

More Than a Bump on the Head:
Representations of Concussions in Fictional Television

by

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ABSTRACT

In contemporary times, concussions have increasingly become part of the public dialogue. And yet, head trauma is still grossly underreported. While news discourse has been analyzed in existing literature, entertainment has not been extensively studied. This thesis used a narrative analysis to examine representations of concussions in 20 episodes of fictional American television from 1963-2018. As opposed to news media's focus on head injuries in sports, most representations did not involve athletics. Instead, characters suffered concussions due to falls, fights, and forceful impact. Overall, four concussion frames were identified: the typical TV concussion, concussions as minor, concussions as humorous devices, and concussions as dangerous. Concussions are often presented as temporary, requiring brief medical treatment, without long-term effects discussed. It was concluded that fictional television portrays concussions in ways that do not always accurately reflect the realities of the injury and that this health messaging may impact the perception of concussions.

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INTRODUCTION

Approximately 1.7 million Americans suffer traumatic brain injuries each year (Faul & Xu, 2010). Repeated head injuries can heighten one's risk for a degenerative disease known as Chronic Traumatic Encephalopathy or CTE, causing life-altering impaired judgment, increased aggression, depression, and behavioral changes, as well as early onset dementia and other neurological problems later in life ("The N.F.L.'s Tragic C.T.E. Roll Call," 2016). This condition is especially common among athletes, particularly with football players (Mez, 2017). Despite evidence that concussions can have serious short and long-term consequences, many dismiss the risks of concussions in sports. Approximately 50-75% of high school athletes underreport concussions (McDonald, Burghart, & Nazir, 2016). Likewise, a prospective cohort study by Meier et al. (2015) found that athletes who had been cleared to play continued to underreport symptoms when present nine days after diagnosis. A study on concussion reporting in female athletes discovered that nearly one-third of those who had suspected a concussion did not report to a trainer, and that, despite 66% of the participants possessing concussion education, there was no correlation between education and diagnosis or treatment (McDonald et al., 2016). Underreporting stems from many variables, including environment, education, experience, and cultural perceptions of concussions.

Media messages about head injuries help shape factors that impede reporting. Concussions are often talked about across media in many different contexts, including news stories, and studies show that news stories impact perceptions surrounding health issues. Research suggests that media have offered mixed messages about concussions. For example, a study by Ahmed, Lee, Schneiders, McCrory, & Sullivan (2014) examined

concussion representation in comedy programs determined that portraying concussions humorously in media could spread inaccurate information. Conversely, a study into video games and their impact on youth hockey players discovered that positive -- or accurate and informed -- concussion messages in video games led to youth hockey players scoring significantly higher on a concussion knowledge test (Goodman, Bradley, Paras, Williamson, & Bizzochi, 2006). And while news and online coverage has been studied, little work has been conducted on entertainment's constructions of concussions. This study addresses this gap in literature, examining representations of concussions in fictional American television programs. Such analysis should help to shed light on public understanding and perceptions of head injuries in relation to entertainment media.

History of Recognizing Head Injuries

Literature on concussions centers on head injuries in sports. Player safety is an issue that has grown slowly over time, from no protective equipment to advanced designs that specifically reduce risk of concussions and CTE. While all athletes are susceptible to head injuries, certain sports yield higher risks, as American football and women's soccer have the highest incidence rate, with females having a twice as likely chance of suffering a concussion while playing sports (Taylor, Bell, Breiding, & Xu, 2017). That said, modern media coverage of concussions has primarily focused on American football, due to high profile cases of head injuries and cases of CTE in famous athletes. Because of this tendency, American football has a clearly trackable history in terms of recognizing head injuries – a history that started early in the game's inception - as well as mandatory protective equipment for the head.

In the early days of American football in the 1800s, players wore no helmets or other padding. Those who were hit in the head were thought of as “getting their bell rung” and would usually return to play without much concern once the effects faded, despite evidence of concussions occurring (Monahan, 2007). In the first 10 years of college football (1880s-1890s), 18 deaths and 159 serious injuries occurred (Harrison 2014). Recognizing some of the immediate effects of hard tackles, football players began using leather helmets to protect their heads – as extra-padding and not to specifically prevent concussions. College players were required to wear helmets by 1939, while the National Football League (NFL) mandated head gear in 1943 (Monahan, 2007). By 1950, plastic helmets had replaced leather, yet helmets still lacked face masks, as injury prevention largely addressed avoiding injury for the person tackling, not the recipient of the blow (Gelberg, 1995).

Over the next 50 years, the addition of visors and different types of face masks, types of padding and materials changed dramatically. Yet with these changes, helmet modifications did little to specifically improve players’ protection against concussions (Clark, 2011). In 2002, Riddell, the company that originally introduced plastic helmets to football, created a new type of helmet called the Revolution as a response to a concussion study showing that current models did little to prevent concussions (PR Newswire, 2002). Research by the University of Pittsburgh Medical Center showed that athletes who wore this type of football helmet were 31% less likely to suffer concussions, compared to traditionally designed helmets (Maroon, 2006). However, the NFL was slow to adapt to these changes, and Riddell marketed their helmets as preventing concussions (as opposed to reducing risks of serious head injuries) despite being warned that it was impossible

(Shankman, 2013). Riddell would lose a massive lawsuit, and, once the pinnacle of helmet brands, the company has lost much in terms of name recognition and potential. As helmet designs were changing, the NFL and other football organizations sought to modify the game itself to reduce injuries. In 2009, the NFL finally made massive changes to player safety rules to attempt to prevent concussions, implementing penalties for dangerous helmet-to-helmet hits regardless of intent (Garda, 2012). Player safety in American football continues to evolve, especially when related to concussions, and there continues to be the addition of new rules to prevent head injuries each season in an attempt to limit the damage from participating in the sport. Permanent head trauma is now recognized as far more prevalent than once thought. A study produced by the American Medical Association revealed a clear majority of deceased former American football players showed signs of having CTE. The study found that CTE could be diagnosed in 177 of the 202 samples and 110 of the 111 former athletes from the NFL (Mez et al., 2017).

While the emphasis has been on improving safety in football, other sports and organizations have also begun examining ways to reduce concussions and other head injuries. Every state has enacted a youth sports safety law that focuses on preventing, diagnosing, and treating concussions in young athletes (Shen, 2018). The CDC partnered with Major League Soccer (MLS) to study the effects of head injuries on performance and then relay that information to P.E. teachers to use as a teaching tool when discussing concussions with students (Hardy, Jordan, Wolf, Johnson, & Brand, 2017). Even youth rugby in the U.K. has begun to make advancements in terms of player safety, as a study

on the dangers of a mismatch in size between opponents has led to young players being matched more evenly with players their own size (Greenfield, 2015).

Overall, although safety has improved in athletics, concussions continue to occur, significantly impacting players' health. A study by Taylor and Sanner (2017) further reveals this importance and concludes with the assertion that reporting and treating a TBI can minimize the long-term and short-term effects. Furthermore, Meehan's research suggests that the U.S. high schools with athletic trainers possess a higher concussion rate, revealing a connection between the presence of those with knowledge of concussion symptoms and the frequency with which concussion is diagnosed (Meehan, 2011). Additionally, research by McDonald points to knowledge as one of the deciding factors in the decision to report (McDonald et al., 2016). Yet, even with more education, the deciding factor in the decision to not report was "the athlete's perception that the injury was not serious and that the athlete did not want to be removed from play" (McCrea, Hammeke, Olsen, Leo, & Guskiewicz, 2004, p. 13). What an athlete perceived about concussions was the deciding factor in self-reporting symptoms rather than concussion knowledge and recognition, implying that another factor like the media plays a major role in how an athlete perceives a concussion.

Likewise, it is important to note that it is not only in organized sports that head injury risks are being recognized. Observations from medical professionals during the Civil War, World War I, and the Iraq War hinted at long-term effects of trauma from head injuries that would eventually reveal similar brain damage in football players (Budinger, 2016). Some who serve in the military find themselves with the same type of long-term neurological effects from concussions, as evidenced by studies into those who

were “shell-shocked” during World War I and injured by IEDs in the Iraq War (Budinger, 2016). These revelations are startling, as it reveals evidence that a simple concussion obtained through recreational or accidental methods can have the same effects as injuries obtained through military service.

While sports tend to be the focus of concussions when it comes to modern media, the most common ways in which a concussion occurs are car accidents and falling (Taylor et al., 2017). It should be noted the third most common cause, and the most common cause among those 15-24, is striking, or being struck by, an object, such as during sports (Taylor et al., 2017). These three common methods of receiving a concussion are reflected in the media, and, as a result, make up every representation of a concussion in this study.

LITERATURE REVIEW

When examining literature related to the representation of concussions on fictional American television, studies looking at the overall impact of health messaging on television are key. Concussion representation in news media is an area of study that has already been greatly explored and is included as well. The literature review for this study is divided into two sections: health messaging on television and head injuries and media.

Head injuries and media

Media perpetuate and reinforce societal norms surrounding concussions. News media are perhaps the most studied information sources when it comes to framing of head injuries such as concussions, influencing how concussions are perceived, as well as the decision to report, diagnose, or treat the injury. Through a content analysis of 102 randomly sampled football games from 2009-2014, Parker (2016) found that how commentators portray health-effects of head injuries does not match the severity of the incidents. It concluded that the commentators “constructed incidents of significance” as glorious representations of violence and masculinity without discussing the potential effects. Not all studies on news media suggest the public nature of these occurrences and the following coverage as negative, however (Petric, 2013). Petric’s (2013) research analyzed news articles, a radio interview, the memorial service, and NFL statements surrounding the suicide of a famous NFL player, Junior Seau, to determine how the dominant masculine ideology plays into the coverage of his death. This study concludes that the rise in public, highly-detailed suicides stemming from these head injuries “ruptures” dominant masculine imagery in sports and pushes narrative forward for social

awareness and research into player safety (Petric, 2013). In other words, the coverage of the long-term effects of concussions by the media changes the way in which masculinity is perceived in sports, because the potential negative effects of a concussion outweigh the masculine ideal of playing through injury (Petric, 2013). Masculinity, or the idea that a certain behavior or attribute is associated with men or the societal representation of a man, is a message that is repeated throughout our culture and one that is associated with playing through concussions that is repeated by the media (Sanderson, Weathers, Grevious, Tehan, & Warren, 2016). Sanderson et. al examined how 177 newspaper articles portrayed the concussions of two NFL quarterbacks and suggested that the vast differences between the two portrayals reveals the ability of the media to have an impact on the perception of a concussion (Sanderson et al., 2016). Many athletes believe strongly that playing through concussions is “tough” or what they are supposed to do – both of which stem from a “masculine” ideal that can be attributed to American football being a purveyor of masculinity in the United States and the message being repeated by media (Anderson, 2012). Anderson’s study focused on an NFL quarterback’s decision to withdraw himself from the game after a head injury and the media portrayal of this decision. This study determined through a media analysis that as the media cover the effects of head injuries and CTE, the public becomes more sympathetic toward decisions against playing through a concussion or head injury. Therefore, proper media coverage of head injuries and their effects can break through the masculine ideology and change the perception of a concussion (Anderson, 2012).

Online content also frequently conveys messages about head injuries. A study by Ahmed, Sullivan, Schneiders, & McCrory (2011) examined concussion-related websites

on the internet for their quality, readability, and accuracy through a quantitative analysis. The study found that the “variability” of the concussion information on websites created a need for sports medicine professionals to focus on the accuracy and readability of the information provided. Concussions are also addressed in social media. Sullivan et al. (2011) analyzed 1,000 concussion-related Tweets over seven days on the social media site Twitter and categorized into themes. Sullivan et al. (2011) suggested that three most common themes of news, sharing personal information/situation, and inferred management showed that social media sites like Twitter could be a major tool in spreading concussion information. A later study on concussion-related videos on *YouTube* found that most videos involving concussions were from news organizations or depicted the injury occurring with few videos from academic sources (Williams et al., 2013). Of the 100 YouTube videos selected for this study, over 50% were from news sources, and the lack of academic or professional sources revealed a clear need for videos with accurate concussion information from organizations with verified concussion knowledge, such as medical professionals and academics. This study also concluded with the assertion that social media could be a major tool in spreading information regarding concussions (Williams et al., 2013).

Little research has been conducted on entertainment media’s representations of concussions. However, a study by Ahmed et al. (2014) examined head injuries and how they were used for comedic purposes on programs ranging from the days of Charlie Chaplin to more recent series such as *The Office* and *South Park*. Ahmed found that, despite similar portrayals of head injuries as comedy throughout the years, there has been a recent shift to use comedy and head trauma in a way that is more satirical and geared

towards social commentary. Despite this shift, the study concluded that using concussions as a source of comedy can “trivialize” the seriousness of the injury and spread misconceptions, even when used for social commentary (Ahmed et al., 2014). While Ahmed’s study focuses on how comedic representations of concussions on television can affect the real-life perception of concussions, this study addresses the overall representation of concussions and the different ways in which concussions are represented in fictional American television.

Using Entertainment Television to Impact Audiences

Existing literature demonstrates that entertainment media impacts attitudes, perceptions, and behavior. Positive health messages can inform the public and shape perception. A study involving entertainment-education and HIV prevention concluded that positive health messaging surrounding HIV prevention has a positive impact on the perception of HIV prevention in general (Schouten, Vlug-Mahabali, Hermanns, Spijker, & van Weert, 2014). Likewise, studies have been done in this same facet involving health messaging and alcohol. A study focusing on the impact of anti-alcohol messages in *ER* resulted in “less positive attitudes” towards binge-drinking, as well as “lower intentions” to binge-drink (Kim, Lee, & Macias, 2014). A study by Ward that examines breastfeeding representation on television and its effects on the perception of breastfeeding suggests that health knowledge can be affected by the media (Ward, Merriwether, & Caruthers, 2006). By examining a sample of undergraduate men and analyzing their opinions on traditional gender roles, their stance on breastfeeding and child-rearing, and their level of media consumption, the study goes on to reveal that media representations can affect men’s perceptions of women’s bodies and their function

(Ward et al., 2006). Another study on breastfeeding representation and its impact on perception through entertainment-education suggests that viewing television clips that depicted public breastfeeding improved attitudes and support for breastfeeding, while also decreased the idea that breastfeeding should be private (Foss & Blake, 2018). Some fictional messages can even be more influential than nonfiction. Expanding on the idea that health messaging directly affects perception, a study by Davin (2003) on health messages in media explains that people believe the messages on television, and sometimes trust them more than actual documentaries/educational tools.

The prior literature examined reveals the impact that health messaging in media can have on the perception of health issues including concussions. It also demonstrates the stigma surrounding concussions, the dangers of misinformation, and the prevalence of misinformation surrounding concussions. Building on the previous literature, this study examines concussion representation in fictional depictions of head trauma that are likely also factors in how concussions are perceived.

THEORETICAL FRAMEWORK

Framing and parasocial interactionism establish the theoretical framework for this study on concussion representations in fictional television. Both theories pertain to media and can be applied to representation on television. These theories help explain how and why a subject, in this case concussions, is represented is important, because they describe how viewers can use media to understand how the real world works.

Framing

Frames are a way in which information is processed to make it easier for people to understand and “classify” the information that they take in (Goffman, 1974). These frames aid people as they attempt to make sense of the world around them and form the basis of culture. Entman (1993) suggested that framing is a way in which a perceived reality is made more salient. Particularly relevant to this study, Entman implied that frames can be used to define problems, discover causes, and create solutions or, more specifically, to “diagnose, evaluate, and prescribe.” In the present study, framing is used as the classification system for the narrative analysis. It is assumed then that television’s framing of concussions impacts viewer perception.

Parasocial Interactionism

Why does entertainment television influence viewers’ attitudes and behaviors? As a theory, parasocial interactionism suggests that media provides a relationship between the audience and the character – whether fictional or real – from which the audience feels a personal relationship (Horton & Wohl, 1956). An illusion of reciprocity causes this relationship to have additional meaning, therefore providing the audience with a reason to believe, sympathize, and empathize with the character who has now become a pseudo-

real-life acquaintance or friend, otherwise known as a persona (Giles, 2002). This “persona” becomes like a real-life relationship, validating the viewer’s thoughts and emotions while simultaneously influencing them (Auter, 1992). Extending parasocial interactionism to concussion representation on television, the relationship between the character with a concussion and the audience is the parasocial interaction. For example, a study on drug use and college students provided evidence that participants who watched reality television and identified with the characters on reality television (parasocial interaction) were more likely to use illegal drugs (Fogel & Shlivko, 2016). Another example of this phenomenon can be found in a study by Hoffner (1996) that examines children and their parasocial interaction with television characters. The study describes wishful identification, characters who the audience wishes to be like, as a method in which parasocial interaction can occur (Hoffner, 1996). Therefore, television characters do not always have to be like the audience for the parasocial interaction to occur, but rather the audience must wish to be like the character. Likewise, in relation to this study on concussion representation, parasocial interactionism suggests that the concussed character affects both the perception of a concussion for the audience as well as the actions taken because of a concussion by the audience because of parasocial interaction.

METHOD

The research questions for this study of concussion representations in television are as follows:

1. How are concussions portrayed on fictional American television shows?
2. What does fictional television convey about injuries, reporting, diagnosis, and treatment of concussions?

Methodology

This study uses a narrative analysis of fictional American television episodes to examine how concussions are represented. A narrative analysis “takes as its object of investigation the story itself (Reissman, 2013, p. 1)” as well as focuses on “narratives” or stories and the similarities or differences in them (Denzin & Lincoln, 2005). The relationship between subjects through broader themes and language is an essential aspect of a narrative analysis and is the focus of this study. As Bruner states, “Narrative derives from both telling (to narrate) and knowing (Bruner, 1986) and “we organize our experience and our memory of human happenings mainly in the form of narrative” (Bruner, 1991, p. 4). Therefore, the study focuses on how concussions are presented in fictional American television based on the Bruner definition of narrative. These representations are categorized into frames (the typical TV concussion, concussions as minor, concussions as humorous devices, and concussions as dangerous) that were selected based on the ways in which ideas and images are portrayed in consistent ways across the media (Stiles, Honos-Webb, & Lani, 1999). More specifically, these frames are repetitive messages involving concussions in the selected television narratives.

Sample

This study analyzes fictional television episodes (see: Table 1) that were identified in the *Internet Movie Database* using the keyword “concussion,” the category “television,” and appeared on American television. These episodes were then confirmed to be accessible and available via streaming on at least one of the following sources:

YouTube, Hulu, Netflix, and Amazon Prime.

Table 1

Show Title	Air Date	Episode Title
Travelers	12/27/2017	Pilot
Travelers	12/26/2017	17 Minutes
Wayward Pines	6/9/2015	The Friendliest Place on Earth
Banshee	3/7/2014	Homecoming
White Collar	1/29/2013	Brass Tacks
The Simpsons	5/6/2012	The Spy Who Learned Me
Hart of Dixie	2/20/2012	Snowflakes & Soulmates
Lie to Me	1/17/2011	Saved
Royal Pains	10/6/2010	Lovesick
Ghost Whisperer	5/7/2010	Blood Money
Criminal Minds	12/16/2009	Retaliation
Ben 10	2/18/2006	The Alliance
Star Trek: Enterprise	5/11/2003	Twilight
Justice League	11/27/2002	A Knight of Shadow: Part II
Home Movies	10/7/2001	Law and Boarder
Batman Beyond	2/10/2001	Curse of the Kobra: Part 2
Star Trek: Deep Space Nine	2/6/1995	Starship Down
Little House on the Prairie	1/12/1980	To See The Light: Part 1
Little House on the Prairie	1/15/1979	Blind Man’s Bluff
The Fugitive	10/22/1963	Decision in the Ring

Conducting the research

To conduct this research, Stuart Hall's "preliminary soak" was first performed on episodes with concussions identified, in which the researcher analyzes the materials beforehand to identify which examples can be strongly analyzed (Hall, 1997). Then, in a much more in-depth process, the scenes that relate to concussions are further analyzed.

"Concussions" are identified through wording in the dialogue (i.e., script, or if a TBI and potential concussion is implied through dialogue, plot, or script by any character). The questions that are utilized when analyzing the selected episodes and scenes of television are as follows: How does the concussion occur? Why does it occur? When does it occur? Do we (as the viewers) see the injury occur? Are health concerns discussed? If so, how are they discussed? Who discusses them? Are there medical professionals involved? How are they involved? When in the process are they involved? Are concussions positively or negatively represented? What is positive or negative about the representation? Is the concussion relevant to the overall narrative? Is it depicted as a source of humor? Is it a throw-away line? Is it a major plot point?

These questions form the basis for the research, as each looks at how concussions are represented in the episode.

FINDINGS

Overall, 20 episodes were analyzed for depictions of concussions. A head injury occurred in every episode in the study, and all but the two episodes of *Travelers* had the injury identified as a concussion in the dialogue. These representations spanned from 1963-2017, across the drama, science-fiction, and animated genres. Prior to discussing the identified narrative frames, the overall concussion experience is outlined here. The findings for this study have three narrative frames: concussions as minor, concussions as humorous devices, and concussions as serious.

The Typical TV Concussion

Concussions occurred in numerous ways throughout the sample, but a pattern emerged depicting the typical television experience. Characters develop concussions in strikingly similar ways. In 12 storylines, concussions resulted from fights or battles. Here, we see the action leading to the head injuries, often accompanied by dialogue that confirms the cause. For example, in the dramatic series *The Fugitive*, a boxing match takes place at the beginning of the episode “Decision in the Ring” (1963), causing a concussion in Joe Smith. Likewise, the main character, Hank, punches his father in the *Royal Pains* episode “Lovesick” (2010), inflicting a head injury. In the animated *Justice League* episode “A Knight of Shadow: Part II” (2002), Batman receives a concussion while fighting a group of villains, and in the animated *Batman Beyond* episode “Curse of the Kobra: Part 2” (2001) he receives yet another concussion the same way. Car accidents caused concussions in four episodes. With these storylines, we usually do not see the injury itself, but we see the accident, and a concussion is later confirmed in the dialogue. For example, in the drama *Lie to Me* episode “Saved” (2011), Dr. Cal Lightman is in a

car accident before being told by an EMT “you have a concussion.” The other three examples of a car accident causing a concussion occur in *Banshee* (hit by a car), *White Collar* (car wreck), and *Home Movies* (hit by a car). In four episodes, characters’ falls led to concussions, which are later diagnosed by medical professionals. For example, in the animated *The Simpsons* episode “The Spy Who Learned Me” (2012), Homer tumbles off a ladder and the scene shifts to a medical facility where he is examined by his boss, Mr. Montgomery Burns. Mr. Burns tells him to take “one ibuprofen,” but is then rebuffed by a doctor and is told that “he suffered a severe concussion. Recent research (suggests) he needs time off.” Another example of this is in the drama *Little House on the Prairie* episode “Blind Man’s Bluff,” where a fall leads to Laura Ingalls’ friend going blind. The other two episodes which include falls as the cause of the concussion are from the drama *Hart of Dixie* episode “Snowflakes and Soulmates” (2012), where there is a fall from a ladder, and the drama *Ghost Whisperer* episode “Blood Money” (2009), where a suspect falls through the roof of a barn. Besides fights, car accidents, and falls, no other causes of concussions were conveyed in the sample studied.

Storylines shared the identification of concussions for the affected characters. For many of the episodes, it was obvious that head injuries had occurred. As viewers, we clearly see characters dramatically hit their heads. Moreover, characters voiced or conveyed specific concussion symptoms that included memory loss, sensitivity to light, and headaches. These symptoms usually occurred either after the concussion has been diagnosed or in a medical setting. For example, memory loss is apparent for F.B.I. Agent Emily Prentiss in the drama *Criminal Minds* episode “Retaliation” (2009), after she suffers a concussion in a car accident. A fellow agent asks her to remember how many

shots she fired at the suspect, to which she replies, “Three.” The agent says, “you emptied your clip” to show that she is suffering from memory loss. In *The Fugitive*, a similar event occurs, as Joe Smith does not remember a reporter who was at a party that the audience sees him meet in an early scene. The episode of *Criminal Minds* also showcases the concussion symptom of sensitivity to light, as Prentiss struggles to see immediately after the concussion. Sensitivity to light is present once again in *Lie to Me* immediately after the car accident leading to the concussion. Interestingly, all cases where sensitivity to light were showcased throughout the sample involved car accidents. Headaches occurred in multiple episodes in the sample, but only in *Banshee*, *Lie to Me*, and *The Simpsons* do they specifically equate the headaches as an aspect of concussion symptoms. In no cases were symptoms present prior to diagnosis except in *The Fugitive*, as Joe Smith showed symptoms which led to the main character, Richard Kimble, suspecting that Joe might be hiding a concussion. In no episode did the injured realize that they might have a concussion and report it; instead, it was confirmed or implied in the dialogue before symptoms ever occurred.

When characters have suffered head injuries, they tend to receive medical treatment, as evident in thirteen episodes. Health professionals attended to these characters, either in hospitals or places that have the appearance of being a medical facility (i.e. bandages, beds, etc. present). Despite doctors appearing in eleven episodes, medical professionals diagnosed or spoke the word “concussion” in just seven of these. The others were diagnosed by the injured or mentioned by another character to the injured. For example, in the science-fiction drama *Wayward Pines* episode “The Friendliest Place on Earth” (2015), the concussed child is in a hospital setting surrounded

by doctors but it is his father who says the word “concussion” when discussing the injury. Conversely, in the animated *Ben 10* episode “The Alliance” (2006), it is a doctor who states that Ben’s grandfather has a “severe concussion.” All but one of these examples included a hospital setting, as well. The exception is from *Royal Pains*, a show in which the main character is a medical professional practicing in his own home.

Every episode featured at least some form of medical treatment on the injured, either explicitly in the dialogue or implicitly in the background. Simple treatments included bandages, ice packs, and, more often, rest. *Criminal Minds* is perhaps the best depiction of the simple treatments, as Emily Prentiss’ team constantly reminds her of the things she must do to heal from a concussion. Another example can be found in *Hart of Dixie*, as the concussed doctor spends time being treated by other medical professionals. On the other hand, more serious treatment included the use of futuristic technologies in both episodes of *Star Trek* and extended hospital stays, such as *Wayward Pines*, *Banshee*, *White Collar*, and *Ben 10*.

Following the concussion treatments, all injured characters recovered completely apart from the “dead” in *Travelers* (which it should be noted led to a conscious being transferred into their body that suffered no ill effects from the concussion). In fact, six episodes forgot the concussion midway through the narrative. For example, in *Ghost Whisperer*, the concussion was mentioned once as an aside when describing the reason a suspect is in the hospital and never mentioned again. In *Criminal Minds*, the concussion is an integral part of the narrative until midway through the episode in which Emily walks into a room, is asked “how are you feeling,” replies “I feel like I’ve been hit by a truck,” and the concussion is never mentioned again. After diagnosis, there was no

follow-up or even mention of the injury in these episodes. Concussions, which have both short and long-term effects, were only shown throughout the sample to have short-term effects. Overall, three narrative frames were identified in the representations studied: concussions as minor, concussions as humorous devices, and concussions as serious.

Concussions as Minor

Many of the episodes analyzed conveyed that concussions were not life-threatening, but were a minor inconvenience, with concussions being downplayed or not taking precedent in the storyline, paired with quick recoveries for the characters with head injuries. In *Wayward Pines*, the father of a boy who suffered a concussion that was serious portrays the injury as minor, saying that he had a concussion when he was the boy's age while playing football and says that his "ears were ringing for a couple of days." This scene is juxtaposed with the boy lying in a hospital bed with far bigger problems than just "his ears ringing." *Justice League* continues this trend, as, after suffering a concussion and being told to lie still by Martian Manhunter, Batman replies "I've survived worse." Batman appears once again in this discussion as Bruce Wayne tells an injured protégé in *Batman Beyond* that "you're lucky. It was just a minor concussion." In *Criminal Minds* the narrative goes a more direct route, as Special Agent Emily Prentiss says that her concussion is "not a big deal," despite showing clear symptoms like memory loss. Another example downplaying the seriousness of a concussion is when in the action show *Banshee* episode "Homecoming" (2014), Job says that "it's just a concussion, man" and that "you get them every day." Another example of this is in the drama *Little House on the Prairie* episode "To See the Light: Part 1," as Adam (who had been blind since childhood) is in an explosion and immediately regains

his sight. These examples offer conflicting messages about concussions—as the injured characters downplay their concussions, they are receiving medical treatment. Their comments downplay the seriousness of the concussion, but the scene and the actions of those in the peripherals of the scene do not.

Concussions also do not take precedence over other events in the narrative throughout the sample. The injured protest to medical professionals and friends or ignore medical advice to finish some other task. For example, in *Hart of Dixie*, the concussed doctor refuses a diagnostic test, stating “I don’t need a CT scan! All I need is a nice warm day.” Later, against medical advice, he drives his car to attend his daughter’s wedding, explaining that he “would not miss the wedding for anything” and that “all parents feel this way.” Luckily, a friend and medical professional convinces him otherwise and drives to the wedding instead. Likewise, in *The Fugitive*, African American boxer Joe Smith must choose between his career or his health due to a concussion. If not for his wife’s intervention, he would have chosen to fight despite brain damage. He says just this, stating “here (the ring) I can hold up my head. I’m not going back.” This narrative also appears in both *Justice League* and *Batman Beyond*, as Batman sustains a concussion and broken ribs in both episodes. After a brief medical scene, the concussion is forgotten to go fight the villains. More interestingly, however, is that the broken ribs are mentioned during the fight in both episodes but not the concussion.

One of the most concerning trends throughout many of the episodes was that the characters chose other, perceived more important options instead of listening to medical advice or treating their concussion. Even if legitimate, serious concerns were noted, there were many times that midway through the episode the concussion was never mentioned

again or there were no ill effects after them being shown early in the episode. In *Criminal Minds*, Special Agent Emily Prentiss suffers a concussion that is taken seriously at the beginning of the episode. Midway through, however, she is released, shows no ill effects, and immediately begins investigating a murderer as if nothing happened at all despite saying that she felt “like she had been hit by a truck.” In the drama *White Collar* episode “Brass Tacks” (2013), science-fiction *Ghost Whisperer* episode “Blood Money” (2010), and animated *Home Movies* episode “Law and Boarder” (2001), concussions are briefly mentioned at the beginning of the storylines without later follow-up, as the concussed characters smoke cigars, help investigate kidnappings, and face further head injuries. In *Batman Beyond*, Bruce Wayne’s protégé continues to fight the bad guys shortly after the concussion, showing no ill effects of the concussion and only pain due to broken ribs. Batman also experiences only minor effects in *Justice League*. In each of these examples, a concussion was diagnosed or acknowledged before being pushed aside and forgotten for something else in the narrative.

Concussions as Humorous Devices

Concussions also serve as comic relief in the episodes studied. Here, concussions are used as jokes or sometimes as the setup to other humorous moments. In *the Simpsons*, Homer suffers a concussion and, despite being told that “recent research suggests” that he needs time off to recover, Mr. Burns says to give him “one ibuprofen.” He caves and gives Homer time off, resulting in a series of hijinks that leads to him slamming a rock against his head for him to worsen his concussion as to hallucinate an imaginary character. Similarly, in *Lie to Me*, psychologist Dr. Cal Lightman fakes his head pain to get his daughter to listen to him to which she replies, “I wish you had hit your head

harder.” Later, the pair joke about the concussion again as he says that “it was just a knock to the head,” to which she makes a joke about there being “no such thing” at his age. Two other examples of this are in *Home Movies*, when the son pretends to forget who his mom is but calls her mom at the end of a long pause for comedic timing, and, in *Royal Pains* where, after suffering a concussion, the seedy father passes out in his car only for his doctor son to discover that it was from taking an Ambien and not the concussion. *Banshee* reinforces this message with Job’s line “It’s just a concussion, man. You get them all the time. The inside of your head must look like a Jackson Pollock” -- an uncomfortable thought at the effects of a concussion in the form of a joke.

With these examples, the problems do not stem from the humor itself but rather the way in which they depict the concussion as not being serious. Each of these examples are from episodes in which it was stated that a concussion occurred and all except *Home Movies* have a medical professional involved -- yet they each use the concussion as a source of humor.

Concussions as Dangerous

In 15 episodes studied, concussions were conveyed as dangerous—leading to serious medical treatment or even death. We often see the serious head injury occurring, such as by car accidents, fights, and falls. In fact, every episode in this study shows the injury occur. The appearance of health professionals also reinforces the severity of the injury, as health professionals appear in every episode except the two episodes of *Travelers*. While some of the episodes show just a brief glimpse of a doctor or bandage, many feature explicit medical treatment and show that a concussion can be dealt with through proper treatment. In the science-fiction *Star Trek: Deep Space Nine* episode

“Starship Down” (1995), the diagnosis of a concussion and proper treatment lead to Captain Sisko surviving a serious head injury. The ship is attacked, and he is injured. The quick actions of his crew, including medical treatment, and common practices like, as stated by the crew, “keeping him conscious and talking” lead to his survival. In the science-fiction *Star Trek: Enterprise* episode “Twilight” (2003), the proper diagnosis and treatment – somewhat more dramatically -- led to the survival of Earth. *The Fugitive*, *Hart of Dixie*, *Royal Pains*, *Lie to Me*, *Criminal Minds*, *White Collar*, and *Ben 10* all featured a doctor or nurse telling the patient that they had a concussion as well as some form of medical treatment. *The Fugitive* features extensive visuals of concussion tests, wound treatment, and the importance of a knowledgeable, capable medical professional when dealing with a head injury. Specifically, *The Fugitive* features a former doctor telling the boxer to “go see a doctor.” *Star Trek* features the phrase “get a medkit” and “try not to move” from a medical professional. *Ben 10* features a doctor telling Ben that his grandfather will “be fine with rest” and that character proceeding to follow the doctor’s advice until he is healed. *Hart of Dixie* features a doctor explaining that the injured “needs a CT scan” to check for further brain damage and refusing to budge as the injured, who is also a doctor, protests. While some of the medical advice is absent or ignored, the presence of medical visuals and professionals is a hint at the seriousness of a concussion and the success of treatment reveals positive depictions of health post-injury.

Five episodes convey that concussions may lead to death. In *White Collar*, Peter was in a car accident, has a concussion, and his wife states “I don’t want the next call to be from the morgue,” implying Peter could have died from his injury. *The Fugitive* is a unique example of the narrative of death, because the main character finds himself in a

struggle between his race, as he believes boxing causes people to treat an African-American man better than they would during this time, his boxing fame, and his life. In fact, Joe Smith says, “If I die, I want to die here,” in reference to a brain injury he sustained from an injury while in the ring. In the end, he chooses not to fight, so the audience is only left with the theory that his participation would have resulted in his death. While these two episodes imply death could have occurred, in three episodes concussions lead to characters’ deaths. Concussions cause the deaths of four characters in both episodes of *Travelers*. A science-fiction show, *Travelers*’ plot hinges on being able to transfer consciousnesses from person to person. Because characters must die to have another consciousness transferred into their bodies in the plot, head injuries were a way in which characters often died. In *Wayward Pines*, the injured boy recovers but a girl who was in the explosion with him that stated she was “fine” and “had a headache” later dies from an “epidural hemorrhage.” A concussion is not an automatic death sentence, and to frame it as such is an interesting and prevalent narrative for several of these episodes.

Shifts Over Time

Over the 54 years studied, 1963-2017, there are notable shifts in the narrative constructions of concussions. In the early years, television was more likely to portray a concussion as a serious medical condition. *The Fugitive* (1963) had the best depiction of the dangers of a concussion and the importance of proper diagnosis and treatment of the episodes in the sample. This is likely because it surrounds boxing, a sport with a history of concussion issues. *Little House on the Prairie* (1979, 1980) dramatically depicted concussions leading to blindness, but that may have more to do with the style of drama during the period that *Little House on the Prairie* aired. *Star Trek* (1995) also had a

serious depiction of a concussion, but, from there, the depictions seemed to transform into either a plot device, an afterthought, or humor. The three animated series as well as the *Star Trek* episode that make up the 2001-2003 time period in the sample ignore the concussion despite the word “concussion” being used. From 2009 onward, the concussions were clearly identified and diagnosed by a medical professional, but the results varied, ranging from the patient ignoring the advice (*Lie to Me*, *Hart of Dixie*, *Criminal Minds*) to the concussion being used as humor (*The Simpsons*, *Banshee*, *Lie to Me*, *Wayward Pines*, *Royal Pains*) to serious concussion effects (*White Collar*, *Ghost Whisperer*, *Travelers*, *Wayward Pines*, *Hart of Dixie*).

DISCUSSION

A total of 20 episodes of fictional American television series were analyzed for this study. All were chosen because they featured the keyword “concussion” on the *Internet Movie Database* (Table 1). The frames that appeared most frequently in these episodes were the typical TV concussion, concussions as minor, concussions as humorous devices, concussions as dangerous, and how the frames shifted over time.

The typical TV concussion based on the sample resulted from fights or battles, car accidents, and falls. Surprisingly, there were no cases of sports or athletics causing concussions in any of the episodes studied apart from boxing in *The Fugitive*. Statistically, however, the three ways in which concussions occurred throughout the sample are accurate for the realities of concussions. Studies show that falling is the leading cause of head-injuries among those 0-14 and 45 and older, while car accidents are the leading cause between 15-44 (Taylor et al., 2017). However, this study also explains that the leading cause of head-injury for the 15-24 age group is being “struck by or against an object” – representing all three ways in which concussions occurred in the sample.

Symptoms for the immediate after effects of a concussion tended to be accurate, as well. In the sample, concussion symptoms included memory loss, sensitivity to light, and headaches. All three of these are common short-term symptoms of mild to moderate head-injuries and accurately depict the after effects of a concussion (Coronado et al., 2015). As mentioned in the findings, every episode featured had some form of medical treatment, and many of the episodes featured a medical professional in a place that had medical connotations such as a hospital, medical facility, or even private facility. This is

an interesting facet, as studies show that some non-medical drama fictional television series are moving away from medical professionals speaking on health issues and instead allowing “laypeople” to speak (Verhoeven, 2008). What about a concussion makes the medical professional or medical surroundings so important that this trend is ignored and one of the two is brought into every representation? One possibility could be the frequency that concussions occur in the United States (Taylor et al., 2017) means that the injury is recognizable and widely known enough for the audience to know that the injured needs some form of medical treatment, even if there is misinformation present. For example, a study into how pregnant women view television representations of child-bearing suggests that there is a difference in the way viewers believe information on television affected their knowledge based on their prior knowledge of the subject (Bessett & Murawsky, 2018). Prior knowledge of a subject affects whether viewers believe the messages presented to them on television, and, in the case with concussions, the lack of a medical professional would make it less believable to the audience.

In many of the episodes studied, concussions were framed as minor. Throughout the study, concussions were portrayed as non-life threatening, downplayed or sometimes did not take precedence at all in the narrative. Studies show that the way in which concussions are portrayed can affect the perception of the severity of a head injury, as a study by McLellan (2018) highlights. The study examined media portrayals of concussions and the decision of players in a rugby league to “return-to-play” after injury and how that decision lowered the perception of the dangers of concussion to the audience. For example, a study by Martin, Wallace, Young, Harriell, & Tatman (2018) showed that participants who watched more hours of television per day were more likely

to agree that that reporting on concussions does not “educate the public” on concussions or CTE. A concussion being portrayed as minor or, even worse, simply forgotten as a part of the storyline, downplays the severity of a concussion and causes viewers to believe that injuries are not as serious as they are. In addition, the injured in several episodes would also quickly recover with little to no side-effects, and there was absolutely no mention of potential long-term effects. This is an important distinction from the realities of a concussion, as a major concern with this type of injury is the long-term effects. Studies show us that repetitive concussions can lead to increased risk for neurological disorders (McAllister & McCrea, 2017). Recent studies have even shown that one instance of a traumatic brain injury or concussion can have major long-term effects, as the results revealed that participants with a “mild TBI” had a 56% increased risk of Parkinson’s disease (Gardner et al., 2018). These long-term effects and disorders, such as CTE and even Parkinson’s, are a real concern for those who suffer concussions that were never mentioned in any narrative in the study even as a possibility. When these episodes frame concussions as minor via characters fighting through concussions, ignoring them to continue the plotline, or not mentioning the long-term effects, there is potentially an extremely dangerous effect on the audience’s perception of the true severity of a concussion.

Concussions were framed as humorous devices in many of the episodes sampled, as well. Studies show that humor can affect the perception of a health issue such as concussions. The study by Ahmed et al. (2014) on concussions and comedy explained that comedy can trivialize a serious issue, and that is the case here. Whether the concussion was a part of the joke, utilized for a punchline, or being an action from which

humor ensues, the way in which humor is used in the episodes has a massive impact on the way the concussion is being framed. Studies show this, as humor can have multiple effects when it comes to healthcare messaging on television. For example, in several of the episodes studied, the humor involving concussions stemmed from either completely downplaying an obvious injury, like Homer bleeding from his eyes in *The Simpsons*, or completely exaggerating the negative effects of the concussion, like the “your head must look like the inside of a Jackson Pollock” comment from *Banshee*. Neither of these examples is an accurate portrayal of a typical concussion. Instead, both are exaggerations for humorous effect. Studies show accuracy is important, as a study on *Seinfeld* episodes depicting health messages involving humor depended on whether the information portrayed was accurate (Trunfio, 2011). Another study that focused on humorous depictions of food allergies on television concluded that “portraying a health condition in a humorous context may reduce perceptions of seriousness and willingness to support public health policies to address risks associated with the condition,” as the exaggeration and lack of accuracy causes the audience to view the condition as less serious than in reality (Abo, Slater, & Jain, 2017, p. 803). In relation to this study, the humor may cause the viewer to view the concussion as less serious in reality because of the exaggeration and lack of accuracy. On the other hand, using humor to shame negative actions and to encourage healthy actions has been shown to have a positive effect on viewers. A study on the humorous representation of unprotected sex on television shows that humor increased the perceived severity of unintended pregnancy in participants, as well as reduced intentions to engage in unprotected sex (Futerfas & Nan, 2017). Unfortunately, there is no example of humor being used to shame a negative action in favor of a positive

one throughout this study. The closest the episodes come to this is in *Hart of Dixie*, as the concussed doctor jokes about his concussion only to be berated by other medical professionals. The doctor does not heed the advice of the other medical professionals, however, negating the idea that shaming this negative behavior reinforces a positive one.

The episodes studied also featured the frame of concussions as dangerous, or concussions as serious medical issues. This frame included treating concussions as the serious injury that they are, as well as exaggerating the symptoms. The problem with this frame occurs not with the seriousness of the injury, but with the way in which people receive information about their health and how this frame can affect their perception of a concussion. This is a problem because, as the study on concussion-related tweets by Sullivan et al. (2011) and concussion related YouTube videos by Williams et al. (2013) showed, inaccurate concussion information is spread throughout the media, and it is important to provide accurate information to the viewers. Exaggerating symptoms can lead to misinformation, as a study in the *International Journal of Preventive Medicine* highlights. This study focused on videos with the term “concussion” on the social media network YouTube and concluded with the suggestion that misinformation could easily be spread on social media (Betty, Corey, Christina, & Aurea, 2018). Other studies show how a concussion is treated can affect perception, as well. For example, a study by McLellan and McKinlay (2011) suggests that how a concussion is portrayed on television can affect the perception of appropriate concussion management based on rugby players playing through both visible concussion symptoms and recognition by commentators. It should also be noted that the danger in these episodes ranged from seriousness that accurately reflects a head injury to outlandish results such as instant death. While not concussion

specific, TBIs (traumatic brain injuries) that include concussions led to about 50,000 deaths per 2.8 million cases a year (Taylor et al., 2017). This is an extremely small section of the injured at less than .018%, which a viewer would assume is a much higher number based on the instant death of anyone who suffers a concussion on a show like *Travelers*. The misinformed threat of instant death or immediate, horrific results from a concussion brings up another factor: fear. Fear can affect the way in which someone reacts to a medical condition, and the way in which a concussion is dangerously represented can affect reporting. For example, a study on breast cancer focused on an episode arc of *90210* that highlighted gene mutations that increase breast cancer risk found that participants who watched the episodes were more likely to have increased fears regarding the “consequences” or the gene and therefore be more likely to talk to a doctor (Rosenthal, de Castro Buffington, & Cole, 2018).

Throughout the episodes studied, concussion representation tended to change over time. In fact, the older the episodes were the more seriously the concussion was treated. This is a departure from what the expectation would be, as most of the research involving concussions and its effects tend to be far more recent than these episodes. Why would shows in the 1960s take concussions more seriously than more recent shows? The easy answer can be found in *The Fugitive*, as concussions and its effects were an issue in boxing far before the realizations began to leak into sports like football. The earliest recorded concussion in boxing can be tied back to ancient Greece, as Homer once wrote of a boxing match that ended with one of the boxers dizzy and bleeding (Masterson, 1976). Prize fighting was also popular throughout England and a major part of English culture, but injury and death led to the sport being deemed illegal until stricter rules were

set in place. These stricter rules, while they cut down on injuries, naturally did not free the sport from concussions, as Martland's study on being "punch drunk" is one of the first real studies into the effects of head injuries on boxers (Martland, 1928). Boxing was the first sport to show significant concern about head injuries, which is likely why *The Fugitive* seemed so far ahead of its time in terms of the seriousness and importance of concussion treatment. As time progressed, however, it seems as if the seriousness of the concussion began to be downplayed. Concussions were used to further the plot in most cases or as an injury that seemed serious but would miraculously disappear once the plot no longer required symptoms to be present. Many times the concussion was completely ignored for other, seemingly more important plot points. Concussions are common, and it is likely that the audience knows someone who has suffered one. Therefore, it is an injury without many outward, visible effects that is perfect to add to the drama of a television series. It is almost as if, as sports like boxing became less popular, so did the mainstream knowledge of concussions. Most concerning, however, is that, as concussions once again have stepped into the mainstream light with the revelations with football, and television seems to have yet to return to the level of seriousness surrounding the injury that shows like *The Fugitive* portrayed.

All of this can be tied back to the theoretical frameworks mentioned earlier in the study. With reference to the theoretical frameworks used in the study, framing allows people to "classify" and understand the information that they take in, while making sense of the world around them (Goffman, 1974). Entman's definition of framing implied that frames are used to "diagnose, evaluate, and prescribe," as the frames in this study of concussions as minor, concussions as humorous devices, and concussions as dangerous

are a part of this process (Entman, 1993). Likewise, parasocial interactionism suggests that there is a relationship between the audience and the character (Horton and Wohl, 1956) and that this interaction validates the viewers feelings and thoughts while simultaneously influencing them (Giles, 2002). Applied to this study, the viewer has a relationship with the concussed character; therefore, how the concussion is framed influences the viewer.

LIMITATIONS/FUTURE RESEARCH

This study used a narrative analysis to examine the representation of concussions on fictional American television series. Through this narrative analysis it was discovered that concussions could be broken down into several distinct frames, including concussions as minor, concussions as humorous devices, and concussions as dangerous. Limitations to this study included the small sample size and the specific use of the *IMDb* keyword “concussion” to narrow the research and collect samples. In addition, non-American and non-fictional television was omitted to create the specificity of fictional American television. To expand research on concussions on fictional American television, a quantitative study breaking down such aspects of these examples as the genre, year, and network, among other things, would allow for frames to be connected more directly to certain types of television series. A quantitative study involving the use of the word concussion in the text would be equally as enlightening on the subject. Another area for future research could be a quantitative study focusing on the way medical professionals or medical treatment is framed in episodes featuring concussions. Lastly an audience study that presents episodes of each concussion framing and then records the results after viewing could explore the way in which each frame immediately impacts the audience.

CONCLUSION

Concussions are a common but serious injury that goes heavily underreported. The fictional American television episodes in this study portrayed concussions in ways that could affect viewer perceptions of concussions through the frames of concussions as minor, concussions as humorous devices, and concussions as dangerous. Concussions as minor, like in *Banshee* and *Criminal Minds*, can cause viewers to underestimate the dangers of a concussion. Concussions as humorous devices, like in *White Collar* and *The Simpsons*, can cause viewers to downplay the seriousness of a concussion. Concussions as dangerous, like in *The Fugitive* and *Travelers*, can cause viewers to overestimate the dangers of a concussion. These frames all affect the way in which viewers perceive concussions, and, in the end, are window into one of the many variables that can impact the reporting, diagnosis, and treatment of concussions.

It is telling that the most positive depictions of concussions, reporting, diagnosis, and treatment occurred in an older television show like *The Fugitive* at a time when the advanced technology required to study the effects of a concussion on the brain had yet to be created. It is also telling that the episode surrounding boxing, a sport known for concussion issues, had the best depiction. While the concussion was a part of every storyline sampled, the concussion was the focal point for the episode of *The Fugitive*. In all other episodes, the concussion was either there to create drama, a side story to break up the main story, or to further the plot. *The Fugitive* created an example of positive messaging towards the importance of reporting, diagnosis, and treatment of a concussion without even having all the information available on the injury that there is today.

The most negative aspect of the representation of concussions was perhaps the lack of any examples of long-term effects. Long-term effects of concussions are perhaps the most concerning, with potential neurological effects being the most dangerous. However, there were no examples of long-term effects or, more unsettling, no mention of the potential for long-term effects for an injury that clearly has the potential for long-term consequences.

It should also be noted that the lack of examples for this study on *IMDb* is startling, as head-injuries are an extremely common injury in fictional television. Why are these the only episodes that the keyword concussion makes it into the description when there are likely many more examples of fictional television shows with a concussion in the plot? This could be because the word “concussion” was spoken in nearly all the episodes, but it seems like there would be more episodes from other series where the word concussion was used. The lack of examples is telling, because, like the plots of many of the episodes sampled, the concussion takes a backseat to other aspects of the storyline – so much so, that it does not even make it into the plot description. In this same vein, a plethora of concussion research has been done on head injuries and sports, and yet there is just one example (*The Fugitive*) of this that made it into the criteria. Perhaps this is because “fictional” was in the prerequisites, but this is still a curious absence when compared to the available research.

As concussions are a common and widespread medical issue, it is important that media accurately reflects the importance of reporting, diagnosis, and treatment of this injury. Concussions are once again in the national spotlight due to the high-profile cases of CTE and other neurological issues in the NFL. Studies are quickly being done on the

impact of the NFL, NFL coverage, and other facets of the NFL on concussions and the perception of concussions. However, concussions are not limited to massive hits on a football field, and the impact of media such as television cannot be ignored.

The purpose of fictional television is to first and foremost entertain, but, as health messages can be shared and absorbed through fictional media, television plays an important role in the decision-making process when it comes to the reporting, diagnosis and treatment of concussions. The goal should be to accurately depict the dangers of this injury while also showing the necessity of proper diagnosis and treatment. As mentioned earlier, the absolute lack of any examples of long-term concussion effects in the sample is extremely concerning. However, the presence of medical professionals or medical treatment of some sort in every example is a positive step in the right direction. While the concussion itself is framed in ways that depict the injury as minor, humorous, and dangerous, the “typical TV concussion” is also framed as a legitimate medical concern across the board. The audience seems to already know that a concussion is a serious medical issue from either personal experience or mainstream coverage of concussions. Therefore, even if the concussion is not treated as a serious medical issue in the storyline, the episodes cannot get away with ignoring the medical implications surrounding the injury without seeming less realistic.

Concussions are not going away anytime soon, but the proper reporting, diagnosis, and treatment can limit the damage of this injury, and the way in which television portrays a concussion can play an important role in these steps.

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