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THE NFL AND CONCUSSIONS

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ABSTRACT

Football is an incredibly popular sport. People have watched it for decades. However, it is also very violent. The NFL recently started a public information campaign called *NFL Evolution*. The goal of this campaign is to show people that the league is working to make football safer. Is it working, though? The purpose of this project is to determine whether the campaign has been effective, via the criteria set by Atkin and Rice (n.d.), content analysis, and how prevalent the messages of the campaign are in external sources. The campaign did meet Atkin and Rice's criteria. Through content analysis, it was found that messages related to changing the game (through organizations, initiatives, and rule changes) are most apparent in this campaign. More research can be done, expanding the sample to sites other than *NFL Evolution* to increase the sample.

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Chapter 1

Introduction

Football is a violent sport. Players get tackled all the time. Sometimes they are hit in the legs. Sometimes, an opposing player wraps him up and pulls him to the ground. And sometimes, they are hit in the head – hit so hard that they are injured by it. One of the many injuries that can occur in football is the concussion.

Throughout the history of the National Football League (NFL), concussions have been treated in different ways. Until 2009, concussions were effectively ignored. D.J. Kain (2008) reported that, in 2007, the NFL sent out a press release that “[denied] the scientific probability that ‘more than one or two concussions leads to permanent problems’” (p. 700). This apparent ignorance as to the effects of concussions led to a lawsuit in 2012, in which former players sued the league for “deliberately [ignoring] and actively [concealing] the information from the [p]laintiffs and all others who participated in organized football at all levels” (Kenney, 2012, p. 1).

In response, the NFL launched *NFL Evolution*. *NFL Evolution* is a public information campaign consisting of articles, videos, and commercials designed to demonstrate that the league is making football safer for everyone who plays it (Goodell, 2012). The website contains sections about concussions, children’s safety, and medical research, along with many others (“NFL Evolution,” 2015).

To millions of people, football is a great sport. They love watching it, playing it, and studying it. However, it is a very dangerous sport, and it would be interesting to see what the NFL is doing to make it safer. Therefore, the purpose of this project is to answer one question: “Has the NFL’s *Evolution* campaign been successful in changing public opinion toward the game?”

In order to properly understand why this question is important, a brief history of the problem has been included. This history includes details about the NFL’s views on concussions during different time periods, the dangers of concussions at various age levels, and the NFL’s current concussion protocol. There is also information about various ways the league is trying to reduce concussions, specifically through *NFL Evolution*.

First, *NFL Evolution* will be evaluated as a public information campaign, based on the criteria of Atkin and Rice. What is the goal of the campaign? Who is the audience? What type of messages is the campaign sending? *NFL Evolution* will also be evaluated through content analysis. An analysis of various articles, videos, and documents from the *NFL Evolution* site will be done. Phrases and images related to the enforcement of the game, methods of improving the game, and concussions will be counted in order to see the messages that the NFL is actually sending through the *NFL Evolution* campaign.

Finally, the messages that the campaign has been sending will be compared to various articles written by sportswriters. The point of this is to determine whether or not the messages that the campaign has been sending have made their way into the mainstream sports world. Or, have the messages mainly stayed within the confines of the *NFL Evolution* site?

Chapter 2

Literature Review

The NFL's Past Views of Concussions

According to Mark Fainaru-Wada and Steve Fainaru (2014), for quite a while, the NFL did not think that concussions were very harmful. They tell the story of Mike Webster, a center for the Pittsburgh Steelers in the 1970s. After he retired, he was diagnosed with brain damage, which led to his death. Fainaru-Wada and Fainaru report that the NFL's retirement board went to court with Webster's family, in order to avoid paying damages.

However, the court gave Webster's family \$1.8 million after his death, and stated that "the NFL retirement board had asked the court to disregard...the testimony of the Board's own medical expert (in addition to *all* the others)" (Fainaru-Wada & Fainaru, 2014). The NFL's retirement board tried to argue that Webster's injuries and death did not come from playing football, even though multiple doctors had determined that they did (Fainaru-Wada & Fainaru, 2014).

This apparent denial continued at least until 2007. Despite announcing a "Summit for Concussions," when the issue would be discussed, the NFL sent out a press release which "[denied] the scientific probability that 'more than one or two concussions leads to permanent problems'" according to D.J. Kain (2008, p. 700). The league continued to deny that multiple concussions were a problem, even though experts had determined that Mike Webster had died from them (Fainaru-Wada & Fainaru, 2014).

The NFL's concussion committee had noted that, "It is important to understand that there is no magic number for how many concussions is too many. . . . [Players] should not be at greater risk of further injury once [they] receive proper medical care for a concussion and are free of symptoms" (Kain, 2008, p. 697).

Kain notes that this is very different from what experts say, noting, "Clinical and neuropathological studies by some of the nation's foremost experts demonstrate that multiple concussions sustained during an NFL player's career cause cognitive problems such as depression and early-onset dementia" (2008, p. 698) and that the "stance taken by the NFL represents the minority opinion on the issue" (2008, p. 697).

The reason for the NFL's views on the subject of concussions is due, in part, to the fact that their studies were not conducted properly, according to Kain. He paraphrases Dr. Robert Cantu when he says, "The league's internal study included only active players between the ages of twenty and thirty during a short six-year window" (2008, p. 702). Other problems are that prior concussions were not included in the study and that the methods of collecting data were not consistent (Kain, 2008, p. 702).

Perhaps the most important point about the NFL's past views on concussions and the fact that it is a dissenting opinion in the medical community comes from Kain: "Scientists might squabble over a precise definition of the term 'concussion,' but all agree with the notion that 'there is no such thing as a minor concussion'" (Kain, 2008, p. 703). He notes that having one concussion will generally not kill a person, but that it can lead to bigger problems in the future.

The NFL's Views on Concussions in the Present

It was 2009 when the NFL's views on concussions began to change. Schwarz (2009) writes that "the N.F.L. not only announced Sunday that it would support research by its most vocal critics but also conceded publicly for the first time that concussions can have lasting consequences." This is a huge admission. It was the year in which the NFL's new focus on concussions began.

The NFL's 2009 Revised Concussion Protocol and Rule Changes

In 2009, the league created a new set of rules that determined how players who have been concussed should be treated. In the league's press release, it states that "a player should not return to the same game after a concussion if the team medical staff has determined that he had lost consciousness" ("League announces," 2009). In other words, the NFL did not want players to play while injured. Under these guidelines, players need to have no symptoms – both while resting and after doing exercise ("League announces," 2009). The league also wanted players to tell team doctors if they had any signs of a concussion – loss of memory, headaches, and "loss of consciousness" included. Once the player was cleared by a team doctor and an independent neurologist, they could play again ("League announces," 2009).

That is perhaps the most important idea behind this new protocol. In a 2009 survey by the Associated Press, 30 players (out of 160 surveyed) said that they did not report their injuries or made them sound less serious than they really were ("Survey: Players," 2009). Part of the reason may come from the mentality that football players have to be tough. If they have injuries, they have to play through them.

For example, Fainaru-Wada and Fainaru (2014) write about a football drill in the 1970s called “The Nutcracker,” in which an offensive player and a defensive player ran right at each other, each trying to knock the other down. They note that current New England Patriots coach Bill Belichick believes that this drill “answered some of football’s most fundamental questions: ‘Who is a man? Who’s tough? Who’s going to hit somebody?’” (Fainaru-Wada & Fainaru, 2014). This is just one example of football players being taught to be tough. The idea, then, that many players today do not want to tell team officials that they are injured is not surprising. They want to keep playing, because that is what is expected of them. Some players surveyed, like the Pittsburgh Steelers’ former player Deshea Townsend, do not tell anyone because they believe that concussions are just a risk that come from playing football (“League announces,” 2009).

Similarly, some players do not want to lose their jobs. According to the Associated Press’ survey, “There is the fear of losing a roster spot in a league where the absence of guaranteed contracts makes some players willing to sacrifice their well-being somewhere down the road for a paycheck in the here-and-now” (“Survey: Players,” 2009).

The 2009 changes in concussion protocol may have been helpful in stopping players from playing with concussions, but they were not the only changes that the league implemented in 2009. They also changed some in-game rules. According to NFL.com’s “Safety Rules and Regulations” page (2013), the league made it “illegal for a defensive player to hit a defenseless receiver in the head or neck area with a hit using the forearm or shoulder, in addition to the current prohibition against helmet-to-helmet hits.” These changes were made in order to reduce the chances of a player being concussed. Similarly, the league legalized certain hits made by *offensive* players to defensive players for the same reason (“Safety Rules,” 2013).

In 2010, the Associated Press reported that there were 30 percent more concussions (at least, concussions that were reported) in 2009 than there were in 2008 (“NFL sees spike”). Along with that, there were 20 percent more concussions in 2010 than there were in 2008. According to the league, this is due to the fact that more players are reporting their concussions (“NFL sees spike,” 2010). Whether or not that is true, one of the benefits that appears to have come from the new protocol is that players are willing to remove themselves from games. Green Bay Packers quarterback Aaron Rodgers left a game against a division rival (games which are generally considered more important than regular games) because he may have been concussed (“NFL sees spike”). His coach and the team doctors believed that he should leave the game, so he did.

The NFL’s 2014 Revised Protocol

As of 2014, the league requires players that may have received a concussion to take tests on the sideline to determine whether they can return to the game or not. The form asks a myriad of questions. The evaluator of the player must check boxes that indicate when the player was injured. Did it happen in practice? In a game? Somewhere else? The evaluator must then determine where the player was hit, and by what. Did his head get hit by a head? A knee? The ground (“NFL SIDELINE TOOL,” 2012)?

Then, a six-question yes/no survey is administered. It clearly states on the form, “Any of the following [conditions] are obvious signs of disqualification” (“NFL SIDELINE TOOL,” 2012). What this means is that, if any of the questions result in a “no” response, then the player should not return to the field. Some of the questions ask whether there was any loss of

consciousness with the player, any confusion, amnesia, or other problems (“NFL SIDELINE TOOL,” 2012).

Players must be able to answer what day, date, month, year, and time it is. They must be able to answer questions about football as well (“what quarter is it right now?”). Players must be able to repeat a list of words that the evaluator reads to them. This is done three times. Also, they have to repeat them a fourth time, at the end of the testing (“NFL SIDELINE TOOL,” 2012).

Perhaps the most important statement on this test, however, comes from a section on monitoring players. It says, “It may be prudent to remove an athlete from play, not leave them alone, and serially monitor them over a period of time.” It shows that, for once, the NFL’s focus is not necessarily on getting players back on the field quickly – it is on making sure that players get back on the field *when they are healthy* (“NFL SIDELINE TOOL,” 2012).

This tool does not constitute, and is not intended to constitute, a standard of medical care. It is a guide derived from the Standardized Concussion Assessment Tool 2 (SCAT2) (McCrory, et al, BSIM '08) and represents a standardized method of evaluating NFL players for concussion consistent with the reasonable, objective practice of the healthcare profession. This guide is not intended to be a substitute for the clinical judgment of the treating healthcare professional and should be interpreted based on the individual needs of the patient and the specific facts and circumstances presented.

NFL Sideline Concussion Assessment Tool: BASELINE TEST. Athlete completes blue sections. ATC/MD/DO completes sheet.

Athlete: _____ Position: _____ Team: _____ Athlete Initials: _____
 Date & Time of Baseline Test: Date: _____ Time: _____ am / pm Evaluator: _____ ATC / MD / DO / Other: _____

RISK FACTORS:

Concussion History
 Have you EVER had a concussion, had your "bell rung", or had any of the symptoms below as a result of a head injury? Y N
 If yes, previous number: 0 1 2 3 4 5 6+
 What type of symptoms did you have? _____
 How long were you out of activity? _____

Have you ever lost consciousness as a result of a head injury? Y N If yes, how long? _____
 Have you ever been hospitalized as a result of a head injury? Y N Details: _____
 Have you ever had any imaging tests of your brain (CT, MRI, DTI, other)? Y N Details: _____
 Date of most recent concussion: _____

Additional Risk Factors: Personal History
 Have you ever been diagnosed with:
 Headache or migraines?
 Learning disability / dyslexia?
 ADD / ADHD?
 Depression, anxiety or other psychiatric disorder?
 Seizure disorder?
 Are you on any medications? If yes please list: _____

Family History
 Has anyone in your family ever been diagnosed with:
 Headache or migraines?
 Learning disability / dyslexia?
 ADD / ADHD?
 Depression, anxiety or other psychiatric disorder?
 Seizure disorder?

How do you feel? The athlete should score themselves on the following symptoms, based on how they feel at the time.
 (i.e. 0 = not present, 1 = mild, 3 = moderate, 6 = severe)

Headache / head pressure	0 1 2 3 4 5 6	Feeling slowed down	0 1 2 3 4 5 6
Nausea / vomiting	0 1 2 3 4 5 6	Sensitivity to noise	0 1 2 3 4 5 6
Neck pain	0 1 2 3 4 5 6	Sensitivity to light	0 1 2 3 4 5 6
Drowsiness	0 1 2 3 4 5 6	Visual problems /blurred vision	0 1 2 3 4 5 6
Balance problems	0 1 2 3 4 5 6	Sleeping more than usual	0 1 2 3 4 5 6
Dizziness	0 1 2 3 4 5 6	Sleeping less than usual	0 1 2 3 4 5 6
Fatigue / low energy	0 1 2 3 4 5 6	Trouble falling asleep	0 1 2 3 4 5 6
Confusion	0 1 2 3 4 5 6	Sadness	0 1 2 3 4 5 6
"Don't feel right"	0 1 2 3 4 5 6	Nervous or anxious	0 1 2 3 4 5 6
Feeling "in a fog"	0 1 2 3 4 5 6	Feeling more emotional	0 1 2 3 4 5 6
Difficulty remembering	0 1 2 3 4 5 6	Irritability	0 1 2 3 4 5 6
Difficulty concentrating	0 1 2 3 4 5 6	Numbness or tingling	0 1 2 3 4 5 6

Total # Symptoms: of 24 = _____ Symptom Severity Score: (max 24 symptoms X max 6 rating) of 144 = _____

Athlete should initial in upper right hand corner that information provided above is accurate to the best of their knowledge
BELOW IS FOR ATC / MD / DO / OTHER PROVIDER USE ONLY

Select Physical Signs or Symptoms: Screen for Cervical Spine and/or More Serious Brain Trauma

Any reported neck pain, c-spine tenderness or decreased range of motion?	Y N
Pupil reaction abnormal or pupils unequal?	Y N
Extracocular movements abnormal and/or cause double vision?	Y N
Asymmetry or abnormalities on screening motor or sensory exam?	Y N
Other	_____

Figure 1: Page 1 of the NFL's Concussion Sideline Test

If the player is determined to have sustained a concussion, then they have to go through the league's revised concussion protocol. As of the 2014 season, the league uses a set of rules similar to the ones implemented in 2009 to help players with possible concussions recover better. According to the "National Football League Head, Neck and Spine Committee's Protocols Regarding Return to Participation Following Concussion," the league based this set of rules off of the Fourth International Concussion in Sports Conference, which took place in 2013 ("NFL SIDELINE TOOL," 2012).

NFL Sideline Concussion Assessment Tool: BASELINE TEST (continued)

ORIENTATION / SAC of 5 = 5

What month is it?	0	1
What is the date today?	0	1
What is the day of the week?	0	1
What year is it?	0	1
What time is it right now? (within an hour)	0	1

SAC / Word Recall: Read list of 5 words 1 per second, ask athlete to repeat list, in any order. (Use of specific lists below optional) For Trial 2 & 3, read the same list of words again and have athlete repeat them back, in any order. One point for each word remembered. You must conduct all 3 trials regardless of their success on trial 1. Do not tell athlete that delayed recall will be tested.

Immediate Recall Trials	Alternative Lists	Delayed recall (perform at end of all sideline testing, at least - 5 minutes)			
#1	#2	#3			
elbow _____	_____	_____	candle _____	baby _____	_____
apple _____	_____	_____	paper _____	monkey _____	_____
carpet _____	_____	_____	sugar _____	perfume _____	_____
saddle _____	_____	_____	sandwich _____	sunset _____	_____
bubble _____	_____	_____	wagon _____	iron _____	_____

Total of all three immediate word recalls: out of 15 = 15 Total delayed recall: out of 5 = 5

SAC / Concentration: Read string of numbers; ask athlete to repeat, backwards. (Use of specific numbers below optional). If correct go to the next string length. If incorrect, read second string (same length) 1 point for each string length correct. Stop after incorrect on both trials. Read digits at rate of 1 digit /sec.

Digits Backward:	Alternative digit lists	
4-9-3	0 1 6-2-9	3-2-6
3-6-4	0 1 3-2-7-9	1-7-9-5
6-2-9-7-1	0 1 1-5-2-8-6	3-6-2-7
7-1-0-4-6-2	0 1 5-3-9-1-4-8	9-3-1-9-6-4

1 point for each sequence correct of 4 = 4 Total of SAC Concentration of 5 = 5

SAC / Concentration cont. Months in reverse order:
Dec - Nov - Oct - Sept - Aug - Jul - Jun - May - Apr - Mar - Feb - Jan
1 point for months in reverse correctly (< 30 sec) = 1

Modified BESS: This is calculated by adding 1 error point for each error during the three 20-sec tests. The maximum total # of errors for any single condition is 10. The higher the score, the worse is the player's balance.

Balance testing - types of errors

- Hands lifted off hip crest
- Opening eyes
- Step, stumble, or fall
- Moving hip into > 30 degrees abduction
- Lifting forefoot or heel
- Remaining out of test position > 5 sec

Which foot tested (non-dominant foot) L R

Double leg stance (feet together) # errors _____

Single leg stance (non dominant foot) # errors _____

Tandem stance (non dominant foot at back) # errors _____

BALANCE SCORE: (summed # of errors) = 24

SCORING:
All SAC scores (summed orange boxes) = 5 of 30
BALANCE Score: (summed BESS Errors) = 24
Symptom Score: (# symptoms reported) = 0 of 24

ADDITIONAL COMMENTS:

Figure 2: Page 2 of the NFL's Sideline Concussion Test

One of the more interesting notes in this protocol is that "there is no set time-frame for return to participation or for the progression through the steps of the graduated exercise program set forth" ("NFL SIDELINE TOOL," 2012). The league is saying that players should not be rushed into returning to play. This goes completely counter to what has happened in the past. Kain writes that the Carolina Panthers wanted to change the contract of a player named Dan Morgan so that he did not automatically receive the \$2 million bonus that was written into his contract. Instead, they wanted him to receive a \$125,000 bonus for each game that he played

(due to the number of concussions he had sustained in his career). Kain writes that Morgan went along with it so that he would not lose his job (2009, p. 711). Compare this with the new protocol: now, the league does not want players to have to go through these types of situations. They want players to play *when they are healthy* (“NFL SIDELINE TOOL,” 2012).

The league’s current protocol has five steps that players have to go through before they can play again. The first is “Rest and Recovery.” Players who have received concussions are not supposed to use a lot of electronics, social media, or go to team meetings. They are supposed to be resting, and those activities are activities which may cause too much mental strain. (“National Football League Protocols,” 2014).

The second step of the concussion protocol is “Light Aerobic Exercise.” At this point, players are allowed to start exercising – using equipment such as treadmills. If they have received neurological testing but are not at normal levels, they should not move on to the next step (“National Football League Protocols,” 2014).

Once they are ready to move on, they move on to the third step: “Continued Aerobic Exercise & Introduction of Strength Training.” Players can continue to exercise, with more intensity than they did during step two. If their testing does not show normal cognitive levels, they may still exercise (“National Football League Protocols,” 2014).

After players are able to exercise at the levels required in step three, they can move on to step four: “Football Specific Activities.” They may now do drills like “throwing, catching, running and other position-specific activities” (“National Football League Protocols,” 2014). This is only allowed to happen once players can do these activities without their symptoms returning (“National Football League Protocols,” 2014).

Finally, there is step five: “Full Football Activity/Clearance.” For this step to take place, players must be cleared by the team doctors. Players that have been cleared are allowed to practice as they would if they did not sustain a concussion. However, an independent neurological consultant must be the one to *finally* clear the player, using the results of all of the tests that the player has undergone (“National Football League Protocols,” 2014).

Example of a Recently Concussed Player: Jordan Cameron

In the 2014 season, former Cleveland Browns tight end Jordan Cameron received a concussion after being hit in the head by Brandon Ross of the Oakland Raiders, according to PBS Frontline’s Concussion Watch (“Jordan Cameron,” 2015). This is the third time that Cameron had been concussed in three seasons, which could be dangerous for him down the road (“Jordan Cameron,” 2015). Kain writes, “A peer-reviewed clinical study performed by Dr. Kevin Guskiewicz found that retired players who sustained three or more concussions in the NFL had a fivefold prevalence of Mild Cognitive Impairment (‘MCI’) diagnosis in comparison to NFL retirees without a history of concussions” (2009, p. 699). It is possible that this could happen to Cameron.

If there is any good news, it is that the team was cautious with Cameron. Concussion Watch quoted Browns coach Mike Pettine as saying, “The league, as they should be, is very deliberate with the (concussion) protocol” (“Jordan Cameron,” 2015). He did not play in five games due to his concussion (“Jordan Cameron,” 2015). According to Jeremy Fowler, in an article written before Cameron’s return:

Coach Mike Pettine believes Cameron, who's participating in practices, has one more test to complete this week. Cameron's concussion protocol calls for two consecutive symptom-free days. Last week, Cameron had a minor setback and didn't travel with the team to Buffalo. He had suffered from headaches in previous weeks. (2014)

This example demonstrates that the NFL's concussion protocol may actually be making positive changes.

Concussions in Children and Young Adults

Concussions are not just a problem for professional football players. Children and young adults also suffer from them. Youth athletes, defined by Gilbert and Johnson as 6-14 year olds, have "larger heads relative to their bodies, along with weaker necks, such that more force from hits to the head is distributed to the brain rather than the body" (2011, p. 49). In this way, concussions can actually be more harmful to children than they are to adults. Gilbert and Johnson go on to say, "Youth athletes also have a demonstrated vulnerability to second impact syndrome, in which a cascade of irreversible neurometabolic events results in catastrophic brain swelling leading to severe disability or, more commonly, death" (2011, p. 49). Second impact syndrome is what can happen "when a player returns to competition before the symptoms of a first concussion resolve" (Kain, 2008, p. 703-704). Because of this possibility, it is very important to prevent concussions in the first place. Gilbert and Johnson write that "Youth athletes, once concussed, are four to six times more likely to experience a second concussion, even if the second blow is relatively mild" (2011, p. 49). If football can be made safer for all players, then the risk of second impact syndrome, along with death, could be lowered.

What about high school athletes? In some ways, they are also more at risk of concussions than older athletes. Gilbert and Johnson write that “Slower and protracted recovery periods from concussion in high school players as compared to college and professional players have been reported” (2011, p. 49). Another problem that comes from high school players being concussed is that it can hurt them academically. They are often unable to concentrate as well or process information as well as other students (2011, p. 49-50). This indicates the need to take care of athletes in this age group as well. If concussions are hindering the ability of students to learn, then measures need to be taken to ensure that concussions are not occurring as frequently.

What Is Being Done About Youth Concussions: *Heads Up Football*

In order to make football safer, especially for younger athletes, USA Football, an organization associated with the NFL, created *Heads Up Football*. It is an initiative that is meant to teach children smarter ways to play football. According to USA Football’s website, *Heads Up Football* is “A comprehensive collection of resources; programs, applications and promotions to effect change and address the complex challenges of player health and safety in youth and high school football” (“Heads Up Football,” 2015).

Heads Up Football involves teaching players how to tackle other players safely. There are multiple steps that are included in this, but the main point is “reducing helmet contacts” (“Heads Up Football,” 2015). *Heads Up Football* also teaches players how to block other players safely. This includes, once again, making sure that you do not use your head in the play.

Another way that *Heads Up Football* is trying to make the game safer does not have to do with the way that players are taught to play, but with the way that players wear their

equipment. This includes making sure that a player's helmet and shoulder pads are being worn correctly...not too loose, and not too tight ("Heads Up Football," 2015). If a helmet is worn incorrectly, it could become ineffective. A helmet that is too loose could cause more damage than it stops. If a player is hit in the helmet, but the helmet rattles around, it could be detrimental to the player.

Coaches can be certified as having been trained in *Heads Up Football*. A certified coach would know how to teach players to play more safely and how to wear equipment safely, along with other topics. They would know how to keep players hydrated and how to help a player who is in cardiac arrest ("Heads Up Football," 2015).

USA Football, along with the NFL, have really worked to promote *Heads Up Football*. They have NFL coaches, such as the New York Giants' Tom Coughlin and the Baltimore Ravens' John Harbaugh, who recommend that parents should only allow their children to play under coaches who are certified by *Heads Up Football* ("Heads Up Football," 2015). This is a huge recommendation. These are big-name, Super Bowl-winning coaches.

The idea is that parents would be more willing to take this advice if it is coming from credible sources – one of the main parts of a public information campaign. *Heads Up Football* has other representatives as well. Hall-of-Fame running back Barry Sanders is one of the people who "support commissioners and coaches while helping parents and players understand the importance of developing sound fundamentals at an early age" ("Heads Up Football," 2015). Other players include former Philadelphia Eagles quarterback Randall Cunningham and former Oakland Raiders quarterback Jeff Hostetler.

Hopefully, as time goes on, children can learn how to play football in a safer manner. The goal is that, eventually, these children will grow into adults who know how to play football

in a safer manner. Both USA Football and *Heads Up Football* are featured heavily in many of the articles and videos on the *NFL Evolution* website.

In the content analysis of the *NFL Evolution* site, one of the categories is specifically meant to count mentions of USA Football and *Heads Up Football*. These are two of the main organizations and initiatives that the NFL is partnered with. If the point of the content analysis is to see what messages the NFL is sending, then it seems logical that USA Football and *Heads Up Football* would be mentioned often.

NFL Evolution

What exactly is *NFL Evolution*? As stated earlier, it is a website created by the NFL to help people “learn more about...health and safety work for athletes of the past, present and future” (“National Football League,” 2012). The website, which first launched in 2012, features videos, articles, and press releases designed to demonstrate what the league is doing to make the game of football safer (“NFL Evolution,” 2015).

The website contains different sections that contain information pertaining to different groups of people. The first section is “Safety for Your Kids.” This section contains articles about *Heads Up Football*. It also contains videos and articles for parents, in an effort to show them that football is becoming safer for their kids to play (“NFL Evolution,” 2015).

There is also a section for “Players & Alumni” of the NFL. In this section, one can find articles about issues that players are facing (such as the acceptance of homosexuality in the NFL). There are articles about the activities of ex-players. One such example is an article about Marcus Lattimore, a former running back for the San Francisco 49ers. After he retired, he began

to work with young adults who played football (“NFL Evolution,” 2015). This is an example of a human interest story.

Most importantly, there is a section entitled “Concussions.” This section has videos and articles focused on player safety. One can find copies of the posters and pamphlets that the league has created, detailing the protocol on how to deal with concussed and possibly concussed players. There are also sections titled “Medical Research,” “Resources,” and “Videos,” but these sections all seem to overlap with the previous sections. A section on “Military” is included, but for the purposes of this study, it was not deemed relevant. It mainly deals with the NFL’s relationship with veterans and how the league tries to give back to them (“NFL Evolution,” 2015).

Throughout this chapter, the overall idea has been that of change. The NFL used to think about concussions as though they were not a problem. Now, they have recognized that this is not the case. In order to show people that they are focused on making the game safer, the league has launched *NFL Evolution*. There are other sites and media outlets that discuss the safety of football. The difference with *NFL Evolution* is that it is run *by the NFL*. The articles and videos on this site are as close to the source as they could possibly be. But, has this campaign been effective at all? Answering that question is the goal of the next chapter.

Chapter 3

Methodology

In order to determine the effectiveness of *NFL Evolution*, a three part methodology was used. First off, *NFL Evolution* will be evaluated as a public relations campaign, based on the

criteria of Atkin and Rice (n.d.). Then, a content analysis will be done in order to determine the main messages of *NFL Evolution*. Finally, the messages of the campaign will be compared to articles by sportswriters, in order to see whether or not they have spread into the mainstream sports world.

Part One: *NFL Evolution* as a Public Information Campaign

At its core, *NFL Evolution* is a public relations campaign. As such, there is a multitude of factors that went into its design. For one, what is its goal? As noted earlier, the goal of *NFL Evolution*, as stated by Commissioner Roger Goodell, is that “The health and safety of players at all levels of the game is our first priority. Among our most important initiatives is helping athletes and their coaches know the signs and symptoms of concussion; and what to do if they suspect an athlete has a head injury” (Goodell, 2012). In addition to concussions, *NFL Evolution* is also meant to inform its audience about how the NFL is making football a safer game, in regards to other types of injuries.

According to Atkin and Rice, there are two main strategic approaches to a public relations campaign: prevention of a behavior or promotion of a behavior (n.d., p. 8). In the case of *NFL Evolution*, the approach is promotion. The NFL is promoting player safety. It is promoting the idea that the league is doing a lot to make the game safer, and that fans/players/parents should not turn away from the game.

Another element of a public relations campaign, as explained by Atkin and Rice, is the audience. Who is the target of the campaign? For *NFL Evolution*, there are quite a few different groups. One group is made up of football players, both current and former. That is why there is

a whole section of the website dedicated to “players and alumni.” The NFL wants to reach these people. There are subsets of this group as well. The NFL is trying to reach different *levels* of football players. This would include high school players, college players, and professional players.

Another group is made up of the parents of children who play football. Many of the articles and videos on the site (specifically in the “Safety for Your Kids” section) are focused on high-profile parents of football players (such as the aforementioned Chris Golic). This was done intentionally. In order to keep children interested in football, their parents need to be willing to let them play. By focusing on this group, the NFL is able to reach not only parents, but children also (“NFL Communications,” 2015).

The final group that *NFL Evolution* is targeting is made up of football fans in general. The NFL has been criticized in the media because of player safety issues. In March 2015, young players (under 30 years old) like Jake Locker of the Tennessee Titans (four years in the league) and Chris Borland (one year in the league) all retired. Many fans of football applauded the moves, but some fans thought it was stupid. Regardless of how fans view it, the league wants fans to understand that concussions are a serious issue and that the league is working to make the game safer.

Atkin and Rice also note that there are two types of message content: informative and persuasive (n.d., p. 8-9). Informative content has two subsets. There are “awareness messages,” in which the audience is told “what they should do” (Atkin and Rice, 2009, p. 8). There are also “instruction messages,” in which the audience is told *how* they should do some action (Atkin and Rice, n.d., p. 8). In the case of *NFL Evolution*, the messages tend to be awareness messages, as well as persuasive messages (“NFL Communications,” 2015).

Many of the articles and videos on this site are meant to tell the audience what the NFL is doing to make the game safer. They are meant to inform the audience about different topics like *Heads Up Football*, rule changes, and more. On the other hand, the article and videos are persuasive messages. They are meant to show people that the game *is* getting safer, and that parents should let their children play, players should not be *afraid* to play, and that fans should continue to watch the game (“NFL Communications,” 2015).

Another element to public relations campaigns is the channel through which it is presented (Atkin and Rice, n.d., p. 10). For *NFL Evolution*, that channel is mainly the website. There have been some commercials on television, but for the most part, the information presented in the campaign is found online.

For a public relations campaign, there are five steps in creating an effective message (Atkin and Rice, n.d., p. 9). The first is credibility (dealing with reliability) (Atkin and Rice, n.d., p. 9). For *NFL Evolution*, the reliability is rather high. Whether fans know it or not, they trust the NFL to some extent. If they did not, they would not even be concerned with whether or not the game is safe. They would simply not care.

The second step is to be *engaging* (Atkin and Rice, n.d., p. 9). The *NFL Evolution* website is just that. The pages are not cluttered with text. If there is a link to an article or a video, there is usually a picture-link that viewers can click on. The different sections of the website help separate the information into groups that are relevant to the different audience members. The fact that there is an “NFL Health & Safety” Twitter timeline embedded onto every page also helps engage the viewers. Twitter is a very popular site at the moment, and integrating it into the site helps make it more interesting.

The third step is to be “involving and relevant” (Atkin and Rice, n.d., p. 9). *NFL Evolution* does that. Once again, the fact that people go on the site means that they find the information relevant and involving. They would not be on the site if they did not find it relevant at all.

The fourth step is understandability (Atkin and Rice, n.d., p. 9). All of the articles and videos on this site are relatively easy to understand. They also give enough information to be relatively useful (meeting the “simple, explicit, and detailed” requirements for this step) (Atkin and Rice, n.d., p. 9).

Finally, the fifth step is “motivational incentives” (Atkin and Rice, n.d., p. 9). This term means that the audience sees some reason to partake in the behavior advocated by the campaign (Atkin and Rice, 2009, p. 9). *NFL Evolution* contains articles and videos that state, many times, that the benefits of football outweigh the costs. Whether the audience actually accepts that is one thing, but the NFL does try to make incentives clear.

Who are the spokespeople for *NFL Evolution*? Through analyzing various press releases, it was found that there are a few different people and groups of people who seem to speak the most for the campaign. One group of people is the NFL Communications staff. This group posts most of the league’s press releases on the sites nflcommunication.com. Any release that talks about *NFL Evolution* was probably posted by them (“NFL Communications,” 2015).

Another spokesperson for the campaign is Christine Golic. As the wife of former NFL player Mike Golic and the mother of two college football players, she has the perspective of someone who has lived around the game for quite a while and who has seen the effects, whether positive or negative, that the game can have on people (NFL Communications Staff, 2013). She is mainly a spokeswoman for issues related to USA Football and *Heads Up Football*, but since

those are groups and initiatives closely related to *NFL Evolution*, it seemed appropriate to include her.

Three high-ranking officials in the NFL have been important promoters of the initiatives included in the NFL Evolution campaign. Dr. John York is the “NFL Owner’s Committee Chairman For Health And Safety” (NFL Communications Staff, 2013). He is the head of a committee that is closely related to the owners of the NFL’s teams. He is, therefore, in a very high ranking position. Rich McKay is a former general manager for the NFL’s Tampa Bay Buccaneers and Atlanta Falcons. He is now the “NFL Competition Committee Chairman” (NFL Communications Staff, 2013).

The NFL Competition Committee is the group which revises the rules of play in the NFL. Generally, if there is public outcry or internal questions about rules in the league, this committee is the one to examine the rules and see if changes need to be made. Some of the rules that they have looked at and changed recently have been rules about player safety.

Jeff Miller is the “NFL Senior Vice President of Health and Safety Policy” (NFL Communications Staff, 2013). As NFL Commissioner Roger Goodell stated, “Health and safety is his sole focus. He reports to me. He is working on all of our various initiatives” (NFL Communications Staff, 2013). Miller says that his job is to help the game become safer in a faster manner. He works with USA Football and *Heads Up Football* to help do that (NFL Communications Staff, 2013).

And finally, Goodell himself is a spokesman for *NFL Evolution*. As commissioner of the NFL, he is technically the boss of the three aforementioned officials. In 2012, he wrote a letter to the fans of the NFL, discussing how the game was becoming safer. He stated, “We are committed to the safety of young athletes, no matter what sport they play... To learn more about

our health and safety work for athletes of the past, present, and future, visit nfl.com/evolution...” (R. Goodell, 2012). He has taken part in promoting *NFL Evolution*, more explicitly than most of the people mentioned prior.

Perhaps not all of these people officially work as part of the *NFL Evolution* campaign. The work they do, however, fits in with the goals of NFL Evolution. As Goodell notes, “How can we continue to make the game safer and more exciting? We can do both. Our obligation is to continue to lead. We will continue to improve equipment, change rules and invest in pioneering research. We have more to do” (NFL Communications Staff, 2012). Goodell wants the game to be safe, but he does not want to lose the fun aspects of the game.

He also notes that “The health and safety of players at all levels of the game is our first priority. Among our most important initiatives is helping athletes and their coaches know the signs and symptoms of concussion; and what to do if they suspect an athlete has a head injury” (Goodell, 2012). One of the main goals of *NFL Evolution* is to ensure that teams know how to deal with head injuries. They want players to play, but in a way that is safe for them.

Part 2 – Content Analysis of *NFL Evolution*

Why do a content analysis of *NFL Evolution*? The main question of this project is to find whether or not the campaign has been successful. A content analysis is one way to do this. A content analysis would show which messages appear most often on the site. This study is focusing solely on *NFL Evolution*, therefore, all of the content analyzed will come from the *NFL Evolution* website (nflevolution.com). The site has a mixture of videos, articles, press releases,

and posters (such as sideline concussion tests). A list of the number of each type was compiled. The final numbers were 102 articles, 12 videos, 2 posters, and 2 press releases. Collectively, these will be referred to as “units” of analysis.

A sample of these units was taken. Since this study is, in essence, a pilot study, defined by Reinard as requiring “at least 10 events in a study” (2008, p. 433). Therefore, 10 articles, 9 videos, and all of the press releases and posters were selected to be analyzed. To get a truly random group of articles, a number was assigned to each article and used a random number generator to select ten of them. There were not enough of the videos, posters, and press releases to warrant taking a sample.

In order to get an unbiased analysis, there will be two coders, the author and one of his colleagues. These two people will watch the videos and read the articles/press releases/posters. For the videos, they will count the number of images (seen) and the number of phrases (said or written) that fit into certain categories. For the rest of the units, they will count the number of phrases written. There will be three different categories, each one with two sub-categories. The categories are as follows:

- *Enforcement*: Related to those who are officiating a football game (whether it is at the NFL level or at a lower level). Enforcement is important, because, in order to make football safer, the NFL is changing some rules and making sure to call some penalties.
 - *“Related to Injury”*: Used to discuss when officials call penalties that exist due to their dangerous nature (for example, “unnecessary roughness,” “forcible block”)

- *“In Charge”*: Used to discuss situations in which it is made clear that the official is in charge of the game (this would include sentences like “The game has gotten *out of control*,” “The official has to *set the tone*,” and more).
- *Change*: Related to groups that are trying to make the game safer, as well as ways that the game is being made safer. The main groups that are helping change the game are USA Football and its initiative *Heads Up Football*. They are developing methods of safe tackling and other ways to play football in a potentially safer manner.
 - *“Safety”*: Used to discuss ways that the game is being made safer. This would include terms such as “safe tackling,” “safe blocking,” and “clinic/camp” (when used to discuss camps where safe methods of playing are taught).
 - *“Organizations”*: Used to discuss different groups that are working to make the game safer. Specifically, this term is used to discuss groups like USA Football and *Heads Up Football*.
- *Concussions*: Related to the diagnosis of or recovery from a concussion, or, more generally, any discussion about concussions. Obviously, the main point of the *NFL Evolution* campaign is to help show people what the league is doing to make the game safer. One of the “parts” of making the game safer, as has been demonstrated, is to reduce concussions.
 - *Diagnosis*: Used to discuss the diagnosis of a concussion. Terms include “symptoms,” “confusion,” “syndrome,” and “CTE.”

- *Recovery*: Used to discuss the period of rest after a player receives a concussion. Terms and phrases related to this topic include “rest,” “protocol” (when discussing concussion protocol), and “does not return.”

The results of each type of analysis (for articles, videos, etc.) will be compiled into separate tables. Then, the results will be compiled into one overall table. The percentage difference between the numbers of counts will be calculated, to determine how similar the results were.

Procedures

The following table was used to code the articles, videos, posters, and press releases.

	FREQUENCY
	<i>Enforcement</i>
	<i>Related to Injury</i>
Phrases	
Images*	
	<i>Related To How Officials Take Charge</i>
Phrases	
Images*	
	<i>Change</i>
	<i>Making the Game Safer</i>
Phrases	
Images*	
	<i>Organizations / Places</i>
Phrases	
Images*	
	<i>Concussions</i>
	<i>Diagnosis</i>
Phrases	
Images*	
	<i>Recovery</i>
Phrases	
Images*	

Table 1: The Coding Sheet

Before the analysis was done, the secondary coder received a list of the articles, videos, posters, and press releases. In order to make sure that the coders were coding similarly, a pilot test was done to make sure that the two coders were looking for the same examples of each category. After testing the coding method, the analysis was ready to begin.

Part 3 – Effectiveness of *NFL Evolution*

Once the resulting tables have been compiled, the main messages of the campaign can be determined. Then, the main focuses would be compared to articles (written by sportswriters) about those focuses. The goal is to see whether the current perception of football (again, as seen in the writing of sportswriters) matches the focus that the NFL is trying to demonstrate.

It is possible that the messages of the campaign have not really made it into the mainstream. The campaign's messages may not have really made an effect outside of groups associated with it (the NFL and USA Football) in particular. In order to gauge the effectiveness of *NFL Evolution* in this way, a Google search will be done for "USA Football" and "Heads Up Football," along with terms like "ESPN" and "Pro Football Talk" (two sites that specialize in sportswriting). This portion of the study will be done anecdotally, just to see if, overall, the messages of *NFL Evolution* can be found in external sources.

Chapter 4

Results

The results of *NFL Evolution* as a public information campaign were already detailed in the methodology. This chapter will focus on the content analysis of *NFL Evolution* and whether or not its messages have appeared in the works of sportswriters.

The Content Analysis

After the content analysis of the articles, videos, posters, and press releases were completed by the author and his colleague, the results were compiled by type. For articles, the total numbers are listed below:

ARTICLES (n = 10)	FREQUENCY - PRIMARY	FREQUENCY - SECONDARY
	<i>Enforcement</i>	<i>Enforcement</i>
	<i>Related to Injury</i>	<i>Related to Injury</i>
Phrases	0	0
Images*	N/A	N/A
	<i>Related To How Officials Take Charge</i>	<i>Related To How Officials Take Charge</i>
Phrases	0	0
Images*	N/A	N/A
	<i>Change</i>	<i>Change</i>
	<i>Making the Game Safer</i>	<i>Making the Game Safer</i>
Phrases	37	47
Images*	N/A	N/A
	<i>Organizations / Places</i>	<i>Organizations / Places</i>
Phrases	58	64
Images*	N/A	N/A
	<i>Concussions</i>	<i>Concussions</i>
	<i>Diagnosis</i>	<i>Diagnosis</i>
Phrases	33	40
Images*	N/A	N/A
	<i>Recovery</i>	<i>Recovery</i>
Phrases	9	11

Images*	N/A	N/A
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Table 2: Total Count for Articles

Ten articles were coded. The most important category, in the case of the articles, was the “Change” category. Both coders found around 40 mentions of “making the game safer” and 60 mentions of organizations and initiatives like USA Football and *Heads Up Football*. There were also 40-50 total mentions of concussions, demonstrating that mentions of concussions were rather prevalent in the articles.

The results for videos follow:

VIDEOS (n = 9)	FREQUENCY - PRIMARY	FREQUENCY - SECONDARY
	<i>Enforcement</i>	<i>Enforcement</i>
	<i>Related to Injury</i>	<i>Related to Injury</i>
Phrases	33	26
Images*	9	4
	<i>Related To How Officials Take Charge</i>	<i>Related To How Officials Take Charge</i>
Phrases	10	7
Images*	0	0
	<i>Change</i>	<i>Change</i>
	<i>Making the Game Safer</i>	<i>Making the Game Safer</i>
Phrases	14	14
Images*	8	2
	<i>Organizations / Places</i>	<i>Organizations / Places</i>
Phrases	17	15
Images*	29	14
	<i>Concussions</i>	<i>Concussions</i>
	<i>Diagnosis</i>	<i>Diagnosis</i>
Phrases	3	14
Images*	0	2
	<i>Recovery</i>	<i>Recovery</i>
Phrases	1	4
Images*	0	1

Table 3: Total Count for Videos

Nine articles were coded. The most important category, in this case, was the “Change” category. Both coders found around 20 mentions of “making the game safer” and 40 mentions

of organizations and initiatives like USA Football and *Heads Up Football*. There were not many mentions of concussions, which was a bit surprising, considering why the campaign was created.

The total counts for posters are as follow:

POSTERS (n = 2)	FREQUENCY - PRIMARY	FREQUENCY - SECONDARY
	<i>Enforcement</i>	<i>Enforcement</i>
	<i>Related to Injury</i>	<i>Related to Injury</i>
Phrases	1	0
Images*	N/A	N/A
	<i>Related To How Officials Take Charge</i>	<i>Related To How Officials Take Charge</i>
Phrases	0	0
Images*	N/A	N/A
	<i>Change</i>	<i>Change</i>
	<i>Making the Game Safer</i>	<i>Making the Game Safer</i>
Phrases	0	0
Images*	N/A	N/A
	<i>Organizations / Places</i>	<i>Organizations / Places</i>
Phrases	0	0
Images*	N/A	N/A
	<i>Concussions</i>	<i>Concussions</i>
	<i>Diagnosis</i>	<i>Diagnosis</i>
Phrases	123	103
Images*	N/A	N/A
	<i>Recovery</i>	<i>Recovery</i>
Phrases	0	0
Images*	N/A	N/A

Table 4: Total Counts for Posters

Two posters were analyzed. The results of the analysis was not surprising. Considering the posters were actually sideline concussion tests, the fact that almost all of the mentions were of concussions makes sense.

And, finally, the total count for press releases was as follows:

PRESS RELEASES (n = 2)	FREQUENCY - PRIMARY	FREQUENCY - SECONDARY
	<i>Enforcement</i>	<i>Enforcement</i>
	<i>Related to Injury</i>	<i>Related to Injury</i>
Phrases	0	0

Images*	N/A	N/A
	<i>Related To How Officials Take Charge</i>	<i>Related To How Officials Take Charge</i>
Phrases	0	8
Images*	N/A	N/A
	<i>Change</i>	<i>Change</i>
	<i>Making the Game Safer</i>	<i>Making the Game Safer</i>
Phrases	8	11
Images*	N/A	N/A
	<i>Organizations / Places</i>	<i>Organizations / Places</i>
Phrases	17	33
Images*	N/A	N/A
	<i>Concussions</i>	<i>Concussions</i>
	<i>Diagnosis</i>	<i>Diagnosis</i>
Phrases	11	19
Images*	N/A	N/A
	<i>Recovery</i>	<i>Recovery</i>
Phrases	4	3
Images*	N/A	N/A

Table 5: Total Counts for Press Releases

Two press releases were coded. The site had links to over 100 press releases, but the overwhelming majority of links on the site were dead (they led nowhere). The most important category, in this case, was the “Change” category. Both coders found around 30-40 mentions in this category.

Then, for each of the four categories, the percent difference was calculated, using the total count for each category. The percent difference overall was also calculated. The fact that the overall percent difference was only 4.63% would indicate that the results of both coders were very close together.

Category	Percent Difference
Articles	16.72%
Videos	18.50%
Posters	18.50%
Press Releases	59.64%
Overall	4.63%

Table 6: Percentage Difference

Results of Searching for External Messages

A Google search for “USA Football” and “Heads Up Football” were done, in order to see whether any external sources (like ESPN or NBC’s Pro Football Talk) discussed the initiatives.

The results were mixed.

In one article, ESPN writer Jennifer Paulett (2014) noted how ESPN gave a grant to USA Football, in order to help make football safer. So on one hand, the NFL’s message of making the game safer *is* getting through. One of, if not the most, important sports media organizations in the world, is supporting USA Football. They clearly agree with the idea of making football safer.

On the other hand, ESPN has been willing to speak up against the NFL’s initiatives. For example, Steve Fainaru and Mark Fainaru-Wada (2014) wrote that a youth football league in Katy, Texas “could be considered a human laboratory for the National Football League,” which “has spent \$1.5 million to persuade parents in leagues like Katy that it is making football safer by teaching tackling techniques that will reduce concussions.” They go on to say that many people think that *Heads Up Football* is just being used to make parents think that football is safer, and that that is not actually the case.

Another interesting note is that, when Googling “USA Football” and “Heads Up Football,” not many articles appeared, except for articles from the official USA Football site and its affiliated sites (like its Twitter page and Facebook page). To get any results, the word “ESPN” had to be added to the Google search. This seems to indicate that, although *NFL Evolution* has a targeted audience, a specified goal, and all of the characteristics of an effective message, it has not been *that* effective. Some articles outside of the sites of *NFL Evolution* and

USA Football have been written about the initiatives, but even then, some are positive and some are negative.

This may be, like Atkin and Rice write, because “Research findings suggest that campaigns are capable of generating moderate to strong influences on cognitive outcomes, less influence on attitudinal outcomes, and still less influence on behavioral outcomes” (n.d., p. 14). Public relations campaigns, according to them, do not really change the attitudes of people. It is possible that, when people hear about *NFL Evolution*, *USA Football*, or *Heads Up Football*, their attitudes are not affected. Those who like football may not necessarily care if the game is that safe. Those who do not think football is safe (and do not like it anyway) may not be affected by news of making the game safer. They may just be cynical.

Chapter 5

Discussion of Results

Based on what Atkin and Rice suggest a public information campaign should do, it can be concluded that *NFL Evolution* is effective as a public information campaign. Does it have a stated goal? Yes. The NFL wants to inform the audience about how the NFL is making football safer. Does the campaign have an audience? Yes. In this case, there are many different audiences. What type of messages are the campaign producing? For *NFL Evolution*, they are ‘awareness’ and persuasive messages. Does it follow the five steps of creating an effective message? As discussed in chapter 3, yes, it does.

What about the content analysis of *NFL Evolution*, though? It seems that the methodology of this study was flawed. When it came to overall count for three of the categories (articles, videos, and posters), the results of the author and his colleague differed by less than 20%. That is not a bad number, but when it came to press releases, there were huge problems. The percent difference for press releases was about 60%, which is unacceptable. The problem with the methodology was most likely that there was not enough clarity on what counted as acceptable for each category. The coders were probably looking for different phrases (or at least were not looking with the same amount of specificity).

However, this does not mean that the results were completely useless. Overall, the coders had a percent difference of only 4.63%, meaning that, overall, they agreed about 95% of the time. This leads to some interesting results. For example, the number one category, by frequency, was the “Change” category (which featured the sub-categories of “making the game safer” and “organizations”). What this indicates is that the main focus of the *NFL Evolution* campaign is the fact that they are making the game safer, specifically through the organizations

USA Football and *Heads Up Football*. This is not surprising, considering the main idea of the campaign included the phrase “The health and safety of players at all levels of the game is our first priority” (Goodell, 2012). It is only logical that the number one category dealt with making the game safer.

The frequency of phrases and images dealing with “Enforcement” (dealing with officials “setting the tone” of the game and calling penalties to prevent plays that can cause injury) was surprising. Based on initial planning of the content analysis, it seemed like this would be a more important category. However, except for a couple of videos and a few occasional references, enforcement really played no role in the study. That seems to indicate that, at least on the *NFL Evolution* site, there really is not much of a focus on officiating as it pertains to making the game safer.

Similarly, the frequency of phrases and images dealing with concussions was surprising. Considering one of the main goals of *NFL Evolution* is “helping athletes and their coaches know the signs and symptoms of concussion; and what to do if they suspect an athlete has a head injury” (Goodell, 2012), it was a bit shocking that concussions did not play a bigger role on the *NFL Evolution* site. There was one exception, though. The posters contained over 100 references to concussions. This is not surprising, considering that those posters were sideline tests used to assist in the diagnosis of concussions.

It is clear, then, that the biggest focus of the *NFL Evolution* campaign is making the game safer (specifically through *USA Football* and *Heads Up Football*). The question that remains is whether or not that message has gotten through to external sources. A Google search for “USA Football” and “Heads Up Football” were done, along with the term “ESPN,” in order to see whether any external sources discussed the initiatives. The results were mixed. On one hand,

the search “ESPN Heads Up Football” resulted in about nine out of the top ten results in Google being related. On the other hand, most of the searches that came up for “ESPN USA Football” were not related to USA Football.

In one article, ESPN writer Jennifer Paulett (2014) wrote about how ESPN gave a grant to USA Football, in order to help make football safer. So on one hand, the NFL’s message of making the game safer *is* getting through. One of, if not the most, important sports media organizations in the world, is supporting USA Football. They clearly agree with the idea of making football safer.

On the other hand, ESPN has been willing to speak up against the NFL’s initiatives. For example, Steve Fainaru and Mark Fainaru-Wada (2014) wrote that a youth football league in Katy, Texas “could be considered a human laboratory for the National Football League,” which “has spent \$1.5 million to persuade parents in leagues like Katy that it is making football safer by teaching tackling techniques that will reduce concussions.” They go on to say that many people think that *Heads Up Football* is just being used to make parents think that football is safer, and that that is not actually the case.

Another interesting note is that, when Googling “USA Football” and “Heads Up Football,” not many articles appeared, except for articles from the official USA Football site and its affiliated sites (like its Twitter page and Facebook page). To get any results, the word “ESPN” had to be added to the Google search. This seems to indicate that, although *NFL Evolution* has a targeted audience, a specified goal, and all of the characteristics of an effective message, it has not been *that* effective. Some articles outside of the sites of *NFL Evolution* and *USA Football* have been written about the initiatives, but even then, some are positive and some are negative.

This may be, like Atkin and Rice write, because “Research findings suggest that campaigns are capable of generating moderate to strong influences on cognitive outcomes, less influence on attitudinal outcomes, and still less influence on behavioral outcomes” (p. 14). Public relations campaigns, according to them, do not really change the attitudes of people. It is possible that, when people hear about *NFL Evolution*, USA Football, or *Heads Up Football*, their attitudes are not affected. Those who like football may not necessarily care if the game is that safe. Those who do not think football is safe (and do not like it anyway) may not be affected by news of making the game safer. They may just be cynical.

If this study were to be done again, a few changes would need to be made. More pilot testing of the methodology would need to be done, to ensure that both coders knew exactly what they should be looking for in the articles and videos. This could result in less of a percentage difference in the results. Similarly, it is possible that this study should have been expanded to cover *more* than the *NFL Evolution* website. It could have included the *USA Football* site as well. This could have resulted in more articles, videos, and press releases, making the sample even better.

Chapter 6

Conclusion

Football is an extremely popular sport. People at all different levels play it. Children. High school students. College students. Professionals. However, is the game safe? In many ways, it is not. Throughout the history of the NFL, the league has treated concussions in a variety of ways. At some points in history, it has ignored them. More recently, it has begun to focus on concussions more. That is the point of the three-point analysis of *NFL Evolution*. This public relations campaign, which started in 2012, is meant to show people, including fans, parents, and players, that the NFL is working to make the game safer.

By performing a content analysis of articles, videos, posters, and press releases, it was found that the main focus of *NFL Evolution*, based on what the campaign is actually producing, is making the game safer via organizations and initiatives like *USA Football* and *Heads Up Football*. However, it would seem that this message has not really been getting through. Many external sources, like ESPN, do not really mention the initiatives. When they do, the results are a mixture of positive and negative.

To make *NFL Evolution* more successful, the league is going to have to convince cynical members of the public that they *are* making the game safer. That is more easily said than done. In this case, maybe an outside, independent source should be consulted to run the campaign. Having the league itself run the campaign may not be the best way to convince people that the game is actually becoming safer.

Regardless, to make *NFL Evolution* more successful, the league has to make some changes. More importantly, though, the league needs to actually work to make the game safer. They cannot just *talk* about what they are doing. They have to actually convince people that they are making the game safer.

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EDUCATION

Penn State Erie – The Behrend College May 2015
Bachelor of Arts in Communication
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LEADERSHIP EXPERIENCE

Co-Chair of the Academy Alumni Association November 2012 – Present

- Founding member
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ACADEMIC EXPERIENCE

- COMM 270H – Introduction to Multimedia Production (Honors Option)
 - Learned how to create animations in Adobe Photoshop and Illustrator, created web sites and videos
- CMPSC 121 – Introduction to Programming Technology
 - Created simple programs using C++ programming language
- COMM 251 – Nature of Media
 - Analyzed the movie *Argo* in relation to race, gender, and nationalism, created a web site for my presentation
- GD 100H – Introduction to Graphic Design
 - Created stylized portraits using Photoshop, learned how to design a page (print or computer) to best convey a message
- MIS 204 – Introduction to Business Information Systems
 - Used Excel and Access to solve problems related to business analysis, used Dreamweaver to create a web presence for myself
- MIS 387 – Website Design and Administration
 - Created a professional website for myself as well as for a non-profit organization using Dreamweaver and Photoshop

HONORS / AWARDS

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- Adobe Photoshop
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