their coping strategies, as well as organizations' crisis engagement.

The NFL concussion crisis presents a platform to expand the ICM because it is ongoing, has national media coverage and involves a large number of stakeholders ranging from fans to consumers watching the game to corporate sponsors. In an attempt to advance the ICM theoretical model, this study adapted it as a strategic marketing and PR message framing decision tool and as a diagnostic for developing an organization's position.

Ultimately, this study sought to inform sports marketers of a more comprehensive marketing approach during times of crisis that incorporates best practices from PR perspectives to strategically support marketing efforts. The overarching purpose of this study was to embrace the complexity and dynamics of the NFL concussion crisis to test the validity of the ICM model, paying particular attention to emotional response. The effects of message response and exposure to the concussion issue on variables that have consequences for marketing and PR strategies were also evaluated. These variables included perceived corporate message credibility, perceived organizational engagement, crisis perception and perceived corporate reputation.

Literature review
The national football League's concussion crisis
The NFL has enjoyed a dominant position in the American sports and entertainment market for some time, which has paid off for team owners and league executives. The NFL has effectively capitalized upon individual players' success through profitable corporate sponsorships (Pasqualicchio *et al.*, 2017) and through exceptional bargaining power to obtain public funds for stadiums (O'Reilly, 2008).

However, the NFL's various scandals and ineffective management of them have created serious marketing vulnerabilities that weaken the league to competitive challenges to their market domination. The TV ratings for National Basketball Association and Major League

Baseball have rapidly grown in the past few years, as the NFL experiences a decline (Morgan, 2017, para. 5). Research shows that NFL markets have significantly overlapping audience segments with other sports leagues. Viewers switch between games dependent on team specific factors, such as surveilling rivals, and if other leagues are broadcasting at the same time (Mondello *et al.*, 2017). Thus, fans have options and they appear to be exercising them.

Research has identified that the NFL has sufficient cultural capital to survive some very serious scandals like domestic abuse committed by its players (Richards *et al.*, 2017). However, multiple and sustained crises could eventually erode this enormous cache of reputational capital. The National Anthem protests have caused ticket sales to decline by up to 30 percent for some teams and TV viewership dropped by over 10 percent from most teams (King, 2017). The negative effects of the anthem crisis are intensified by a previous crisis where the NFL was caught accepting millions of dollars from the US Government to honor the military. From viewers' perspectives, the NFL should have offered this service for free (Koesters *et al.*, 2017). Previous research clearly demonstrates that a pattern of irresponsible behavior by the NFL toward veterans and patriotic fans will greatly harm their reputation and reduce the effectiveness of future marketing initiatives (Coombs, 2007).

The issue of player concussions is a dangerous lingering crisis (Heinze and Di, 2017) that has evolved since 2009 when an NFL concussion feature story appeared in *GQ* (Laskas, 2009) and introduced the issue to a variety of consumer groups including NFL fans, families and critics. Since *GQ*'s 2009 feature story, the concussion issue has gained momentum due to popular culture and social media. In fact, *Fortune* has declared the issue an "existential crisis for America's most popular sport" (Huddleston, 2017, para. 2) and Orr (2015) claimed it a "marketing nightmare" (p. 1735).

Sony's 2015 motion picture concussion brought the issue to public attention while highlighting the NFL's sub-optimal response and consistent claims that there is no link between football and long-term head trauma (Fainaru-Wada and Fainaru, 2013). Concussion tells the story of Bennett Omalu, the doctor that discovered Chronic Traumatic Encephalopathy (CTE), a disease caused by repeated head trauma, in numerous deceased football players' brains. CTE is a progressive neurodegenerative disease that occurs in association with repetitive concussions and leads to memory loss, paranoia, aggression and sometimes suicide (Concussion Legacy Foundation, n.d.). It has been diagnosed in 110 former NFL players (Ward *et al.*, 2017, para. 1). However, it should be noted that there have been accusations that the depiction of Omalu's CTE discoveries in the film concussion were misrepresented and overexaggerated (Associated Press, 2015). The film illustrates Omalu as a pioneer in the field of discovering head trauma in NFL players, but a doctor interviewed by the Associated Press claims that these discoveries have "been around for decades" (Pulver, 2015, para. 2).

Heinze and Di (2017) found the NFL's response to the concussion issue transitioned over time from reactive strategies to proactive measures. The NFL has undertaken some rule changes to reduce the frequency of player concussions, but the evidence about this strategy's efficacy is unclear (Kelly, 2017). Evidence does show that if a concussion is properly treated, players can return to the game with their performance unaffected (Reams *et al.*, 2017). However, the occurrence of a concusion has been demonstrated to have serious negative financial impacts upon a player's career (Navarro *et al.*, 2017). Thus, the crisis influences not only general consumers and fans but current and former players as well.

It is well established that crises can cause damage to a company's marketing efforts in addition to its highly valuable and intangible assets such as brand equity (Dawar and Pillutla, 2000). The danger posed to the NFL's brand is the persistent nature of the concussion problem. Unlike player misbehavior where the memory of these crises will eventually fade, concussions are an inherent risk that will persist as long as it remains a contact sport.

The sport of football is ingrained in American culture and many consumers have a stake and involvement in the football industry; attending NFL football games and watching them

on television are common routines and traditions for families. However, one has to question how continuous negative coverage of concussions in football impacts the NFL. Through a content analysis of 1,035 tweets, Wilbur and Myers (2016) found that the concussion movie negatively affected perceptions of the NFL. However, a content analysis merely explains what people are saying, whereas a more advanced approach to research that illustrates outcomes of specific crisis management strategies would provide sports marketers with tangible best practices.

According to Fearn-Banks (2002) a crisis is, "a major occurrence with a potentially negative outcome affecting the organization, company, or industry, as well as its publics, products, services, or good name" (p. 2). Traditionally, crisis management strategies have been viewed as being driven by PR professionals; however, there is significant value in aligning marketing and PR strategies. While marketing and PR are often considered different disciplines in academia, in reality they are not as the emergence of marketing public relations (MPR) demonstrates. MPR activities are designed to support marketing objectives such as raising awareness, informing and educating target audiences, gaining understanding, building trust, giving consumers reasons to buy, and motivating consumer acceptance (Harris, 1991).

The concussion crisis presents the NFL and the sport of football in general with a significant PR and marketing threat (Heinze and Di, 2017; Wilbur and Myers, 2016; Orr, 2015). It is possible that the NFL has recently realized the importance of sound crisis management strategies. The NFL promoted an opening for a senior communications strategist whose primary responsibility is to provide crisis communications counsel to the league's executives and Bedard (2018) believes this job posting is a response to increasing disinterest among NFL fans.

Human emotions and crisis
Emotion is conceptually defined as a state of mental readiness in response to a person's appraisal of the environment and thoughts (Lazarus, 1991). Television viewing and involvement in sports-related activities is very much an experiential process that elicits feelings of pleasure, joy and excitement, also known as emotions (Lim *et al.*, 2010). There is a growing interest in the field of consumer research regarding the roles consumer emotions play in forming attitudes and influencing decisions (Laros and Steenkamp, 2005; Poels and Dewitte (2006).

Consumer emotions also have significant influence in crisis situations, such as those the NFL continues to experience. Nabi (2003) found that emotions influence the degrees of message processing, recall and judgment a person experiences. Kemp *et al.* (2014) found that when people realized they have limited control during a natural disaster, feelings of fear and anxiety manifest. The presence of positive emotions during a person's response to a crisis can facilitate rapid coping and prevent long-term health issues (Fredrickson *et al.*, 2003).

Sports marketers can leverage consumer emotions by examining them during crisis situations and developing response strategies to positively influence and change emotions. For example, how a story is framed can induce emotions such as fear and anger; when professionals take into account the specific crisis situation at hand and how it has been framed by the media, they can move forward with corporate response strategies that use emotional appeals to mitigate the crisis (Kim and Cameron, 2011). Anger in particular is apparent and prominent in social media reactions in response to crises (Utz *et al.*, 2013). When organizational spokespeople express genuine emotions of sadness or regret during a crisis, it can exert a positive impact in mitigating negative feelings and result in a more positive post-crisis organizational reputation (Claeys *et al.*, 2013). Thus it is evident that, during times of crisis, an organization should identify and leverage emotional upheavals that are felt by various audiences to craft more effective marketing and PR response strategies.

ICM model

Jin *et al.* (2007) developed the ICM model to guide professionals as they account for target audience emotions during a crisis. The ICM is rooted in the appraisal theory of psychology, which posits that a person's emotions derive from evaluations of events they experience (Scherer *et al.*, 2001). When a person is exposed to a crisis they appraise it cognitively in reference to how it impacts their goals and well-being. According to the theory, appraisal is a necessary condition of emotion (Lazarus, 1991).

The ICM recognizes four dominant negative emotions derived from the structural model of appraisal. The first is anger, which results from a crisis determined as an offense against "me" and "mine" (Lazarus, 1991, p. 222). For instance, a company dumping toxic waste into a community water supply would induce anger because it harms the health of community members. The second negative emotion is fright, which would happen when a crisis creates an uncertain and existential threat to the public. The third negative emotion is anxiety, which is caused by an immediate, concrete and overwhelming danger, although, not as serious as one that would induce fright (Lazarus, 1991). ICM conceptualizes anxiety as the default emotion present in every crisis. The final negative emotion is sadness, which is caused by an irrevocable loss. Guo (2017) has identified the presence and importance of positive emotions arising from a tragic event that calls for further theoretical development of the model.

As Figure 1 illustrates, the ICM model is based on two axes with four quadrants. On the *X*-axis is the audience's coping strategy, with conative coping occupying the left and cognitive coping on the right. The *Y*-axis represents the level of engagement by the organization with high engagement on the top and low engagement on the bottom. Quadrant 1, top right, represents high organizational engagement and conative coping. This means that the organization is actively involved in engaging audiences that are employing active coping strategies. The dominant emotion experienced by the public is anger and the
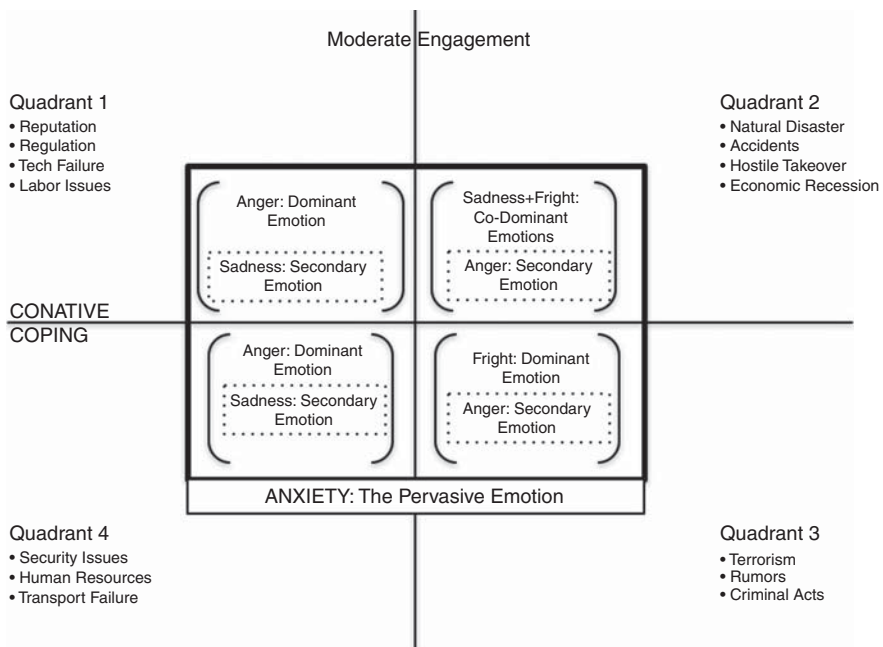

Figure 1.
Integrated crisis mapping (ICM) model

Source: Adapted from Jin *et al.* (2012)

secondary is anxiety. The details of the remaining three quadrants follow this structure as displayed in Figure 1. Also displayed in Figure 1 are 14 different crisis cases that Jin *et al.* (2007) mapped onto the model according to the continuum labels and using a case study method. Jin *et al.* (2012) revised emotions labeled in each of the quadrants based on findings from 14 new crisis cases.

The primary purpose of this study was to understand how different types of emotions, derived from the ICM model, influence public perceptions of an actual sports crisis situation to inform marketing and PR strategies when responding to a sports-related crisis. Additionally, this study sought to understand differences in audience perceptions as a result of two different crisis response strategies: an accident-framed response and an equipment failure-framed response. These two response frames were derived from crisis scenarios featured in quadrants 2 and 4 in the ICM model. To better fit the NFL concussion crisis situation, "transportation failure" from quadrant 4 was replaced with "equipment failure."

The ICM model explains that dominant emotions audiences would experience during an accident are sadness and fright, whereas dominant emotions experienced during an equipment (transportation) failure crisis are anxiety and anger. With this in mind, and using the ICM model as a guide, *H1a–H1d* were posited:

H1a. The accident-framed crisis response will induce stronger feelings of sadness in participants than the equipment failure-framed response.

H1b. The accident-framed crisis response will induce stronger feelings of fright in participants than the equipment failure-framed response.

H1c. The accident-framed crisis response will induce stronger feelings of anxiety in participants than the equipment failure-framed response.

H1d. The accident-framed crisis response will induce stronger feelings of anger in participants than the equipment failure-framed response.

Perceived organizational engagement

Perceived organizational engagement is featured in the ICM model as a continuum ranging from high to low. The type of crisis situation influences how engaged an organization should be in managing the crisis and perceptions surrounding the crisis. Organizational engagement is defined as the level or amount of resources, energy and effort an organization employs to deal with a crisis issue (Jin *et al.*, 2007). Strategic ambiguity and advocative stances appear to dominate organizational responses to crises. Considering that Jin (2010) found that audiences seem to accept these advocative stances, further research might yield new insights into stance adoption. Jin (2010), through an evaluation of information from news articles, primarily assessed organizations' perceptions of how engaged they should be in crisis situations depending on how closely related the situation was to organizations' goals. She found that organizations were moderately engaged. However, the present study sought to understand audience perceptions of organizational engagement, vs understanding organizations' assessments of engagement – the reason being that audience perceptions of high organizational engagement often result in more favorability for the organization (Jin and Liu, 2010). Following what the ICM model poses in terms of organizational engagement – that an accident crisis situation is associated with higher organizational engagement in comparison to an equipment [transportation] failure crisis – hypothesis two was posited:

H2. The accident response condition will create stronger perceptions of organizational engagement in the crisis situation in comparison to the equipment failure response.

Corporate message credibility, crisis perception and perceived corporate reputation as a function of response type

Effective crisis response strategies can "protect" (Coombs, 2006, p. 242) an organization's reputation, and ultimately its marketing efforts, during a crisis. Crisis responses are deemed as effective if the audiences believe they are credible, have more favorable perceptions of the crisis after an organization's response to it, and have positive perceptions about the organization's reputation, which is why the variables listed above were of interest in this study. While much communication and PR research analyzes crisis situations through case studies, Coombs (2006) suggests that more research should address audience perceptions as a result of different response strategies as some strategies are more effective than others. Thus, different crisis response types can affect how audiences perceive the crisis situation, whether or not they view the crisis response as credible, and how they perceive the organization's reputation after the response is issued (Kim and Cameron, 2011).

Corporate message credibility

As indicated previously, researchers have called for a line of crisis communication research that focuses on emotion, explaining that emotions are at the foundation of audience interpretations of crisis situations (Jin *et al.*, 2010). Kim and Cameron (2011) examined the relationship between emotional appeals used in messages and its effects on perceived corporate message credibility. Corporate message credibility is defined as, "the degree to which a message is perceived as believable and convincing" (Kim and Cameron, 2011, p. 840). They found that the use of emotional appeals in corporate messages positively influenced participants' perceptions of credibility of the message. In messages promiting physical activity, perceived credibility of the message was dependent on the type of message frame used (Borah and Xiao, 2018). Gold *et al.* (2010) found that different message styles, such as positive and informal tones, influence message credibility which in turn increases trust in the information presented. It is evident that message elements influence consumers' perceived credibility of the message.

As the ICM model outlines, specific crisis situation categories will induce specific emotional responses. Because there is not an established link between crisis responses derived from the ICM model and perceptions of corporate message credibility, the following research question was posed:

 RQ1. Will participants' perceptions of corporate message credibility differ as a function of crisis response type (accident frame vs equipment failure frame)?

Crisis perception

Billings *et al.* (1980) explain that perceptions of crisis situations are often a result of collective, shared social processes. However, individual perceptions may lead to shared, social perceptions. Thus, deciphering individual processes of crisis perceptions is a necessary first step in understanding crisis response outcomes. Johansen *et al.* (2012) found that how professionals perceive a crisis, as well as the organization's size, affects approaches and responses to crisis situations. While previous research focused on internal perceptions of crisis situations, more work needs to be done to understand how general audiences perceive crisis situations. The next research question was posed in light of crisis perception:

 RQ2. Will participants' perceptions of the NFL concussion crisis differ as a function of crisis response type (accident frame vs equipment failure frame)?

Perceived corporate reputation

A company's reputation consists of audience perceptions of its ability to meet their expectations and is built on shared ideas of dimensions including vision and leadership

(Fombrun and Gardberg, 2000). A company's reputation is a valuable, intangible asset that impacts the company's marketing efforts (Dawar and Pillutla, 2000). A company's reputation is at threat during a crisis situation (Coombs, 2007) and how an organization responds to a crisis could potentially impact its reputation. Therefore, crisis responses should be strategically crafted in an effort to protect an organization's reputation and marketing efforts after a crisis occurs (Coombs and Holladay, 1996). Scholars have yet to evaluate the impact on corporate reputation as a function of crisis types that are posited by the ICM model:

RQ3. Will participants' perceptions of the NFL's reputation differ as a function of crisis response type (attitude frame vs equipment failure frame)?

Media exposure

The mass media has the power to influence public opinion and plays a vital role in crisis communication (Fortunato, 2000). Media messages associated with an organization's crisis can influence audience perceptions of the crisis and their evaluations of the organization involved (Yannopoulou *et al.*, 2011). Thus, individuals who experience exposure to news stories or other information pertaining to the NFL concussion crisis, including concussion movie trailers, could perceive the NFL's reputation differently than those who have little or no exposure to the crisis.

Additionally, previous research suggests that feelings of anger affect audience evaluations of organizations' efforts in managing a crisis, and impact their information processing (Nabi, 2002; Jin *et al.*, 2010). Kim and Cameron (2011) found that, in comparison to sadness-inducing crisis news, individuals exposed to anger-inducing crisis news had negative perceptions of the organization involved in the crisis. Hence, the way information is presented in the media can trigger audience emotions – anger, specifically – impacting their perceptions of the organization involved in the crisis. Additionally, a content analysis of consumer responses to a variety of organizational crises revealed anger as the dominant emotion (Jin, 2010). As discussed previously, anger is often the strongest emotion audiences exhibit during a crisis (Jin, 2010; Utz *et al.*, 2013).

Regarding the processing of emotions, human emotions have been described as a "process effect through which judgements are made" (Lerner and Tiedens, 2006, p. 120). Consumers often have emotional responses to a situation, and use these emotions to evaluate the situation. More specifically, Nabi (1999) suggests that angry people process information more carefully than those who are not angry. This emotionally aided, motivated processing, which was aroused by an experience (e.g. a crisis) or a message, can then influence attitudes and beliefs. Thus, it can be posited that emotions play a mediating role in the influence of evaluations of organizations during crisis situations.

With this information in mind, and focusing on the effects and strength of the anger emotion specifically, the following hypotheses were posited taking media exposure and the anger emotion into account:

H3a. Media exposure to the concussion issue will have an indirect effect on participants' evaluations of corporate message credibility through feelings of anger.

H3b. Media exposure to the concussion issue will have an indirect effect on participants' evaluations of organizational engagement through feelings of anger.

H3c. Media exposure to the concussion issue will have an indirect effect on participants' evaluations of crisis perception through feelings of anger.

H3d. Media exposure to the concussion issue will have an indirect effect on participants' evaluations of perceived corporate reputation through feelings of anger.

Sports fan involvement
Zaichkowsky (1985) developed a measure to examine the extent to which individuals involved in a situation decide to support an organization through their attitudes and behavioral intentions. Involvement is defined as a person's perceived relevance of the situation based on his or her needs, values and interests. Bee and Havitz (2010) adapted the involvement construct for sports fans by explaining how level of fan involvement can influence commitment or resistance to change in a particular sport. Hallahan (2000) explains that, in the context of crisis communication, different audiences have different carrying capacities for addressing, or even thinking about, social problems or issues. Levels of involvement can influence individuals' carrying capacities for information. With this in mind, involvement was used as a control to ensure that involvement is not attributed to explaining why participants make certain assessments.

Methodology

Experimental design and sample
Using the ICM model as a guide, a web-based experiment was conducted using crisis response strategies (accident message vs equipment failure message) as independent variables. The participants ($n = 302$) were recruited using Amazon Mechanical Turk (MTurk), a web-based crowdsourcing service. A total sample size of at least 275 was desired in order to have enough participants in each experimental condition to effectively carry out statistical analyses (VanVoorhis and Morgan, 2007). Participants were paid $2 for their participation in the experiment. MTurk is a viable data collection service and participants demonstrate classic heuristics and pay attention to directions at least as much as subjects from traditional sources (Paolacci *et al.*, 2010). Additionally, Casler *et al.* (2013) compared online responses of participants recruited from MTurk to responses from a student sample, as well as from responses from participants recruited via social media and found that the three samples' responses were almost indistinguishable. According to Buhrmester *et al.* (2011), MTurk can be used to gather high-quality data.

The experiment itself was constructed with experimental quality control in mind: qualtrics software was programmed to randomly assign participants to conditions, experimental flow was tested to ensure participants would not experience response burnout, and confounding factors such as message length were controlled (Thorson *et al.*, 2012). The first step required participants to read a consent form approved by the campus institutional review board. Participants were then asked questions to measure their involvement with the NFL. Next, all participants viewed the AP news story about the NFL concussion issue and upon clicking "next," were randomly assigned to either the accident-framed NFL response or the equipment failure-framed NFL response. Finally, all participants answered a total of 27 questions to measure the other independent and dependent variables (specific measures are described below). Participants were also presented with five demographic questions to capture age, gender, ethnicity, current state of residence, and education level.

Sample
Half of the participants ($n = 151$) were randomly assigned to the accident condition while the other half was assigned to the equipment failure condition. Men (62.9 percent, $n = 190$) composed most of sample while women constituted 37.1 percent ($n = 112$). Half of the sample (50.3 percent, $n = 152$) were aged 25–34, while participants aged 45–54 composed 24.8 percent ($n = 75$). Participants aged 55–64 composed 10.3 percent ($n = 31$), and young adults 18–24 made up 8.6 percent ($n = 26$). The smallest segment (6.5 percent, $n = 18$) were seniors 65 and older. In terms of ethnicity, 81.1 percent ($n = 245$) were White/Caucasian, while African American composed 6.6 percent ($n = 20$) and 6 percent ($n = 18$) were Asian/

Pacific Islander. Hispanic/Latino's were 5 percent ($n = 15$) and 1.3 percent ($n = 4$) identified themselves as "other."

In terms of education, 6.6 percent ($n = 20$) held a master's degree, while 39.4 percent ($n = 119$) of respondents had a bachelor's degree and 10.9 percent ($n = 33$) had the associates degree. Participants with only a high school diploma were 11.9 percent ($n = 36$), while 26.2 percent ($n = 79$) had earned a diploma plus some college credit hours. A small minority (5 percent, $n = 15$) either had no high school diploma or some alternate form of education.

Stimuli

All participants were exposed to the same news story that was designed to orient them toward the issue and trigger an initial emotional response. A trained and experienced sports journalist wrote the hypothetical, four-paragraph newspaper story about the NFL and the concussion issue. The content of the article was drafted from a composite of actual news articles about the issue, which were gathered through ProQuest. The author deliberately framed the issue in a manner so as to avoid showing bias in either direction (support or nonsupport for the NFL). To make the story more current, two sentences were added to provide recent stats on the number of NFL players diagnosed with CTE. An Associated Press logo was added to the story to give it the appearance that it came from the Associated Press wire service, as opposed to other news sources that might elicit source bias among participants.

A hypothetical press release from the NFL served as an independent variable and was crafted by trained and experienced PR practitioners. The releases were written to appear as a direct response to the news article stimuli, but manipulated to produce two types of frames: an accident-framed message and an equipment failure framed message. The authors selected several actual NFL press releases about concussions and adopted non-manipulated content from them, while matching the NFL's style. The content of these press releases were manipulated by adding two sentences that explained the cause, accident or equipment failure, of player concussions. In the accident condition the first manipulated sentence stated, "concussions are the result of accidental situations," while the second sentence stated, "players experience a loss of control when tackling." For the equipment malfunction condition the first sentence stated "concussions are the result of equipment failure," whereas the second stated, "helmets are not manufactured correctly." Besides these alterations, the length and contents of each response were kept similar. The manipulated crisis responses were evaluated by a panel of ten graduate students to ensure the responses were manipulated in the way the researchers intended.

Variables

Sports fan involvement and exposure to the concussion issue were used as control variables. There were five dependent variables including: emotion (anger, anxiety, sadness and fear), crisis perception, perceived organizational engagement, perceived corporate message credibility and perceived corporate reputation. Measures came from reliable, pre-established scales and were slightly adapted to fit the context of the crisis situation.

Sports fan involvement

Participants' levels of involvement in the NFL were measured using scales from Zaichkowsky (1985), as well as Bee and Havitz (2010), whose scales are more applicable in the context of sport fan involvement. A four-item ($a = 0.961$, $M = 5.74$, $SD = 1.4$), seven-point scale (strongly disagree–strongly agree) was used to evaluate participants' interest in watching NFL games, information seeking about the NFL, and whether or not they consider themselves to be fans of NFL football.

Emotions

This study combined emotions elicited from the ICM model (anger, anxiety, sadness and fear) with the Differential Emotions Scale (Izzard, 1993). This study used a four-item ($a = 0.838$), even-point scale (not at all-very much) where individuals indicated the level of emotion experienced (anger: $M = 3.57$, SD $= 1.9$; anxiety: $M = 3.28$, SD $= 1.75$; sadness: $M = 4.6$, SD $= 1.85$; fear: $M = 2.7$, SD $= 1.71$).

Corporate message credibility

Corporate message credibility was defined as the degree to which participants viewed the crisis response as believable and convincing. It was measured using six items ($a = 0.75$, $M = 3.4$, SD $= 1.4$) with seven-point bipolar opposite scales: unbiased-biased, accurate-inaccurate, believable-unbelievable, convincing-unconvincing, trustworthy-untrustworthy and telling the whole story-not telling the whole story (Ohanian, 1990).

Perceived organizational engagement

Jin et al. (2007) created measures to code organizational engagement in crisis cases, as reported in news stories. However, because we are evaluating self-reports of participants' perceived organizational engagement, we created our own measure using concepts from our preferred definition of organizational engagement: the level or amount of resources, energy and effort an organization employs to deal with a crisis issue (Jin et al., 2007). Three items ($a = 0.935$, $M = 3.53$, SD $= 1.62$) using seven-point bipolar opposite scales captured participants' perceived levels of organizational engagement: unsatisfactory-satisfactory, low priority for the NFL-high priority for the NFL, and low effort-high effort.

Crisis perception

A model of crisis perception (Billings et al., 1980), while typically used for internal organizational assessment of crisis perceptions, was adapted using items relevant to external audiences. A nine-item ($a = 0.787$, $M = 4.41$, SD $= 0.9$), seven-point scale evaluated participants' perceived disruptiveness and threat of the issue (i.e. "Is the concussion issue a threat to the NFL's reputation?" not at all-very much), as well as if the issue will push the organization to make changes or create less support for it (i.e. "The concussion issue will push the NFL to make the following changes: equipment rules/regulations" and "The concussion issue will create less support for the NFL in the following ways: corporate sponsorships," strongly disagree–strongly agree).

Perceived corporate reputation

Fombrun and Gardberg's (2000) reputation quotient was adapted for the context of this study to measure participants' perceived reputation of the NFL after reading the news story and corporate response stimuli. A six-item ($a = 0.921$, $M = 3.78$, SD $= 1.3$), seven-point scale (strongly disagree–strongly agree) was used to evaluate: the NFL's responsibility to society, leadership, care for its supporters/fans, participants' trust in the NFL, its integrity and participants' willingness to say good things about the NFL.

Exposure to the NFL concussion issue

Finally, to capture participants' exposure to the NFL concussion issue before their participation in this study, they were asked to select cases that apply to them, such as: "I was aware of the NFL concussion issue before taking this survey," "I have seen and/or read news articles about the NFL concussion issue" and "I have watched movie trailers for the Sony motion picture concussion, starring Will Smith." An index was created from the items with a range from 1 (low exposure) to 6 (high exposure) ($M = 3.29$, SD $= 1.42$).

Analysis. To test the hypotheses and answer the research questions, regression analyses were conducted with involvement toward the NFL and exposure to the concussion issue as covariates. Regression analyses using the Hayes (2017) process macro software, Model 4, tested the anger emotion as a mediator.

Results

Emotional response to the crisis response messages

Whether or not the emotions proposed by the ICM model held true as a result of crisis response frames derived from quadrants 2 and 4 of the model was examined. Hypotheses were as follows: The accident-framed crisis response will create stronger (*H1a*) sadness and (*H1b*) fright emotions compared to the equipment failure-framed crisis response. The accident-framed crisis response will create stronger (*H1c*) anxiety and (*H1d*) anger emotions compared to the equipment failure-framed crisis response.

Surprisingly, none of these hypotheses were supported (see Table I for full results): *H1a*: in comparison to the equipment failure response condition, the accident response did not significantly improve prediction of the sadness emotion, $\Delta F(3, 267) = 2.766$, $p > 0.05$, $\Delta r^2 = 0.01$. *H1b*: compared to the equipment failure condition, the accident response was not associated with the anxiety emotion, $\Delta F(3, 268) = 1.775$, $p > 0.05$. For *H1b*, the control model explained a significant amount of variance for the fright emotion, $F(2, 267) = 3.83$, $p < 0.05$, $R^2 = 0.028$. Exposure to the concussion issue was associated with less feelings of fright

	B	SE	β	t	p
Sadness					
Covariates					
Involvement toward NFL	0.071	0.086	0.054	0.820	0.413
Exposure to concussion issue	0.073	0.086	0.056	0.848	0.397
Predictor					
Accident-framed crisis response (in reference to equipment					
failure frame)	0.376	0.226	0.101	1.663	0.097
Anxiety					
Covariates					
Involvement toward NFL	0.141	0.081	0.116	1.747	0.082
Exposure to concussion issue	−0.070	0.081	−0.057	−0.864	0.388
Predictor					
Accident-framed crisis response (in reference to equipment					
failure frame)	0.316	0.212	0.091	1.491	0.137
Fright					
Covariates					
Involvement toward NFL	0.149	0.079	0.124	1.890	0.060
Exposure to concussion issue	−0.205	0.079	−0.171	−2.597	0.010*
Predictor					
Accident-framed crisis response (in reference to equipment					
failure frame)	0.235	0.207	0.069	1.138	0.256
Anger					
Covariates					
Involvement toward NFL	−0.125	0.089	−0.093	−1.413	0.159
Exposure to concussion issue	0.202	0.089	0.149	2.266	0.024*
Predictor					
Accident-framed crisis response (in reference to equipment					
failure frame)	−0.349	0.233	−0.091	−1.502	0.134

Note: *$p < 0.05$

Table I.
Regression coefficients
for the predictor
of emotions

($\beta = -0.171$, $p < 0.05$). However, the accident response condition was not associated with feelings of fright, $\Delta F(3, 267) = 1.296$, $p > 0.05$, or anger (*H1d*) $\Delta F(3, 267) = 2.255$, $p > 0.05$, compared to the equipment failure response.

Perceptions of organizational engagement
H2 predicted that the accident response condition will create stronger perceptions of organizational engagement in the crisis situation compared to the equipment failure response. The control model explained a significant amount of variance for perceived organizational engagement, $F(2, 268) = 9.542$, $p < 0.001$, $R^2 = 0.067$. Involvement toward the NFL was associated with stronger perceptions of organizational engagement ($\beta = 0.241$, $p < 0.001$), and exposure to the concussion issue was associated with decreased perceptions of organizational engagement ($\beta = -0.228$, $p < 0.001$). Adding the conditions significantly predicted perceptions of organizational engagement, $\Delta F(3, 268) = 4.632$, $p < 0.05$, $\Delta r^2 = 0.016$. The accident response condition was associated with stronger perceptions of organizational engagement ($\beta = 0.127$, $p < 0.05$), in comparison to the equipment failure response.

Perceptions as a function of crisis response type
RQ1 asked if participants' perceptions of corporate message credibility would differ as a function of crisis response type (accident frame vs equipment failure frame).

The control model explained a significant amount of variance for message credibility, $F(2, 267) = 10.13$, $p < 0.001$, $R^2 = 0.071$. Involvement toward the NFL was a predictor of stronger perceived message credibility ($\beta = 0.188$, $p < 0.01$) and exposure to the concussion issue was a predictor of decreased perceived message credibility ($\beta = -0.276$, $p < 0.001$). Adding the accident condition was associated with stronger perceived message credibility ($\beta = 0.028$, $p < 0.001$) in reference to the equipment failure condition.

RQ2 asked if participants' perceptions of the NFL concussion crisis would differ as a function of crisis response type (accident frame vs equipment failure frame).

The control model explained a significant amount of variance for crisis perception, $F(2, 264) = 4.9$, $p < 0.01$, $R^2 = 0.036$. Involvement toward the NFL was associated with stronger perceptions of the crisis negatively impacting the NFL ($\beta = 0.143$, $p < 0.05$). The crisis response conditions were not associated with perceptions of the crisis, $\Delta F(1, 261) = 0.211$, $p > 0.05$, $\Delta r^2 = 0.001$.

RQ3 asked if participants' perceptions of the NFL's reputation would differ as a function of crisis response type (accident frame vs equipment failure frame; see Table II for results). The control model explained a significant amount of variance for perceived reputation, $F(2, 260) = 13.15$, $p < 0.001$, $R^2 = 0.085$. Involvement toward the NFL was associated with stronger perceived corporate reputation ($\beta = 0.238$, $p < 0.001$) and exposure to the concussion issue was associated with negative perceptions of corporate reputation ($\beta = -0.301$, $p < 0.001$). Adding the accident response condition was associated with stronger perceived corporate reputation ($\beta = 0.16$, $p < 0.01$) in reference to the equipment failure condition.

Feelings of anger as a mediator
H3a–*H3d* were as follows: media exposure to the concussion issue will have an indirect effect on participants' evaluations of: corporate message credibility, organizational engagement, crisis perception and perceived corporate reputation through feelings of anger. Results indicated that only *H3a* was supported: the model containing corporate message credibility as the outcome variable was significant. Media exposure was approaching significance as a predictor of the anger emotion, $b = 0.2$, $SE = 0.09$, $p = 0.06$. The anger emotion was associated with a decrease in corporate message credibility, $b = -0.25$, $SE = 0.04$, $p < 0.001$. The indirect

	B	SE	β	t	p
Perceptions of organizational engagement					
Covariates					
Involvement toward NFL	0.273	0.073	0.241	3.741	0.001***
Exposure to concussion issue	−0.259	0.073	−0.228	−3.537	0.001***
Predictor					
Accident-framed crisis response (in reference to equipment failure frame)	0.410	0.191	0.127	2.152	0.032*
Perceptions of corporate message credibility					
Covariates					
Involvement toward NFL	0.187	0.064	0.188	2.918	0.004**
Exposure to concussion issue	−0.276	0.064	−0.276	−4.295	0.001***
Predictor					
Accident-framed crisis response (in reference to equipment failure frame)	0.596	0.165	0.210	3.617	0.001***
Perceptions of NFL concussion issue (negative impact)					
Covariates					
Involvement toward NFL	0.090	0.041	0.143	2.168	0.031*
Exposure to concussion issue	0.051	0.042	0.081	1.227	0.221
Predictor					
Accident-framed crisis response (in reference to equipment failure frame)	0.050	0.110	0.028	0.459	0.646
Perceptions of Corporate Reputation					
Covariates					
Involvement toward NFL	0.215	0.058	0.238	3.714	0.001***
Exposure to concussion issue	−0.270	0.058	−0.301	−4.700	0.001***
Predictor					
Accident-framed crisis response (in reference to equipment failure frame)	0.410	0.149	0.161	2.759	0.006**
Notes: *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$					

Table II.
Regression coefficients
for the prediction of
independent variables
as a function of crisis
response type

effect of media exposure on corporate message credibility through the anger emotion was tested using a bootstrap estimation approach with 5000 resamples. These results indicated that the indirect coefficient was significant, $b = -0.051$, SE $= 0.06$, LLCI $= -0.102$, ULCI $= -0.007$. Media exposure was associated with approximately 0.05 points lower corporate message credibility as mediated by anger (see Figure 2).

Discussion

A new approach to sports crisis strategy

The NFL concussion crisis is evidence that when crises are ignored over time and mismanaged, an organization's marketing efforts suffer (Heinze and Di, 2017; Wilbur and Myers, 2016; Orr, 2015), sports viewership decreases and alternatives are explored by consumers (Morgan, 2017, para. 5), and a variety of stakeholders including corporate sponsors and current players are negatively influenced (Richards *et al.*, 2017). Sports marketers can learn from the NFL's mistakes and results from this study provide a clear path forward for marketers managing a crisis. Therefore, this study sought to inform sports marketers of a comprehensive marketing approach during times of crisis that incorporates best practices from PR perspectives to strategically support marketing efforts. Considering that audiences consuming sports content experience heightened sense of emotions (XYZ), the NFL concussion crisis was a unique context for understanding how different types of emotions, derived from the ICM model, influence public perceptions of an actual sports
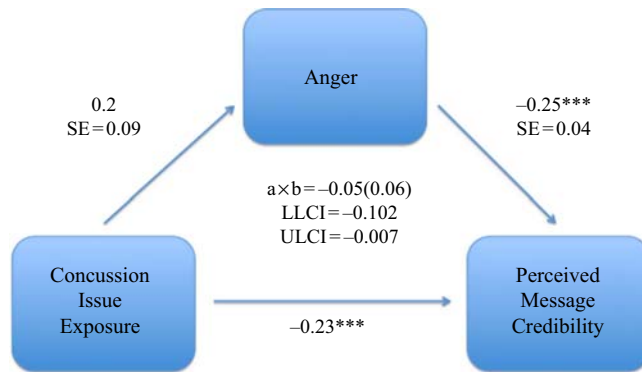
Note: ***p<0.001

crisis situation. Understanding how to properly leverage audience emotions provides sports
marketers with a strategic advantage and tools needed to quickly adapt to and recover from
a crisis (Coombs, 2006, 2007) to protect the effectiveness of their marketing strategies
(Dawar and Pillutla, 2000; Orr, 2015).

First, sports marketers should carefully determine proper framing methods when crafting a
crisis response as different response types affect consumers in different ways. Clearly, the
study's findings are evidence that message frames shape audiences' evaluations of the
organization involved in a crisis. These evaluations have consequences on the reputation and
future viability of an organization and the effectiveness of its marketing efforts. The complex
nature of a crisis – one that involves a variety of stakeholder groups and is perpetuated by the
media – directly impacts audience emotions, which then affect how they perceive crisis response,
organizational engagement in the crisis and corporate reputation. Thus, there are predicatable
characterstics concerning crisis type that sports marketers and PR professionals need to
consider when developing a crisis response strategy that accounts for audience emotions.

Second, it is recommended that sports marketers leverage PR practices by engaging in
media monitoring (Alfonso and Suzanne, 2008). Doing so allows for the assessment of media
coverage of the crisis to inform an appropriate crisis response to control the narrative, protect
organizational reputation and ultimately protect the effectiveness of sports marketing
strategies. This study explains that sports fan involvement is positively associated with
perceptions of the NFL's reputation, while audience exposure to the NFL concussion issue is
negatively associated with perceptions of the NFL's reputation. It is apparent that media
coverage of a crisis significantly impacts organizational reputation.

Findings from this study suggest that those managing a crisis response strategy should
monitor the crisis as it unfolds over time. A close examination of the NFL concussion crisis
revealed that there is much more at play – beyond crisis response strategy – that influences
how audiences perceive and respond to a crisis. Audience emotions, media attention and
popular culture are all factors that contribute to a particular agenda of the crisis. These
factors influence perceptions as much, if not more than, crisis response type.

Emotions mediate evaluations of organizations

Beyond proactively engaging with the media, sports marketers should also examine forces
external of the organization that influences consumer emotions. There are many forces that
impact audience emotions during a crisis. News articles, concussion movie trailers and the
premiere of the concussion movie were all points of exposure that audiences experienced,

most of them positioning the NFL in a negative light. In this case, audience exposure to the concussion issue in the media created negative perceptions of the NFL, which also encouraged feelings of anger, and anger facilitated a decrease in consumers' perceptions of corporate message credibility. This serves as the beginning of an attempt to adopt aspects of the ICM model to better understand how audiences' exposure to media coverage of a crisis, coupled with their emotions, affect their evaluations of organizations in crisis.

Theoretical implications of the ICM model
Findings from this experiment also suggest that crisis responses derived from the ICM model are not significant predictors of the emotions of sadness, fright, anxiety and anger, as posited by the model. The issue of concussions in football did not directly impact audiences in the same manner as other cases used to test the ICM model (natural disasters, security issues, etc.). This suggests that other significant variables could be missing from the model, such as media coverage of a crisis and exposure to the crisis; this is important to take into consideration as the model continues to be refined and applied to more diverse crisis types. Given the strong association between exposure to media coverage of the crisis and feelings of anger, the ICM model could be adapted as a predictive tool if media coverage was included as an additional variable on a continuum. Despite this strong association, current crisis communication research does not evaluate the influence of prior audience exposure to media coverage of a crisis on crisis response interpretation, warranting further exploration of this phenomenon.

Limitations and directions for future research
As is the case with most crisis research, a limitation for this study is the specific crisis scenario that was used. The NFL concussion crisis is different from other crisis types in that it does not directly impact people's well-being, but instead affects their perceptions of an institution and sport that has become a part of American culture and tradition. Books, documentaries, major motion pictures and other media have made it increasingly part of public discussion, so it is a dynamic risk situation that involves many audiences that have different stakes in the issue. It is beneficial to use situations like this in scholarly research as crisis scenarios are in large part complex and contingent upon many internal and external forces (Cancel *et al.*, 1999; Coombs and Holladay, 2005). To ensure that the complexity and both practical and theoretical potential of the crisis mapping approach is fully realized, future studies should be undertaken using modeling analytical tools such as structural equation modeling or hierarchical linear modeling for retrospective analysis of existing cases.

This study evaluated, essentially, layperson evaluations of the concussion crisis and their responses to message stimuli using Amazon MTurk. Although sports fan involvement was measured and accounted for, targeting NFL fans, specifically, would generate findings applicable to this particular audience. Only two crisis response frames were tested; a future study similar to this one could evaluate perceptions of additional frames. Finally, much of the measures for this study were adopted from PR and communications literature. Future studies that examine a balanced blend of outcomes relevant to sports marketing and PR professionals would allow for more comprehensive findings.

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Appendix 1. NFL concussion AP news story

Over the last two decades, the NFL seemingly could do no wrong. The Dallas Cowboys, bought by Jerry Jones for $150m in 1989, are now valued at $2.1bn. In total, 20 of the league's 32 teams are valued at $1bn or more. Eight of the country's top 15 most-watched TV programs were Super Bowls.

But fissures have formed in the once-pristine NFL edifice. More than 2,000 former players are suing the league over head injuries, and what they were and were not told about the long-term damage of concussions. Junior Seau, among the greatest linebackers in league history, committed suicide and was later found to have a concussion-related brain disease. Seau's family filed a wrongful-death lawsuit against the league. A study released shows signs of an ailment similar to Seau's in five living NFL alumni.

As of September 2015, a total of 87 out of 91 former NFL players have tested positive for the brain disease at the center of the debate over concussions in football, according to new figures from the nation's largest brain bank focused on the study of traumatic head injury. The degenerative disease is known as CTE, commonly referred to as CTE. The lab has found CTE in the brain tissue in 131 out of 165 individuals who, before their deaths, played football either professionally, semi-professionally, in college or in high school.

"There's an uneasy feeling around the NFL, because although the league is arguably more popular than it's ever been before, there are also these glaring areas of deep concern about player safety on the field, and the players' health off the field and after their careers are over," said Michael MacCambridge, author of "America's Game: The Epic Story of How Pro Football Captured a Nation."

Appendix 2. NFL response, equipment failure manipulation

We are aware of and are investigating the issue of concussions in the sport of football. Player concussions are a result of equipment failure. Helmets and padding are improperly manufactured. We have plans to examine this issue and determine necessary steps forward. That being said, we are

encouraged by the ongoing focus on the critical issue of player health and safety. We have no higher priority. We all know more about this issue than we did 10 or 20 years ago. As we continue to learn more, we apply those lessons to make our game and players safer (NFL Communications).

Appendix 3. NFL response, accident manipulation
We are aware of and are investigating the issue of concussions in the sport of football. Player concussions are the result of accidental situations. The NFL has strict rules designed to protect players from head injuries and the league enforces these rules aggressively. However, some unintentional on-field accidents transpire, which are beyond the players' ability to control. We have plans to examine this issue and determine necessary steps forward. That being said, we are encouraged by the ongoing focus on the critical issue of player health and safety. We have no higher priority. We all know more about this issue than we did 10 or 20 years ago. As we continue to learn more, we apply those lessons to make our game and players safer (NFL Communications).

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