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THE ATHLETE'S CONCUSSION EPIDEMIC

A Thesis Submitted to the Faculty of the Broadcast and Media Operations for the School of Arts,
Media, and Communications Department in Partial Fulfillment of the Requirements for the
Degree of Master of Arts
at
Lindenwood University

By

Andrew James Marsh

Saint Charles, Missouri May 2020

ABSTRACT

Title of Thesis: The Athlete's Concussion Epidemic

Andrew Marsh, Master of Arts/Mass Communication, 2020

Thesis Directed by: Mike Wall, Director of Broadcast and Media Operations for the School of Arts, Media, and Communications

The main goal of this project is to inform and educate you on the various threads concerning concussions in the world of sports. Athletes competing in contact sports at a high level are at risk of receiving a mild traumatic brain injury as well as suffering from post concussion syndrome. The reader can review the state of concussions and receive professional information from doctors and trainers. The audience can also get an inside look into the minds of players who have dealt with this injury themselves. One will find qualitative and quantitative data that presents information related to mental health issues caused by mild traumatic brain injuries. Personal accounts as well as statistical research accommodate the findings involving concussions as it pertains to hockey and football players at the professional level and other high performing levels. The focus is directed towards long term health complications and the various nuances of a diagnosed concussion within society.

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Introduction

As a Mass Communication student, my goal has to been well versed in all aspects of the communications field. At Lindenwood University, I have studied the aspects of a television broadcast, how to properly edit audio for radio, and the proper way to conduct a sports broadcast. For someone who looks to enter into the field of sports, I thought it would be appropriate to focus on a topic that continues to be a concern for the sports of football and hockey, concussions. The research on this topic proves to be educational while also falling under the field I want to become a part of in the future.

Concussion research has continued to grow, as it now has infiltrated the likings of sports. This is for the betterment of sports due to the copious amount of injuries suffered because of a traumatic brain injury (TBI). This research which I have compiled from 2018-2020 shows the risk each of these athletes face everyday while playing their respective sport. The younger athletes currently participating in football or hockey as well as the parents of these children can find my project online via website. The website is filled with research that includes informational videos and personal audio interviews. This research is comprised to give the audience an understanding of what risk concussions pose rather than telling the audience a specific way of living.

The research on my website is broken down into three categories (Medical & Mental Health, Media & Mindset, and Player Safety). Each category has two to three sub categories explaining how concussions effect that area specifically. If an audience member wants to add to the discussion, he or she can leave a comment or question on the Discussion Board located in the site's task manager bar. It is of utmost importance that the younger generation understands fully

the impact concussions can have on one's long-term health. By using current technology, the younger generation can feel more inclined to pay attention.

Context/Literature Review

A mild traumatic brain injury, also known as a concussion, has been at the forefront of discussion within sports. A concussion can occur when a person suffers one or multiple hits the head. The impact of a concussion can cause a brief impairment of brain function to the person who received the head injury. Athletes competing in contact sports such as football and hockey have been more susceptible to experiencing a concussion during their playing career due to the highly intense nature of each sport. While these athletes receive treatment for this injury to prevent short term implications, the longterm impact of concussions has been overshadowed. Although the recovery time for a concussion is roughly 7 to 14 days, some athletes will return to action before the end of the resting period. An athlete can experience post-concussion syndrome that can last up to a few weeks. Some of these symptoms include headaches, dizziness, fatigue, vomiting, blurred vision, and more. While a concussion at the time of impact can be very harmful, the ramifications post-concussion is the main focus of many doctors and physicians. According to Max N. Yang, Kristen Clemens-Noelle, Brian Parrish, and Wei Yang (2019), out of 44.7 million people, “Nearly 1 in 5 adults in the United States has a mental illness” (2019, p.1). If not treated properly, long term damage to the brain can possibly occur into what is known as Chronic Traumatic Encephalopathy.

Memory loss, confusion, depression, behavioral changes, and dementia are all signs of the traumatic brain disease known as Chronic traumatic encephalopathy. Referred to as CTE, this disease is most commonly associated with severe head injuries occurring within the game of football. Within the human brain, proteins known as tau proteins act as a stabilization for

microtubules. In CTE, an abnormality of tau proteins can form clumps, slowly spreading, killing brain cells. Dr. Ann McKee, a Chief Neuropathologist and director of the VA- BU-CLF Brain Bank of Boston, notes, “It was in 2005 that a pathologist named Bennet Omalu discovered Mike Webster had become the first American football player to have Chronic traumatic encephalopathy” (“What is CTE?”, n.d.). Although still in the early stages of research, there is a potential link between concussions and CTE. In 2016, the National Football League finally issued a statement that acknowledged the connection between the game of football and the disease.

The National Hockey League has had its fair share of injuries as well since its conception. After the lockout during the 2004-2005 season, the game itself evolved from a more physical style to a style consisting of speed and skill. However, with the lack of physical intimidation, many skilled players are finding themselves in a vulnerable position, leading to injuries. In 1997 to 2004, the years leading up to the lockout, a recorded 559 players suffered a concussion. The overall rate of concussions during that span was 5.8 per 100 players (Benson, Meeuwisse, Rizos, Kang, and Burke, 2011). Former players of both leagues have spoken out in order to educate the masses of the potential harm improper concussion treatment has on the lives of those who experience the injury.

As it pertains to CTE, according to Shauna H. Yuan, Department of Neurosciences at the University of California, San Diego, and Sonya G. Wang, Department of Neurology at the University of Minnesota, CTE symptoms can be broken down into two different groups. The authors explain, “one group presents with changes in cognitive function, including memory and executive impairment. A second group presents with behavioral changes, including impulsivity and violent behavior prior to mood or cognitive decline” (Yuan, Wang, 2017). The former

athletes who have spoken out have discussed their issues, mentioning how tough it is to tell their story. Many people that enjoy watching football or hockey are fed an inaccurate description of all the nuances surrounding a concussion. Authors of “Invincible bodies: American sport media’s racialization of Black and white college football players”, Siduri J. Haslerig, Rican Vue, and Sara E Grummert (2018) suggest, “Print and broadcast media often minimize the severity of head injuries through flawed or misleading reporting” (p. 5). There is a lack of knowledge within the sports media that inaccurately depicts concussions. According to authors Osman Hassan Ahmed and Eric E. Hall (2016):

“The use of misleading terms such as “mild concussion”, ‘minor concussion’ and ‘slight concussion’ are commonplace in the media. Although media articles are often written by individuals (i.e. journalists) who are not medically trained, these articles have the potential to influence perceptions regarding concussion for a wide audience due to the global reach of the internet” (Goff, 2015 as cited in Ahmed & Hall, 2016, p. 7).

A study was conducted that analyzed 98 videos on YouTube with over 100,000 views with the keyword “concussion”. Of the 98 videos, 48% were consumer based, 50% were television based, and 2% were internet based. Out of all the videos posted, none of them were considered to be professionally accurate. Of these videos, 48% consisted of sports with very few mentioning concussion treatment or prevention (Kollia, Basch, Mouser, and Deleon, 2018.)

Overall, the lack of knowledge on this subject directed by the media has placed athletes in an unfortunate circumstance. In return, these athletes can feel pressure to return to game play which can ultimately lead to serious or worsening effects for a player’s health in the future.

Research Methodology

This project aims to use qualitative and quantitative data to present information related to mental health issues caused by mild traumatic brain injuries. Personal accounts as well as statistical research accommodate the findings involving concussions as it pertains to hockey players at the professional level. Primary research in the form of interviews and surveys are included in this project. Secondary Research such as database research and video are included in this project as well. The focus is directed towards long term health complications with concussions having an impact on the media, players, and the player's health.

Production and Analysis

The link between chronic traumatic encephalopathy and concussions has still yet to be proven, however, research being made by doctors working closely with the disease have pointed to these two subjects being linked. Even though multiple former athletes have been diagnosed with the disease, there is still no conclusion that mild traumatic brain injuries are linked to CTE. However, according to Shauna H. Yuan, Department of Neurosciences at the University of California, San Diego, and Sonya G. Wang, Department of Neurology at the University of Minnesota, CTE is most commonly associated with contact sports within the United States with symptoms formed into two groups. The authors note, "one group presents with changes in cognitive function, including memory and executive impairment.

A second group presents with behavioral changes, including impulsivity and violent behavior prior to mood or cognitive decline" (Yuan, Wang, 2017). Those opposing the link could make an argument that these symptoms pose as dementia. However, the authors explain the diagnoses of the disease, stating, "the definitive diagnosis for CTE is neuropathological

evidence of early perivascular tau deposition in the brain. Tau is a microtubule binding protein, important for axonal transport. Abnormal phosphorylated tau deposition is also found in other types of neurodegenerative diseases, such as Alzheimer's disease" (Yuan, Wang, 2017).

Unfortunately, due to changes in behavioral patterns, a person dealing with these symptoms can be misconstrued as a psychiatric diagnosis. Tau deposition may be found in other parts of the brain in the later stages of CTE if the patient is not treated correctly.

Concussion treatment can be viewed from multiple perspectives depending on what side of the screen one is viewing from. In this case, the media, whether it be online or on a tv broadcast, has shaped the way fans, players, and sports organizations view concussions. According to Ian R. Murray, Andrew D. Murray, and James Robson of *Sports Concussions: Time for a Culture Change*, "Concussion has long been viewed as a benign occurrence, "part and parcel" of sport, and for some even considered as a "badge of honor." Convincing society of the importance of recognizing concussion is particularly challenging because most athletes who experience concussion seem to recover without readily apparent consequence" (2015, p. 76). The problem occurring is indeed the quick turnaround of players after they receive the head injury. Most fans wait for their favorite player to return in a few weeks, and once that player does return, people seemingly forget it ever happened. The authors also mention, "The recent media focus on the long-term effects of concussion should not deter people from participating in sport, where the positive health benefits of participation are considerable. Rather, it should serve as a stimulus for a cultural change in our attitudes toward concussion and its management" (2015, p. 77). The media has a way of twisting the narrative so that it

looks like players are not benefitting from being active rather than the narrative be focused on ways to combat concussions in a reasonable and healthy manner.

It can be said that the perspective given to the people from the media about the state of concussions can be misconstrued. While there are media outlets that report factual information on the status of concussions within sports, there are other sources that are not particularly correct. Sometimes it is not directly the fault of the tv broadcast televising a game, however, indirectly the announcers will make comments that ultimately don't reflect how concussions should be portrayed.

The disease known as CTE will continue to play a factor in the lives of many athletes in the years to come. There is no stopping CTE, however, there are plenty of alternatives to combatting the disease. Player safety within the games of football and hockey are imperative to minimizing the damage concussions pose.

Through my primary research, I was able to gather personal opinions on the subject from a media member as well as a former player. Through the surveys conducted, I was able to find out how many people have suffered a concussion. In doing so, I also enhanced my social media skills and broadcasting skills, two skills that I did not excel in prior to enrolling at Lindenwood University.

Conclusion

Overall, I believe this project to be a success. I have been conducting research over the past four semesters to bring this project to life. The education of others as it pertains to my project was the ultimate goal when enrolling at Lindenwood University. While there were a few road bumps on the way, I believe I have produced a successful project dealing with

concussions in sports. Although I was not able to conduct video interviews with those I had reached out to, I believe the one's I talked to gave informative insights and opinions into the matter.

The strength in this project lies with the layout of the website and its ability to lend itself to a younger audience. The ability to keep a younger audience member attentive throughout each category is what will make this project a success in the long run. Having a discussion board for others to continue the conversation after absorbing the rest of the information will be a sign of success for the future of concussion research. As long as there is an audience to educate, the discussion will continue to push player safety in the right direction.

The importance of media influence on the fans and players as it pertains to concussions can not be overlooked. Rising technology will give way to protection in the future, but continued education for the fans and players will ultimately give way to a safer sport.

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