

Wilfrid Laurier University

Scholars Commons @ Laurier

Theses and Dissertations (Comprehensive)


2016

No More Mind Games: Content Analysis of In-Game Commentary of the National Football League's Concussion Problem

Jeffrey Parker

Wilfrid Laurier University, park3240@mylaurier.ca

Follow this and additional works at: <https://scholars.wlu.ca/etd>

 Part of the [American Popular Culture Commons](#), [Broadcast and Video Studies Commons](#), [Criminology Commons](#), [Criminology and Criminal Justice Commons](#), [Critical and Cultural Studies Commons](#), [Entertainment, Arts, and Sports Law Commons](#), [Gender, Race, Sexuality, and Ethnicity in Communication Commons](#), [Health Policy Commons](#), [Mass Communication Commons](#), [Other Film and Media Studies Commons](#), [Public Relations and Advertising Commons](#), [Social Influence and Political Communication Commons](#), [Sociology of Culture Commons](#), [Sports Studies Commons](#), and the [Television Commons](#)

Recommended Citation

Parker, Jeffrey, "No More Mind Games: Content Analysis of In-Game Commentary of the National Football League's Concussion Problem" (2016). *Theses and Dissertations (Comprehensive)*. 1800.
<https://scholars.wlu.ca/etd/1800>

This Thesis is brought to you for free and open access by Scholars Commons @ Laurier. It has been accepted for inclusion in Theses and Dissertations (Comprehensive) by an authorized administrator of Scholars Commons @ Laurier. For more information, please contact scholarscommons@wlu.ca.

**No More Mind Games:
Content Analysis of In-Game Commentary of the National Football League's
Concussion Problem**

by

Jeffrey Parker

B.A. (Honours), Wilfrid Laurier University, 2013

THESIS

Submitted to the Department of Criminology in partial fulfillment of the requirements for
Master of Arts in Criminology

Abstract

American (gridiron) football played at the professional level in the National Football League (NFL) is an inherently physical spectator sport, in which players frequently engage in significant contact to the head and upper body. Until recently, the long-term health consequences associated with on the field head trauma were not fully disclosed to players or the public, potentially misrepresenting the dangers involved in gameplay. Crucial to the dissemination of this information to the public are in-game televised commentators of NFL games, regarded as the primary conduits for mediating in-game narratives to the viewing audience. Using a social constructionist theoretical lens, this study aimed at identifying how Game Commentators represented in-game head trauma and concussions during NFL games for viewer consumption, through a content analysis of 102 randomly sampled regular season games, over the course of six seasons (2009-2014). Specifically, this research questioned the frequency and prevalence of significant contact, commentator representations of significant player contact, commentator representations of the players involved in significant contact and commentator communication of the severity of health hazards and consequences associated with significant contact. Observed during the content analysis were 226 individual incidents of significant contact. Findings indicate that commentator representations of significant contact did not appropriately convey the potential health consequences associated with head trauma and concussions to the viewing audience. Instead, incidents of significant contact were constructed by commentators as glorified instances of violence, physicality and masculinity- largely devoid and diffusive of the severity of health consequences associated with head injuries and concussions.

Acknowledgements

First and foremost, I would like to extend my sincerest gratitude to my thesis supervisors, Dr. Daniel Antonowicz and Dr. Kenneth Dowler. Words cannot express how much I appreciate the encouragement, mentorship and guidance you have both provided over the course of this academic journey. Thank you so much for your contributions to this thesis; it has been a privilege to have the opportunity to work with you both.

To my external reviewer, Dr. Doris Hall: Thank you very much for providing your time and insights all the way from California. Your expertise and feedback has been invaluable.

I would also like to take this opportunity to thank the entire Department of Criminology at Wilfrid Laurier University Brantford. I truly value the tremendous education I have received during my academic tenure at this institution and it has been an honour to learn from genuinely great minds.

To Marg Harris: You are a credit to Wilfrid Laurier University and are the absolute backbone of this graduate program. I want to express my deepest admiration for all of the times you have gone above and beyond the call of duty to support the graduate student experience. I will never forget the genuine kindness you have shown me.

To my Mom: I hope to someday possess half of your strength of character and integrity. I am infinitely lucky to have you as my mother; you are the human being that I am constantly striving to become. I could not have accomplished any of this without your love, patience and unwavering support.

Lastly, to the love of my life, Hilary: You know exactly how I feel about you without even having to say a single word, XO.

Table of Contents

Abstract	ii
Acknowledgements	iii
Table of Contents	iv
List of Tables	vi
Chapter One: Introduction	1
Theoretical Orientation.....	8
Chapter Two: Literature Review	14
Commentator Representations of Gender in Sports.....	15
Commentator Representations of Race in Sports.....	15
Commentator Influence in Viewer Perception of Violence.....	16
Dramatic Embellishments by Commentator During Competition.....	18
Commentator Influence on Viewer Perception of Gameplay.....	21
Navigating Masculinity and Cultural Scripts in the NFL.....	22
Media Representations of Head Trauma in Sports.....	24
Concussion Research.....	26
Corporate Deviance.....	28
Chapter Three: The Research Design	37
Content Analysis.....	37
Data Collection.....	37
How the National Football League (NFL) schedules televised games.....	41
NFL Games Excluded From Sample.....	42
Variable Construction and Measurement.....	44
Operational Definition for Coding Head Trauma/Concussive Hits.....	44
Coding Sheet Thematic Categories.....	46
Chapter Four: Descriptive Results	56
Frequency and Prevalence of Upper Body Contact of Significance.....	56
Commentator Representation of Specific Incidents of Upper Body Contact of Significance.....	59
Commentator Representation of Players Involved in Upper Body Contact of Significance.....	60
Commentator Representation of Health Hazards and Consequences of Upper Body Contact of Significance.....	62
Chapter Five: Analysis & Discussion	65
Frequency and Prevalence of Upper Body Contact of Significance.....	66
Commentator Representation.....	69
Glorification of Upper Body Contact of Significance.....	70
Representation of Upper Body Contact of Significance Penalties.....	74
Commentator Representation of Players.....	77
Toughness.....	77

Masculinity.....	83
Representation of Severity and Health Hazards.....	85
Consequences of Concussions.....	86
Brainwashing.....	92
Chapter Six: Conclusions.....	99
Prevalence of UBCS.....	100
Representation of Contact.....	101
Representation of Players.....	101
Representation of Severity and Health Hazards.....	102
Contributions.....	104
Limitations.....	106
Recommendations for Future Research.....	107
Appendices.....	108
Appendix A: Random Sampling Tables.....	108
Appendix B: SPSS Coding Manual for In-Game Commentary Analysis.....	112
Appendix C: Results Tables.....	124
References.....	127

List of Tables

Number of NFL regular season games by television network.....	41
Position of the player that received the upper body contact of significance.....	56
Season of Game.....	57
Network of Game Televised.....	58
Quarter of Play.....	58
Game Commentators (Play-by-Play Announcer and Game Analyst) provide hyperbole associated with upper body hit of significance.....	59
Commentary Pairing (Play-by-Play Announcer, Game Analyst) provides glorification of upper body contact of significance.....	59
Game Commentators (Play-by-Play Announcer and Game Analyst) provide specific representation of in-game physicality.....	60
Game Commentators (Play-by-Play Announcer and Game Analyst) react to penalties (or lack thereof) resulting from upper body contact of significance.....	60
Game Commentators (Play-by-Play Announcer and Game Analyst) provide specific representation of players who initiate/commit upper body contact of significance.....	60
Game Commentators (Play-by-Play Announcer and Game Analyst) provide specific representation of players who receive upper body contact of significance.....	61
Game Commentators (Play-by-Play Announcer and Game Analyst) provide specific representation of specific representation of player toughness.....	61
Game Commentators (Play-by-Play Announcer and Game Analyst) use the word "concussion" when describing on the field upper body contact of significance.....	62
Game Commentators (Play-by-Play Announcer and Game Analyst) use the word "head trauma" and its derivatives when describing on the field upper body contact of significance.....	62
Game Commentators (Play-by-Play Announcer and Game Analyst) reference NFL safety protocols surrounding "head injuries" when describing on the field upper body contact of significance.....	63

Game Commentators (Play-by-Play Announcer and Game Analyst) reference potential health hazards surrounding "head injuries" when commenting on upper body contact of significance.....	63
Game Commentators (Play-by-Play Announcer and Game Analyst) mention the player's ability to walk off the field following upper body contact of significance.....	64
Game Commentators (Play-by-Play Announcer and Game Analyst) provide specific representation of player's decision to return to gameplay after an upper body injury.....	64

Chapter One: Introduction

In recent years, there has been growing concern regarding the long-term health consequences of head trauma among current and former National Football League (NFL) players that were incurred through on the field contact. While the sports media and the NFL presently emphasize the serious steps taken to curb these types of injuries, head trauma is not a new phenomenon and relative “concussive hits” have not always been as vilified and penalized as they might be today. On the contrary, the NFL had previously utilized the violence and physicality of the sport as a major selling point when marketing their product to the mainstream audience (Anderson and Kian, 2012). While the NFL framed hits, tackles and quarterback sacks as supreme athletic feats with a hyperbolic representation of their players as “gridiron gladiators” being “tough as nails”, the possible negative health consequences of “concussive hits” and relative head injuries were not represented in the NFL’s narrative to the public (Bryant, Comisky and Zillmann, 1981; Kain, 2009). In light of civil lawsuits brought against the NFL by former players, new information has emerged regarding exactly when the NFL became aware of the severity of head trauma related injuries and moreover, what the NFL did to potentially hide this information from both its players (former and current) and the public at large (Balsam, 2012, Breslow, 2014).

Therefore, the purpose of this study is to analyze how sports commentators represented in-game head trauma and concussions during NFL regular season games to the viewing audience, and to further examine how the potential health hazards and consequences associated with head trauma/concussive hits were communicated to the viewing audience by in-game commentators.

There are four major research questions that will be examined in this study. First, *how prevalent were incidents of concussive hits and on the field head trauma during NFL games and has the frequency of these incidents changed over the past six seasons?* Here, it is important to inquire into the finer particulars of these incidents of contact to the head and upper body region, such as: which position of play most frequently received concussive/hazardous hits to the head, which season of NFL play did these hits occur in and which quarter of play did these hit occur in? By inquiring into these details and trends over time, a more thorough understanding of the context surrounding the prevalence of these on the field incidents will be obtained.

Second, *how did in-game NFL television commentators (Play-by-Play Announcer and Game Analyst) represent specific instances of head trauma/concussive hits to the viewing audience during live NFL football games?* In particular, this question aims to examine whether during a period of immense media scrutiny concerning the NFL's treatment and reaction to concussion management and player safety, if significant upper body contact was glorified or condemned to the audience during commentary. Here, analysis will be directed towards identifying verbiage and framing techniques utilized by commentators in their representation of hits to the viewing audience (e.g. hyperbole, cliché, dramatic performativity etc.). Inquiry will also be placed into how penalties (or lack thereof) related to head trauma/concussive hits were represented by commentators, analyzing discourse concerning their necessity, legitimacy and influence/impact on gameplay.

Third, how were the NFL players who initiated and received on the field head trauma/concussive hits represented to the viewing audience during NFL broadcasts by

Game Commentators? In specific, were players that initiated/delivered these hits positively or negatively represented by commentators? In contrast, how were players that received these hits represented by commentators to the televised viewing audience? It is important to investigate representations of player toughness, masculinity and physicality within commentator rhetoric when framing incidents of head trauma/concussive hits to the viewing audience, concentrating on the relative risks, rewards and potential consequences of these incidents.

Fourth, *how did NFL Game Commentators communicate the severity of health hazards and consequences associated with head trauma/concussive hits to the viewing audience during incidents of significant hits/contact?* Inquiry will be placed into the frequency of commentator references towards health hazards during incidents of head trauma/concussive hits, how commentator communication of these relative health hazards might have changed over the past six seasons and how specific advancements in concussion protocol and safety initiatives in the NFL were represented by commentators to the viewing audience during head trauma/concussive hits.

The timeframe for this study is from 2009 to 2014. Over this period, the NFL has been engaged in several class action lawsuits with former players (and their families) concerning the long-term health consequences associated with on the field head trauma. This has led to numerous public relations challenges associated with the perceived safety and dangers of playing American (gridiron) football.

This study will examine whether representations of safety and potential health hazards have changed over the course of six seasons, and if so, in what ways? Focus will be placed on identifying specific commentator verbiage in the description and framing of

in-game physicality to the viewing audience. This examination will analyze the utilization of communication/narrative formats within commentary and more specifically, inquire into how subsequent frames, themes and discourses were constructed and delivered to the viewer for consumption (Altheide and Schneider, 2013).

It is also important to study head trauma and concussive hits in the NFL because of the mounting evidence surrounding the long-term health consequences of such head injuries and the potential dangers of concussions. With the advance of neuroscience, neuropsychology and relative medical fields in recent years, researchers have been able to associate repeated head trauma with a higher susceptibility for cognitive dysfunction later in life. Werts (2012) examined numerous medical studies and found cognitive decline of former NFL players, with higher rates of cognitive impairment (such as dementia, Alzheimer's disease, Parkinson's disease and depression) among retired NFL players compared to the general population. Other researchers have identified the prevalence of chronic traumatic encephalopathy (CTE) (a degenerative brain disease resulting from repeated blows to the head) among NFL players, as well as investigations into neurodegenerative causes of death, where again, NFL players experienced higher mortality rates compared with the general population (Drysdale, 2013; Lehman, Hein, Baron and Gersic, 2012).

In addition, it is also essential to examine the area of corporate deviance. The NFL, as a multi-billion dollar per year conglomerate of 32 teams, has allegedly engaged in instances of conspiracy, negligence and fraud, which may have endangered their workers (NFL players) and even potentially, its consumers (the public), by misrepresenting the health hazards associated with on the field head trauma. Many

studies have sought to question, “What did the NFL know about this relationship, and when?” regarding head trauma, focusing on the NFL’s failure to disclose the long-term health risks of head trauma to its players, as well as their failure to instill preventative initiatives to avoid further traumatic exposure and injury, once aware. (Drysdale, 2013; Goldberg, 2013; Gove, 2011; Hanna and Kain, 2009; Lipsky, 2008).

Fainaru-Wada and Fainaru (2013) examined the NFL’s staunch public denial of any relationship between on the field head trauma and concussions with long-term health consequences, despite privately possessing information confirming the legitimacy of these dangers. In 1994, the NFL and then commissioner, Paul Tagliabue, assembled the NFL Mild Traumatic Brain Injury (MTBI) committee to study concussions in the league, however many of the nation’s leading concussion researchers were notably excluded from this committee (while much of the committee consisted of NFL “insiders”). Fainaru-Wada and Fainaru (2013) state that the NFL and its MTBI committee used its extensive funds to manufacture scientific research intended to defend the NFL (while simultaneously discrediting contrarian research), going as far to state that no player had ever sustained long-term brain damage and that, “professional football players do not sustain frequent repetitive blows to the brain on a regular basis” (p.170). Contrasting the MTBI committee’s public stance on the absence of health hazards associated with head trauma and concussions for NFL players, the league was simultaneously acknowledging long-term brain damage as a consequence of repeated concussions received during NFL games, through confidential settlements made by the NFL’s own retirement board, to compensate former players with brain damage. Rather than taking accountability for the safety of former, current and even future NFL players and their exposure to hazardous,

long-term health risks associated with head trauma and concussions, the NFL instead elected to cover up the “concussion problem” with blanket denials. Through the spread of misinformation and the manufacture of industry-funded research by those whose responsibility it should have been to advocate for the health, the safety and well being of former, current and future NFL players were placed at risk by the NFL. It is noted that the NFL engaged in deceitful practices akin to the tobacco industry, which will have a lasting public health impact on generations of players and their families (Brownell and Warner, 2009; Cummings, Morley and Hyland, 2002).

Therefore, this study is significant, as it will investigate how the issue of head trauma and concussions are transmitted from commentator to viewer, as well as question how game images are framed and represented, and to what end.

To date, there has been no academic research that has engaged in a content analysis of NFL Game Commentator representations of head trauma and how the “concussion issue” has been framed to the public. Studies have yet to critically analyze NFL games through the transcription and coding of in-game commentary, as it relates to head trauma and concussive hits, in light of the ongoing media coverage, emergent medical information and pending legal cases.

In light of the concussion litigation, corporate deviance allegations and public relations challenges levied against the NFL, it is integral to pay attention to how these ongoing issues might influence the representation of head trauma and “concussive hits” by NFL commentators during televised broadcasts. When analyzing commentator representations of head trauma and concussive hits to the public during games, the financial investment the NFL has in maintaining its enormous North American popularity

must be accounted for. Further awareness towards the methods and techniques used by the NFL to counter its detractors, through positive public relations campaigns and the “manufacture of doubt” informs the current study, expressing the needs to fully scrutinize the NFL’s potential ulterior motives in what is represented during its game broadcasts.

It is significant to recognize the possible public health ramifications involved in the representation of head trauma and concussive hits during NFL games, as many individuals are largely informed on issues through the mainstream media. Considering the NFL’s large viewership across North America, commentator rhetoric surrounding the implications and consequences (or lack thereof) of head trauma and concussions may then, potentially influence individuals’ decisions to engage and participate in all levels of contact sports.

With the NFL challenging and intentionally misrepresenting the severity and potential consequences of head trauma and concussive hits associated with the game, both television viewers and players (on all levels) may possess a false and inaccurate understanding of the dangers of head trauma and the role contact sports might play in receiving them. This responsibility is highlighted by Fainaru-Wada and Fainaru (2013), who state, “The NFL’s science hadn’t taken place in a vacuum. Three million kids between 6 and 14 years old played tackle football. There are 1.1 million high school players and 68,000 college players. The NFL’s research had been followed by medical personnel who were making decisions involving those kids” (p.211).

Research into the role of sports commentators in the production and representation of narratives during sporting events to the viewer provides insight into the level of influence commentary possesses in framing issues to the public. Several studies

examined commentator representations of violence in sports as entertainment. In particular, this area of research examined exaggerated framing techniques (such as show business narratives and dramatic performativity) employed by commentators during representations of head trauma (Bryant, Comisky and Zillmann, 1977; Cummins and Hahn, 2012; Frederick, Lim, Chung and Clavio, 2013; Hansen, 1999; Keene and Cummins, 2009; Lewis and Weaver, 2013; Messner, Hunt, Dunbar, Chen, Lapp and Miller, 1999; Segrave, 1997; Sullivan, 1991; Wanta and Leggett, 1988; Westerman and Tamborini, 2010).

In order to understand the in-game action and events, as represented by NFL commentators, it is also necessary to recognize the underlying hypermasculine subculture that exists within the NFL and the ongoing organizational conflict between the desire to win and the desire to advocate and ensure player safety (Kain, 2009). Within this environment, the commentators contribute to the representation of players as “gladiators” and “warriors”, aiding in the development of public perceptions towards social constructs of “toughness” and/or “weakness”. Thus, attention must be directed towards representations of masculinity during NFL broadcasts, through commentator verbiage, hyperbole and overall framing of the physicality and potential injuries associated with concussive hits (the individual players involved, the hit itself, speculations on the injury, responses upon return to play, etc.) (Anderson and Kian, 2012; Sanderson, Weathers, Grevious, Tehan and Warren, 2014).

Theoretical Orientation

Using social constructionism as the guiding theoretical perspective, I aim to isolate the predominant messages constructed and disseminated through Game

Commentator narratives surrounding in-game incidents of head trauma and concussions, which may influence viewer perceptions of head injuries and concussions as hazardous health issues of consequence. Viewing this thesis study through a social constructionist lens provides the opportunity to examine and interrogate the mediated meanings of data collected during the content analysis of televised NFL commentary in games and what potential realities were constructed for public consumption.

As defined by Charmaz (2006), social construction theory is “a theoretical perspective that assumes that people create social reality(ies) through individual and collective actions. Rather than seeing the world as a given, constructionists ask, ‘how is this accomplished?’” (p.189).

It must be understood that the representation of violence and physicality during televised NFL games is distilled through the “filter” of those who frame the action: NFL commentators and behind the scenes producers. As such, the message conveyed to the consumer within NFL games is mediated and potentially altered, to adhere to the intended, overarching narrative and motivations of those who frame the image (the 32 team conglomerate known as the National Football League).

Pertinent to this study, is an inquiry into how NFL broadcasts specifically constructed the representation of head trauma and concussions for public consumption and understanding. In light of what is scientifically known about the adverse health consequences of head trauma and concussions in NFL play, it is an imperative to examine how the construction of these issues may have exposed and influenced public perception regarding the risks and consequences associated with head trauma (or lack thereof).

It is critical to apply social construction theory in professional sports given that athletics and major sporting events (such as the NFL's Super Bowl) are regarded as highly valued cultural touchstones within mainstream North American society (Oriard, 2014; Real, 1975; Smith, 2014; Tainsky, Xu, and Zhou, 2014). As a result, it is important to recognize the role of professional sports in the creation and representation of images and messages, and how the viewer receives them. This is relevant when investigating not only how meanings are constructed, but also exactly who holds the power to invoke the dominant narratives. Gamson, Croteau, Hoynes and Sasson (1992) explain that the "genius" of social constructionism is that those who possess the power to mediate meanings are able to "make the whole process seem so normal and natural that the very art of social construction is invisible" (p. 374). Therefore, it is the obligation of the social constructionist theorist to decode these multi-layered, mediated messages and articulate how these narratives were represented to the public.

When applying the social constructionist theoretical lens back to the NFL, it must be acknowledged that the league had long been able to present its violent physicality (over several decades) without any apparent contestation. By framing the action through sports commentator narratives (which emphasized on the field violence as simply "part of the game"), the NFL was able to construct a casual, social acceptance and normalization of violence in its sport, without promoting the prospective health hazards associated with the game. This theory is further supported by Frederick, Lim, Chung and Clavio (2013), suggesting that through the formalized structure and implementation of rules of gameplay that exist within NFL, the violence that occurs in-game is legitimized, with these

significant acts of “physical violence being diffused by skewing the boundaries of acceptability” (p. 66).

When examining the intersection of sport, language and culture, Mean and Halone (2010) suggest that professional sports represented in the media engage in “communicative practices and processes that reinforce and maintain traditional forms of power and discrimination”, further on positioning media representation of professional sports “as a site that constructs, represents, and provides insight into culture and cultural forms” (p. 255). Furthermore, the authors note that professional sports have become such a consistent, everyday presence within mainstream North American consciousness, that the actual messages and meanings represented during sport commentary (generally highly metaphoric, euphamistic and hyperbolized) are often received as routine, unremarkable and trivial by the consumer. Through this perceived passive consumption and taken-for grantedness (regarded as a normal aspect of modern life), professional sports are then viewed as a “common resource”, able to “aid and guide understanding, meaning-making and audience interpretations; a resource that is also drawn on to sell and promote products given sport’s intrinsic value for many people” (Mean and Halone, 2010, p. 254).

Relative to inquiry into social constructionism in professional sports is the work of Bryant, Brown, Comisky and Zillman (1982), which examined the relationship between sports commentary and the social construction of drama in promoting athletic events. In particular, the authors identified the use of manufactured conflict during professional sports commentary, where “interpersonal animosity” and “classic confrontations” were purposefully created for audience consumption, despite the absence

of any legitimate personal conflict between competing teams/players. Legendary National Basketball Association (NBA) player, Bill Russell, acknowledges the sports media construction of grudges and feuds during their portrayal of in-game competition. Russell notes that despite carrying on a personal friendship with long-time opponent Wilt Chamberlain, they were represented to the public during game broadcasts as being “mortal enemies” (which the public believed as fact).

Here, it is important to recognize these socially constructed aspects of professional sports; for despite being portrayed as authentic, athletic contests, it is crucial to note that professional sporting events are not 100% objectively presented to the viewer. Rather, the broadcasted message is *always* mediated and altered through the use of “show business” techniques, constructing sport as entertainment, which inherently distorts how the viewer perceives the actual event.

Other academic analyses into social construction in professional sports have examined topics such as the sports media coverage of “celebrity athlete” Sidney Crosby’s highly publicized concussion issues, as well as the contemporary sports media’s social construction of the elite, championship-caliber athlete (such as Tiger Woods or Michael Jordan) (Maguire, 2009; McGannon, Cunningham and Schinke, 2013). Identified within these studies was the general public’s uncontested acceptance of sports media narratives and representations of sporting events as “natural and normal”, which consistently reaffirms the “genius” of social constructionism (Gamson, Croteau, Hoynes and Sasson, 1992).

The next chapter will review the body of literature on topics associated with the representation of head trauma by television broadcasters during NFL games. Chapter

three will discuss the research design for this study, explaining the intended process for data collection, as well as describing the variables included in the coding instrument. Chapter four will examine the research results found within this study. Chapter five will engage in a discussion of the results and analyze the implications of the research findings. Chapter six will provide summary and conclusions of this overarching project, also recognizing this study's contributions, limitations and recommendations for future research.

Chapter Two: Literature Review

In order to approach this present research agenda, it is imperative to examine the wide range of topics and subtopics that contribute to this multifaceted issue. First, it is essential to analyze literature pertaining to how the media frames and represents televised sports to the public. This is followed by an examination of how these representations may influence viewer perception of the events. Then, inquiry will be directed towards literature examining the influence of social norms and masculine constructs within the National Football League (NFL) culture. This will be followed by an evaluation of how the mainstream media generally represented the issue of head trauma in sports. From there, it is necessary to perform an overview on the science and health consequences of head trauma and concussions in sports, to grasp the long-term implications of these injuries and to appreciate what is at stake in this study. Lastly, it is important to develop a further understanding of corporate deviance literature, as the NFL has been accused of engaging in deceptive practices to undermine the severity of concussions to the public.

Considering that the focus of this thesis research will be dedicated towards transcribing, coding and analyzing sports commentators' representation and framing of head trauma and concussive hits during NFL games, there is value in more broadly examining the role commentators play in the framing of professional sports narratives across various relevant topics. Most literature concerning studies of in-game sports commentary and the potential framing effects on viewers are presently located at various intersections of the sport-media nexus, including topics such as gender, race and violence in sport as entertainment.

Commentator Representations of Gender in Sports

In examining sports commentator representations of gender in sports, studies explicitly identified disparities in the representation of athleticism between males and females, as well as a strong reliance on patriarchal depictions of masculinity and femininity. Bissell and Duke (2007) performed a media content analysis on both sports commentary and camera work in six women's Olympic beach volleyball games, coding for sexualized talk and camera emphasis on specific athlete body parts. While the authors found no sexuality in the audio sports commentary alone, the visual narrative from video coverage showed nearly 37% of camera shots were focused on either the chest or buttocks of the female athletes. Bissell and Duke (2007) concluded that the "visual coverage of the game" served to utilize sex and sexuality to promote and sell the sport to audiences.

Similarly, Parker and Fink (2008) examined the effect of sport commentator framing on viewer attitudes of female athletes in the Women's National Basketball Association (WNBA). The researchers provided treatment groups with manipulated commentary (Play-by-Play and Game Analyst) that was either positively or negatively framed, and a control group that received the original game commentary (all maintaining the original screen visuals of the game). Parker and Fink (2008) found that framing alone did not impact the viewer's attitudes towards WNBA players in this study, however male viewers had far lower ratings of positive attitudes.

Commentator Representations of Race in Sports

Researching commentator representations of race in sports, Halone and Billings (2010) analyzed racial and gender disparities among 2367 coded lines of sports

commentary during the men and women's National Collegiate Athletic Association (NCAA) "Final Four" basketball games in 2000. The authors utilized the "inductively derived taxonomy" of NCAA basketball commentary to develop distinct categories to place the in-game codes in, such as, "physicality/athleticism ("can physically dominate the lane", intellectual/mental skill ("can read defenses easily") and determination/motivation ("he simply won't let them lose")" (p. 1652). In total, Halone and Billings (2010) found 1118 accounts of athletic performance within the commentary coding. This article provided an interesting methodological template for how to categorize and develop codes specific to in-game commentary. Other studies have examined the role television producers and commentators play in packaging "consistent and easily interpretable" media frames by utilizing stereotypes to reinforce viewer understandings and enhancing perceived drama. (Desmarais and Bruce, 2009; Desmarais and Bruce, 2010).

Commentator Influence in Viewer Perception of Violence

While there is an inherent level of violence and physicality expected within contact sports such as football, hockey and boxing, research indicates that sports commentators might overemphasize the prevalence of violence, hostility and aggression in an attempt to elevate viewer entertainment (Cummins and Hahn, 2012; Messner, Hunt, Dunbar, Chen, Lapp and Miller, 1999; Sullivan, 1991; Westerman and Tamborini, 2010).

Sullivan (1991) examined the impact of dramatic television commentary on viewers' perception and enjoyment of in-game violence and player hostility by screening a college basketball game with manipulated commentary. Results from this study showed that in-game commentary had the potential to change viewer perception of the

game's narrative and violence, suggesting that viewers were vulnerable to commentator bias potentially altering their individual perceptions of in-game violence and hostility (Sullivan, 1991).

Similarly, Messner, Hunt, Dunbar, Chen, Lapp and Miller (1999) studied the impact of media messages in sports broadcasts on the perception of violence among young males in the United States. When analyzing NFL games for representations of violence as “exciting and rewarding behaviour”, the authors found tremendous use of “martial metaphors and language of war” when describing gameplay, using terms such as “battle”, “ammunition”, “point of attack”, “blitz”, “attack mode” (p.7). Further, Messner et al (1999) noted many examples of hyperbole which described players as being violently “buried”, “stuffed”, “walloped”, “cleaned out” and “wiped” during an NFL game (p.6).

Westerman and Tamborini (2010) examined the impact of televised sports production and its presentation on the sports viewing audience and their level of consumption. The authors suggest that sport commentators assist in framing conflict to the audience and the portrayal of ‘violence as entertainment’ within the context of the game. Specifically, they comparatively analyze forms of scripted violence (embellishment of conflict and combat for entertainment purposes) and non-scripted violence (naturally occurring throughout the gameplay) within sport. Aligned with the findings of previous research, Westerman and Tamborini (2010) found that sports commentator use of dramatic portrayals of team/player rivalries and feuds were connected with increased enjoyment in the gameplay.

Further examining the representation of sports violence as spectacle, Coakley

(1988) refers to a concept of the “entertainment conspiracy”, in which viewing audiences internalize commentator enthusiastic narratives of exaggerated, hyperbolic representations of violence and roughness/toughness, as this rhetoric frames the viewed sporting events as significantly more enjoyable and noteworthy during post game conversations. Here, Coakley (1988) suggests that the “entertainment conspiracy” is most salient among casual sports viewers, who more passively consume the narratives disseminated by Game Commentators, without possessing extensive knowledge or appreciation of the more technical nuances of the sport themselves.

Cummins and Hahn (2012) studied the representation of violence in televised sports through an examination of the relationship between the use of instant replay, perceived violence and viewer entertainment during both exciting and dull games. The results of Cummins and Hahn’s (2012) study found a positive relationship between sports violence and enjoyment and stated that perceived violence was “a significant predictor of enjoyment of play”. Of interest among their findings was that the relationship between violence and enjoyment was not constant, but was dependent on the nature of play. For instance, exciting play was met with viewer enjoyment, while perceived violence contributed to viewer enjoyment during dull games.

Dramatic Embellishments by Commentator During Competition

Many previous studies on sports commentary have focused on the influence commentators have in framing gameplay to the television viewers and the subsequent impact on viewer attitudes, enjoyment and overall perception of the games they are watching. Research has consistently shown the influence sports commentators have on the television viewers’ interpretation of a sporting event through use of more dramatic,

emotion-laden accentuations in their depictions of the action (Bryant, Comisky and Zillmann, 1977; Bryant, Comisky and Zillmann, 1977; Hansen, 1999).

Bryant, Comisky and Zillmann (1977) performed a media content analysis of six televised NFL games (two games were selected from three major networks), examining the use of language and verbiage during commentary (coded as either descriptive, humorous or dramatic). Of the 5728 sentences coded across these games, the authors found that commentators added substantial “dramatic embellishments” to the “human drama of athletic competition”, regarded as highly stylized. It was noted that these sports commentators relied heavily on a select few clichés in their commentary.

The researchers have also examined the use of sports commentary as a substitute for on the field action during lackluster games and the commentators’ perceived responsibility to inject drama, tension and suspense into the broadcast. Here, Bryant, Comisky and Zillmann (1977) recognize how sports commentators are able to construct and relay a game as a “fierce competition” to the viewing audience through embellishment, when in reality, the game itself may be rather dull. While regarded as a compensatory response to less exciting visual in-game action, Bryant, Comisky and Zillman (1977) note that commentator influence on viewer perception is so pervasive, that fans in actual, live attendance of sporting events often rely on the sports broadcast (via radio transmission) to “verify that what they had just seen was really what they thought they saw” (p. 150). Ultimately, the authors found that dramatic sports commentary was a “critical contributor to the spectator’s appreciation of televised sports” through commentator influence on viewer perceptions of quality, violence and enjoyment of the games (p.153).

Hansen (1999) studied the influence of partisan sports commentators in the construction of viewer perceptions of real time, in-game action. The author identified the two main narrative styles in sports broadcasting: colour commentary (interpretation of action, background information on players/teams) and Play-by-Play (real time description of in-game action) and explored the relationship and interaction between the two in announcing NFL football games. The author further suggested that professional football was more susceptible to “interpretive commentary” in real-time more so than other sports, due to the lag in-between plays, providing the commentary pairing with more time to construct their narratives for the viewer. Furthermore, when analyzing the relationship between colour commentator and Play-by-Play announcer, Hansen (1999) found that broadcasting teams often achieve an “internally consistent game narrative”, whereby their on-air conversation was collectively partisan towards their respective home teams.

Similarly, Scott, Hill and Zakus (2014) examined how Play-by-Play and colour commentators strategically insert specific narratives and storylines into their commentary, to maintain and grow viewer interest. Here, the researchers suggest that during televised sporting events, there is a strategic marketing of specific, previously prepared narrative frames (such as stereotypes, inset beliefs and references to past cultural events), that commentators can utilize while calling “in-game” action, with the intent to capture interest and build their viewing audience (Scott, Hill and Zakus, 2014). It was also recognized that the narrative structure of commentary may differentiate between sports, as the live, in-game pacing of an American (gridiron) football game, compared to that of baseball and basketball game, will allow different lengths of time in which announcers can provide interpretive commentary, as opposed to a less biased

accounting of the action in play.

Commentator Influence on Viewer Perception of Gameplay

As the narrative conduit to the television viewer, the sports commentator is tasked with relaying in-game action to the viewer as it occurs. However, this task is dependent on the commentator's interpretation of events, which is naturally prone to subjectivity and may vary depending on each commentator's own partisan opinions and bias. A number of studies have examined how commentators might influence viewer perception of gameplay. Keene and Cummins (2009) studied the influence of a sports commentators' credibility on viewer perception of gameplay, based on the commentators' previous athletic experience (college athlete, college coach, professional athlete, no experience). The authors found that viewers perceived sports commentators with previous athletic experience as more credible in their representation of gameplay, while commentators with no experience were regarded as far less credible in their analysis. Keene and Cummins (2009) also note that viewers perceived the actual gameplay as more exciting and entertaining during games called by commentators with previous athletic experience.

Related studies examined framing effects of sports media on the viewer perceptions through the comparison of character-focused narratives and performance-focused narratives, as well as sports commentators' ability to alter viewer perceptions through justification of on the field violence (Frederick, Lim, Chung and Clavio, 2013; Lewis and Weaver, 2013). Similarly, Wanta and Leggett (1988) studied 34 college football commentators' use of clichés through a media content analysis. Segrave (1997) examined the use of hyperbolic and metaphorical conventions in the language and

rhetoric of sports commentary. The author's study into the "language of sport" or "sportspeak" emphasized the prevalence of sports commentator's use of both violent rhetoric and life or death analogies during broadcasts.

Navigating Masculinity and Cultural Scripts in the NFL

While some have noted the increased awareness and caution associated with concussions and head injuries within present NFL culture (in light of ongoing litigation from former players and mounting media criticism), others express concern about the willingness of players, coaches and medical staff to report concussive symptoms; for fear of removal from the game, financial concerns and the desire to win "at all costs" (Neumann, 2011).

Providing some insight into this level of intensity, commitment and sacrifice among players embedded within the NFL culture, Stampler (2014) examined an anonymous poll conducted by ESPN of 320 active NFL players, which found that 85 percent of players polled would choose to play in the Super Bowl even if they knew they had a concussion. It is information of this nature that necessitates a further analysis into the overarching inner workings of the culture which NFL players exist with, examining the extent and detail to which the severity of long-term health consequences of head trauma are actually communicated.

Kain (2009) examined the ongoing conflict in NFL culture between player safety and the desire to win. The author analyzed the internal handling of "concussion management" protocols, possible conflicts of interest and institutional pressures placed on NFL medical staffs to clear players to return to play. Here, Kain (2009) reports specific instances in which NFL head coaches, such as Bill Belichick, disregarded trainer

recommendations, seemingly valuing victory over individual player health and safety. This is collated with research suggesting that NFL players themselves withhold reporting concussive symptoms during games, in part due to the incentivized-laden nature of NFL contracts (whereby, if they don't play, they don't get paid) (Cantu and Register-Mihalik, 2011; DeLamielleure, 2014; Edwards and Bodle, 2014; Fainaru-Wada and Fainaru, 2013; Robeson, King, 2014).

Compounding these concerns, are the challenges highlighted by MacGillivray (2014), involving NFL player reporting of concussive symptoms and judgment regarding ability to return to play. The author states that the decision-making ability of NFL players immediately following a concussion is severely compromised and while under this impairment, players are not qualified to adequately address the risk and dangers of continued play. As a result, MacGillivray (2014) suggests that it is the responsibility and duty of a sports team's medical staff, trainers and coaches to act as safeguards against immediate return to play in the aftermath of a concussed hit. Therefore, the author suggests that emphasis should be placed on the obligation to prevent further damage to a player over the pursuit of winning, which is a cumbersome challenge considering the cultural climate of the NFL, typified in a notable quote from Oakland Raiders' owner Al Davis, whose guiding motto was, "Just Win, Baby!".

Research into the framing and construction of masculinity regarding NFL quarterback Aaron Rodgers' decision to remove himself from play due to a concussion (and his teammate, Donald Driver's insistence and support of his choice), which ran counter to the traditional masculine scripts associated with NFL culture, examined the nature of how sports journalists and commentators contribute to hypermasculine social

scripts (Anderson and Kian, 2012). Anderson and Kian (2012) noted that scripts emphasizing the “masculine warrior” narrative (whereby physical sacrifice is viewed as a badge of honour) were progressively changing as players become more educated on the subject of concussions. Alarming, the researchers also found that the “concussion event” and Rodgers’ decision were not framed as particularly “newsworthy” and that the representation of “risk” associated with head trauma in the NFL widely varied.

An integral aspect in the representation of masculinity within professional sports is the general acceptance that elite athletes inherently play through pain, something consistently framed as a taken-for-granted “part of the game” (Adams, Anderson and McCormack, 2010; Fogel, 2011; Messner, 1990; Kreager, 2007).

Similarly, Sabo (2009) highlights the “prerequisite of toughness” required for success in professional sports, associating the denial of pain in athletics with representations of masculinity, specifically within American (gridiron) football culture, in which pain and toughness are perceived to “enhance character”.

Media Representations of Head Trauma in Sports

Focusing on media representations of concussions and head trauma in sport, Webb (2014) examined journalistic representations of the “concussion crisis” in American (gridiron) football across professional, collegiate and youth levels, through analysis of 489 print articles from ESPN and Sports Illustrated. It was found that the tone of concussion reporting within the sports media was of a “distinctively negative slant”, with heavy use of specific hot-button narrative metaphors emphasizing “disorder, sickness, and death” and “war, crime and violence” (Webb, 2014, p. 60).

Moe (2014) examined print media portrayals of injuries in NFL football before

and after the death of former NFL player, Mike Webster, who controversially passed away (in large part) due to chronic traumatic encephalopathy (CTE). The author analyzed 496 mainstream print articles to measure how the publicity of Webster's death impacted narratives in reportage of injuries of NFL players, finding an increase in frequency of mentions of "head injuries" upon Webster's death (Moe, 2014).

Sanderson, Weathers, Grevious, Tehan and Warren (2014) examined how the print sports media framed the injury status of two NFL quarterbacks (Jay Cutler and Robert Griffin III) within the NFL's hypermasculine subculture. Sanderson et al (2014) suggest that the sports media's representation of these injuries may have the power to incite a paradigm shift in present cultural norms regarding athlete injuries, constructions of "toughness" and pressure to return to play.

In a content analysis of Sports Illustrated articles, Nixon (1993) examined representations of the health risks, pain, injury and comebacks of professional players. In this study, the author noted that while physical self-sacrifice associated with playing through pain and injuries may shorten careers, risks associated with injuries were often minimized/undermined, with greater emphasis on the perceived benefits of playing through pain, regarded as an opportunity to prove toughness of character and masculinity.

Another content analysis, by Trujillo (1995) examined the representation of masculinity in NFL through analysis of 18 regular season televised Monday Night Football games during the 1993-1994 season. During this study, the author examined Game Commentator representations of players' bodies, noting "players were described as weapons, missiles, shields, rockets, hitting machines and other instruments of violence. Especially violent impacts were shown in multiple, slow-motion replays and were

narrated in ceremonial detail” (p. 411).

Petric (2013) performed a content analysis of 35 print media representations of masculinity and health risks in the aftermath of the suicide of NFL legend, Junior Seau. Here, the author attempted to interpret how relative discourse surrounding Seau’s death was constructed and their various potential meanings.

Relatedly, the representation of risk was also present in the work of McGannon, Cunningham and Schinke (2013), who performed an ethnographic content analysis of 68 articles concerning NHL hockey star, Sidney Crosby’s concussion, examining how the sports media constructed meanings, risks and consequences associated with the concussion narrative.

In a study of YouTube videos, researchers performed a content analysis of the most highly viewed concussion-related clips, many of which involved sporting events and athletic injuries, to examine how concussion knowledge was disseminated from this platform (Williams, Sullivan, Schneiders, Ahmed, Lee, Balasundaram and McCrory, 2014). The researchers found that while new media platforms such as YouTube might be helpful in broadcasting concussion knowledge and awareness to wider populations, the inability to regulate the quality of uploaded media content would serve as problematic if being utilized as an educational/informational vehicle (Williams, Sullivan, Schneiders, Ahmed, Lee, Balasundaram and McCrory, 2014).

Concussion Research

The most widely and commonly used term related to head trauma is concussion, which is broadly defined as an “injury that affects an individual’s cognitive ability and neurological functioning” (MacGillivray, 2014, p.8). Tator (2014) further expands on

this definition by highlighting the various types of concussive disorders including “acute concussion, second impact syndrome or acute cerebral swelling, post concussion syndrome, depression or anxiety, chronic traumatic encephalopathy (CTE)” (p. 81). Marshall (2012) notes that concussions are generally diagnosed through the identification of cognitive, somatic, affective and sleep disturbance symptoms and that 90% of concussions do not involve the loss of consciousness as historically assumed.

During the early 1990s, the NFL’s communication department would cite in-house statistics that there was, on average, only one concussion every three or four games, while leading neurologist, Dr. Joseph Maroon (former team neurologist for the Pittsburgh Steelers) estimated that concussions occurred on average two to four times per game in the NFL (Fainaru-Wada and Fainaru, 2013). Contrasting that data when examining the prevalence of concussions in the NFL, Omalu, DeKosky, Minister, Kamboh, Hamilton and Wecht (2005) found that concussions occurred roughly 0.41 times per game. Regarding those concussions, the researchers found that “67.7% of concussions involve impact by another player’s helmet, 20.9% involve impact by other body regions (e.g., a knee), and 11.4% involve impact on the ground (29, 31, 32, 40). It has been reported that 9.3% of the concussions involved loss of consciousness and 2.4% of the concussions resulted in hospitalization” (Omalu et al, 2005, p. 131).

Drysdale (2013) highlights the prevalence of chronic traumatic encephalopathy (CTE) among NFL players, defined as “repeated blows to the head” which ultimately result from concussions, given the consistent physicality of NFL games. Of particular relevance, Lehman, Hein, Baron and Gersic (2012) performed a mortality study on neurodegenerative causes of death among 3439 former NFL football players. Drawing

from a sample of players from 1959 to 1988 who had played at least five seasons, the researchers found that NFL players had three times the neurodegenerative mortality rate than the general U.S. population (four times higher for Alzheimer's disease and Amyotrophic Lateral Sclerosis, often referred to as A.L.S. or Lou Gehrig's disease).

Werts (2012) examined other long-term health consequences of concussions, citing a study from the University of North Carolina which surveyed 2,552 retired NFL players, and found that "Of 592 players who said they sustained three or more concussions during their career, 20.2 percent of them had been diagnosed with depression" (p. 4). Drawing from another study conducted by the NFL, Werts (2012) noted that of over 1,000 former players, "retired players that were under the age of fifty were nineteen times more likely to have dementia, Alzheimer's disease, or other memory-related diseases than the general population of similarly aged men" (p.5).

Corporate Deviance

It is important to examine the area of corporate deviance during this literature review, for the National Football League (NFL), as a multibillion dollar, unincorporated nonprofit organization (regarded as a trade association for the 32 teams that play in the league) has allegedly engaged in instances of fraud, conspiracy, deception and negligence. A major facet of these allegations suggests that the NFL may have endangered the long-term health of its players and provided misinformation regarding the health hazards of concussions to the public.

The work of Markowitz and Rosner (2012) lays the foundation to thoroughly understand how corporations engage in illegal conspiracies and deceitful, seditious practices that challenge, withhold and deny pertinent information regarding the health

and safety of their products, potentially endangering consumers and the public at large. The authors specifically analyze the chronology of corporate malfeasance within the lead industry and polyvinyl chloride (PVC) industry, noting the extensive utilization of public relations to counter criticisms and the “manufacture of doubt”. Markowitz and Rosner (2012) highlight that “it was important, from the industry’s point of view, to undercut the credibility of this outsider (researcher) as it was to rebut his argument” (p. 111). The work of Markowitz and Rosner (2012) provides a template for the present study, for it is analogous to the NFL’s management of the “concussion issue” over the past several decades and offers a historical framework to compare against.

When researching the corporate deviance literature concerning head trauma and concussions in the NFL, the work of Fainaru-Wada and Fainaru (2013) is regarded as a landmark publication, as it exposed the conspiracies committed in the NFL’s attempt to cover up the problem of head trauma to the North American mainstream population. Fainaru-Wada and Fainaru (2013) argue that the NFL was fully aware of the dangers and health ramifications associated with on the field head trauma and concussions, as the league had awarded permanent disability benefits to several former players suffering from chronic and degenerative brain damage (such as Mike Webster and Gerry Sullivan), with all parties reaching the conclusion that these players developed brain damage as a result of repeated head trauma incurred by playing NFL football. In light of this knowledge, Fainaru-Wada and Fainaru (2013) state that the NFL and their Mild Traumatic Brain Injury (MTBI) committee maintained a steadfast public denial of all health hazards associated with on the field head trauma and counteracted these allegations with industry-funded research published in peer-reviewed journals, such as

Neurosurgery.

Lipsky (2008) highlights the NFL's dubious attempts to "address" concussions in the sport through its in-house creation of their Mild Traumatic Brain Injury (MTBI) committee in 1994. In particular, the appointment of the committee chair, Dr. Elliot Pellman, a rheumatologist (who served as a medical advisor for the National Hockey League, Major League Baseball and team doctor for the NFL's New York Jets), with no previous neurological experience or expertise was puzzling. Pellman has since been exposed as largely unqualified for his position, with many of his scientific findings having been largely refuted, such as his claim that "NFL players who returned to play in the same game in which they suffered a concussion were not at significant risk of a second injury, either in the same game or during the season" (Lipsky, 2008, p.968).

Despite being consistently rejected during peer review, many of the MTBI committee papers were published in *Neurosurgery* (with accusations of bias leveled at *Neurosurgery* editor-in-chief and NFL consultant, Dr. Michael Apuzzo (Fainaru-Wada and Fainaru, 2013). Fainaru-Wada and Fainaru (2013) note some of the MTBI committee's published findings in *Neurosurgery* included assertions such as: concussions in the NFL occurred very infrequently (one every three games), concussion symptoms went away very quickly without long-term consequences, there was no great risk of returning to play after a concussion (with concussed players being no more susceptible to repeat concussions), players did not sustain repetitive blows to the brain on a regular basis and that it was unlikely for players who achieve NFL elite levels to be concussion prone. Hanna and Kain (2009) further suggest that the NFL and its MTBI committee fostered misconceptions among players' perspectives on the dangers of concussions, by

stressing that “there is no magic number for how many concussions are too many” and “encouraged players to treat their concussive conditions with less than due care” (p.7). Similarly, Fainaru-Wada and Fainaru (2013) found that those within the MTBI committee who disagreed with its methods and practices had been fired, researchers who disagreed or challenged the MTBI committee’s findings were subject to intimidation and professional discrediting, and those who published alternative concussion findings experienced severe blowback from the NFL (where the NFL was viewed as trying to discredit and censor its opposition).

Important within this corporate deviance framework is the NFL’s “manufacture of doubt” surrounding the health hazards related to head injuries and concussions and the NFL’s legal and ethical liability, with many researchers comparing the league’s actions with that of the tobacco industry (Fainaru-Wada and Fainaru, 2013; Goldberg, 2013). Here, Fainaru-Wada and Fainaru (2013) refer to the NFL as “Big Football”, drawn from comments made by leading activist, Christopher Nowinski, as well as Congresswoman Linda Sanchez (during a House Judiciary Committee hearing on concussions in the NFL). Researchers have identified the parallel between the NFL’s blanket denial of any linkage between on the field play and long-term head trauma (and its consequences), with that of the tobacco industry (known as “Big Tobacco”), noting that like the tobacco industry, the NFL “played on the margins of science” (Fainaru-Wada and Fainaru, 2013, p. 280). Here, several researchers have found that rather than just ignoring and denying allegations of the health risks associated with concussions, the NFL (similar to other major industries such as tobacco, lead, PVC) utilized its vast financial resources to mount public relations campaigns, challenged the science behind dissenting research,

emphasized favourable data and funded their own (potentially biased) scientific research (Fainaru-Wada and Fainaru, 2013; Goldberg, 2013; Hanna and Kain, 2009).

Goldberg (2013) suggests that through the manufacture of industry funded “counter research”, the NFL created public confusion and uncertainty regarding the legitimacy of claims made regarding concussions. Hanna and Kain (2009) further emphasize the corporate negligence committed by the NFL and the league’s endangerment of its employees due to the “failure to warn” players of the “unreasonable risks” associated with head trauma and (multiple) concussions. Here, it is valuable to examine ethical considerations associated with the decision-making process for those who engage in American (gridiron) football, at all levels of gameplay.

Inquiry into concepts of informed consent and autonomy, Robeson and King (2014) suggest that due to allegations against the NFL concerning their misrepresentation and concealment of the health hazards of playing American (gridiron) football, those who voluntarily chose to participate were not provided adequate information to necessitate “informed consent”. In particular, there is concern regarding the risk and potential health implications associated with the population of youths enrolled in American (gridiron) football, as the onus has been placed on the discretion of parents and guardians, who have not been sufficiently informed of the potential dangers of football.

Researchers have also studied the ongoing institutional pressures and resistance within the NFL regarding various amendments to the game that might improve player safety and the appropriate management of their health. In particular, Drysdale (2013) examined the ongoing reticence within the NFL to make alterations to the rules and gameplay that would reduce the risk of head trauma. The author further studied the

“evolution of discovery” of chronic traumatic encephalopathy (CTE) within the NFL, arguing the need to impose a legal obligation on the NFL to protect players through use of PET scans, which can detect the presence of CTE. However, it was noted that while the NFL’s “public stance” expresses great concern and targets initiatives towards reducing concussions and head trauma in the game, the league is still reluctant to invest in PET scans for CTE (which cost around \$5,000 and can only be performed at UCLA); this despite being a multi-billion dollar a year industry (Drysdale, 2013).

Similarly, Polsky (1997) researched organizational pressures within the NFL, which identifies conflicts of interest among NFL team medical staffs, which may potentially endanger the health and well-being of NFL players, raising potential allegations of medical malpractice. The author suggests that NFL team doctors experience tremendous pressures to “clear” players from their organization and employers (NFL teams), which could violate their medical ethics, in order to help the team win. Polsky (1997) explains how NFL teams encourage medical staff to “perform less serious procedures than what is really necessary, with a faster recovery period to minimize an athlete's time out of action, or management may encourage a team physician not to investigate an injury fully” (p. 515-516). Furthermore, NFL team management exerts pressure on medical staff to abide by the organization’s wishes, under threat of job loss and professional discrediting. Polsky (1997) also notes that team doctors experience pressure from both players (due to machismo/exaggerated masculinity, fear of replacement, contractual/economic situations) and coaches (who are pressured to win, encourage playing hurt and expect “toughness” from their athletes). Altogether, Polsky (1997) brings into question the credibility of NFL concerns of player health and safety,

especially at the cost of winning.

By acknowledging the massive public relations division within the NFL, it is necessary to examine literature concerning how corporations counteract negative publicity and how it is represented to the public. The concept of “greenwashing” is important towards a greater understanding of the influence public relations campaigns have on altering public perception and public discourse. Greenwashing is defined as a public relations practice exercised by alleged corporate polluters, in which negative publicity is countered by the promotion of misinformation and the development of an environmentally conscious and responsible public image (Holcomb, 2008). Specifically, Budinsky and Bryant (2011) identify greenwashing strategies such as “publishing false health and safety reports, which work to shift the focus from the firm, create confusion, undermine credibility, criticize valuable alternatives and deceptively promote the firm’s objectives, commitments and accomplishments” (p. 209). It is widely suggested that the NFL’s public relations equivalent of greenwashing is their highly publicized association with the American Cancer Society and Susan G. Koman Breast Cancer Foundation, conversely termed “pinkwashing”, whereby the NFL launches a month long campaign of breast cancer awareness, consistently referenced during in-game broadcasts (Lubitow and Davis, 2011).

Several studies have examined the public relations technique utilized by corporations such as the NFL, known as “strategic philanthropy”, whereby philanthropic initiatives are not necessarily altruistically motivated, but are rather synergetic attempts to improve brand image and benefit from positive publicity. Specific to the NFL, executives and public relations teams invest in the development of positive public images

through financial donations, fundraising and community involvement (Babiak, Mills, Tainsky and Juravich, 2012; Nickel and Eikenberry, 2009; Sheth and Baibak, 2010). Koning, Matheson, Nathan and Pantano (2014) note that since the expansion of critical media coverage involving head trauma and concussions in the NFL, enrollment in youth American (gridiron) football (ages 6-14) has declined by 6.7 percent. In recognition of the growing concern regarding the safety of youth football, the NFL responded with a public relations “blitz”, by partnering with McDonalds and developing a “Happy Meal” toy line called “Game Zone”. Berfield (2013) examines the NFL’s explicit motivations to attract the impressionable youth “Happy Meal” demographic (identified as age 6 to 14). Barfield (2013), quoting NFL Vice President of Fan Strategy, Peter O’Reilly, explained that “NFL research shows kids who become fans of NFL teams during their elementary school years are locked in for life”, which is again, analogous to the methods and philosophy of the tobacco industry.

Insight into what else was “at stake” for the NFL in covering up the findings on the associations between on the field play and long-term health hazards is described by Dr. Joseph Maroon in Fainaru-Wada and Fainaru (2013), who regarded the cost of the “concussion issue” to move far beyond civil litigation and towards the overall “future” of the sport. In particular, Maroon argued, “If only 10 percent of mothers in America begin to conceive football as a dangerous game, that is the end of football” (Fainaru-Wada and Fainaru, 2013, p. 206).

This chapter examined the influence sports commentators have on viewer perceptions during broadcasts, analyzing commentator representations and framing of gameplay, gender, race, dramatic embellishments and violence to the audience. The

chapter has also focused on the cultural scripts and hierarchical masculine social cues often found within the NFL subculture. Additionally, the body of research concerning concussions, on the field head trauma and the long-term health consequences of traumatic brain injuries were studied. Lastly, the field of corporate deviance was investigated, in particular examining allegations made against the NFL.

In the next chapter, the research design will be outlined, detailing the sampling method, data collection process, variable construction and data analysis approach.

Chapter Three: The Research Design

Content Analysis

Investigation into the specific research questions of this study requires a content analysis of in-game National Football League (NFL) commentary. Content analysis is identified by Neuman (1997) as “a technique for gathering and analyzing the content of text. The “content” refers to words, meanings, pictures, symbols, ideas, themes, or any message that can be communicated. The “text” is anything written, visual, or spoken that serves as a medium for communication” (In Macnamara, 2005, p. 2). It is important to track the rhetoric, definitions and themes utilized by commentators during the current study as Altheide and Schneider (2013) explain, “what we call things, the themes and discourse we employ, and how we frame and allude to experience are crucial for what we take for granted and assume to be true” (p.115). Thus, the research objective is to observe and analyze how the seriousness of health consequences related to head trauma in the NFL were framed and represented to the viewing public by in-game sports commentators, over a several year span. This will be achieved through both qualitatively and quantitatively transcribing and coding sports commentator representations of in-game instances of head trauma, concussions and hits of significance in the NFL, during football games between the 2009 and 2014 seasons.

Data Collection

Access to primary data will be obtained through the purchase of a subscription to NFL Game Pass, an online video streaming service similar to Netflix that provides every archived NFL game, commercial free and in its entirety, dating back to the 2009 season. Simple random sampling will be used to select one game for every week of regular

season NFL games included within the sample. Every individual game will be assigned a number within its given week and a random number generator will select which game will be coded, to avoid selection bias. There is a sample pool of 1,446 regular season NFL games, with 89 different in-game commentary pairings to potentially draw from, over the course of the six seasons being studied (see Appendix A for further detail).

By coding one game per week, over six seasons, 102 regular season games will be drawn altogether for this study. The number of games to randomly sample from may vary over the 17 week regular seasons, in which the 32 NFL teams play 16 regular season games, as United States national holidays, overseas games (played in the United Kingdom) and bye weeks (where teams are given a week off during the season play) alter how many games are scheduled and played on any given week.

It is important to account for this variance in commentator pairings when sampling and coding games, as in-game commentators possess diverse and unique personalities, providing distinctive interpretations and representations of gameplay, making it significant to take into account when analyzing games. Traditionally, in-game NFL commentary pairings consist of what is deemed a “two-man booth”, with one commentator generally regarded as the “Play-by-Play Announcer” and the other announcer regarded as the “Game Analyst”.

It is also important when transcribing and coding commentator representations of head trauma, concussive hits and significant on the field contact, to be aware of the commentator’s professional background. As Keene and Cummins (2009) explain, sports commentators come from various backgrounds (such as former NFL players, former NFL coaches, professional broadcasters, etc.), with each commentator possessing distinct

perspectives and opinions, which may influence how they mediate the games and action to the viewing audience. As a result, for every commentator sampled, a brief biographical analysis of the commentator's career was conducted to provide insight into their professional experience.

Televised broadcasts of NFL games generally consist of two (or occasionally three) commentators, with each possessing a specialized role within the broadcast, appropriate and complimentary to their professional training and expertise. In the case of televised broadcasts of the NFL, the formula for the pairing of broadcast commentators generally contains a Play-by-Play Announcer and Game Analyst. During NFL games, the role of the Play-by-Play Announcer is almost always occupied by a professionally trained, career television broadcaster, with a background in broadcast journalism and news reporting. These individuals might often be perceived in show business terms as the "straight man" to their Game Analyst counterpart.

In contrast with the more straight-laced Play-by-Play Announcer, the role of Game Analyst is filled by an individual with on the field, in-game experience, generally either a former professional player or NFL head coach (and occasionally an individual who has done both). These individuals tend to rely more on their own gregarious experiences in the NFL and knowledge of its culture, referencing personal anecdotes with firsthand knowledge of the game, having been "down in the trenches" themselves. For example, FOX Broadcasting Game Analyst, Troy Aikman, is an NFL Hall of Fame quarterback, who played his entire career with the Dallas Cowboys, until he was forced to retire as a result of repeated concussions. Aikman's personal history and experiences have the potential to convey a very different narrative regarding incidents of significant

upper body contact to the viewer during gameplay. This particular point of view might contrast with that of CBS Broadcasting Play-by-Play Announcer, Greg Gumbel, a professional reporter and sportscaster who did not play American (gridiron) football at the professional or collegiate level. As a result, it is of value to acknowledge who is mediating the messages to the viewer and their specific qualifications.

An independent variable present throughout NFL games within the sample is the sideline reporter or sideline correspondent, as these individuals provide in-game insights and updates regarding player injuries and personnel changes. Generally, there is one sideline reporter assigned to each commentary pairing per game, however, the sideline reporters are not consistently assigned to the same commentary pairing every week. What the sideline reporter says will be transcribed and coded, although it will be flagged as sideline reportage, to ensure the sideline reporter is not confused with a particular commentator or commentator pairing.

Much like the sports commentators, sideline reporters come from a variety of backgrounds (such as former players, former coaches, professional broadcasters, etc.) and are often females, which might potentially provide an alternative narrative to their commentator counterparts, all of whom are males. What sideline reporters say regarding injurious plays and the aftereffects of concussive hits and upper body contact of significance to the players involved is important, as this information is as equally disseminated to the viewing public as what is said by commentators. Since sideline reporters were not consistently attached to a commentary pairing, their inclusion in the simple random sampling process would have been regarded as too inconsistent to the sample, as the various combinations of commentary pairings and sideline reporters would

then expand into the several hundreds.

How the National Football League (NFL) schedules televised games

Generally, the NFL airs Sunday afternoon games at 1:00 p.m. EST, 4:30 p.m. EST, and its Sunday evening game beginning at 8:30 p.m. EST. CBS Broadcasting (CBS) owns the broadcast rights for Sunday afternoon American Football Conference (AFC) games, while FOX Broadcasting (FOX) possesses the broadcast rights for Sunday afternoon National Football Conference (NFC) games. If a Sunday afternoon game is played by teams from both conferences, the television network that holds the broadcasting rights to the “visiting or away team” will air the game. The National Broadcasting Company (NBC) owns the broadcast rights for the Sunday night game and the Entertainment Sports Programming Network (ESPN) owns the broadcast rights to the Monday night game (see Table 1 below).

Table 1. Number of NFL regular season games by television network

Television Network:	Sample of Regular Season Games Broadcast
CBS Broadcasting (CBS)	613
Entertainment and Sports Programming Network (ESPN)	103
National Broadcasting Company (NBC)	101
FOX Broadcasting Company (FOX)	629
	Total: 1446

The NFL’s 17-week regular season schedule is developed by the league, utilizing a scheduling formula that evaluates each team’s previous year’s conference and divisional standings (win/loss record). This procedure has been in place since the 2002 season, which was the last time the league expanded its number of overall teams. According to the NFL Communications department, regular season scheduling takes into

account the structure of the league, which consists of four teams playing within each division, four divisions within each conference and two conferences (Aiello, McCarthy and Signora, 2012).

Traditionally, each NFL team is matched up with the teams from within their division twice per season (playing one game at home and one game as the visiting/away team), with the rest of a team's season consisting of four games against another AFC division (rotating from three other divisions every year), four games against another NFC division (rotating from the four other conference divisions every year), with two remaining games to be scheduled at the discretion of the league based on winning percentage and team standings. The schedule development also takes into account one "bye week" provided to every team, which gives them one week off during the regular season, presumably to rest, heal injuries and recuperate from travel.

NFL Games Excluded From Sample

Not all National Football League (NFL) regular season games that occurred during the six-year sampling period were included in this sample. Games excluded from the sample included the annual NFL games that occurred during the Thursday of the Thanksgiving holiday in the United States, because they have traditionally broadcast only specific teams each year (with the Dallas Cowboys and Detroit Lions each annually holding home games on this Thursday). Occasionally, commentary teams who work the Thanksgiving game on Thursday might also work a Sunday game during the same week, enhancing their chances of being randomly selected.

Similarly, all NFL games that aired on Thursday nights during the six-year sampling period were excluded; as they were broadcast infrequently over the years

sampled (often being aired beginning in November, opposed to at the start of the NFL's regular season in September) and were also aired on the NFL Network until the 2014 season, a far more exclusive cable/satellite station, that generally netted lower viewership. Eight Thursday night NFL games began to air on CBS during the 2014 season, contributing to a more inconsistent scheduling of games over the sample period.

Also of note, NFL playoff games and the league's annual championship "Super Bowl" game were excluded, as there was a potential for a selection bias. In particular, since the NFL playoffs consisted of teams with the best regular season records (the four winners of each division and two "wild card" teams with the best records remaining from each conference), it was perceived that these teams would be far more accomplished than those who did not make the playoffs. As a result, if NFL teams that made the playoffs were perceived as superior, it is possible that playoff games could potentially misrepresent the level of action, physicality and frequency of injurious hits or incidents of upper body contact of significance.

It is also recognized that since playoff games and the Super Bowl are generally the most highly viewed NFL games of the year, the broadcasting networks would consistently appoint their primary commentary pairings. This would influence the likelihood that these commentary pairings would be selected and might overrepresent a specific commentator's rhetoric.

Another aspect in the development of the NFL regular season schedule is flexible scheduling, which is enacted during the latter half of the season to determine which teams play in the Sunday night game (consistently one of the most viewed games of the week as it airs during "primetime" at 8:30 p.m. EST on NBC). Flexible scheduling, initiated by

the NFL in 2006 and expanded in 2014 to begin earlier in the season (from Week 10 up to Week 5), involves moving a Sunday afternoon game into Sunday evening, to ensure a “quality matchup”, based on a team’s seasonal performance. Teams placed into the “flex” game position are given 12 days notice of the time shift and are suggested to have “playoff implications” as the season progresses, regarded as far more intriguing games for the viewing audience.

These games were included in the sample because the teams placed in the flex schedule would be playing each other that week regardless of timeslot. While there is potential that NBC commentator pairings might receive more “quality matchups” on paper, there is no ability to predict the quality of these games aside from the team records, which might fluctuate over the course of the NFL season. It is also generally assumed that since television networks that broadcast NFL games place their primary commentary pairings on games perceived to be “quality matchups” each week, NBC’s positioning would be no different than the games called by the premiere pairings who commentate for CBS or FOX.

Variable Construction and Measurement

Operational Definition for Coding Head Trauma/Concussive Hits

Up to this point, on the field head trauma, head injury, significant in-game contact and concussions have been referenced relatively interchangeably. However, moving forward into the transcription, coding and analysis process of this study, it is important to operationalize a specific definition when referring to head trauma, head injury, in-game contact of significance and concussions during NFL games to avoid confusion. These types of injuries are consistently regarded as the “invisible injury”, as concussions, head

injuries and relative traumatic brain injuries that occur on the field are extremely difficult to externally observe and identify. Obtaining an official diagnosis of a traumatic brain injury usually requires thorough neurological examinations, such as Magnetic Resonance Imaging (MRI) tests, Computerized Axial Tomography (CAT) scans and Positron Emission Tomography (PET) scans of the brain. To appreciate the ambiguous challenges in identifying specific instances of in-game head trauma, Omalu et al (2005) note that in their study of concussions in the NFL, only 9.3% of concussions resulted in the loss of consciousness, which is the most obvious and visible external signifier of a concussion for the viewer.

Therefore, when transcribing and coding for commentator representations of head trauma and relative concussive hits during NFL games, assessment of verified concussions or head trauma is highly subject to interpretation and is not an observable measure. Thus, what will be specifically analyzed are incidents within NFL games in which a play or game action appears to involve upper body contact of significance. *Upper body contact of significance (UBCS)* will be defined as on the field physical contact of a player from the shoulder pad region and above, that is acknowledged by commentators as an important collision or contact, warranting further comment and reaction and potentially, extended review.

Utilizing the research findings of concussions in NFL games by Omalu et al (2005), upper body contact of significance (UBCS) will be interpreted using reasonable contextual discretion (erring on the conservative side regarding questionable instances), that will focus on whether an on the field hit, collision or injury occurred around the head, neck and shoulder region, through impactful contact with another player's helmet,

other bodily region (such as knees, shoulders and elbows) or the ground.

Taking into account the pace and inherent level of physicality within all NFL games, the most predominant “hits” acknowledged by Game Commentators will be assessed and recognized as upper body contact of significance (UBCS), as the aim of this study is to analyze how commentators represent head-oriented contact to the viewer. With that noted, upper body contact of significance that is blatant and apparent to the audience, but for some reason is not acknowledged by commentators, will also be included at the discretion of the coder.

Coding Sheet Thematic Categories

For organizational purposes, the entire 60 minute regular season NFL game will be coded by individual quarter. There are four, 15 minute quarters within a single game, so each game will possess coding sheets with boxes designated to identify specific quarters, documenting the game as it progresses.

The coding sheet (see Appendix B) will analyze the latent and manifest variables present within the context of the sampled NFL games. It is through these variables that the representation of concussive hits and head trauma (hereon referred to as upper body contact of significance or UBCS) by Game Commentators will be thoroughly examined.

Through the compilation of the statistical frequency of instances of UBCS across the examined variables, the resulting data will provide substantial material for further analysis and qualitative interpretation. As noted above, when transcribing and coding “what is being said” during NFL commentary, it is also significant to identify and distinguish the specific roles of the individuals within the sports commentary booth itself, and the relative logic behind these pairings. As a commentary pairing or “team”, both

Play-by-Play Announcer and Game Analyst bring their diverse skillsets to the commentary booth during NFL games, ostensibly complimenting each other with their specific qualifications. However, with these specific qualifications in mind, it must be acknowledged that both the Play-by-Play Announcer and the Game Analyst, possessing significantly diverse professional backgrounds, might approach commentating NFL games from entirely different perspectives, with a subsequent potential for bias in their interpretation and representation of events.

In response to the potential variance among the commentary pairings, the coding sheet has specifically isolated the roles of Play-by-Play Announcer and Game Analyst into their own response sections, to account for any possible differences in their representations of the on field events. The following will provide examples of thematic categories included within the coding sheet during the content analysis of NFL games (see Appendix B for a complete view of the coding manual).

The unit of analysis utilized in this coding sheet is the individual incident of upper body contact of significance (UBCS) itself. In total, there are 226 cases identified as UBCS incidents to be included within this study, allowing for an in-depth inquiry into how the various commentary pairings specifically represented the relative thematic categories associated with UBCS to the viewing audience. For each thematic category/variable assessed (unless otherwise stated), an initial “Yes or No” question will be asked to qualify whether the individual Play-by-Play Announcer and Game Analyst provided any comments relative to the corresponding category. If answered “Yes”, any subsequent comments made by the individual Play-by-Play Announcer and/or Game Analyst will be identified and coded separately into segregated categories. Here, the

specific comments provided by either Play-by-Play Announcer and/or Game Analyst (transcribed verbatim) will be compiled for further contextual reference and analysis.

The coding sheet consists of 105 individual questions (see Appendix B), beginning with the identification of necessary contextual details present within each incident of UBCS such as: **Name of player that received UBCS, position of the player that received UBCS, game in which UBCS occurred, date of game, season of game, week number of game, network of game televised, NFL commentary pairing (Play-by-Play Announcer, Game Analyst) of game, professional background of Play-by-Play Announcer, professional background of Game Analyst and quarter of play.**

Following the initial section of the coding sheet is a thorough examination into the frequency and representation of thematic categories/variables constructed to identify specific areas of inquiry associated with UBCS that will assist in informing the study's research questions.

Officially acknowledged on-field injuries by commentators will assess the frequency and representation of “officially” acknowledged head injuries that occurred in the aftermath of UBCS, during the televised broadcast. This includes time taken to assess injury (such as the halting of gameplay), carting players off the field and “status updates” to inform the audience the medical situation of the player.

Commentator immediate reaction to upper body contact of significance (In The Moment) examines what the commentator says in the immediate aftermath of substantial contact to the upper body region. Inquiry will be placed into how the commentator responds to the incident. How do the individual commentators frame UBCS to the viewer *immediately* following it?

Commentator digested reaction of upper body contact of significance (Upon Further Replay) will assess how the Play-by-Play Announcer and Game Analyst, upon further review, might potentially reconstruct representations of the contact? Does the representation differ from the immediate reaction? How do individual Game Commentators represent the narrative of the contact as it is replayed over and over? How many times is it replayed?

Commentator reaction to an officially acknowledged head injury or concussion resulting from upper body contact of significance will focus on how the Play-by-Play Announcer and Game Analyst represented an upper body contact of significance (UBCS) injury to the viewer, which has been officially diagnosed as a “concussion” or “concussion-like” by NFL officials or team doctors on the field. How often do commentators specifically refer to the word “concussion”? What does the commentator emphasize as important and immediately imperative after such an incident? Do commentators acknowledge the health risks, the dangers, do they speculate, are they disregarding or serious? How do commentators portray this type of injury and its severity to the viewer and the health risks involved? Here, specific attention will be directed towards commentator verbiage and phrasing used to represent an injured and officially diagnosed “concussed” player. Of importance is the context in which specific mention of the words “concussion” or “head trauma” are used, inquiring into how commentators handle/manage the specific wording of head trauma and concussion, how they represent the words, their meaning, handling the topic delicately or side-stepping of topic, changing the subject or outright avoidance of wording.

Commentator acknowledgement of player's previous injury/medical history

examines whether the Play-by-Play Announcer and Game Analyst make reference to a player's health and medical history after receiving upper body hit of significance. For example, are certain players identified as more injury prone or at greater physical risk than others due to previous injuries? Are players with a previous history of concussions mentioned any differently during game commentary of UBCS?

Commentator reaction to penalties (or lack thereof) resulting from incidents of upper body contact of significance will examine how the Play-by-Play Announcer and Game Analyst interpret penalties (or the absence of penalties) resulting from incidents of UBCS. This inquiry is relevant to acquiring insight into how penalties are represented to the viewer by commentators, such as whether these penalties are framed as good or bad, called for or uncalled for, a necessity of the game to maintain control or a waste of time "let them police themselves". For example, do commentators challenge the "integrity of the game" by the penalties being called or are these penalties represented as justifiable? Are the consequences of "illegal" hits made during the engagement of an upper body hit of significance (UBCS) mentioned by commentators, such as a fine or suspension?

Commentator representation of players who initiate/commit upper body contact of significance will focus on how the Play-by-Play Announcer and Game Analyst represent the player initiating upper body contact of significance. Attention will be placed on whether this contact is positively or negatively reinforced by commentators. For example, is there a glorification of the violence, athleticism, excitement, coolness,

necessity of the hit, boosting moral, or is there an acknowledgment of the gravity of the violence, inappropriateness of the hit, safety concerns, and long-term effects?

Commentator representation to players who receive upper body contact of significance will analyze the frequency and context in which the Play-by-Play Announcer and Game Analyst represent the player receiving upper body contact of significance. For instance, are recipients of UBCS represented by commentators as tough and durable for “withstanding” the contact or are UBCS recipients represented by commentators as weak and vulnerable for allowing such contact? Also, focus will be further placed on the frequency and context in which commentators’ reference UBCS recipients’ ability to walk off the field under their own power.

Commentator narrative representation of in-game physicality will focus on the Play-by-Play Announcer and Game Analyst’s use of hyperbole, catchphrases and cliché when representing instances of upper body contact of significance to the viewer. Examples include the glorification of the violence associated with the physicality of UBCS, attention to the inflection of the commentator’s voice and measured delivery to add emphasis to the narrative, such as, “He’s seeing birdies” or “Hit like a freight train”. This may include commentator anecdotes associated with gameplay physicality such as, “Well, when I was a player....”, tracing how the game has changed, recalling previous injuries of players from past games, how tough football players are ,etc.

Commentator representation of player toughness will examine the frequency and context in which the Play-by-Play Announcer and Game Analyst represent player toughness during specific instances of UBCS. For example, are players involved in UBCS incidents framed as “gladiators”, “superhuman” and presented to the viewer as

“larger than life” through themes relative to hypermasculinity, or are these players represented as simply doing their job, without any glorification?

Commentator kneejerk medical diagnosis involves the frequency and context in which the Play-by-Play Announcer and Game Analyst provide immediate reaction to on the field injuries relative to UBCS, with specific identifications of commentator suggestions and speculation as to what injury the player might have received. Examples might include, “Well, that looks like he might be out for the playoffs”, “Here’s hoping he can get back into the game, they really can’t afford to lose him”, “That looks like his knee just gave out”, etc.

Commentator representation of player safety will examine how the Play-by-Play Announcer and Game Analyst represent the health and well-being of players who receive upper body contact of significance - while getting back up from the incident, while on the sidelines, while being attended to by medical staff, while re-entering the game etc. Examples here include inquiry into how commentators represent the responsibility of individual teams to advocate and attend to their player’s safety. Similarly, attention will be paid to commentators’ representation of the NFL’s level of responsibility and safety protocol initiatives, in advocating player health to the audience. Focus will also be placed on the emphasis of the qualification and efficacy of medical staff attending to players, the player’s “best interest in mind”, and their ability/urgency to get the players back into the game.

Commentator representation of player’s decision to return to play after an upper body injury will focus on the Play-by-Play Announcer and Game Analyst through references towards the severity of injury (or lack thereof) in the aftermath of UBCS, how

much the team needs the player to win, how much the team is missing him, the probability of a player returning to play from the injury, if they should, how/when the decision will be made. Furthermore, are players that are able to return to play represented as heroic, tough, durable, and exceptional- potentially reinforcing the notion of playing through pain and injury? Or do commentators caution the risks involved with returning too soon? Identification of what is said by the Play-by-Play Announcer and, how much the team needs the player, how much the team is missing him, the probability of a player returning to play from the injury, if they should, how/when the decision will be made. In comparison, are players *who do not return-to-play* represented differently? If seen on sidelines, is their toughness or commitment questioned by commentators or is their caution commended?

Commentator avoidance of head trauma and concussion issues will analyze the frequency and context in which the Play-by-Play Announcer and Game Analyst elect not to address, or avoid dialogue involving head trauma, concussions and relative issues during incidents of UBCS. Are there specific deviations away from such discussion and subject matter and are these instances particularly noticeable?

Identification of NFL (sub) cultural cues will examine Play-by-Play Announcer and Game Analyst statements like, “this is how they play”, emphasis on athletic work ethic, playing through pain, not being normal/superhuman, commitment to winning at-all-costs, gladiatorial “sport ethic”.

Sideline reportage of injured player status focuses on how Play-by-Play Announcer and Game Analyst engage with the sideline reporter during gameplay, for specific updates on the status of players injured during UBCS incidents. For example,

sideline reportage might provide insight into the type of injury, what the medical staff is saying, if the player is expected to return, if he wants to return and speculation of what team doctors “think happened”.

Commentator reference to a player's ability to walk off the field following upper body contact of significance will examine Play-by-Play Announcer and Game Analyst emphasis placed on the representation of players’ ability to “get back up” after receiving UBCS through phrases such as “it’s great to see him walking off the field under his own power after that hit” and “he’s slow to get up and jog over to the sideline”, to develop a further understanding of how player resiliency and the implications of UBCS are presented to the viewer.

Research Questions

There are four major research questions in this study. They include:

1. How prevalent were incidents of concussive hits and on the field head trauma during NFL games and has the frequency of these incidents changed over the past six seasons?
2. How did in-game NFL television commentators (Play-by-Play Announcer and Game Analyst) represent specific instances of head trauma/concussive hits to the viewing audience during live NFL football games?
3. How were the NFL players who initiated and received on the field head trauma/concussive hits represented to the viewing audience during NFL broadcasts by Game Commentators?

4. How did NFL Game Commentators communicate the severity of health hazards and consequences associated with head trauma/concussive hits to the viewing audience during incidents of significant hits/contact?

The next chapter will examine the results derived from the media content analysis of 102 randomly selected NFL games, where there will be specific focus on the frequency and overarching context of the above-mentioned thematic categories/variables.

Chapter Four: Descriptive Results

There are several important themes that have emerged within this study. There were 226 observed incidents identified and coded as upper body contact of significance (UBCS) during this study. The following results were derived through the use of SPSS Statistics software, in which the statistical output of frequencies from several variables were vetted and analyzed.

Frequency and Prevalence of Upper Body Contact of Significance

Table 2. Position of the player that received the upper body contact of significance

Position of Player	Frequency	Percent %
Offense		
Quarterback	70	31.0
Wide Receiver	52	23.0
Running Back	27	11.9
Tight End	22	9.7
Fullback	6	2.7
Offensive Tackle	3	1.3
Defense		
Cornerback	21	9.3
Linebacker	12	5.3
Safety	9	4.0
Defensive Tackle	2	.9
Defensive End	1	.4
Special Teams		
Punter	1	.4
Total	226	100.0

Table 2 examines the specific position of NFL players who received upper body contact of significance (UBCS), identifying the frequency of UBCS across the positions of play. From the 226 instances of UBCS examined, players at the *quarterback* position were the most frequent recipients, with 70 instances of UBCS in total, consisting of 31% of all cases accounted for in this study. Second in frequency of UBCS was the *wide*

receiver position, which tallied 52 individual instances of UBCS, contributing to 23% of all incidents analyzed in this study. 78.3% of all cases of UBCS accounted for in this study occurred among offensive “playmaker” positions (*quarterback, running back, wide receiver, tight end, full back*). When including UBCS from the *offensive line* position of play, 79.6% of all UBCS occurred on the offensive side of the football. Of the remaining 20.4% of UBCS examined in this study, 20% occurred across defensive positions (*defensive tackle, defensive end, linebacker, cornerback, safety*) and 0.4% or 1 individual incident of UBCS occurring at the *punter* position. The defensive position with the most frequent incidents of UBCS was the *cornerback* position, which occurred 21 times over the course of the analysis, accounting for 9.3% of all UBCS studied.

Table 3. Season of Game

Season	Frequency	Percent %
2009	39	17.3
2010	35	15.5
2011	35	15.5
2012	49	21.7
2013	41	18.1
2014	27	11.9
Total	226	100.0

Table 3 examines the frequency in occurrences of upper body contact of significance (UBCS) across the six NFL seasons included in this analysis. The 2012 season contained the highest number of UBCS cases, with 49 individual instances, accounting for 21.7% of all UBCS identified in this study. Five of the six NFL seasons (2009, 2010, 2011, 2012, 2013) each included 35 or more individual instances of UBCS. The 2014 season possessed the lowest incident rate of UBCS, accounting for just 11.9% (or 27 individual incidents) of UBCS in this study.

Table 4. Network of Game Televised

Network	Frequency	Percent %
CBS	90	39.8
FOX	88	38.9
NBC	31	13.7
ESPN	17	7.5
Total	226	100.0

Table 4 examines the number of NFL games broadcast by television network, which were randomly selected for this study, that contained individual instances of upper body contact of significance (UBCS). Both CBS and FOX possessed a large portion of televised NFL broadcasts with instances of UBCS, accounting for 178 individual incidents (90 for CBS, 88 for FOX) or 78.6% (39.8% for CBS, 38.9% for FOX) of all UBCS instances analyzed.

Table 5. Quarter of Play

Quarter	Frequency	Percent %
First Quarter	36	15.9
Second Quarter	65	28.8
Third Quarter	69	30.5
Fourth Quarter	56	24.8
Total	226	100.0

Table 5 examines data concerning the specific quarter of play in which upper body contact of significance (UBCS) occurred within the 60 minute timeframe of an NFL regular season game. The *Third Quarter* of NFL games contains the most instances of UBCS with 69 individual cases (30.5 % of all instances within the study), with the *Second Quarter* of NFL games in close second place, with 65 individual cases of UBCS (28.8% of all cases). Incidents of UBCS occurred least frequently during the opening *First Quarter* of play in NFL games, accounting for 15.9% of all cases of UBCS

examined, occurring 14.6% less often than the *Third Quarter*, where incidents of UBCS occurred the most frequently.

Commentator Representation of Specific Incidents of Upper Body Contact of Significance

Table 6. Game Commentators (Play-by-Play Announcer and Game Analyst) provide hyperbole associated with upper body hit of significance

Response	Frequency	Percent %
Yes	118	26.1
No	334	73.9
Total	452	100.0

Table 6 examines the frequency and prevalence of Game Commentator (Play-by-Play Announcer and Game Analyst) use of hyperbole during incidents of upper body contact of significance (UBCS). Data obtained shows that Game Commentators (Play-by-Play Announcer and Game Analyst) employed hyperbole associated with incidents of UBCS during 26.1% of all observed cases.

Table 7. Commentary Pairing (Play-by-Play Announcer, Game Analyst) provides glorification of upper body contact of significance

Response	Frequency	Percent %
Yes	121	53.5
No	105	46.5
Total	226	100.0

Table 7 examines the frequency and prevalence of Game Commentator (Play-by-Play Announcer, Game Analyst) glorification of upper body contact of significance (UBCS). From the individual cases of UBCS observed, data shows that 53.5% of these incidents contained examples of in-game glorification of UBCS by the commentary pairing.

Table 8. Game Commentators (Play-by-Play Announcer and Game Analyst) provide specific representation of in-game physicality

Response	Frequency	Percent
Yes	307	67.9
No	145	32.1
Total	452	100.0

Table 8 examines the frequency and statistical prevalence of Game Commentators' (Play-by-Play Announcer and Game Analyst) use of specific representations of in-game physicality during incidents of upper body contact of significance (UBCS). Data obtained for this study shows that 67.9% of UBCS cases included within this analysis contained specific commentator representations of in-game physicality.

Table 9. Game Commentators (Play-by-Play Announcer and Game Analyst) react to penalties (or lack thereof) resulting from upper body contact of significance

Response	Frequency	Percent %
Yes	87	19.2
No	365	80.8
Total	452	100.0

Table 9 examines the frequency of Game Commentators' (Play-by-Play Announcer and Game Analyst) combined reaction to penalties (or lack thereof) resulting from UBCS. Data collected for this analysis shows that collectively, commentators provided reaction to penalties during 19.2% of UBCS incidents.

Commentator Representation of Players Involved in Upper Body Contact of Significance

Table 10. Game Commentators (Play-by-Play Announcer and Game Analyst) provide specific representation of players who initiate/commit upper body contact of significance

Response	Frequency	Percent %
Yes	202	44.7
No	250	55.3
Total	452	100.0

Table 10 examines the frequency and prevalence in which Game Commentators (Play-by-Play Announcer and Game Analyst) provided specific representations of players who initiated/committed UBCS, during observed incidents within the study. Further analysis of this data shows that Game Commentators provided specific representations of the initiating/committing UBCS players during 44.7% of cases studied.

Table 11. Game Commentators (Play-by-Play Announcer and Game Analyst) provide specific representation of players who receive upper body contact of significance

Response	Frequency	Percent %
Yes	229	50.7
No	223	49.3
Total	452	100.0

Table 11 examines the frequency and prevalence of Game Commentators' (Play-by-Play Announcer and Game Analyst) specific representations of players who received upper body contact of significance (UBCS). Research findings collected show that Game Commentators collectively provided specific representations of UBCS recipients within 50.7% of analyzed cases.

Table 12. Game Commentators (Play-by-Play Announcer and Game Analyst) provide specific representation of specific representation of player toughness

Response	Frequency	Percent %
Yes	91	20.1
No	361	79.9
Total	452	100.0

Table 12 displays the frequency and prevalence in which Game Commentators (Play-by-Play Announcer and Game Analyst) provided specific representations of player toughness during incidents of UBCS. Findings from data collected observed that Game

Commentators collectively provided specific representations of player toughness 20.1% of UBCS incidents included in this study.

Commentator Representation of Health Hazards and Consequences of Upper Body Contact of Significance

Table 13. Game Commentators (Play-by-Play Announcer and Game Analyst) use the word "concussion" when describing on the field upper body contact of significance

Response	Frequency	Percent %
Yes	13	2.9
No	439	97.1
Total	452	100.0

Table 13 examines the frequency of Game Commentators' (Play-by-Play Announcer and Game Analyst) use of the word "concussion" when describing an incident of on the field, upper body contact of significance (UBCS). The data shows that of the incidents of UBCS observed within this study, there were 2.9% or 13 individual mentions of the word "concussion" in total. Of the remaining 97.1% of UBCS cases examined, there was no identified usage of the word "concussion".

Table 14. Game Commentators (Play-by-Play Announcer and Game Analyst) use the word "head trauma" and its derivatives when describing on the field upper body contact of significance

Response	Frequency	Percent %
Yes	19	4.2
No	433	95.8
Total	452	100.0

Table 14 examines the frequency of Game Commentators' (Play-by-Play Announcer and Game Analyst) use of the word "head trauma" and its relative derivatives when describing on the field incidents of upper body contact of significance (UBCS).

The data shows that Game Commentators collectively made use of the word “head trauma” and its derivatives during 4.2% of UBCS incidents examined.

Table 15. Game Commentators (Play-by-Play Announcer and Game Analyst) reference NFL safety protocols surrounding "head injuries" when describing on the field upper body contact of significance

Response	Frequency	Percent %
Yes	51	11.3
No	401	88.7
Total	452	100.0

Table 15 examines the frequency and prevalence of Game Commentators’ (Play-by-Play Announcer and Game Analyst) reference towards NFL safety protocols surrounding "head injuries" when describing on the field incidents of UBCS. Data collected found that collectively, Game Commentators made reference to NFL safety protocols surrounding head injuries during 11.3% of all UBCS cases included in this study.

Table 16. Game Commentators (Play-by-Play Announcer and Game Analyst) reference potential health hazards surrounding "head injuries" when commenting on upper body contact of significance

Response	Frequency	Percent %
Yes	24	5.3
No	428	94.7
Total	452	100.0

Table 16 provides the frequency of Game Commentator (Play-by-Play Announcer and Game Analyst) references to potential health hazards surrounding "head injuries" when commenting on upper body contact of significance (UBCS). Data collected shows that Game Commentators referenced the potential health hazards surrounding "head injuries" during 5.3% of UBCS incidents observed within this study, with the remaining 94.7% of analyzed incidents containing no such reference from Game Commentators.

Table 17. Game Commentators (Play-by-Play Announcer and Game Analyst) mention the player's ability to walk off the field following upper body contact of significance

Response	Frequency	Percent %
Yes	45	10.0
No	407	90.0
Total	452	100.0

Table 17 examines the frequency and statistical prevalence of Game Commentators' (Play-by-Play Announcer and Game Analyst) reference towards a player's ability to walk off the field following upper body contact of significance (UBCS). From the individual cases of UBCS included in this study, data found that Game Commentators made mention of the player's ability to walk off the field after UBCS during 10.0% of incidents.

Table 18. Game Commentators (Play-by-Play Announcer and Game Analyst) provide specific representation of player's decision to return to gameplay after an upper body injury

Response	Frequency	Percent %
Yes	30	6.5
No	422	93.4
Total	452	100.0

Table 18 examines Game Commentators' (Play-by-Play Announcer and Game Analyst) specific representation of a player's decision to return to gameplay after an upper body injury. Data shows that collectively, commentators provided specific representation of a player's decision to return to gameplay after an upper body injury in 6.5% of UBCS incidents observed.

The next chapter will provide thorough discussion and interpretation of the research findings, specifically interrogating the results as they relate to the outlined research questions and examining the potential implications of these findings.

Chapter Five: Analysis & Discussion

This chapter will explore and delineate how the findings derived from the results section have informed on the four major research questions of this study. First, this chapter will analyze the frequency and prevalence of incidents of upper body contact of significance (UBCS). Here, it is important to examine how often UBCS occurred during gameplay, in order to distinguish the in-game context (such as position of UBCS recipients, quarter of play of UBCS, etc.) in which these incidents most frequently transpired.

Second, this chapter will analyze how commentators represented the actual physical contact within incidents of upper body contact of significance (UBCS). By specifically examining the representations of physicality and relative violence within the act of UBCS, there is an opportunity to interrogate and decipher how these incidents were framed and conveyed to the viewing audience.

Third, this chapter will also examine how commentators represented the specific players involved within incidents of upper body contact of significance (UBCS). Through analyzing the representations of players who both initiated and received UBCS, there is an opportunity to more succinctly understand how commentators portrayed these players within their mediated messages to the viewing public.

Fourth, this chapter will examine how commentators represented the potential health consequences and repercussions of upper body contact of significance (UBCS). In light of what is presently known regarding sports-related traumatic brain injuries, it is important to thoroughly analyze how commentators disseminated messages concerning player safety and the potential risks and hazards associated with head trauma to the

viewing audience.

Frequency and Prevalence of Upper Body Contact of Significance

Throughout this study, several compelling findings have emerged which require further analysis and discussion, beginning with an examination into the first research question: *How prevalent were incidents of concussive hits and on the field head trauma during NFL games and has the frequency of these incidents changed over the past six seasons?*

The findings reveal that the *quarterback* position had the highest prevalence of upper body contact of significance (UBCS) incidents. This is not surprising, as *quarterback* is one of the most important positions in the game. Having received 31% of all incidents of UBCS in this study, the *quarterback* is regarded as the “field general”, often burdened with the responsibility of leading their team to victory (especially the team’s offense). Between the necessity of the *quarterback* to “stay in the pocket” to complete difficult passes and absorbing sacks and knockdowns from defenders in order to “take one for the team”, there are ample opportunities during gameplay that place *quarterbacks* at risk for UBCS.

The position of play with the second highest prevalence of UBCS, *wide receiver* (23%), is also tasked with great on field responsibility. *Wide receivers* must run intricately designed routes, at incredible speeds down long lengths of the football field, often placed in “defenseless” positions, while attempting to catch the football. The physical extension and commitment of *wide receivers* during reception attempts often exposes them to UBCS, as these plays combine extreme feats of athleticism to make the

catch, with the subsequent velocity of impending collisions with the defender(s), as well as eventual contact with the grass/turf field beneath.

When analyzing which positions of play received the highest frequencies of UBCS, it is important to recognize that 78.3% of all cases occurred among offensive “playmaker” positions (*quarterback, running back, wide receiver, tight end, full back*). Here, it is critical to note that these positions of play are largely responsible for scoring production, generally considered to be some of the most exciting aspects of NFL gameplay, consistently replayed during broadcasts of game highlights and results. A premium has long been placed in professional sports on offensive scoring production, as signified by the successful Nike ad campaign for Major League Baseball (MLB), which heralded “Chicks Dig the Longball” when framing the “coolness” and “sexiness” of homerun production to the viewing audience (Weir, 2012). Offensive playmakers in the NFL (as in other professional sports) are highly paid, and are important to “selling” the game to the public. As such, they will receive most of the attention, with an emphasis on their ability to make “miraculous” plays and score touchdowns. With reference to the injurious consequences for offensive playmakers, during in-game commentary, FOX Broadcasting Play-by-Play Announcer, Thom Brennaman mentioned, “Had 3 quarterbacks go down of course last week, those are the guys who get all the pub, a guy like McCoy will, a guy like Celek will too, but all the others, that is very much on the forefront in terms of the major issues in the NFL before the year began and right up to this very weekend” (November 18, 2012). Thus, while offensive playmakers may be rewarded both financially and with glory and glamour getting “all the pub”, due to their

exciting position of play, they do so at a tremendous risk, as these positions most frequently incur UBCS.

Although the majority of UBCS cases occurred among offensive positions, those on the defensive side of the football (who largely initiated these incidents) did receive some incidents of UBCS, most frequently at the *cornerback* (9.3%) position. It is significant to note that when defensive players at the *cornerback*, *linebacker* and *safety* positions received UBCS, it was almost always during the commission of a significant hit or tackle during a passing play, where high velocity collisions were often involved.

Given the tumult and media controversy associated with the NFL's management of concussions and head trauma, and the civil lawsuits filed by roughly 4,800 former players against the league; over the timeframe of this study the NFL's Competition Committee implemented several changes to official gameplay. Such changes to gameplay included amendments to kickoffs (limiting wedge blocking in 2009, moving the kickoff back to the 35 yard line in 2011) and a greater emphasis on protecting "defenseless" players from exposure to hits around the head region (Diamond and Solomon, 2014).

Along with these measures, the NFL also instituted stricter return to play guidelines following officially diagnosed concussions, and more attentive safety protocols regarding concussion testing. With this knowledge, it is valuable to examine the prevalence of upper body contact of significance (UBCS) incidents and to analyze if these incidents changed in frequency during the timeframe of this study (Michael, 2015). Despite these rule changes, the research findings did not detect any discernable changes in the frequency of UBCS, remaining relatively consistent across the first five seasons of

this study (2009 to 2013). However, there was a somewhat precipitous drop in UBCS incidents during the 2014 NFL season (dropping roughly 7% from the prior season). Here, it is suggested that the implemented changes to gameplay and protocol may eventually enhance player safety and potentially reduce incidents of UBCS. However, retention and adherence to these changes should be regarded as an ongoing process, before the efficacy of these NFL initiatives can be accurately measured.

By focusing on the prevalence of UBCS incidents over the course of this study, there is a greater capacity to understand the contextual environment in which these incidents occur. In developing this foundational understanding of UBCS, this research is able to proceed into examining how these specific incidents are further interpreted and represented by Game Commentators to the viewing audience at large.

Commentator Representation

For many television viewers, watching the NFL provides an entertaining opportunity to relax over the course of a Sunday afternoon while enjoying games. The intent of this study is not to imply that NFL football is “bad” or to attempt to deprive viewers of their favourite pastime. Rather, the intent is to identify and acknowledge that although these games may be a form of escapist entertainment to many, the physicality and violence involved in NFL gameplay is not without its prospective dangers and potential health consequences. Here, analysis of the research findings will seek to provide a thorough interrogation of the second research question: *How did in-game NFL television commentators (Play-by-Play Announcer and Game Analyst) represent specific instances of head trauma/concussive hits to the viewing audience during live NFL football games?*

Of value during this specific area of analysis was a vigorous interrogation of how Game Commentators (Play-by-Play Announcer and Game Analyst) constructed the act of upper body contact of significance (UBCS) itself, as commentators are integral purveyors of how UBCS incidents are constructed and disseminated to the viewing audience. In particular, it is important to examine instances of commentator glorification of this contact, as well as further analysis of narratives surrounding the legality and necessity of UBCS incidents.

Glorification of Upper Body Contact of Significance

Of particular value to this study was the identification of a consistent glorification of UBCS by Game Commentators during their representation of these incidents to the viewing audience. Research findings frequently elaborated that during NFL broadcasts, incidents of UBCS were often vociferously exalted, with commentators heaping praise upon the physicality and violence of these incidents. This greatly informs the present research, as the representation of UBCS to viewers is consistently positively constructed as an entertaining spectacle of violence (Coakley, 1988). In these instances, commentators utilized dramatic performativity and embellishments within their representations of UBCS, more similar to the exaggerated glorifications of physicality and “human carnage” associated with the “sports entertainment” of World Wrestling Entertainment (WWE). Through the use of dramatic performativity in the representation of UBCS, Game Commentators contribute to the glorification of these plays, as evinced by game commentary such as:

Johnson (*exclaiming*): Oh, he gets crushed again! And this time he’s down!
Bernard Pollard, hit him again! And he’s hurt! (Gus Johnson, October 3, 2010)

Harlan: Wracked by Mathis, who was a Pro Bowler a couple of years ago, also hit by Brakenridge.

Wilcots (*laughing*): Rashean Mathis is such a physical defender at the cornerback position. Listen and feel this (*Replay of the hit is played with isolated audio*)

Harlan: You can feel it up here.

Wilcots (*laughing*): Yeah, I could feel it, the booth just shake. Mathis, boy he's more than just a man-to-man cover guy, he's a VERY physical player.

Harlan (*laughing*): Those are the kinds of hits you used to level in the secondary

Wilcots: We could hit a little bit, we'll knock the mouthpiece out. (Kevin Harlan, Solomon Wilcots, September 13, 2009).

Dedes: And Edwards looked like he's shaken up. It was Clay Matthews who laid the SMACK on the Buffalo quarterback

Cross: He knew the SMACK was coming, it wasn't just pressure, he was about to take a SHOT. He takes a pretty little one-two for it too.

Dedes: A little Trent Edwards sandwich at Lamabeu field, Garrett and Matthews crunching the Bills' quarterback. (Spiro Dedes, Randy Cross, September 19, 2010).

Tirico: Oooph, BIG HIT, Sherrick McMannis, that hurt on a warm day, that STINGS on a freezing night. Second special teams tackle from McMannis, Ouch babe! (Mike Tirico, December 9, 2013).

Frequent commentator glorification of UBCS poses fundamental challenges to the development of public awareness and factual perceptions concerning the known potential health and safety risks of such plays, with commentators instead propagating UBCS as some of the most exciting, noteworthy and entertaining plays in football. This line of argumentation is strongly supported in the work of Comisky, Bryant, and Zillmann (1977), who state, "The enjoyment of televised sports events closely corresponds with perceptions of roughness, enthusiasm, and even violence in play. With the perception of all these aspects of play being strongly influenced by broadcast commentary, it appears that, to a high degree, the sportscaster is a critical contributor to the spectator's appreciation of televised sports" (p. 153).

Furthermore, by representing UBCS as a glorified spectacle of violence, it has been suggested by Young and Smith (1988) that commentators contribute to the

“unwitting acceptance of pro-violence value and norms”, whereby televised broadcasts contribute to a positive slant in representations of sports violence, often constructing violence in professional sports as an accepted, admired and potentially desired aspect of these sporting events (p. 302).

Additionally, commentator representations of UBCS as a spectacle of violence were often highlighted through embellished, hyperbolic statements and the extensive use of cliché by Game Commentators to “spice up” their delivery during UBCS incidents. With vocal emphasis, Game Commentators relied on hyperbolic and glorified representations of UBCS, utilizing rhetorical idioms such as:

Absolutely sandwiched, banged, blasted, buried, crushed, flattened, drilled, pounded, smoked, dumped, chopped in half, wholloped, leveled, laid him out, laid the smack, layin’ the wood, took a crack, took a shot, took a nasty shot, took a lick, took it right in the kisser, still feeling the sting, crowned him, what a crunch, lowered the boom, head on the swivel, lit up, bone-rattling, watch him come right into your kitchen.

Here, commentators consistently framed these legitimate incidents of violence and physicality through token scripts, which served to undermine and diffuse the severity of the potential consequences of UBCS. Commentators often laced their representations of UBCS with giddiness and humour, frequently laughing at the sheer physicality of these incidents of significant contact.

Specifically focusing upon the glorification of UBCS, there were many instances identified throughout this study in which Game Commentators explicitly referenced the isolated sounds of UBCS during instant replay, representing the violence and physicality within these incidents as a form of gladiatorial entertainment. Commentators often attempted to convey the abrasive physicality of the “on the field experience” of UBCS through the isolation of audio, relaying to the viewing audience the ferocity and impact of

these incidents, as stated during gameplay:

Wilcots (*laughing*): Boy that was like a TRRRRAIN wreck. Hillis meets Burrell and McClain, he took on BOTH linebackers. Take a listen to this one (*providing isolated audio of hit*) OAH! Can ya feel it Kevin, can ya feel it?

Harlan: I always feel it when I'm up here man, what're you talkin' about this is the NFL (Kevin Harlan, Solomon Wilcots, October 28, 2012).

Johnson: How loud do you think that is inside the helmet?

(*Both commentators chuckling during the replay*)

Tasker: Boom, you said it Gus, you could feel that one up here, LISTEN (*providing replay of isolated audio of hit*) (Gus Johnson, Steve Tasker, October 3, 2010).

As noted above, during these presentations of the isolated audio of UBCS, Game Commentators were often heard audibly laughing or chuckling at the sound of impact during replays, reacting to the prospective violence with impressive awe:

Michaels: And Tolbert's gonna take the ball to the 27 yard line, takes a CRACK from Lewis, as the Chargers set up for a fieldgoal.

(*Replays of the hit are showed at varying speeds*)

Collinsworth (*laughing*): WOW! Uhhuhho. One of the reasons you don't cut back is you don't want to see this guy (*laughing*) when you're a runner. Tolbert tries to cut back against the grain and look what he runs into. WHOA! And remember (*laughing*) helmet-to-helmet is off when it's a runner in the open field not a defenseless player, welcome back Ray Lewis! (Al Michaels, Cris Collinsworth, December 18, 2011).

In these examples, it appears that the use of laughter and levity during commentator representations of UBCS frames these incidents in a lighter, less-consequential perspective to viewers, potentially diffusing these instances of their possible dangers and ramifications. However, as this study has regularly demonstrated, UBCS incidents are legitimately no laughing matter, and thusly, do not appear to be represented to the viewer in the appropriate tone, provided the known severity of the possible long-term health consequences.

Representation of Upper Body Contact of Significance Penalties

Over the timeframe of NFL games studied, there was a narrative across commentary stressing the NFL's growing concern over player safety and specific initiatives aimed at curbing head injuries, through rule changes and alterations of gameplay. Particular emphasis was placed on protecting "defenseless players" from absorbing traumatic upper body contact, through the institution of harsher penalties and fines, aimed at deterring dangerous acts (such as helmet-to-helmet hits and players launching with the crown of their helmets).

However, when analyzing incidents of UBCS, there appears to be an exercise in contradiction from Game Commentators regarding their representation of penalties (or lack thereof), often delivering conflicting, mixed-messages to the viewer. Substantial confusion arises due to the inability of Game Commentators to distinguish the differences between legal incidents of UBCS within the confines of gameplay and illegal incidents UBCS that deserve to be penalized, as noted:

This is a great job by Barron, who is that physical presence, GREAT hit, ya know, I uh, somebody has to tell me the difference between that hit and the hit we saw on Dez Bryant last week in Dallas in a huge, huge play. There was no difference in those two hits. Why is one a penalty and why one not? We'd said it during the game, I thought that was a huge mistake, that had a big impact on that game (Brian Billick, December 16, 2012).

Da'Norris Searcy came in, yeah that's.... you know, this is a tough, I don't know if I agree with this call, I know the referees are tryin' to err on the side of safety, but, you know, he's goin' in with his shoulder, it's a BIG man catchin' the football, he's behind, he's just goin' in to try and make the hit right as the guy is hittin' the ground. I don't know if you penalize Da'Norris Searcy for that one (Steve Beuerlein, September 16, 2012).

Additionally, by editorializing commentator representations concerning the legitimacy and (in)correctness of penalty calls stemming from UBCS, there is potential

for Game Commentators to manufacture a climate of doubt and ambivalence among viewers. This commentator rhetoric potentially delegitimizes the value of these penalties in the eyes of the viewer, as they are framed as potentially having a negative influence on the outcome of games. It was found that Game Commentators frequently questioned penalty decisions altogether and often, defended UBCS “hits” through the justification of them being “part of the game” as signified in:

Dedes: Again, they say helmet-to-helmet contact.

Beurerlein: And the rules are very clear, the rules are VERY clear in the NFL now, and if you haven’t figured out, it is a point of emphasis.

Dedes: You know, it looks worse when you look at it on the slo-mo replay”.

Beurerlein: For sure, but it’s a contact game, I mean that was not an extenuating, uh, circumstance play, I think (Spiro Dedes, Steve Beurerlein, December 23, 2012)

That was Godfrey on the hit right here. And is there helmet-to-helmet? I don’t know, I mean, that’s a tough call, the league has made it clear that they want you to lower your target. Good football play to me, but it was close enough, you just, that’s the challenge, that’s the predicament these DBs are in, in football today (John Lynch, September 30, 2012).

Oh my, what? And here comes the flag and I’m sure that’ll be for unnecessary roughness and what a, what a pass and catch, way to lay out Steve Smith....That shouldn’t have been called unnecessary roughness, Michael Griffin, well he came flyin’ in there, but he didn’t he only hit him with his shoulder pad, flyin’ across, it was a grazing blow, I’m not saying the intent wasn’t there... (Dan Dierdorf, September 28, 2010).

This representation of penalties associated with UBCS from commentators becomes quite problematic, as the intent of these protective measures are but one component, of the broader NFL directive aimed at altering the culture of in-game physicality, ostensibly intended to reduce potentially dangerous upper body hits. By often defending UBCS and decrying subsequent penalties, commentators are reifying an “old school” rhetoric that glorifies the grit and toughness associated with in-game physicality. When navigating these commentator interpretations of penalties relative to UBCS, there appears to be a

rather derisive, negative tone within their discourse, voicing specific concerns about how these penalties might influence game outcomes.

Similarly, commentator rhetoric which questions what diagnostically constitutes UBCS-related penalties has the potential to undermine the positive value of these protective safety measures, as these penalties are often framed as highly subject to interpretation, often unnecessary and antithetical to the “integrity of the game”. It is intriguing to note, that in framing penalties stemming from UBCS (regardless of whether commentators agreed with the penalty call or not), there was an explicit preface provided by commentators, noting that imposition of enhanced penalties and safety initiatives were explicit NFL directives, exemplified here:

I guess they think the commissioner is joking about these and I know it's tough to do, but ya know he's gonna be opening his mail here in the next week and payin' the fine. We talked to some of these guys, you know, it's so hard on the defensive players and trying to adjust and do all those things, but it just doesn't matter, ya know? The NFL is not going to put up with this, they're going to change the fundamentals of the game, and they're not gonna see this anymore (Cris Collinsworth, November 7, 2010).

In sum, thorough scrutiny of commentator representations of the “contact” within UBCS incidents exposes the largely positive light these incidents are framed in. By glorifying the spectacle of violence and physicality associated with UBCS, commentators substantially contribute to the “entertainment principle”, whereby viewing audiences passively consume and internalize these commentator narratives, perceiving these incidents as positive and enjoyable aspects of NFL gameplay (Coakley, 1988). Consequently, this positive framing of UBCS serves to diffuse and undermine the severity and potential dangers of these incidents, distilling a skewed and inaccurate representation of UBCS to the viewing public.

Commentator Representation of Players

At the outset of this study, it was speculated that the research findings of commentator representations might potentially segregate players who initiated and received UBCS into binary frames of “strong” and “weak”. However, upon further investigation of the findings, this was not the case. While there were some obvious differences in the framing of UBCS initiators and recipients (which will be discussed below), it was found that Game Commentators most frequently marveled at the physicality of nearly all players engaged in UBCS. The following analysis will attempt to address the third research question: *How were the NFL players who initiated and received on the field head trauma/concussive hits represented to the viewing audience during NFL broadcasts by Game Commentators?*

When evaluating the representation of players involved in upper body contact of significance (UBCS), the findings observed that at the apex of commentator representations of players that initiated or received UBCS, was an extensive emphasis on toughness and hegemonic masculinity, regardless of the players’ role in UBCS incidents.

Toughness

Throughout this examination into the predominant commentator representations of players involved in UBCS, there must be specific attendance towards the glorification of player toughness. In these instances, there was an explicit heralding of player durability, extreme pain/injury tolerance and elite physical conditioning, constructing representations of “superhuman/supernatural” physical specimens; evocative of how one might perceive fictional superheroes. Within these constructions of player toughness, commentators consistently glorified the grit and fortitude of players involved in UBCS

and their ability to earn respect through such violent, ferocious incidents of contact and still continue to play. Commentary examples of such glorification of player toughness during UBCS include:

Johnson: Here's Gradkowski, running for the first down holy! And he got it. Whoa! Bernard Pollard crushed him! But Gradkowski picks up the first down, he gains five, and showed some toughness there, you're supposed to slide I thought Steve?

Tasker: You gotta love Bruce Gradkowski, look at this, slide! Oh, that hurts man. There's some ya know, Gus, there's some quarterbacks in the NFL that don't survive that hit.

Johnson: We told ya Bruce Gradkowski was gritty and a tough guy, well he showed it on the last play.

Tasker: Yeah, this is, he's a blue collar. Listen to this hit, he gets, rolled up, I tell ya what, that makes ya play harder if you're on his team, Gus. It really does. (Gus Johnson, Steve Tasker, October 3, 2010)

Dedes: McCluster is CRUSHED at the 39, we've talked about how tough he is, a guy his size taking on those shots.

Beuerlein: And Dexter McCluster is one tough dude, that was a big hit on a little man" (Spiro Dedes, Steve Beuerlein, September 16, 2012)

Nobody told Pierre Thomas, and if you wanna be respected in this league, listen to this ovation. Helmet comes off and Pierre Thomas wants no part of the new rule that says stop the play, he's gonna keep fighting and goodness knows what happens from here, he got a facemask to the back of the helmet. Ummm, tough guy. Crazy, but tough guy (Cris Collinsworth, October 7, 2012).

And here comes the second one, the hit, you can see facemask to facemask, Emerson Griffin on Jake Cutler. And this is nothing new for Jay Cutler, that's why every game we have done, you know the one thing that we always walk away with is a healthy respect for the toughness of Jay Cutler (Daryl Johnston, December 9, 2012).

Within this analysis of the glorification of player toughness during representations of UBCS, it was important to distinguish the differences in commentator representations of those who initiated UBCS, and those who received it. To begin, players identified as having initiated UBCS were consistently portrayed in commentary as aggressive "warriors", with discourse focusing on the impressiveness of these players' ferocity of

gameplay. Frequently, accompanying scripts utilized by Game Commentators glorified initiating players (very often defensive players) as “beasts” and “badasses”, with verbiage evoking gladiatorial imagery of players using their finely tuned bodies as weapons, on a metaphorical battlefield. Examples of commentator representations of players who initiated UBCS included:

Whoahoahoah (*laughing*), I told ya TJ Ward could bring the heat, I told ya, he’s gonna kiss ya right there on the chin. Good hit, good tackle (Solomon Wilcots, November 17, 2010).

Mohamed Massaquoi is drilllled, oh my goodness and Harrison is layin’ the wood and he is SLOW to get up, much like Cribbs before him, flag has been thrown. Harrison is all over the field! 2008 NFL defensive player of the year (Kevin Harlan, November 17, 2010).

These corners will STICK YOU, no question about it. Dunta Robinson has got a reputation as being a big hitter on the back end, and you can see now, he has made his mind up, he’s gonna go about a hundred and ten miles an hour and try to ROCK Ryan Matthews. Yeah and we know, at least I know, from the mentality of most NFL players, Chris, they go out on their shield, they’ve got nothin’ left, you gotta carry ‘em out on your own shield (Tim Ryan, September 23, 2012).

Somewhat echoing Game Commentator glorification of the toughness and physicality of players who initiated UBCS, similar glorification was observed among representations of players who received UBCS. In these instances, recipients of UBCS were predominantly presented as exceedingly tough and resilient for their ability to “withstand” such significant contact, and still retain the ability to complete, make or save the football, over the course of a live play. Commentator emphasis on the ability of UBCS recipients to receive contact and positively contribute to gameplay include:

Brenneman: Did Randle hang onto that football? He did and my, did he take a hit from Mike Mitchell and Randle, injured on the play. Brian, you see plays like this and you wonder how guys, how they ever get up sometimes?

Billick: That was a man’s play right there. Hopefully he’ll be back up, hopefully it’s just the wind being knocked out of him.

Brennaman : Ruben Randle able to get up after takin' that big hit a moment ago from Mike Mitchell (Thom Brennaman, Brian Billick, September 22, 2013).

Macatee: That is caught and somehow, Mohamed Massaquoi held onto the football, he got pounded.

Tasker: That was two guys who gave him a big shot, it was Dwight Lowry, who converged on him just as he made the catch and manohman.

Macatee: But he hung onto the football, gain of six (Bill Macatee, Steve Tasker, November 20, 2011).

Pass to a wide open Hill, Polomalu pounds him, OH! Had ta hurt, what a catch but he held onto it. Tremendous effort by Hill to hold onto it, a CLEAN hit but a VERY vicious hit as it was (Jim Nantz, October 13, 2013).

It is within these representations of players who received UBCS, where commentator discourse exemplifies the precedence placed upon the player's ability to successfully convert plays, despite receiving significant contact. Here, commentator rhetoric reinforces the positive gains and rewards of physical sacrifice, while largely ignoring the potential physical toll these athletic feats might have on the individuals. Similarly, it was noted that while those who received UBCS might be "slow to get up" according to commentators, due to the physicality associated with this contact, the mere ability to "pick themselves up off the field" under their own power was heralded by commentators as a source of pride.

Another interesting finding within the representation of players who received UBCS was the identification of how Game Commentators specifically represented UBCS recipients that played at the *quarterback* position. Over the course of this study, research indicated that *quarterbacks* were the most frequent recipients of UBCS. Consistent with commentator representations of UBCS recipients in general, *quarterbacks* were glorified as exceptionally tough. When delving further into the analysis of how commentators

represented *quarterbacks*, it was found that these players were often framed as especially durable and courageous while receiving UBCS, as displayed during commentary:

And how ‘bout the courage of Matt Hasselbeck? Right back into the game, when we last saw him, they were taking him off the field, takes another shot, big shot, has to go off and get attention, right back into the game, his first play? Right back into the pocket and fires it down field (Charles Davis, November 1, 2009).

Brennaman: Now that’s two hits in a row Stanton has taken, how much can one man take? Those are two MAJOR hits.

Diehl: Those are VICIOUS hits that you never want your quarterback to take, not to mention, when this is your only quarterback with the full experience that he has on your roster, you can’t let your quarterback take these hits.

Brennaman: Well, we expected a physical, tough football game (Thom Brennaman, David Diehl, September 21, 2014)

Tryin’ to run for the first down, takes it in the tumbler, it’s Polamalu right at the first down marker, it’ll depend on the spot, but how about the nerve of Bortles to take on a former defensive player of year head-on for the first down? (Spiro Dedes, October 5, 2014).

This consistent commentator representation of UBCS recipients as durable and resilient, in the face of significant contact, may not be an appropriate narrative to disseminate to the viewing audience. By glorifying the physical sacrifice of UBCS recipients through their toughness and courage to withstand this physicality, commentators distil a potentially disarming message to the viewer- mediating to the audience that, despite possible risks or physical consequences these incidents might ultimately have on players, UBCS is akin to a badge of honour received “in battle”.

Another integral facet in the glorification of player toughness was the premium commentators placed on the ability of players involved with UBCS to experience and tolerate tremendous amounts of pain and injury. Although it is generally acknowledged that professional football is a physically taxing sport (with players at the elite, NFL level consistently playing with nagging, often season-long injuries), incidents of UBCS

provided examples of representations of substantial player pain. Here, in spite of awareness regarding the health hazards associated with head trauma over the timeframe of this study, the viewing audience was exposed to commentator rhetoric that appeared less concerned with player safety, instead commending the tenacity and durability of players to “play hurt”. While UBCS was consistently framed in commentary as physically “jarring”, “impactful” and “forceful”, the ability to withstand these plays was presented as an act of valour and durability, as displayed during commentary:

Celek shaken up. Brent Celek has NEVER missed a game, since he was a fifth round pick back in 06 out of the University of Cincinnati, and you know he’s taken plenty of hits through the years (Thom Brennaman, November 18, 2012).

Michaels: I think one of the reasons they might’ve taken a time out is to keep Miller in the game, he took a SHOT, needed a moment, here’s the shot from Iloka.

Collinsworth: George Iloka almost cut Miller in half on this one. This is some SHOT down the field. I don’t care who you are, how tough you are, these are the kinds of shots that make ya think about it. Legal shot, got his shoulder in there, but as gutsy as Heath Miller is, you remember those. Bloody lip comin’ out of it, but he is not comin’ out of the game, he has played 1044 snaps this season out of 1077 comin’ in, I agree, I think they called that time out just to get their number one threat on third down back on the field (Al Michaels, Cris Collinsworth, December 28, 2014).

Once again, of primary concern regarding these glorified representations of player toughness is the relative absence of references towards the potential consequences of UBCS. Instead, commentators often constructed an atmosphere of player invincibility due to their impressive athletic feats and elite ability, after engaging in UBCS.

While commentators may have occasionally cited players as being “slow to get up” or “shaken up on the play” after UBCS, it was noted that these incidents were predominantly treated as the physical sacrifice required, or “cost of playing the game”. The continuous framing of NFL players as able to withstand, and moreover, thrive after

engaging in UBCS, due to their lauded toughness is alarming, as it is fundamentally ignorant of the potential residual health hazards of these types of plays. In truth, when sustaining head trauma or a concussion on the football field, it does not matter how tough or outwardly resilient an NFL player is, the dangers and potential health hazards of such injuries remain the same.

Masculinity

In this study, there were strong representations of hegemonic masculinity. Here, Game Commentators used patriarchal and hypermasculine discourse and rhetoric to describe incidents of UBCS. Incidents of masculine posturing within UBCS were frequently observed, with commentators providing glorifying instances of violence and aggression through hypermasculine discourse such as:

And he's out there, Jimmy Graham, you see him in the huddle number eighty at the top of your screen, right here after takin' that shot, he doesn't want to give anybody the satisfaction. So Graham remains in the game (Kenny Albert, September 9, 2012).

Someone need to tell Tashaun Gibson that Heath Miller is a MAN. He's a tough guy to get on the ground, you saw after making that catch and then taking that hit from Gibson. (*During replay of play*) And watch the hit he takes from Gibson, but this is, Heath Miller is one of the toughest football players in the national football league, if you don't wrap him up, he's not goin' down, they're happy to have him back (Solomon Wilcots, November 24, 2013).

Brennaman: Did Randle hang onto that football? He did and my, did he take a hit from Mike Mitchell and Randle, injured on the play. Brian, you see plays like this and you wonder how guys, how they ever get up sometimes?

Billick: That was a man's play right there. Hopefully he'll be back up, hopefully it's just the wind being knocked out of him.

Brennaman : Ruben Randle able to get up after takin' that big hit a moment ago from Mike Mitchell (Thom Brennaman, Brian Billick, September 22, 2013).

This is similar to previous research, which also found strong depictions of gladiatorial iconography and hegemonic masculinity within media representations of

American (gridiron) football (Anderson and Kian, 2012). Furthermore, with regard to the expressed concerns about player safety, at all levels of contact sports (mostly American gridiron football), public discourse has often been vocally adverse to protocols and regulations concerning head trauma. The authors made particular reference to the use of familiar phrases within the sporting lexicon, which invoked “masculinity, denying weakness, and/or using femphobia or homophobia to motivate others” (Anderson and Kian, 2012, p.154). Combat sports, such as professional football provided what Messner (1990) considered to be the embodiment of a certain type of masculinity, as identified during commentator representations of in-game physicality (p.214).

There are a number of concerns that arise from the analysis of hypermasculine rhetoric used during commentator representations of players involved in UBCS. First, it is imperative to reiterate that masculinity and the “manly durability” of NFL players is not a valid, protective defense against the genuine health consequences associated with head injuries and concussions. In spite of commentator glorification of UBCS, where masculine posturing might be perceived as “cool” or “badass” by viewers watching at home, these representations do not accurately depict the fact that even the toughest players are susceptible to on the field head trauma, regardless of heralded machismo.

Consequently, rhetoric surrounding representations of player masculinity during UBCS may pose a substantial threat to the reporting of player head injuries, as the focus and concern may be directed towards maintaining high standing within the NFL’s subcultural masculine hierarchy, with fears of being perceived or “outed” as weak or less-manly, for not abiding by the gladiatorial scripts of “manning up”. However, in reality, the often patriarchal commentary disseminated to the viewing public has failed to note

that such glorified masculine traits were of no assistance to heralded former players such as Junior Seau, Andre Waters and Mike Webster- all of whom died in part, from the residual effects of long term degenerative brain injuries associated with on the field head trauma.

Secondly, masculine representations of players involved in UBCS is of considerable concern when surveying the ongoing prevalence of domestic violence within the NFL. Through emphasis on hegemonic masculinity and glorification of the substantial on the field violence that occurs during UBCS, one would be remiss not to identify the heavily publicized domestic violence controversies which occurred during the timeframe of this study, involving high-profile players such as: Ray Rice, Chad Johnson, Ray McDonald, Greg Hardy and Jovan Belcher.

Recognizing the potential tone-deafness regarding commentary through the use of patriarchal and hypermasculine rhetoric, it is disrespectful and condescending to women to glorify masculinity and singularly equate it with toughness. Thus, it would be strongly advisable against further contributing to public perceptions that reiterate hegemonic masculinity within instances of violence, given the ongoing challenges of domestic violence among NFL personnel.

Representation of Severity and Health Hazards

At the forefront of this research was a focused inquiry into the fourth and final research question, examining: *How did NFL Game Commentators communicate the severity of health hazards and consequences associated with head trauma/concussive hits to the viewing audience during incidents of significant hits/contact?* Here, it is integral to address how NFL Game Commentators (Play-by-Play Announcers and Game Analysts)

represented the overarching health hazards, safety concerns and potential consequences associated with head trauma and concussive hits to the viewing audience. What becomes evident when assessing this issue, is that NFL Game Commentators largely represented the topic of concussions, head injuries and potential health consequences during incidents of upper body contact of significance (UBCS), as if they were as invisible as the much maligned “invisible injuries” themselves.

Consequences of Concussions

The widespread absence of explicit references towards concussions, head trauma and potential health hazards during UBCS cases by commentators is concerning from a social constructionist perspective. Here, the perception of these UBCS incidents are, for the most part, represented to the viewing audience as devoid of real world consequences—instead, often framed as entertainment. Because Game Commentators do not regularly represent instances of UBCS with reference towards caution and concern for player safety, and the potential of long term cognitive impairment, the viewer is only provided with a singular mediated message; where the implication is that these types of “hits” are a casual part of an enjoyable, entertaining sport.

Oftentimes, the mediated messages disseminated to the viewing audience by commentators regarding UBCS come across as both confusing and contradictory, especially when referencing a player’s ability to walk off the field under his own power, after receiving UBCS. This representation is particularly troublesome, as it severely undermines a fundamental aspect of what is scientifically known about on the field head injuries: *You cannot diagnose potential head injuries or brain trauma with the naked eye.* The frequent commentator emphasis on a player’s ability to walk off the field after

receiving UBCS is an alarmingly diffusive narrative, as it misrepresents the genuine realities of in-game head injuries to the viewer. Commentary examples of the diffusive rhetoric regarding a player's ability to walk off the field includes:

Good news for Bears fans is that Jay Cutler not only got up but ran off the field. And, there's no trainers lookin' at him, no thought of an X-ray or conversation, uh to take him back to the locker room, which is extraordinary considering the hit he took from Ndamukong Suh. We'll show you that after the play (Mike Tirico, December 12 2014).

That is a great sign as Cribbs is up to his feet to walk out. It was his by his college teammate at Kent State, James Harrison, which really caught him, you can see there's some concern from Harrison as well (Kevin Harlan, November 17, 2010).

Yeah, but just sometimes enough of the blow, is enough, coming down from that distance is enough to really shake you up. He's up and walking, now that's a good sign (Ronde Barber, December 22, 2013).

Here, the viewing audience is provided with a faulty narrative, possibly implying that players must not be grievously injured after UBCS, as they are able walk to the sidelines under their own power. As consistently noted in this study, head trauma and concussions are considered "invisible injuries" because they cannot be explicitly, externally observed. Subsequently, by repeatedly constructing a narrative that represents UBCS recipients' ability to walk off the field as a positive sign, the severity of potential head injuries to the viewer is considerably undercut and devoid of consequence. The wider implication of this misrepresentation is simple: If Game Commentators emphasize the positivity of a player walking off the field after receiving UBCS, there is potential that viewers might interpret those who receive UBCS- but are able to walk off the field- as individuals that must not have received a potentially serious head injury, which is scientifically inaccurate.

When inquiring into whether the communication of the potential health hazards and consequences of UBCS by Game Commentators has changed over the past six seasons, the most approximate answer might be a cautious yes, with a noteworthy asterisk. Despite the relative lack of prominence paid by commentators towards specifically referencing concussions, head trauma and their potential health consequences during UBCS incidents, a silver lining was identified in the findings that deserves recognition, with regard to what the Game Commentators *did* mention, relative to UBCS. In particular, commentators more frequently discussed the official NFL safety protocols and precautions surrounding head injuries during instances of UBCS, stressing the rigorous safety guidelines initiated and instituted by the NFL, to ensure player safety concerning potential traumatic brain injuries (TBI). Although these references to NFL safety protocols were not a consistent point of emphasis during most UBCS incidents examined (in which, very little related was mentioned), references to NFL safety protocols were far more frequently discussed than the actual injuries and consequences themselves. The messages disseminated to the viewing audience framed UBCS as a great concern to the NFL, represented as a proactive, caring league, with Game Commentators noting:

It's almost like it's like in these NFL stadiums now, there are hospitals within the stadium, the care that the players and people on the sidelines receive is incredible, mandated by the NFL (Kevin Harlan, October 24, 2010).

Joshua Cribbs, yeah he wants back in right away (laughs) he's a proud young man, he doesn't believe that one hit can knock him out of the football game, and so he wants back in, but ya know, this is one of those directives, one of those emphasis that the National Football League is looking at, head collisions, so ya have to do what's best for the player, they have to make sure that he meets all the baseline testing before he comes back into the gam. As we see them take Joshua Cribbs in for more testing, back to the locker room he goes (Solomon Wilcots, November 17, 2010).

In conveying these messages, commentators often provided little-to-no explanation or context as to *why* the NFL began taking these advanced safety precautions, offering a rather vague depiction of why these safety initiatives are of importance. The construction of the NFL's safety protocol narrative was also reflected in the research findings during commentator representations of a player's decision to return to play after receiving UBCS. Within this context, commentators made explicit note of the imperative for players to engage and pass the implemented NFL safety protocols after receiving instances of UBCS, before being allowed to re-enter the game. Specific in-game examples of commentator representations of the NFL's return to play protocols include:

Well, everybody is very sensitive to making sure that the test is done properly these days, Celek is going to come back into the game (Al Michaels, October 10, 2010)

Nantz: Well, you should've seen him makin' his way to the sideline. I'd be very surprised if they didn't run a battery of tests on him to be honest, I mean, he tried to get up, fell back down, then to the sideline, he was just definitely was uh, just struggling to get back the sideline. Walkin' sideways all cockeyed. I mean, there are all kinds of stringent rules now and even earlier than this, when he first got up, he signaled to the sideline.

Simms: Yea, he wobbled when he first got up, he staggered, and then kinda went sideways, then he gathered himself and ran off, or jogged off I should say.

Nantz: If they did evaluate him, it was quick, quickly done... Back into the huddle is Tannehill.

Simms: Yeah, you know think about how this works, Jim. When there is something like that they can call down and tell the bench they saw this. There's a, uh, independent person watchin' from upstairs, a medical staff guy. Then the Miami medical staff will be allowed to got to a monitor and look at the hit and see what he, how he stumbled off the field and then they could evaluate him on the sidelines. Now they could've evaluated him, we didn't see every second on the sidelines, but apparently they think he's ok and that's why he's back in the game.

Nantz: With the new rules that are in place, you would think that that is definitely is worth an examination, of course you we don't know, maybe they did, we didn't see it. If they did evaluate him, it was quick, quickly done (Jim Nantz, Phil Simms, December 30, 2012).

What is problematic about the NFL's return to play safety protocols is that the abovementioned sideline evaluation often occurs during hotly debated, high-stakes NFL football games. Within this extremely competitive context, there is concern over the legitimacy and fidelity to these safety protocols, as a premium is placed on winning in the NFL, often with an emphasis on individual, physical sacrifices, such as "taking one for the team". While commentators emphasized the NFL safety protocols that must be passed to return to play, the pressure on players, coaches and medical staffs to win is incalculable and thus, may pose a conflict of interest in advocating for player safety.

Findings show several instances in which commentators have acknowledged players that received UBCS returning to play, yet respond somewhat quizzically to their ability to pass the aforementioned protocols. Nonetheless, commentators did not question the legitimacy of return to play protocols, deferring to the efficacy of the staff administering these sideline safety tests. The representation of fidelity and legitimacy of NFL concussion protocols is highlighted during an in-game conversation between FOX Broadcasting commentators, Joe Buck and Troy Aikman:

Buck: Stewart Bradley is back in the game.

Aikman: That surprises me

Buck: Me too

(However, seemingly in defense of the NFL's concussion protocol and safety measures, Buck then recalibrates his response).

Buck: So whatever tests were performed, whatever hurtles he had to get over on the sideline, to the Eagles' satisfaction he's ok to return (September 12, 2010).

The vocal support of the NFL's official safety protocols during game commentary is particularly glaring, in light of what is known about the NFL's controversial concussion lawsuit with former players, in which roughly 900 million dollars will be paid out to players and their families over the next 65 years, as compensation for past, present and

future players diagnosed with specified neurological problems. Subsequently, commentator acknowledgement of the NFL's safety protocols regarding concussions and head injuries might best be regarded as a function of the NFL's tremendous public relations department.

Of specific note during the timeline observed in this study, was a marked narrative shift in the NFL's public stance on head trauma and concussions incurred during gameplay. Here, the commentator rhetoric appears to have been subtly co-opted by the NFL's officially instituted safety protocols, with rechristened narratives concerning on the field head trauma, directed towards the NFL's protective and proactive measures on player safety. Emphasis of this rhetoric, placing the NFL as leading the charge in making American (gridiron) football "more safe" is quite evident during in-game commentary:

This is very much the protocol now, they'll, if somebody has a concussion-like hit, they'll have them lie down for a period of time, talk to them, once they get to that point, they have them sit up for at least a minute. High school coaches would know exactly what I'm talking about, this is now how you're supposed to do this. Now, they'll see how he does, is he light headed, talk to him again, it's always great to see him at least sit up (Cris Collinsworth, September 15, 2013)

Yeah, and they started in that same two back set, with a fullback, started the second half with the full-back and the tailback, but it was Mike McNeil in there instead of Mahaffey so, and I didn't see him on the bench when they first came out, so I think he just came out of the lockerroom from the second half, hope he can get back, but you've got to be SUPER careful Chris, as you know, with concussion protocol (Tim Ryan, November 17, 2011).

When interpreting these commentary frames, it is likely no coincidence that commentators often reference NFL safety protocols during UBCS cases, as these frames contribute to the reorientation of narratives surrounding head trauma in the professional football, now placing the NFL on the right side of history.

Brainwashing

Image management is a vital component to the National Football League's thriving success as a brand. Therefore, it is not surprising that the NFL would attempt to mitigate any further negative publicity associated with head trauma and concussions, through the initiation of positive, proactive campaigns aimed towards rehabilitating the NFL's image. It is at this point that I suggest the term, "brainwashing" as a phrase to appropriately encapsulate how the NFL has pivoted its rhetoric with regards to the "concussion issue", by utilizing public relations initiatives such as strategic philanthropy to improve their image.

With regards to "brainwashing", in a very short span of time the NFL proactively initiated new return to play initiatives concerning concussion diagnosis protocols for its players, partnered with the Center for Disease Control and Prevention (CDC) to launch a nationwide "Heads Up Football" program with USA Football, to inform youth American (gridiron) football safety and amateur coaching in "concussion awareness and management protocols" (NFL.com). The NFL also donated 30 million dollars to the National Institute of Health to fund ongoing research concerning head trauma, concussions and chronic traumatic encephalopathy (CTE). Similarly, the NFL granted 100 million dollars in funding to Harvard Medical School over 10 years, to extensively study the health problems and aftereffects of former NFL players (Manza, Young, 2015). As a whole, "brainwashing" is analogous to the NFL's technique of "cause-related marketing" public relations, known as pinkwashing. Here, October is designated "Breast Cancer Awareness Month" for the NFL (as well as Domestic Violence Awareness Month), in which the league donates an indeterminate portion of merchandise sales to

charitable women's organizations. This pinkwashing initiative has also been criticized as an attempt gain favour with the highly valued female viewing demographic, especially in the aftermath of recent domestic violence scandals involving the NFL.

In light of this information, while the efforts to underscore the NFL's initiatives to enhance player safety might be a genuine response by the league to "make good" due to alleged past wrongdoing concerning their concussion management, the techniques of its targeted, branded exposure during in-game commentary appears to be more consistent with a public relations campaign. Here, it is suggested that through utilization of altruistic, benevolent imagery, the NFL is able to counteract negative publicity and controversy, through one of the primary vehicles for information dissemination: NFL game commentary.

While it is important to maintain an acute appreciation that professional American (gridiron) football is an inherently physical sport- its gladiatorial nature often lauded as, "not a contact sport, but a collision sport", it is imperative to acknowledge that this extensive physicality does not just occur within a vacuum isolated solely within the massive professional stadiums of the National Football League. Throughout North America, there are countless semi-professional, college and university, high school and recreational contact American (gridiron) football programs, with teams and players engaging in potentially hazardous, imitable gameplay "as seen on TV" in the NFL. Therefore, it is problematic when these preeminent messengers "as seen on TV" appear to often gloss over, undermine or completely ignore one of the more inconvenient realities facing NFL gameplay, in the representation of UBCS.

The question then moves towards inquiry into potential motivations. Why is it

that Game Commentators do not make more frequent references to such significant and serious issues such as concussions, head trauma and the potential health consequences during instances of UBCS, while millions are watching and listening? Interpreting the possible reasoning behind Game Commentators' relative silence regarding the hot-button topics surrounding concussions and associated health hazards during UBCS cases is challenging for a multitude of reasons.

To begin, the NFL itself has never been found to have explicitly prohibited broadcast networks and commentators from using the word "concussion" or relative references towards head injuries or their potential health ramifications during games. Although the NFL has been accused of several somewhat dubious practices with regard to their management of the "concussion issue" over the years, there has been no conspiratorial "smoking gun" or "leaked internal memo" to suggest the NFL has ever formally warned broadcasting networks against making reference to concussions or the potential health consequences associated with head trauma.

One logical explanation for the relative "radio silence" regarding in-game commentary references towards concussions and head trauma during cases of UBCS, is that the NFL brand is simply too financially valuable to broadcast networks. This theory has considerable merit when considering that networks broadcasting NFL games (CBS, FOX, ESPN, NBC) have each invested billions of dollars in yearly licensing fees, for the opportunity to air NFL games. In delineating the NFL's value to television networks, consider that the NFL is widely regarded as a "ratings juggernaut". During the 2013 NFL season, over 500 million television viewers watched the NFL games on FOX and CBS alone (Chemi, 2014). This value is further amplified by Kurt Badenhausen (2014) in

Forbes, recognizing that, “The Super Bowl last year drew a record audience of 111 million people. NFL games represent 23 of the 25 most-watched TV programs this fall and they attract twice as many average viewers as broadcast primetime shows”. Thus, for broadcast networks operating within the volatile, rapidly fluctuating television industry, ratings and advertising revenue are paramount to success and business survival, with televised NFL games consistently at the top of ratings.

As noted by Futterman, Schechner and Vranica (2011) of the Wall Street Journal, “audiences are fragmenting among hundreds of channels and alternative viewing options, such as the internet. Football remains one of the few programs that still draws tens of millions of viewers who watch live”. Therefore, within this business climate, it would be almost foolhardy of these television networks to create animosity with such a valuable, reliable commodity as the NFL, by providing critical commentary that may place emphasis on an uglier, potentially damaging side of the sport.

A similar argument that addresses the relative absence of references to concussions and head trauma during cases of UBCS by commentators might involve broadcast networks’ fear of creating an adversarial, acrimonious relationship with the NFL. While accounting for the abovementioned ratings power and significant financial benefits the NFL offers television networks, there is an obvious concern for not wanting to be left out of such “ratings bonanzas”.

The prospect of creating acrimony with the NFL may have already shown to be too much of a risk for television networks, as displayed in the ESPN/PBS “Frontline” controversy. Over a 15 month period, ESPN (owned by parent company, Disney) partnered with the PBS series, “Frontline”, to create an in-depth companion documentary

to Fainaru-Wada and Fainaru's (2013) book, *League of Denial: The NFL, Concussions and the Battle for Truth*. However, in August 2013, ESPN removed themselves from any and all association with the production, claiming that they did not possess editorial control over the completed project (something detractors note ESPN would have been aware of much earlier in the development process). Many critics attacked ESPN, claiming that the network (while claiming to be both a news media enterprise and entertainment company), removed themselves from the documentary due to a growing concern of damaging their longstanding, beneficial relationship with the NFL and their highly rated, "Monday Night Football" broadcast.

This is not the first time a network has allegedly balked at the pressure of jeopardizing its relationship with the NFL. In 2003, ESPN decided to cancel its controversial show, "Playmakers", a dramatic series about the darker side of professional football. Despite the fact that then-NFL commissioner, Paul Tagliabue, personally complained to then-Disney CEO (ESPN's parent company), Michael Eisner about the product, in response to the show's cancellation, ESPN executive vice-president, Mark Shapiro stated, "Not for a minute did they imply that the future of our partnership would be based on this program. ESPN is intoxicating for the NFL, we need to live with each other". Once again, the potency of the NFL brand and its tremendous value and influence within the popular culture marketplace appears to, at the very least, informally discourage networks from creating dissenting content.

In a similar development over the past several years, public controversy has emerged regarding the political correctness surrounding the team name of the NFL's Washington "Redskins", with many considering the team name to be offensive, tone-

deaf, disrespectful and racist towards Aboriginal and Native populations.

In response to this naming controversy, networks such as FOX and CBS have elected to allow their Game Commentators to use their own individual discretion when electing whether to refer to the team as the “Redskins”. Subsequently, it has been publicized that several commentators such as CBS’ Phil Simms and NBC’s Tony Dungy have decided to boycott the use of the term “Redskins”, simply referring to the team by some iteration of the “Washington Football Team”.

Of specific importance here, is that while several dozen print and online media outlets have refused to refer to the team by their “Redskins” moniker, out of sensitivity against a “dictionary defined slur”, major television networks broadcasting NFL games featuring the Washington “Redskins” have not taken such assertive, hardline stances against what has been widely regarded as an offensive term.

Once again, the NFL has not explicitly mandated that broadcast networks use the derogatory “Redskins” name (although the NFL has also thus far refused to force the team to change its name and has displayed no sign of forcing one anytime soon). However, the fear of creating an adversarial relationship with a brand as lucrative and powerful as the NFL, once again appears to have instilled a yielding and complacency of television networks to remain in the NFL’s “good graces”, even if that means making repeated references to a racial slur on broadcast television.

Taken altogether, it is important to recognize that to the best of our knowledge, the NFL has not engaged in formal or explicit actions against broadcasting networks, to enforce what should and should not be mentioned regarding concussions and head injury related to incidents of UBCS by commentators. However, it must also be acknowledged

that given the magnitude of the NFL's television ratings success, as well as concern over the potential loss of significant revenue that might accompany an adversarial relationship with the NFL, the absence of commentator representations of the serious health hazards during UBCS might simply be a matter of conscious self-policing by the networks themselves.

As such, while television viewers may be receiving these representations of on the field cases of UBCS through the commentator's narrative lens, it is not in the best interest of either the NFL or the television networks to broadcast negative comments associated with UBCS (such as references to the dangers of concussions and head injury), as this could be detrimental to both the relationship with the NFL and its brand, which in all likelihood, would be considered "bad business" for television networks.

The following chapter will provide an overarching summary of this project and draw specific conclusions based upon the research findings. This chapter will also address the study's contributions to the body of knowledge and fields of inquiry; recommendations for directions in future research and acknowledgement of the limitations of the study.

Chapter Six: Conclusions

The subject of head injuries and concussions in American (gridiron) football remains a highly divisive issue. At the present, there are several burgeoning challenges to public opinion with regards to the safety and management of head trauma within the NFL. Conflict has emerged through discourse over topics such as the designation of injury accountability and responsibility; contention over the legitimacy of perceived risks, dangers and health consequences; and the general lack of consensus regarding appropriate responses to mitigate further damage stemming from these types of injuries.

A particular concern driving this study focused on the widespread engagement in American (gridiron) contact football by individuals across demographics within North America (not just at the professional, NFL level), inciting a legitimate fear that an unknown number of the population may have been exposed to substantial health risks associated with on the field head trauma. The genuine alarm arising from this safety concern identifies the future possibility of a major, widespread public health crisis. Here, individuals engaged in American (gridiron) football may have been uninformed or unaware of the important health hazards associated with on the field head injuries; but nonetheless engaged in potentially hazardous gameplay associated with long-term cognitive dysfunction/distress.

It is strongly believed in this study, that the overarching public knowledge and public perception regarding the safety and possible health hazards of head injuries within football gameplay are largely rooted in how relative information has been constructed and disseminated. Utilizing a social constructionist perspective, this study has argued that the “social reality” of public perceptions are significantly shaped and manipulated

through the mediated messages precipitated by media commentators (Charmaz, 2006). Therefore, the specific purpose of this study aimed to thoroughly analyze how potential head injuries (identified through incidents on the field contact, operationally defined as upper body contact of significance) were represented to the viewing public across the most high profile disseminators of NFL gameplay narratives: NFL television Game Commentators.

Over this course of study, four major research questions were posed to assist in guiding the pursuit of inquiry into how Game Commentators represented upper body contact of significance (UBCS) to the viewing audience; where public perception concerning the safety (or lack thereof) of on the field head trauma would likely be formulated. In specific, these four major research questions sought to examine: the prevalence of UBCS, commentator representation of the act of UBCS, commentator representation of the players involved in UBCS and the representation of the health consequences of UBCS.

Prevalence of UBCS

Assessing the first research question regarding the prevalence of upper body contact of significance (UBCS), there were 226 individual instances identified over the course of 102 randomly sampled regular season games, or an average of roughly 2.2 incidents of UBCS per game analyzed. This frequency of UBCS is in stark contrast with previous published findings by the NFL's Mild Traumatic Brain Injury committee, which had suggested concussive incidents occurred as infrequently as one concussion in every three games played (Fainaru-Wada and Fainaru, 2013).

Although UBCS incidents were not used as indicators of verified concussions or head injuries, these incidents were certainly indicative of a consistent and violent type of play involving the exposure of players' upper body region, which should be further observed with caution. It is also important to note that in light of the frequency of UBCS incidents during NFL games, there is a strong possibility that viewers might casually take UBCS for granted, potentially inoculating viewers to the severity of these instances of significant upper body contact.

Representation of Contact

Focusing on the second research question, with regard to commentator representations of UBCS incidents in particular, pertinent findings suggested that these instances of contact were glorified and heralded for their perceived physicality, regarded as an entertaining spectacle of violence. With respect to how these representations may influence public perceptions of the health hazards of UBCS, the extensive use of hyperbole and dramatic performativity by commentators possesses a diffusive quality, framing UBCS as a form of inconsequential, escapist entertainment- similar to a fictional action movie or professional wrestling. However, in doing so, there is potential for the viewing audience to become desensitized by the consistent glorification of UBCS, marginalizing the potential to inform public perceptions of the authentic health implications of UBCS and undermining the potential ramifications of the "aftermath" of these incidents.

Representation of Players

Analyzing the third research question concerning representations of the individual NFL players involved in UBCS, the predominant rhetoric conveyed by Game

Commentators constructed both initiators and recipients of UBCS as extremely tough and masculine. Throughout this narrative, engagement in UBCS was depicted as a glorified “rite of passage” for players, essential in reifying their grit and dedication to play a “man’s game”, despite pain and injury. These findings are particularly concerning, as toughness and masculinity do not immunize players from the potential health hazards associated with UBCS; as relative injuries are undiscerning, regardless of perceived toughness. With commentators evoking warrior rhetoric and hypermasculine scripts, while glorifying player toughness, a fundamental misrepresentation of the “invisible injury” is disseminated to the viewing audience.

Specifically, the messages mediated to the viewing public regarding players involved in UBCS emphasize the visible resiliency and durability of players to unleash and withstand such violence and physicality. This is a perilous misrepresentation of UBCS, as the viewing public might perceive the framing of toughness and resiliency as a signifier that UBCS might not pose potential health consequences. It is acutely concerning that the viewing public might be imbued with this faulty and inaccurate perspective regarding the risks associated with UBCS, as there are substantial implications concerning decision-making and involvement in American (gridiron) football at any level, which might be severely compromised due to commentator constructions.

Representation of Severity and Health Hazards

When addressing the fourth and final research question, it was explicitly identified that representations of the potential health consequences associated with head trauma and concussions were virtually nonexistent during NFL commentary over the

course of this study. This was a substantial finding, as the absence of almost any reference to head trauma, concussions and the potential long term health ramifications throughout the 226 individual incidents of UBCS, strongly suggests an apprehension and possible avoidance of these topics by commentators during broadcasts.

When further analyzing how representations of the health consequences of concussions and head trauma were disseminated to the viewing public, there is a very strong possibility that viewers will remain unaware of the potential repercussions of concussive-related injuries, as the subject matter was rarely addressed.

Despite the relative lack of commentator discourse on the potential consequences of concussions, head trauma and UBCS, commentators did appear to make an effort to acknowledge NFL initiatives aimed at altering gameplay to reduce head injuries during the latter years of analysis. While these remarks may be construed as a reactive public relations tactic by the NFL (after protracted controversy over the concussion lawsuit with former players), it is notable that some mention (albeit very little) was made regarding safety protocols and elevated awareness regarding concussions in the NFL, even if it is only intended to rehabilitate the NFL's image.

The cumulative investigation and analysis into commentator representations of head trauma and concussions through incidents of UBCS, and subsequent examination into how these potential health hazards and consequences associated with head trauma/concussive hits were communicated to the viewing audience have been thoroughly and thoughtfully engaged. From this, there are several meritorious research findings observed within this study, which indicate that commentator representations of UBCS to the viewing audience were flawed and did not appropriately convey the

potential significant health consequences associated with head trauma and concussions. Instead, research findings consistently observed UBCS incidents represented as glorified instances of violent physicality, which hyperbolically emphasized player toughness, while framing these incidents as largely devoid of consequence and taken-for-granted.

When collectively evaluating the prevalence of these glorified representations of UBCS over the course of this study, it is suggested that public perceptions regarding the potential health hazards of UBCS, head trauma and concussions were misrepresented through NFL commentary. When considering the substantial research and analysis employed within this thesis, utilizing the guiding theoretical perspective of social constructionism, the findings of this study are solidly aligned with previous academic research concerning commentator influence on viewer perceptions of televised professional sporting events (Bellamy, 1989; Comisky et al., 1977; Messner, Duncan and Wachs, 1996; Parker and Fink, 2008; Sullivan 1991). Therefore, it is fair to conclude that there is a considerable probability and likelihood that viewer perceptions of head trauma, concussions and UBCS are influenced by the narrative rhetoric of Game Commentators during televised NFL games.

Contributions

The purpose of this study sought to analyze how significant contact to the upper body and head area of NFL players (operationally defined as upper body contact of significance or UBCS) was represented to the public through the narrative lens of television Game Commentators. While previous research in similar fields examined the influence of sports commentary on viewer perceptions in areas such as gender (Bissell and Duke, 2007; Parker and Fink, 2008), race (Desmarais and Bruce, 2009; Desmarais

and Bruce, 2010; Halone and Billings, 2010) and violence (Chen, Lapp and Miller, 1999; Cummins and Hahn, 2012; Messner, Hunt, Dunbar, Westerman and Tamborini, 2010; Sullivan, 1991), there was a noticeable gap in literature pertaining to commentator representations of head trauma and concussions in sport.

In light of the ongoing contemporary discussion regarding the management of concussions and head trauma in the NFL, and the controversial civil lawsuit filed by former players, there presented a substantial need for a directed investigation into how Game Commentators represented instances of head trauma, concussions and UBCS to this viewing audience during NFL games. This study isolated in-game rhetoric produced by commentators in their construction of players, physicality and consequences associated with head trauma and concussions, through inquiry into specific verbiage and narrative framing techniques used during incidents of UBCS.

By articulating how these abovementioned discourses were mediated to the viewing audience, researchers are able to develop a stronger understanding of how public perceptions of the prospective safety and consequences of American (gridiron) football might be constructed and interpreted. The substantive importance of this contribution is rooted in the widespread engagement in American (gridiron) contact football across North America, far beyond just the NFL. As individuals play American (gridiron) contact football across a multitude of levels, ranging from recreational youth leagues to high school and post secondary programs, there is a possibility that a significant portion of the population has been exposed to, and informed by, the representations of head trauma and concussions disseminated by NFL Game Commentators.

Because this research encompassed such diverse and widespread areas of inquiry to focus upon (such as: commentator influence on viewer perceptions, dramatic performativity, media framing, masculinity in sport, corporate deviance, concussions etc.), this study was able to contribute informed research relevant across a number of fields of study; providing further context and understanding regarding commentator representation of UBCS within commentary and subsequent viewer perceptions.

Possibly the most substantial contribution this research might provide concerns the ability to deliver a greater awareness to commentator representations of UBCS. It is important to note that during in-game commentary, the potential health hazards and long-term consequences associated with incidents of UBCS were not appropriately addressed to the viewing audience. Therefore, if this research is able to inform or caution individuals towards a greater attentiveness and more critical interpretation when discerning commentator discourse, it is possible that individuals might not be as open to receiving commentator perceptions as reality.

Limitations

While acknowledging the importance and value of this study's contributions to the literature and state of knowledge, in the spirit of full transparency, the potential limitations of the study must also be acknowledged. The sample size of regular season NFL games to draw upon for analysis in this study was limited to the seasons provided in the NFL Game Pass archives, which began with the 2009 season. It would have been preferred to have access to a much larger time period of NFL seasons to sample from, as the issues surrounding the NFL and relative "concussion issues" dates back over 20 years, with the NFL's Mild Traumatic Brain Injury committee having been initially

convened in 1994 (Fainaru-Wada and Fainaru, 2013; Lipsky, 2008). It would have been advantageous to possess access to a wider span of NFL regular season games, to attempt to determine potential shifts in representations of concussions and head trauma over a longer period of time, as well as interrogate how the framing of UBCS incidents may have changed over time.

Another potential limitation of this study involves the concept of upper body contact of significance and recognition of such instances. While the researcher always erred on the conservative side regarding which cases of UBCS to include in this study, there is obviously room for differing opinions regarding what can be regarded as “contact of significance”.

Recommendations for Future Research

There are several prospective directions future research might care to venture, following along a similar path of this current research project. To begin, the significant issue of potential long-term health consequences associated with head trauma and concussions in sports is not solely isolated to the NFL and American (gridiron) football. In light of present, ongoing civil lawsuits against the National Hockey League (NFL) (Miller and Wendt, 2015) and World Wrestling Entertainment (WWE) (Ziv, 2015), it would be advisable for future research to investigate representations of head trauma and concussions within other “combat” sports, such as boxing, mixed-martial arts, hockey, lacrosse and professional wrestling. It is of importance to illuminate how various major sporting brands have managed issues regarding head trauma and concussions, and how subsequent messages on the subject have been disseminated to the public.

When examining future research directions involving the NFL, there is also substantial value for future researchers to analyze Game Commentators' representations of concussions and head injuries, in comparison with the representation of knee injuries, to delineate how commentators represent both forms of injury. It was observed during the present study that knee injuries were often characterized by commentators with extreme concern, due to the premium placed on speed and mobility during gameplay. It would be beneficial to further investigate how these injuries were constructed and framed to the viewing audience, gauging representations of severity, comparative to the known potential health consequences of injuries to the head and the knee.

Of similar interest within the present study was the observed commentator representation of "official safety protocols" initiated by the NFL to protect players from exposure to traumatic head injuries. Future research should direct inquiry into the possible influence NFL safety protocols actually have on player safety, through a directed investigation of official statistics regarding the prevalence of reported concussions and head injuries. There was some question within this study regarding the legitimacy and efficacy of these safety protocols, with concern over the influence that NFL subcultural cues may have in dissuading more stringent concussion testing and reporting by NFL players and staff. Therefore, further research into the overall effect of NFL safety initiatives should be comprehensively vetted to determine if these protocols significantly provide protective measures against head injuries.

APPENDICES

Appendix A: Random Sampling Tables

Table 19. Number of games to randomly sample from, per season

Year	Number of Games
2009	242
2010	246
2011	245
2012	239
2013	238
2014	236
Total: 1446	

Table 20. Number of commentary pairings that might be randomly sampled

Year	Number of Pairings
2009	28
2010	32
2011	24
2012	25
2013	29
2014	30
Total: 168	

Table 21. Number of NFL regular season games by commentator pairings

Television Network	Commentator Pairing	Number of Games
NBC	Al Michaels, Cris Collinsworth	101
FOX	Kenny Albert, Daryl Johnston	101
CBS	Jim Nantz, Phil Simms	93
CBS	Greg Gumbel, Dan Dierdorf	84
CBS	Kevin Harlan, Solomon Wilcotts	84
CBS	Ian Eagle, Dan Fouts	82
FOX	Joe Buck, Troy Aikman	81
ESPN	Mike Tirico, Jon Gruden	64
FOX	Dick Stockton, John Lynch	58
FOX	Chris Myers, Tim Ryan	55
FOX	Thom Brennaman, Brian Billick	52
CBS	Marv Albert, Rich Gannon	46
ESPN	Mike Tirico, Jon Gruden, Ron Jaworski	32
FOX	Kevin Burkhardt, John Lynch	32
CBS	Gus Johnson, Steve Tasker	28
FOX	Ron Pitts, John Lynch	27
FOX	Sam Rosen, Tim Ryan	26

FOX	Dick Stockton, Charles Davis	21
CBS	Bill Macatee, Steve Tasker	19
CBS	Greg Gumbel, Trent Green	17
FOX	Thom Brennaman, Troy Aikman	17
CBS	Ian Eagle, Rich Gannon	17
CBS	Spero Dedes, Solomon Wilcots	16
CBS	Kevin Harlan, Rich Gannon	16
CBS	Andrew Catalon, Steve Beuerlein, Steve Tasker	16
FOX	Chris Myers, Ronde Barber	16
CBS	Dick Enberg, Dan Fouts	15
CBS	Spero Dedes, Steve Beuerlein	14
FOX	Ron Pitts, Jim Mora	13
FOX	Thom Brennaman, David Diehl	13
CBS	Bill Macatee, Rich Gannon	12
FOX	Dick Stockton, Ronde Barber	11
FOX	Dick Stockton, Charles Davis, Jim Mora	10
FOX	Ron Pitts, Mike Martz	10
CBS	Don Criqui, Randy Cross	9
CBS	Don Criqui, Steve Beuerlein	8
CBS	Bill Macatee, Steve Beurlein	7
FOX	Sam Rosen, Chad Pennington	7
FOX	Sam Rosen, Heath Evans	7
FOX	Sam Rosen, Brian Billick	7
FOX	Gus Johnson, Charles Davis	6
FOX	Chris Myers, Brian Billick	6
FOX	Justin Kutcher, Charles Davis	5
FOX	Dick Stockton, Brady Quinn	5
CBS	Spiro Dedes, Rich Gannon	5
CBS	Tom McCarthy, Adam Archuleta	5
FOX	Chris Myers, Trent Green	4
FOX	Tim Ryan, Chris Myers	4
FOX	Sam Rosen, Tim Ryan, Chris Myers	4
CBS	Spero Dedes, Steve Tasker, Steve Beuerlein	3
ESPN	Chris Berman, Trent Dilfer	3
CBS	Spero Dedes, Randy Cross	3
FOX	Dick Stockton, Kirk Morrison	3
ESPN	Trent Dilfer, Brad Nessler	2
FOX	Dick Stockton, Brian Billick	2
CBS	Andrew Catalon, Adam Archuleta	2
FOX	Thom Brennaman, Brian Billick, Chris Myers	2
ESPN	Mike Greenberg, Mike Golic, Steve Young	2

CBS	Brian Anderson, Adam Archuleta	2
FOX	Chris Myers, Charles Davis	2
FOX	Chris Myers, Kurt Warner	2
FOX	Sam Rosen, Kirk Morrison	2
FOX	Chris Rose, Trent Green	2
CBS	Dan Dierdorf, Spero Dedes	1
CBS	Jim Nantz, Dan Fouts	1
CBS	Dan Fouts, Gus Johnson	1
CBS	Andrew Catalon, Rich Gannon	1
CBS	Andrew Catalon, Steve Tasker	1
CBS	Don Criqui, Steve Tasker	1
CBS	Dave Ryan, Steve Tasker	1
CBS	Bill Macatee, Steve Beurlein, Steve Tasker	1
CBS	Brad Johansen, Chris Simms	1
CBS	Tom McCarthy, Chris Simms	1
FOX	Craig Bolerjack, John Lynch	1
FOX	Sam Rosen, John Lynch	1
FOX	Ron Pitts, Charles Davis	1
FOX	Thom Brennaman, Charles Davis	1
FOX	Dick Stockton, Donovan McNabb	1
FOX	Chris Myers, Jim Mora	1
FOX	Chris Myers, Ross Tucker	1
FOX	Chris Rose, Torry Holt	1
FOX	Chris Rose, Ross Tucker	1
FOX	Chris Rose, Kurt Warner	1
FOX	Mike Goldberg, Brendon Ayanbadejo	1
FOX	Sam Rosen, Ronde Barber	1
FOX	Justin Kutcher, David Diehl	1
FOX	Tim Brando, Brendon Ayenbadejo	1
FOX	Tom McCarthy, Heath Evans	1
FOX	Matt Vasgersian, Ross Tucker	1

Total: 1446

Table 22. Television Network Glossary

Network Glossary	
ABC	American Broadcasting Company
CBS	Columbia Broadcasting System
ESPN	Entertainment and Sports Programming Network
FOX	FOX Broadcasting Company
NBC	National Broadcasting Company
HBO	Home Box Office
TNT	Turner Network Television
TBS	Turner Broadcasting System

Appendix B: SPSS Coding Manual for In-Game Commentary Analysis

1. Unit of Analysis
 - Upper Body Contact of Significance
2. Name of NFL player that received the upper body contact of significance
 - Example: Gijon Robinson
3. Further detail of the upper body contact of significance
4.

Position of the player that received the upper body contact of significance
 - 1=Quarterback
 - 2=Running Back
 - 3=Wide Receiver
 - 4=Tight End
 - 5=Fullback
 - 6=Center
 - 7=Offensive Tackle
 - 8=Offensive Guard
 - 9=Defensive Tackle
 - 10=Defensive Tackle
 - 11=Linebacker
 - 12=Cornerback
 - 13=Safety
 - 14=Kicker
 - 15=Punter
5. Game (Team 1 vs. Team 2)
 - JAX vs. IND
6. Chronological number of game coded
 - 1
7. Number of Randomly Sampled Game
 - 1
8. Date of Game
 - September 12, 2009
9. Season of Game
 - 1=2009

- 2=2010
- 3=2011
- 4=2012
- 5=2013
- 6=2014

10. Week Number of Game

- 1=1
- 2=2
- 3=3
- 4=4
- 5=5
- 6=6
- 7=7
- 8=8
- 9=9
- 10=10
- 11=11
- 12=12
- 13=13
- 14=14
- 15=15
- 16=16
- 17=17

11. Network of Game Televised

- 1=CBS
- 2=ESPN
- 3=FOX
- 4=NBC

12. NFL Commentary Pairing (Play-by-Play Announcer, Game Analyst)

- Example: Kevin Harlan, Solomon Wilcotts

13. Play-by-Play Announcer of Game

- Example: Kevin Harlan

14. Professional background of Play-by-Play Announcer

- 1=Professional Sports Broadcaster

- 2=Former NFL Player
- 3=Former Collegiate Player
- 4=Former NFL Coach

15. Game Analyst of Game

- Example: Solomon Wilcots

16. Professional background of Game Analyst

- 1=Former NFL player
- 2=Professional Sports Broadcaster
- 3=Former NFL Head Coach

17. Name of Sideline Correspondent

- _____

18. Professional background of sideline reporter

- 1=Former NFL player
- 2=Professional Sports Broadcaster
- 3=Former NFL Head Coach

19. Quarter of Play

- 1=First Quarter
- 2=Second Quarter
- 3=Third Quarter
- 4=Fourth Quarter

20. Play-by-Play Announcer provides immediate representation of upper body contact of significance

- 1=Yes
- 2=No

21. Description of Play-by-Play Announcer's immediate representation of upper body contact of significance

22. Game Analyst provides immediate representation of upper body contact of significance

- 1=Yes
- 2=No

23. Description of Game Analyst's immediate representation of upper body contact of significance
24. Play-by-Play Announcer provides digested representation of upper body contact of significance (Upon further review)
 - 1=Yes
 - 2=No
25. Description of Play-by-Play Announcer's digested representation of upper body contact of significance (Upon further review)
26. Colour Analyst's provides digested representation of upper body contact of significance (Upon further review)
 - 1=Yes
 - 2=No
27. Description of Colour Analyst's provides digested representation of upper body contact of significance (Upon further review)
28. Play-by-Play Announcer uses the word "concussion" when describing on the field upper body contact of significance
 - 1=Yes
 - 2=No
29. Description of Play-by-Play Announcer's use of the word "concussion" when describing on the field upper body contact of significance
30. Game Analyst uses the word "concussion" when describing on the field upper body contact of significance
 - 1=Yes
 - 2=No
31. Description Game Analyst's use of the word "concussion" when describing on the field upper body contact of significance
32. Play-by-Play Announcer uses the word "head trauma" when describing on the field upper body contact of significance
 - 1=Yes
 - 2=No

33. Description of Play-by-Play Announcer's use of the word "head trauma" when describing on the field upper body contact of significance
34. Game Analyst uses the word "head trauma" when describing on the field upper body contact of significance
 - 1=Yes
 - 2=No
35. Description of Game Analyst's use of the word "head trauma" when describing on the field upper body contact of significance
36. Play-by-Play Announcer references NFL safety protocols surrounding "head injuries" when describing on the field upper body contact of significance
 - 1=Yes
 - 2=No
37. Description of Play-by-Play Announcer's reference to NFL safety protocols surrounding "head injuries" when describing on the field upper body contact of significance
38. Game Analyst references NFL safety protocols surrounding "head injuries" when describing on the field upper body contact of significance
 - 1=Yes
 - 2=No
39. Description of Game Analyst's reference to NFL safety protocols surrounding "head injuries" when describing on the field upper body contact of significance
40. Play-by-Play Announcer references potential health hazards surrounding "head injuries" when commenting on upper body contact of significance
 - 1=Yes
 - 2=No
41. Description of Play-by-Play Announcer's reference of the potential health hazards surrounding "head injuries" when commenting on upper body contact of significance
42. Game Analyst references potential health hazards surrounding "head injuries" when commenting on upper body contact of significance
 - 1=Yes
 - 2=No

43. Description of Game Analyst's reference of the potential health hazards surrounding "head injuries" when commenting on upper body contact of significance
44. Play-by-Play Announcer mentions the player's ability to walk off the field following upper body contact of significance
 - 1=Yes
 - 2=No
45. Description of Play-by-Play Announcer's mention of the player's ability to walk off the field following upper body contact of significance
46. Game Analyst mentions the player's ability to walk off the field following upper body contact of significance
 - 1=Yes
 - 2=No
47. Description of Game Analyst's mention of the player's ability to walk off the field following upper body contact of significance
48. Play-by-Play Commentator reacts to an officially acknowledged head injury or concussion resulting from upper body contact of significance
 - 1=Yes
 - 2=No
49. Description of Play-by-Play Commentator's reaction to an officially acknowledged head injury or concussion resulting from upper body contact of significance
50. Game Analyst reacts to an officially acknowledged head injury or concussion resulting from upper body contact of significance
 - 1=Yes
 - 2=No
51. Description of Game Analyst's reaction to an officially acknowledged head injury or concussion resulting from upper body contact of significance
52. Play-by-Play Commentator acknowledges player's previous injury/medical history
 - 1=Yes
 - 2=No

53. Description of Play-by-Play Commentator's acknowledgement of player's previous injury/medical history
54. Game Analyst acknowledges player's previous injury/medical history
- 1=Yes
 - 2=No
55. Description of Game Analyst's acknowledgement of player's previous injury/medical history
56. Play-by-Play Commentator reacts to penalties (or lack thereof) resulting from upper body contact of significance
- 1=Yes
 - 2=No
57. Description of Play-by-Play Commentator's reaction to penalties (or lack thereof) resulting from upper body contact of significance
58. Game Analyst reacts to penalties (or lack thereof) resulting from upper body contact of significance
- 1=Yes
 - 2=No
59. Description of Game Analyst's reaction to penalties (or lack thereof) resulting from upper body contact of significance
60. Play-by-Play Commentator provides specific representation of players who initiate/commit upper body contact of significance
- 1=Yes
 - 2=No
61. Description of Play-by-Play Commentator's representation of players who initiate/commit upper body contact of significance
62. Game Analyst's provides specific representation of players who initiate/commit upper body contact of significance
- 1=Yes
 - 2=No

63. Description of Game Analyst's representation of players who initiate/commit upper body contact of significance
64. Play-by-Play Commentator provides specific representation of players who receive upper body contact of significance
- 1=Yes
 - 2=No
65. Description of Play-by-Play Commentator's representation of players who receive upper body contact of significance
66. Game Analyst provides specific representation of players who receive upper body contact of significance
- 1=Yes
 - 2=No
67. Description of Game Analyst's representation of players who receive upper body contact of significance
68. Play-by-Play Commentator provides specific representation of in-game physicality
- 1=Yes
 - 2=No
69. Description of Play-by-Play Commentator's representation of in-game physicality
70. Game Analyst provides specific representation of in-game physicality
- 1=Yes
 - 2=No
71. Description of Game Analyst's representation of in-game physicality
72. Play-by-Play Commentator provides specific representation of player toughness
- 1=Yes
 - 2=No
73. Description of Play-by-Play Commentator's representation of player toughness
74. Game Analyst provides specific representation of player toughness
- 1=Yes

- 2=No

75. Description of Game Analyst's representation of player toughness

76. Play-by-Play Commentator provides specific representation of player weakness

- 1=Yes
- 2=No

77. Description of Play-by-Play Commentator's representation of player weakness

78. Game Analyst provides specific representation of player weakness

- 1=Yes
- 2=No

79. Description of Game Analyst's representation of player weakness

80. Play-by-Play Commentator provides specific kneejerk medical diagnosis of upper body contact of significance

- 1=Yes
- 2=No

81. Description of Play-by-Play Commentator's kneejerk medical diagnosis of upper body contact of significance

82. Game Analyst's provides specific kneejerk medical diagnosis of upper body contact of significance

- 1=Yes
- 2=No

83. Description of Game Analyst's kneejerk medical diagnosis of upper body contact of significance

84. Description of Play-by-Play Commentator's representations of player safety

85. Description of Game Analyst's representations of player safety

86. Play-by-Play Commentator provides specific representation of player's decision to return to play after an upper body injury

- 1=Yes
- 2=No

87. Description of Play-by-Play Commentator's representation of player's decision to return to play after an upper body injury
88. Game Analyst provides specific representation of player's decision to return to play after an upper body injury
- 1=Yes
 - 2=No
89. Description of Game Analyst's representation of player's decision to return to play after an upper body injury
90. Description of Play-by-Play Commentator's avoidance of head trauma and concussion issues
91. Description of Game Analyst's avoidance of head trauma and concussion issues
92. Play-by-Play Commentator provides specific reference towards NFL (sub) cultural cues
- 1=Yes
 - 2=No
93. Description of Play-by-Play Commentator reference towards NFL (sub) cultural cues
94. Game Analyst provides specific reference towards NFL (sub) cultural cues
- 1=Yes
 - 2=No
95. Description of Game Analyst's reference towards NFL (sub) cultural cues
96. Sideline reportage is provided regarding injured player status
- 1=Yes
 - 2=No
97. Description of sideline reportage of injured player status
98. Identification of what Play-by-Play Commentator's noticeably do not say
99. Identification of what Game Analyst noticeably does not say

100. Play-by-Play Commentator provides hyperbole associated with upper body contact of significance
- 1=Yes
 - 2=No
101. Description of hyperbole in Play-by-Play commentary associated with the upper body contact of significance
102. Game Analyst provides hyperbole associated with upper body hit of significance
- 1=Yes
 - 2=No
103. Description of hyperbole in Game Analyst commentary associated with the upper body contact of significance
104. Commentary Pairing Glorifies Upper Body Contact of Significance
- 1=Yes
 - 2=No
105. Description of the glorification of the upper body contact of significance in commentary

Appendix C: Results Tables

Table 25. NFL Commentary Pairing (Play-by-Play Announcer, Game Analyst) present during incidents of upper body contact of significance (UBCS)

Pairing	Frequency	Percent
Al Michaels, Cris Collinsworth	30	13.3
Jim Nantz, Phil Simms	18	8.0
Thom Brennaman, Brian Billick	16	7.1
Mike Tirico, Jon Gruden	15	6.6
Marv Albert, Rich Gannon	11	4.9
Chris Myers, Tim Ryan	10	4.4
Joe Buck, Troy Aikman	10	4.4
Greg Gumbel, Dan Dierdorf	10	4.4
Spero Dedes, Steve Beuerlein	8	3.5
Gus Johnson, Steve Tasker	7	3.1
Thom Brennaman, David Diehl	6	2.7
Ian Eagle, Dan Fouts	6	2.7
Dick Stockton, Charles Davis	6	2.7
Bill Macatee, Steve Tasker	6	2.7
Sam Rosen, Tim Ryan	5	2.2
Ron Pitts, John Lynch	5	2.2
Spero Dedes, Randy Cross	3	1.3
Spero Dedes, Solomon Wilcotts	3	1.3
Dick Stockton, Ronde Barber	3	1.3
Sam Rosen, Chad Pennington	2	.9
Dick Stockton, John Lynch	2	.9
Mike Tirico, Ron Jaworski, Jon Gruden	2	.9
Kevin Harlan, Rich Gannon	2	.9
Thom Brennaman, Troy Aikman	2	.9
Jim Nantz, Phil Simms, Bill Cowher	1	.4
Kevin Burkhardt, John Lynch	1	.4
Dick Enberg, Dan Fouts	1	.4
Ron Pitts, Jim Mora	1	.4
Total	226	100.0

Table 26. Play-by-Play Announcer present during incidents of upper body contact of significance (UBCS)

Name	Frequency	Percent %
Al Michaels	30	13.3
Thom Brennaman	24	10.6
Jim Nantz	19	8.4
Kenny Albert	18	8
Mike Tirico	17	7.5
Kevin Harlan	16	7.1

Spero Dedes	14	6.2
Chris Myers	12	5.3
Marv Albert	11	4.9
Dick Stockton	11	4.9
Joe Buck	10	4.4
Greg Gumbel	10	4.4
Gus Johnson	7	3.1
Sam Rosen	7	3.1
Ian Eagle	6	2.7
Ron Pitts	6	2.7
Bill Macatee	6	2.7
Kevin Burkhardt	1	0.4
Dick Enberg	1	0.4
Total	226	100

Table 27. Game Analyst present during incidents of upper body contact of significance (UBCS)

Name	Frequency	Percent %
Cris Collinsworth	30	13.3
Phil Simms	19	8.4
Daryl Johnston	18	8.0
Jon Gruden	17	7.5
Solomon Wilcotts	17	7.5
Brian Billick	16	7.1
Tim Ryan	15	6.6
Rich Gannon	13	5.8
Steve Tasker	13	5.8
Troy Aikman	12	5.3
Dan Dierdorf	10	4.4
Steve Beuerlein	8	3.5
John Lynch	8	3.5
Charles Davis	7	3.1
Dan Fouts	7	3.1
David Diehl	6	2.7
Ronde Barber	5	2.2
Randy Cross	3	1.3
Chad Pennington	2	.9
Total	226	100.0

Table 28. Professional background of Game Analyst

	Frequency	Percent
Former NFL Player	192	85.0
Former NFL Head Coach	34	15.0
Total	226	100.0

Table 29. Week Number of Games Containing
Upper Body Contact of Significance

Week Number	Frequency	Percent %
1	10	4.4
2	15	6.6
3	18	8.0
4	11	4.9
5	14	6.2
6	8	3.5
7	14	6.2
8	18	8.0
9	9	4.0
10	15	6.6
11	20	8.8
12	10	4.4
13	12	5.3
14	12	5.3
15	15	6.6
16	11	4.9
17	14	6.2
Total	226	100.0

References

- Adams, A., Anderson, E., & McCormack, M. (2010). Establishing and challenging masculinity: The influence of gendered discourses in organized sport. *Journal of Language and Social Psychology*, 29(3), 278-300.
- Albert, K. (Play-by-Play Announcer). (September 9, 2012). Washington Redskins vs. New Orleans Saints. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. New Orleans, Louisiana: FOX.
- Altheide, D., & Schneider, C.J. (2013). *Qualitative Media Analysis Second Edition*. Newbury Park, CA: Sage.
- Anderson, E., & Kian, E. (2012). Examining media contestation of masculinity and head trauma in the National Football League. *Men and Masculinities*, 15(2), 152-173. doi:10.1177/1097184X11430127
- Babiak, K., Mills, B., Tainsky, S., & Juravich, M. (2012). An investigation into professional athlete philanthropy: Why charity is part of the game. *Journal of Sport Management*, 26(2), 159-176.
- Balsam, J. S. (2012). NFL players' concussion lawsuit: the defensive game plan. *Labor & Employment Law*, 40(4), 10.
- Barber, R. (Game Analyst). (December 22, 2013). Minnesota Vikings vs. Chicago Bears. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. Chicago, Illinois: FOX.
- Berfield, S. (2013, November 15). As Concussions Worry Parents, NFL Blitzes Into Happy Meals. Retrieved September 22, 2014.

- Billick, B. (Game Analyst). (December 16, 2012). Tampa Bay Buccaneers vs. New Orleans Saints. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. New Orleans, Louisiana: FOX.
- Billings, A. C., Halone, K. K., and Denham, B. E. (2002). "Man, that was a pretty shot"; An analysis of gendered broadcast commentary surrounding the 2000 men's and women's NCAA final four basketball championships. *Mass Communication and Society*, 5(3), 295-315.
- Bissell, K. L., & Duke, A. M. (2007). Bump, set, spike: An analysis of commentary and camera angles of women's beach volleyball during the 2004 summer Olympics. *Journal of Promotion Management*, 13(1-2), 35-53. doi:10.1300/J057v13n01_04
- Brennaman, T. (Play-by-Play Announcer) & Billick, B. (Game Analyst). (November 18, 2012). Philadelphia Eagles vs. Washington Redskins. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. Washington D.C: FOX.
- Brennaman, T. (Play-by-Play Announcer) & Billick, B. (Game Analyst). (September 22, 2013). New York Giants vs. Carolina Panthers. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. Charlotte, North Carolina: FOX.
- Brennaman, T. (Play-by-Play Announcer) & Diehl, D (Game Analyst). (September 21, 2014) San Francisco 49ers vs. Arizona Cardinals. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. Phoenix, Arizona: FOX.
- Breslow, J. (2014, February 4). The NFL's Concussion Problem Still Has Not Gone Away. Retrieved September 20, 2014, from:
<http://www.pbs.org/wgbh/pages/frontline/sports/concussion-watch/what-weve-learned-from-two-years-of-tracking-nfl-concussions/>

- Breslow, J. (2014, September 19). The NFL's Concussion Problem Still Has Not Gone Away. Retrieved September 20, 2014, from:
<http://www.pbs.org/wgbh/pages/frontline/sports/concussion-watch/the-nfls-concussion-problem-still-has-not-gone-away/>
- Brownell, K. D., & Warner, K. E. (2009). The perils of ignoring history: Big Tobacco played dirty and millions died. How similar is Big Food?. *Milbank Quarterly*, 87(1), 259-294.
- Bryant, J., Brown, D., Comisky, P. W., & Zillmann, D. (1982). Sports and spectators: Commentary and appreciation. *Journal of Communication*, 32(1), 109-119.
doi:10.1111/j.1460-2466.1982.tb00482.x
- Bryant, J., Comisky, P., & Zillmann, D. (1981). The appeal of rough and- tumble play in televised professional football. *Communication Quarterly*, 29, 256–262.
- Bryant, J., Comisky, P., & Zillmann, D. (1977). Drama in sports commentary. *Journal of Communication*, 27(3), 140-149. doi:10.1111/j.1460-2466.1977.tb02140.x
- Buck, J. (Play-by-Play Announcer) & Aikman, T. (Game Analyst). (September 12, 2010). Green Bay Packers vs. Philadelphia Eagles. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. Philadelphia, Pennsylvania: FOX.
- Budinsky, J and Bryant, S. (2011). 'It's Not That Easy Being Green': Greenwashing of Environmental Discourses in Advertising.
- Cantu, R. C., & Register-Mihalik, J. K. (2011). Considerations for return-to-play and retirement decisions after concussion. *PM&R*, 3(10), S440-S444.
- Charmaz, K. (2006). *Constructing grounded theory*. Thousand Oaks, CA: Sage.

- Coakley, J. (1988). Media coverage of sports and violent behavior: An elusive connection. *Current Psychology*, 7(4), 322-330. doi:10.1007/BF02686629
- Comisky, P., Bryant, J., & Zillmann, D. (1977). Commentary as a substitute for action. *Journal of Communication*, Summer.
- Cummins, R. G., & Hahn, D. (2013). Re-presenting sport: How instant replay and perceived violence impact enjoyment of mediated sports. *Mass Communication and Society*, 16(6), 787-807. doi:10.1080/15205436.2013.779719
- Cummings, K. M., Morley, C. P., & Hyland, A. (2002). Failed promises of the cigarette industry and its effect on consumer misperceptions about the health risks of smoking. *Tobacco control*, 11, 110-117.
- Davis, C. (Game Analyst). (November 1, 2009). Seattle Seahawks vs. Dallas Cowboys. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. Dallas, Texas: FOX.
- Dedes, S. (Play-by-Play Announcer). (October 5, 2014). Pittsburgh Steelers vs. Jacksonville Jaguars. [Televised Sports Broadcast]. *NFL on CBS*. Jacksonville, Florida: CBS.
- Dedes, S. (Play-by-Play Announcer) & Beuerlein, S. (Game Analyst). (September 16, 2012). Kansas City Chiefs vs. Buffalo Bills. [Televised Sports Broadcast]. *NFL on CBS*. Buffalo, New York: CBS.
- Dedes, S. (Play-by-Play Announcer) & Beuerlein, S. (Game Analyst). (December 23, 2012). Oakland Raiders vs. Carolina Panthers. [Televised Sports Broadcast]. *NFL on CBS*. Charlotte, North Carolina: CBS.

- Dedes, S. (Play-by-Play Announcer) & Cross, R. (Game Analyst). (September 19, 2010). Buffalo Bills vs. Green Bay Packers. [Televised Sports Broadcast]. *NFL on CBS*. Green Bay, Wisconsin: CBS.
- DeLamielleure, J. (2014). Concussion in the National Football League: Viewpoint of an Elite Player. *Journal Of Law, Medicine & Ethics*, 42(2), 133-134.
doi:10.1111/jlme.12127
- Desmarais, F., & Bruce, T. (2010). The power of stereotypes: Anchoring images through language in live sports broadcasts. *Journal of Language and Social Psychology*, 29(3), 338-362. doi:10.1177/0261927X10368836
- Desmarais, F., & Bruce, T. (2008). Blurring the boundaries of sports public relations: National stereotypes as sport announcers' public relations tools. *Public Relations Review*, 34(2), 183-191. doi:10.1016/j.pubrev.2008.03.016
- Diamond, A. B., & Solomon, G. S. (2014). Modifying factors in sports-related concussion: dangerous style of play. *The Physician and sports medicine*, 42(3), 20-25.
- Dierdorf, D. (September 28, 2010). Tennessee Titans vs. New York Giants. [Televised Sports Broadcast]. *NFL on CBS*. Rutherford, New Jersey: CBS.
- Drysdale, T. A. (2013). Helmet-to-Helmet Contact: Avoiding a Lifetime Penalty by Creating a Duty to Scan Active NFL Players for Chronic Traumatic Encephalopathy. *Journal Of Legal Medicine*, 34(4), 425-452.
doi:10.1080/01947648.2013.859969
- Edwards, J. C., & Bodle, J. D. (2014). Causes and Consequences of Sports Concussion. *Journal Of Law, Medicine & Ethics*, 42(2), 128-132. doi:10.1111/jlme.12126

- Fainaru-Wada, M., & Fainaru, S. (2013). *League of Denial: The NFL, Concussions and the Battle for Truth*. Random House LLC.
- Fogel, C. (2011). Sporting Masculinity on the Gridiron: Construction, Characteristics and Consequences. *Canadian Social Science*, 7(2), 1-14.
- Frederick, E. L., Lim, C. H., Chung, J., & Clavio, G. (2013). Determining the Effects of Sport Commentary on Viewer Perceptions, Attitudes, Beliefs, and Enjoyment through Violence Justification. *Journal of Sports Media*, 8(1), 65-86
- Gains, C. (2014). Look How Much More Quarterbacks Are Paid Than Everyone Else. *Business Insider*. Retrieved from <http://www.businessinsider.com/nfl-highest-paid-positions-2014-9>
- Gamson, W. A., Croteau, D., Hoynes, W., & Sasson, T. (1992). Media images and the social construction of reality. *Annual review of sociology*, 373-393.
- Goldberg, D. S. (2013). Mild traumatic brain injury, the national football league, and the manufacture of doubt: An ethical, legal, and historical analysis. *Journal of Legal Medicine*, 34(2), 157-191. doi:10.1080/01947648.2013.800792
- Halone, K., & Billings, A. (2010). The temporal nature of racialized sport consumption. *American Behavioral Scientist*, 53(11), 1645-1668.
doi:10.1177/0002764210368090
- Halone, K., & Meân, L. (2010). Situating sport, language, and culture as a site for intellectual discussion. *Journal of Language and Social Psychology*, 29(3), 386-396. doi:10.1177/0261927X10368832
- Hanna, J. M., & Kain, D. (2010). NFL's Shaky Concussion Policy Exposes the League to Potential Liability Headaches. *Ent. & Sports Law*, 28, 9.

- Hansen, A. D. (1999). Narrating the game: Achieving and coordinating partisanship in real time. *Research on Language and Social Interaction*, 32, 269–302.
- Harlan, K. (Play-by-Play Announcer) & Wilcots, S. (Game Analyst). (September 13, 2009). Jacksonville Jaguars vs. Indianapolis Colts. [Televised Sports Broadcast]. *NFL on CBS*. Indianapolis, Indiana: CBS.
- Harlan, K. (Play-by-Play Announcer). (October 24, 2010). Cleveland Browns vs. New Orleans Saints. [Televised Sports Broadcast]. *NFL on CBS*. New Orleans, Louisiana: CBS.
- Harlan, K. (Play-by-Play Announcer) & Wilcots, S. (Game Analyst). (November 17, 2010). Cleveland Browns vs. Pittsburgh Steelers. [Televised Sports Broadcast]. *NFL on CBS*. Pittsburgh, Pennsylvania: CBS.
- Harlan, K. (Play-by-Play Announcer) & Wilcots, S. (Game Analyst). (October 28, 2012). Oakland Raiders vs. Kansas City Chiefs. [Televised Sports Broadcast]. *NFL on CBS*. Kansas City, Missouri: CBS.
- Holcomb, J. (2008). Environmentalism and the Internet: Corporate greenwashers and environmental groups. *Contemporary Justice Review*, 11(3), 203-211.
doi:10.1080/10282580802295328
- Impact of Television: How Television Changed the Game. (2015). Retrieved from <http://operations.nfl.com/the-game/impact-of-television/>
- Jeong, Y., Tran, H., & Zhao, X. (2012). How Much Is Too Much? The Collective Impact of Repetition and Position In Multi-Segment Sports Broadcast. *Journal Of Advertising Research*, 52(1), 87-101. doi:10.2501/JAR-52-1-087-101

- Johnson, G. (Play-by-Play Announcer) & Tasker, S. (Game Analyst). (October 3, 2010). Houston Texans vs. Oakland Raiders. [Televised Sports Broadcast]. *NFL on CBS*. Oakland, California: CBS.
- Johnston, D. (Game Analyst). (December 9, 2012). Chicago Bears vs. Minnesota Vikings. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. Minneapolis, Minnesota: FOX.
- Kain, D. (2009). "It's Just a Concussion:" The National Football League's Denial of a Causal Link Between Multiple Concussions and Later-Life Cognitive Decline. *Rutgers Law Journal*. 697-725 n. 164.
- Koning, R., Matheson, V., Nathan, A., & Pantano, J. (2014). The Long- Term Game: An Analysis of the Life Expectancy of National Football League Players. *International Journal of Financial Studies*, 2(1), 168-178.
- Kreager, D. (2007). Unnecessary Roughness: School, Sports, Peer Networks, and Male Adolescent Violence. *American Sociological Review*, 72, 705-724.
- Lehman, D. W., & Hahn, J. (2013). Momentum and Organizational Risk Taking: Evidence from the National Football League. *Management Science*, 59(4), 852-868. doi:10.1287/mnsc.1120.1574
- Lehman, E. J., Hein, M. J., Baron, S. L., & Gersic, C. M. (2012). Neurodegenerative causes of death among retired National Football League players. *Neurology*, 79(19), 1970- 1974.
- Lewis, N., & Weaver, A. J. (2013). More Than a Game: Sports Media Framing Effects on Attitudes, Intentions, and Enjoyment. *Communication & Sport*, 2167479513508273.

- Lipinsky, B. (2008). Dealing with the NFL's Concussion Problems of Yesterday, Today, and Tomorrow. *Fordham Intellectual Property, Media & Entertainment Law Journal*,
- Lubitow, A., & Davis, M. (2011). Pastel injustice: The corporate use of pinkwashing for profit. *Environmental Justice*, 4(2), 139-144.
- Lynch, J. (Game Analyst). (September 30, 2012). Carolina Panthers vs. Atlanta Falcons. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. Atlanta, Georgia: FOX.
- Macatee, B. (Play-by-Play Announcer) & Tasker, S. (Game Analyst). (November 20, 2011). Jacksonville Jaguars vs. Cleveland Browns. [Televised Sports Broadcast]. *NFL on CBS*. Cleveland, Ohio: CBS.
- MacGillivray, H. (2014). Where is The Awareness in Concussion Awareness: Can Concussed Players Really Assume The Risk in a Concussed State?. *Jeffrey S. Moorad Sports Law Journal*, 21, 529-577.
- Macnamara, J. (2005). Media content analysis: Its uses, benefits and best practice methodology. *Asia Pacific Public Relations Journal*, 6(1), 1-34.
- Maguire, J. (2009). The social construction and impact of champions. *Sport in Society*, 12(9), 1250-1264. doi:<http://dx.doi.org/10.1080/17430430903137944>
- Markowitz, G., & Rosner, D. (2012). *Deceit and denial: The deadly politics of industrial pollution*. University of California Press.
- Marshall, C. M. (2012). Sports-related concussion: a narrative review of the literature. *The Journal of the Canadian Chiropractic Association*, 56(4), 299.

- Matthes, J., & Kohring, M. (2008). The content analysis of media frames: Toward improving reliability and validity. *Journal of Communication, 58*(2), 258-279.
doi:10.1111/j.1460-2466.2008.00384.x
- McGannon, K. R., Cunningham, S. M., & Schinke, R. J. (2013). Understanding concussion in socio-cultural context: A media analysis of a national hockey league star's concussion. *Psychology of Sport & Exercise, 14*(6), 891-899.
doi:10.1016/j.psychsport.2013.08.003
- Meân, L., & Halone, K. (2010). Sport, language, and culture: Issues and intersections. *Journal of Language and Social Psychology, 29*(3), 253-260.
doi:10.1177/0261927X10368830
- Messner, M. (1990). When bodies are weapons: Masculinity and violence in sport. *International Review for the Sociology of Sport, 25*(3), 203-220.
doi:10.1177/101269029002500303
- Messner, M., Hunt, D., Dunbar, M., Chen, P., Lapp, J., & Miller, P. (1999). Boys to Men: Sports Media. Messages about Masculinity: A National Poll of Children, Focus Groups, and Content Analysis of Sports Programs and Commercials
- Michael, E. (2015). School of Hark Knocks-The Impact of the NFL Concussion Litigation. *Cardozo Arts & Ent. LJ, 33*, 289.
- Michaels, A. (Play-by-Play Announcer) & Collinsworth, C. (Game Analyst). (October 10, 2010). Philadelphia Eagles vs. San Francisco 49ers. [Televised Sports Broadcast]. *NBC Sunday Night Football*. San Francisco, California: NBC.

- Michaels, A. (Play-by-Play Announcer) & Collinsworth, C. (Game Analyst). (November 7, 2010). Dallas Cowboys vs. Green Bay Packers. [Televised Sports Broadcast]. *NBC Sunday Night Football*. Green Bay, Wisconsin: NBC.
- Michaels, A. (Play-by-Play Announcer) & Collinsworth, C. (Game Analyst). (December 18, 2011). Baltimore Ravens vs. San Diego Chargers. [Televised Sports Broadcast]. *NBC Sunday Night Football*. San Diego, California: NBC.
- Michaels, A. (Play-by-Play Announcer) & Collinsworth, C. (Game Analyst). (October 7, 2012). San Diego Chargers vs. New Orleans Saints. [Televised Sports Broadcast]. *NBC Sunday Night Football*. New Orleans, Louisiana: NBC.
- Michaels, A. (Play-by-Play Announcer) & Collinsworth, C. (Game Analyst). (September 15, 2013). San Francisco 49ers vs. Seattle Seahawks. [Televised Sports Broadcast]. *NBC Sunday Night Football*. Seattle, Washington: NBC.
- Michaels, A. (Play-by-Play Announcer) & Collinsworth, C. (Game Analyst). (December 28, 2014). Cincinnati Bengals vs. Pittsburgh Steelers. [Televised Sports Broadcast]. *NBC Sunday Night Football*. Pittsburgh, Pennsylvania: NBC.
- Miller, J. J., & Wendt, J. T. (2015). The concussion crisis in the National Hockey League. *Journal of Contemporary Athletics*.
- Moe, A. (2014). Banging Heads-Media Portrayals of Injuries in Professional Football Before and After the Death of Mike Webster.
- Nantz, J. (Play-by-Play Announcer) & Simms, P. (Game Analyst). (December 30, 2012). Miami Dolphins vs. New England Patriots. [Televised Sports Broadcast]. *NFL on CBS*. Foxborough, Massachusetts: CBS.

- Nantz, J. (Play-by-Play Announcer). (October 13, 2013). Pittsburgh Steelers vs. New York Jets. [Televised Sports Broadcast]. *NFL on CBS*. East Rutherford, New Jersey: CBS.
- Neumann, L. (2011). Raising awareness of the severity of concussions. *The Sport Journal*, 14.
- Nickel, P. M., & Eikenberry, A. M. (2009). A critique of the discourse of marketized philanthropy. *American Behavioral Scientist*, 52(7), 974-989.
- Nixon, H. L. (1993). Accepting the risks of pain and injury in sport: Mediated cultural influences on playing hurt. *Sociology of Sport Journal*, 10, 183-183.
- Omalu, B. I., DeKosky, S. T., Minster, R. L., Kamboh, M. I., Hamilton, R. L., & Wecht, C.H. (2005). Chronic traumatic encephalopathy in a National Football League player. *Neurosurgery*, 57(1), 128-134.
- Oriard, M. (2014). Chronicle of a (football) death foretold: The imminent demise of a national pastime? *The International Journal of the History of Sport*, 31(1-2), 120-133. doi:10.1080/09523367.2013.842557
- Parker, H. M., & Fink, J. S. (2008). The Effect of Sport Commentator Framing on Viewer Attitudes. *Sex Roles*, 58(1/2), 116-126. doi:10.1007/s11199-007-9344-8
- Patten, D. (2013). Full 2012-2013 TV Season Series Rankings. Retrieved from <http://deadline.com/2013/05/tv-season-series-rankings-2013-full-list-506970/>
- Petric, J. E. (2013). *Martyrs of Masculinity: Narratives about Health Risks and Head Trauma in the NFL* (Doctoral dissertation, University of Cincinnati).
- Polsky, S. (1997). Winning medicine: professional sports team doctors' conflicts of interest. *J. Contemp. Health L. & Pol'y*, 14, 503.

- Real, M. R. (1975). Super Bowl: mythic spectacle. *Journal of Communication*, 25(1), 31-43.
- Ryan, T. (Game Analyst). (November 17, 2011). Carolina Panthers vs. Indianapolis Colts [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. Indianapolis, Indiana: FOX.
- Ryan, T. (Game Analyst). (September 23, 2012). Atlanta Falcons vs. San Diego Chargers. [Televised Sports Broadcast]. *FOX: NFL Football Sunday*. San Diego, California: FOX.
- Sabo, D. (2009). Sports Injury, the Pain Principle, and the Promise of Reform. *Journal of Intercollegiate Sports*, 2, 145-152.
- Scott, O., Hill, B., & Zakus, D. (2014). Framing the 2007 national basketball association finals: An analysis of commentator discourse. *International Review for the Sociology of Sport*, 49(6), 728-744. doi:10.1177/1012690212466852
- Segrave, J. (1997). A Matter of Life and Death: Some Thoughts on The Language of Sport. *Journal of Sport & Social Issues*, 21(2), 211-220.
doi:10.1177/019372397021002007
- Sheth, H., & Babiak, K. M. (2010). Beyond the game: Perceptions and practices of corporate social responsibility in the professional sport industry. *Journal of Business Ethics*, 91(3), 433-450.
- Smith, A.R. (2014). American Football Becomes the Dominant Intercollegiate National Pastime. *The International Journal of the History of Sport*, 31(1-2), 109-119.
- Stampler, L. (2014). Most NFL Players Would Keep Their Heads in the Game, Even With Concussion. *Time.com*, Business Source Complete, January 28.

- Stopping the Invisible Injury. (2014). *Exceptional Parent*, 44(8), 58-59.
- Sullivan, D. B. (1991). Commentary and viewer perception of player hostility: Adding punch to televised sports. *Journal of Broadcasting and Electronic Media*, 35, 487–504.
- Tamborini, R., Weber, R., Bowman, N., Eden, A., & Skalski, P. (2013). 'Violence Is a Many-Splintered Thing': The Importance of Realism, Justification, and Graphicness in Understanding Perceptions of and Preferences for Violent Films and Video Games. *Projections: The Journal For Movies & Mind*, 7(1), 100-118. doi:10.3167/proj.2013.070108
- Tainsky, S., Xu, J., & Zhou, Y. (2014). Qualifying the Game Uncertainty Effect A Game-Level Analysis of NFL Postseason Broadcast Ratings. *Journal of Sports Economics*, 15(3), 219-236.
- Tator, C. H. (2014). Chronic traumatic encephalopathy: How serious a sports problem is it? *British journal of sports medicine*, 48(2), 81-83
- Tirico, M. (Play-by-Play Announcer). (December 9, 2013). Dallas Cowboys vs. Chicago Bears. [Televised Sports Broadcast]. *ESPN Monday Night Football*. Chicago, Illinois: ESPN
- Tirico, M. (Play-by-Play Announcer). (December 12 2014). New Orleans Saints vs. Chicago Bears. [Televised Sports Broadcast]. *ESPN Monday Night Football*. Chicago, Illinois: ESPN.
- Trujillo, N (1995). Machines, missiles, and men: images of the male body on ABC's Monday Night Football. *Sociology of sport journal*, 12 (4).

- United States Centers for Disease Control and Prevention. (2013). Concussion: A Must Read for Players. Retrieved from:
http://www.cdc.gov/concussion/pdf/NFL_Player_Poster-a.pdf
- Wanta, W., & Leggett, D. (1988). "Hitting paydirt": Capacity theory and sports Announcers' Use of cliches. *Journal of Communication*, 38(4), 82-89.
doi:10.1111/j.1460-2466.1988.tb02071.x
- Wanta, W. (2013). Reflections on communication and sport: On reporting and journalists. *Communication & Sport*, 2167479512471334.
- Warren, C. & Karner, T. (2010). *Discovering qualitative methods: Field Research, interviews and analysis* (2nd ed.). New York: Oxford University Press.
- Webb, J. B. (2014). Concussions and Other Headaches: An Analysis of the Journalistic Coverage of the Concussion Crisis and Football-Related Brain Trauma.
- Weir, R. (2012). Chicks Dig the Long Ball, but GMs Prefer a High OBS.
- Werts, J. (2012). Ringing the Bell on Concussions: The Rise of Head Injuries and Cognitive Decline in Football Players, and the NFL's Obligation to Improve Safety Measures.
- Wilcots, S. (Game Analyst). (November 24, 2013). Pittsburgh Steelers vs. Cleveland Browns. [Televised Sports Broadcast]. *NFL on CBS*. Cleveland, Ohio: CBS.
- Williams, D., Sullivan, S. J., Schneiders, A. G., Ahmed, O. H., Lee, H., Balasundaram, A. P., & McCrory, P. R. (2014). Big hits on the small screen: an evaluation of concussion-related videos on YouTube. *British journal of sports medicine*, 48(2), 107-111

Young, K., & Smith, M. D. (1988). Mass media treatment of violence in sports and its effects. *Current Psychology: Research & Reviews*, 7(4), 298-311.

Ziv, S. (2015, April 10). Three Former Wrestlers Sue WWE. *Newsweek*.

Retrieved from <http://www.newsweek.com/three-former-wrestlers-sue-wwe-321706>