

Attitudes of Coaches and Athletes:
The Impact of Attitudes on Concussions in Athletics

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Abstract

The purpose of this study was to explore coaches and athletes understanding of concussions and comparing what coaches and athletes themselves say about concussions. This study involved the use of surveys designed specifically towards athletes and coaches about the awareness, diagnosis and educational background of concussions. Research in this area should continue as there is very little information available regarding educational implications of coaches and athletes about concussions.

CHAPTER 1

INTRODUCTION

Overview

A concussion is a type of traumatic brain injury (TBI), caused by a bump, blow, or jolt to the head that can change the way the brain normally works. Concussions can also occur from a blow to the body that causes the head to move rapidly back and forth. Even a “ding,” “getting your bell rung,” or what seems to be mild bump or blow to the head can be serious.

Concussions can occur in *any* sport or recreational activity. It is important that all coaches, parents, and athletes learn the signs of a concussion and the steps to take should the symptoms of a potential concussion occur. Concussions have been a major concern because of the complications concussions can cause and the devastating effects they have if athletes don’t seek the proper care.

Second Impact Syndrome (SIS) occurs when an athlete suffers post-concussive symptoms following a head injury. If an athlete returns to play too soon following a concussion and sustains another blow to the head, diffuse cerebral swelling, brain herniation, and death can occur. These series of events happen so rapidly that usually there is not enough time to stabilize or transport an athlete from the playing field to the emergency room. The mortality rate for SIS is close to 50%. It’s important to discuss SIS because athletic trainers and people in the sports medicine world are feeling more pressure from the coaching staff to return athletes back to play more quickly following concussions and events like SIS are occurring more frequently.

There are many characteristics, personality traits, and responsibilities that an individual must interconnect, balance and perfect if they are going to fulfill their full potential as a coach to provide their players with the highest level of guidance possible. In today’s competitive world,

coaches appear to have less sympathy when their players sustain head injuries, often demanding that the sports medicine staff release players back into play before they are ready (Mallett & Cote, 2006). A major problem that has been in the eye of football, especially in the National Football League (NFL) is concussions among football players. Football players are being hit in the head repeatedly and a majority of them will face a concussion in their careers. Many football coaches played with concussions themselves back in the early periods of football, and have trouble relating to the new guidelines that have been set forth by the sports medicine staff.

The recommendations changed in 2013 as researchers suggested possible links between repeated head trauma in football and chronic traumatic encephalopathy (CTE), a degenerative disease that can lead to permanent brain damage. These issues are not just occurring at the professional level, they are starting as early as the high school level and continuing up to the college level, where a lot of pressure is not only on the coaches but on the athletes themselves. Athletes are feeling the immense pressure of success at the college level and when an injury or a concussion occurs, most athletes feel the need to hide their injuries from coaches and the sports medicine staff in fear of losing their starting spots or playing time once they are cleared to return to play. Most athletes also feel pressure from the coaches themselves about being tough and playing through injuries and concussions because in the coaches mind, it's not that critical.

Coaches are also pressuring the sports medicine staff at the college level to return athletes back to play before they are ready; and many athletic trainers are losing their jobs because of it. Coaches themselves are required to take an online professional development session focused on concussions as a way to spread the word on the seriousness of concussions and most coaches do comply. Coaches are getting better at prevention and going through training, but there are still coaches who do not see the concerns when dealing with athletes and concussions. Coaches'

negative attitudes can also rub off on their athletes causing the athletes to develop negative attitudes toward concussions.

Coaches' leadership behavior is an important factor affecting athletes' psychological outcomes. The multidimensional model of leadership proposes that group performance and member satisfaction are functions of the congruence among three states of leader behavior: required, actual, and preferred behavior (Chelladurai & Riemer, 1998). Coaches may need more education in those changes (Mallett et al., 2006). Coaches want to win and athletes want to compete and the challenge is to find the right balance between playing with some discomfort and playing when it's dangerous.

Statement of the Problem

The purpose of this study is to explore coaches and athletes understanding of concussions and comparing what coaches and athletes themselves say about concussions.

Hypothesis

This study is based on a descriptive research model. There is no null hypothesis.

Operational Definitions

For the purpose of this study, the term “*athlete*” means a registered college student who plays for an official college varsity team. Athletes who will participate in this study are Division III (DIII) athletes at a college who are participating in fall sports which include; Men's/Women's Soccer, Field Hockey, Women's Volleyball and Cross Country

The term “*coach*” refers to the individuals who instruct and direct the athletes in practice and during games for their designated sport. Coaches who will participate in this study are DIII coaches at a college who coach; Men's/Women's Soccer, Field Hockey, Women's Volleyball and Cross Country.

The term “***concussion***” refers to a traumatic brain injury that alters the way the brain functions.

CHAPTER TWO

LITERATURE REVIEW

Overview

This literature review examines the attitudes that coaches and athletes have on athletic injuries, Injury prevention programs, and rehabilitation; concentrated specifically on concussions. The first section provides insight on a controversial sports injury that is plaguing athletes - concussions. The second section examines the coaches' attitudes towards concussions and how they view injury prevention programs and the benefits of rehabilitation for their athletes. The third section provides insight on the athletes' attitudes about concussions and if they believe that injury prevention programs and rehabilitation works in recovery from these injuries. Finally, the literature review will discuss the interventions for improving the problem of negative attitudes associated with these injuries and how we can remediate these issues.

Concussions

Concussions have been on the rise in the athletic population over the past few years. They have also been the center of many controversial topics, especially in the National Football League (NFL) and collegiate athletics due to the severity of these injuries and the impact on possible return to play. Concussions can be defined as any alteration in cerebral function caused by a direct or indirect force transmitted to the head resulting in brief loss of consciousness, light-headedness, blurred vision, headaches, nausea, vomiting, balance disturbance, photophobia, amnesia, and difficulty concentrating (Wojtys, Hovda, Landry, Boland, Lovell, McCrea, & Minroff, 1999). Concussions can be difficult to diagnose, as symptoms and effects are presented differently in each person who sustains a blow to the head. It's estimated that approximately

200,000 to 300,000 concussions occur each year in sports in the United States. This number can only be approximated because many concussions in sports are evident only to the individual player, who may be motivated not to report their injury out of fear that they may be removed from play (Cantrill 2011). This is where the controversy with concussions comes into play in athletics. Three of the major decisions facing concussion controversies include (1) returning to play, (2) value of published guidelines, and (3) risk of catastrophic injury or permanent cognitive deficits (Standaert, Herring, & Cantu, 2007). Return to play protocols set forth by sports medicine staff usually consists of different strategies: (1) physical and mental rest, (2) exercise programs of gradually increasing intensity, and (3) medical clearance and return to play (ACSM, 2011).

The physical rest section of the return to play protocol usually requires the athlete to seek as much rest as possible. While bed rest is not required, strenuous activity should be avoided until the athlete has no post-concussion symptoms (for at least 24 to 48 hours) after the last symptom is experienced (National Athletic Training Association (NATA), 2013). Just as athletes recovering from a concussion need to get physical rest, they also need to get cognitive (mental) rest as well. A concussion impacts the brain's cognitive function which involves thinking, concentrating, learning and reasoning, and the brain's actual structure. It makes sense that engaging in cognitive activities is lessened during a concussion. It is important for an athlete to do something that doesn't cause an athlete's symptoms to worsen. As a result, both the most recent international consensus of concussion experts and, most recently, the American Academy of Pediatrics recommend that athletes limit scholastic and other cognitive activities to allow the brain time to heal. The National Athletic Training Association (NATA) broke down cognitive rest stating that cognitive rest means time off from school or work, no homework, no reading, no

visually stimulating activities (video games, computers, texting or use of cell phones and television), no exercise, no trips or social visits and to get as much rest and sleep as possible (NATA 2013).

Once an athlete is symptom free for 24-48 hours he/she is allowed to begin the return to play protocol which is usually a five day progression marked by different exercises and stages, which vary in every college setting. An athlete must be symptom free through all stages to be able to be cleared and re-evaluated by a physician. If the team physician feels that the athlete is ready and passes all clearance's, than the athlete is allowed to return to play (ACSM, 2011).

Coaches Attitudes

There are many characteristics, personality traits, and responsibilities that an individual must interconnect, balance and perfect if they are going to fulfill their full potential as a coach to provide their players with the highest level of guidance possible. The problem though lies with coaches and their attitudes toward winning and having a closed mindset that winning is everything. Coaches are becoming too involved with the winning aspect of the game and many wonder if coaches even realize the true importance of playing the game. Coaches are adding too much pressure on athletes that can ultimately cause burnout and even force the athlete to leave the sport. Coaches are also becoming demanding over injuries and forcing the sports medicine staff to release a player back into play after sustaining an injury - anything from an ankle sprain to a concussion (Mallett et al., 2006).

Coach's expert knowledge and experience, as well as scientific acquisitions, confirm the importance of the role of expert coaches in the development of careers of potential top-level athletes in individual and team sports. It is very important for the expert coach to know how to make and insist on demands that are prime in stimulating the development of an athlete's

potential (Trninic & Papic, 2009). Relations between athletes and coaches aren't stabile. Competitive success and failure significantly influence this relationship. In addition, the factors that affect the coach-athlete relationship include sports type, competition level, athlete's age, and coaches and athletes sex. The relationship between athlete and coach is exceptionally important in that the coach isn't responsible only for athlete's successful career, but also that his relation to the athlete can produce termination of an athlete's career.

A major problem that has been central in the NFL in recent years is the issue of concussions among football players. Football players are being hit in the head repeatedly over and over again and the majority of them will face a concussion in their career. Many football coaches played with concussions themselves, and have trouble relating to new guidelines that urge medical staffs to run baseline and post-injury tests and to rest players for longer periods after head injuries. The recommendations changed in 2013 as researchers have suggested possible links between repeated head trauma in football and chronic traumatic encephalopathy, a degenerative disease that can lead to permanent brain damage (ACSM, 2011).

Coaches' leadership behavior is an important factor affecting athletes' psychological outcomes. The multidimensional model of leadership proposes that group performance and member satisfaction are functions of the congruence among three states of leader behavior: required, actual, and preferred behavior (Chelladurai et al., 1998). Coaches may need more education regarding those changes (Mallett et al., 2006). Coaches want to win and athletes want to compete and the challenge is to find the right balance between playing with some discomfort and playing when it's dangerous. While many coaches push for athletes to complete injury prevention and rehabilitation programs, coaches never fully demand it.

Athletes' Attitudes

Without athletes, sports would simply not exist. Athletes are known for being some of the toughest, strongest, and fastest people with an attitude to win and only win. Athletes are also known for one other thing that hides behind the uniform. Athletes are known for ignoring injuries and playing through pain, because that's what is expected and most fear losing their spot or position on the team if they suffer from an injury (Malcom, 2006). Research suggests that ignoring pain is expected in organized sports and the majority of coaches will ignore athletes' complaints of any pain and tell athletes to simply shake it off. This has become a norm and athletes are now, toughing it out and shaking it off. Athletes do not necessarily start out with this tough attitude. Many young athletes develop it during youth and into adolescence because it's what they are taught by parents and coaches. Coaches have been blamed for causing this tough attitude in athletes because coaches want tough dedicated athletes who will stop at nothing to win (Dixon & Sagas, 2007). Athletes are feeling excessive added pressure to succeed in their sport from coaches, that they are not allowing themselves to heal properly after sustaining an injury.

Playing with pain is a key principle of the sport ethic, a set of ideas that together comprise norms of traditional athleticism. Also included in the sport ethic are the beliefs that athletes make sacrifices for the game, that they always strive for distinction, and that they refuse to accept limits in the pursuit of their dreams (Hughes & Coakley, 1991). Athletes who adhere to the sport ethic must focus both on proving themselves and on improving their abilities. Improvement comes through hard work, which, according to the sport ethic, necessitates enduring and even learning to welcome pain.

For those athletes who are fully committed to the sport ethic, little distinction is made between minor body aches associated with rigorous physical exertion and more serious pain that signals the onset of a potentially debilitating injury (Malcolm, 2006). Pressure and stress add to athletes' attitudes towards injuries because an athlete does not want to deal with the repercussions of an injury and the rehabilitation and time it takes to come back. Rehabilitation programs are designed to help an athlete come back from an injury and most rehabilitation programs are developed by athletic trainers who monitor the athlete and help them progress through specific stages of the injury repair phase (Fisher & Hoisington, 1993).

Burnout is another factor that plagues athletes' attitudes toward sports. The emotional/physical exhaustion dimension taps feelings associated with being emotionally and physically exhausted by the demands of training and competition. The reduced sense of accomplishment dimension assesses athletes' feelings of personal growth and successful achievement through their sport participation. The devaluation dimension assesses athlete's loss of interest in sport and their desire to withdraw (Raedeke & Smith, 2001).

Prevention Programs

Concussions are a tough injury to manage due to the mechanism of injury and the differences in symptoms that vary by athlete and sport. Concussions cannot be prevented in sports, but concussions can be managed and if proper education is promoted in schools, concussions can be managed. Athletes tend to hide their concussions from medical professionals because they believe a small headache isn't a big deal (McCrea, Hammeke, Olsen, Leo & Guskiewica, 2004). Players also seem to be largely unaware of common signs and symptoms indicating concussion and the potential seriousness of continued participation in contact or collision sports after an initial concussion. Future prevention initiatives should focus on

education to increase athlete awareness of concussion and its risks and promote open lines of injury report.

Athletes also need to be aware of second impact syndrome (SIS), which occurs when the brain swells rapidly, and catastrophically, after a person suffers a second concussion before symptoms from an earlier one have subsided (McCrea et al., 2004). This second blow may occur minutes, days, or weeks after an initial concussion and even the mildest grade of concussion can lead to SIS. The condition is often fatal, and almost everyone who is not killed is severely disabled. In order to prevent SIS, guidelines have been established to prohibit athletes from returning to a game prematurely. For example, professionals recommend that athletes not return to play before symptoms of an initial head injury have resolved (McCrea et al., 2004). Due to the serious nature of SIS, return to play protocols are set by the sports medicine staff for proper health and safety of athletes.

Both athletes and coaches tend to have negative attitudes on concussion education and don't take the severity of a concussion seriously. Many times, athlete's play it off like it's no big deal and coaches tend to not know about it and elect not to say anything, or they do not know about it because the athlete fails to disclose it. What athletes and coaches need to understand is that a concussion needs to be taken more seriously because it can do more than sideline an athlete, it can potentially kill them.

Along with these injury prevention programs, it is important to educate both athletes and coaches on negative attitudes toward injuries and educate them on why they should not hide injuries from the sports medicine staff. It is also important to educate both athletes and coaches on concussion, concussion symptoms, complications of concussions and SIS. Education is key in preventing injuries and looking out for the health and safety of athletes. Athletic trainers and

other members of the sports medicine staff need to take extra time to educate athletes during the off-season to help prevent injuries. Athletic trainers also need to educate athletes on the importance of rehabilitation and injury prevention programs.

Summary

Concussions effect athletes all over the world and can occur in any sport. The sports medicine staff needs to intervene and develop intervention programs for both athletes and coaches on injuries, injury prevention, and rehabilitation of injuries. Education is the only way to stop negative effects of concussion injuries with athletes and coaches and in order to improve the attitudes of coaches and athletes towards injuries, they need to be able to understand the consequences of hiding and not taking proper care of these injuries. This challenge can all stop with proper education and proper protocols that need to be set forth and required by the athletic administration staff. The athletic administration staff also needs to develop proper consequences for all those that do not follow the proper steps in taking care of the health and safety of athletes. This can also include athletes who do not follow proper prevention programs and rehabilitation and the athletes who hide injuries from the sports medicine staff. If all of this is properly taken care of, than the world of sports can be a much safer place.

CHAPTER III

METHODS

Design

This study is a descriptive study using surveys to determine the attitudes of both coaches and athletes regarding concussions. There will be two surveys given during the fall athletic season. One survey will be given to Gouchers' fall athletes and another survey will be given to coaches of fall sports. Variables include discussing the term athlete and coach, defining these roles by operational definitions and defining the term concussion (see Chapter I).

Participants

The participants used in this study are Division III athletes and coaches at a college located in Baltimore, Maryland. The focus of the study will be on fall athletics (Men's/Women's Soccer, Field Hockey, Volleyball, Cross Country). The ages of the athletes is between 17-22 years of age. Participants will be coaches, assistant, and volunteer coaches of specific fall sports (Men's/Women's Soccer, Field Hockey, Volleyball, Cross Country). Coaches' participant ages vary between 22 and 60 years of age.

Instrument

The instrument used in this study is a survey specifically designed to look at attitudes and perceptions regarding concussion injuries. The surveys' were developed based on researching information about concussions and care regarding such injuries. Reliability measures of the survey are unavailable. The importance of responding to the survey truthfully will be stressed.

Procedure

Each fall sports team was asked if they would like to volunteer for a survey about concussions. They were not required to fill out the survey, but candy was offered to those as an

incentive to fill it out. Those who volunteered for the survey were given a URL address to an online survey site to fill out the survey. Athletes were told that the surveys were anonymous and that their names would not be identified. Overall 74 athletes filled out the online survey. For the coaches, an email was sent to all fall coaches asking if anyone would like to help out and fill out a survey about concussions. The email also stated that they were not required to fill out the survey, but if they did, it would be anonymous. Only three coaches responded and volunteered to fill out the online survey.

CHAPTER IV

RESULTS

This study examines coaches and athletes understanding of concussions and the proper management of concussions. This is a descriptive study using survey methodology. The survey given to coaches can be found in Appendix A. The survey given to athletes can be found in Appendix B. Data from the surveys were placed into an Excel spreadsheet and analyzed. **Table 1** displays the survey questions that coaches and athletes had in common. **Table 2** displays the data from coaches for their unique questions. **Table 3** displays the data from athletes for their unique questions.

This descriptive study has no hypothesis as stated in Chapter I of this paper.

Table 1

Data from Questions Common to Both Coaches and Athletes

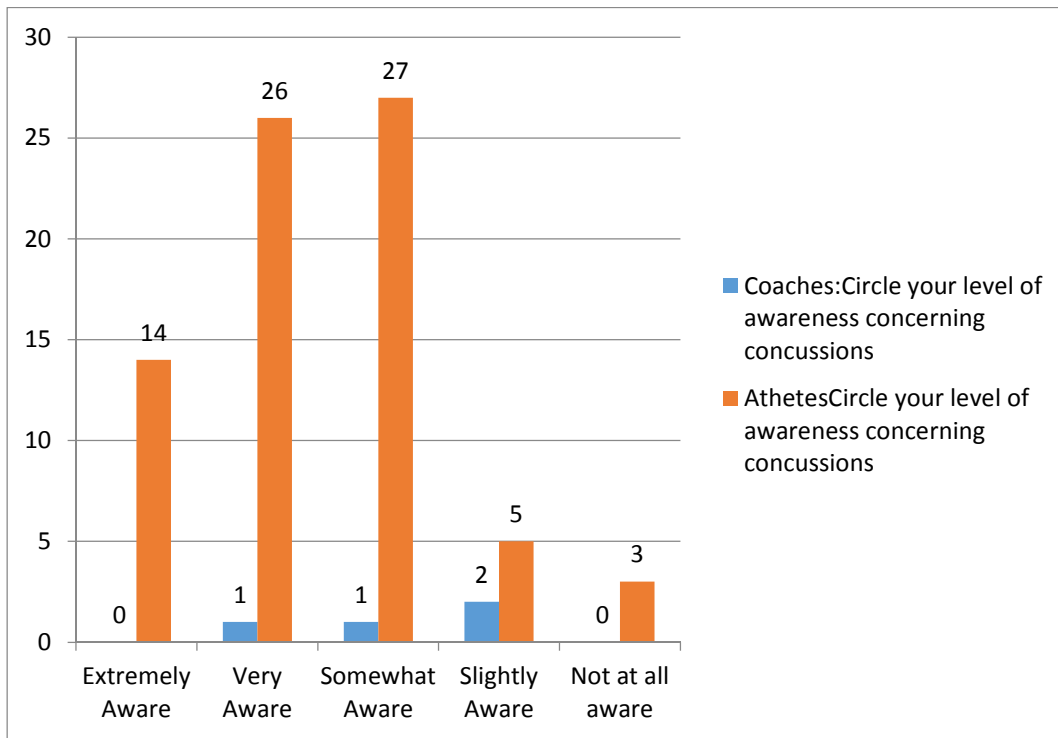


Table 2
Coaches Responses To Unique Questions

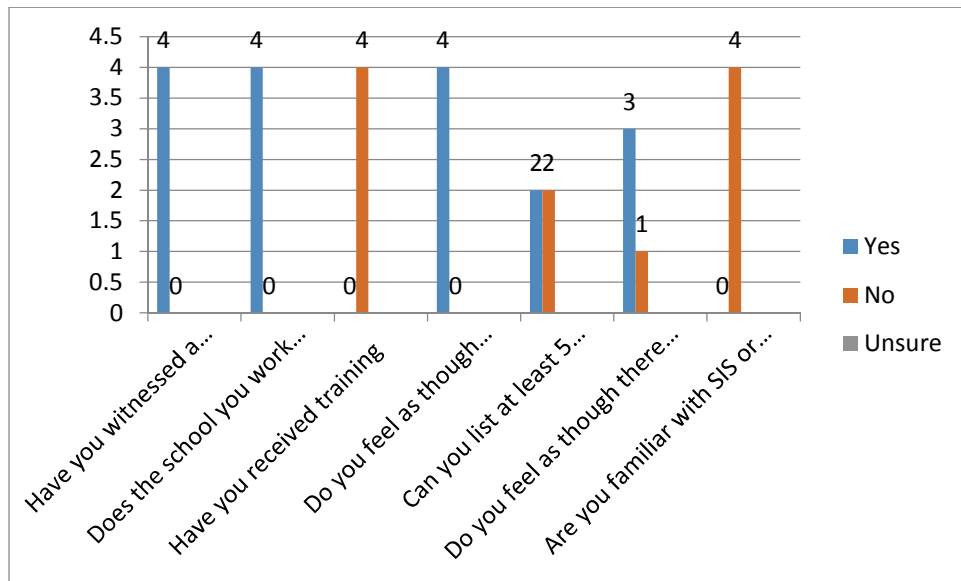
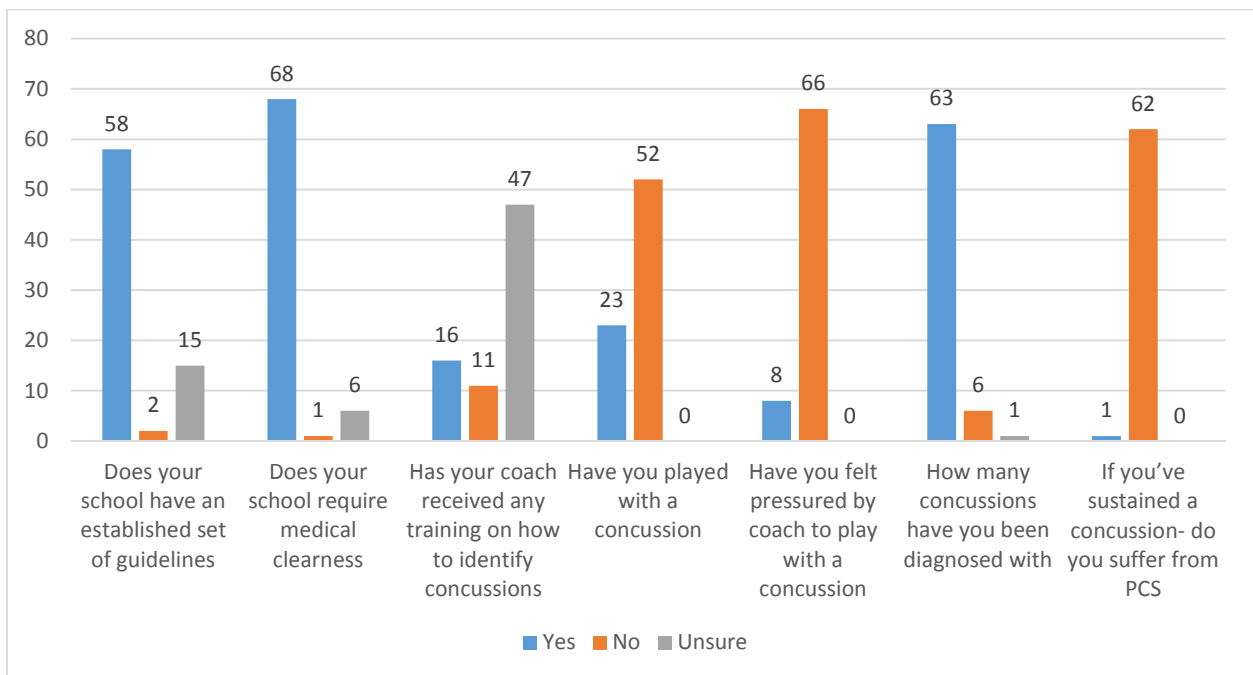


Table 3
Data from Athletes To Their Unique Questions



The survey also asked an open-ended question of both athletes and coaches for any additional information respondents wished to add. Briefly, the summary of those responses from coaches was that medical professionals were too quick to bench athletes with headaches. Many schools have different standards but most coaches feel schools should have a common standard to follow. Coaches also feel as though athletes do not necessarily always tell the truth and that some lie to play and some lie to get out of playing/practicing.

For athletes, most described not being educated enough about concussions in their responses. Athletes also found it difficult to determine the differences between just a headache and symptoms of a concussion. Lastly, most talked about making sure to encourage teammates to report concussions to the medical staff and when in doubt, sit out. Survey answers are presented in Appendix C.

There was an additional open-ended question for athletes. The question dealt with symptoms or problems they were currently experiencing due to a concussion. In summary, they reported: headaches; trouble studying/difficulty remembering class material; dizziness; depression; balance problems; sensitivity to light; confusion; stuttering/forgetting words; and forgetting what they were doing. Responses to this question are presented in Appendix D.

CHAPTER V

DISCUSSION

This study examines coaches and athletes understanding of concussions and the proper management of concussions. This is a descriptive study using survey methodology. There was no hypothesis in this descriptive study.

Threats to Validity

Two types of threats to validity exist: external and internal validity. External validity refers to the type and size of the sample. The coaches and athletes were all from the same small liberal arts college and thus represented a “convenience” sample in that they worked or knew the researcher. As such, the study should not be generalized further than the institution involved. The study does serve as a source of information and a methodology for other institutions to use as a model.

Considering internal validity, descriptive research is impacted by the attitudes and experiences the responders have at the time of completion of the survey. As such, it is not verifiable but rather serves as a model and guide for the institution and for other researchers.

Connection to the Literature

Research has shown that concussions are a difficult injury to diagnose due to the nature of the injury and the time it takes for symptoms to possibly show up. Most of the time concussions present with just a headache. Most athletes and coaches believe that having a headache is not “necessarily” a concussion. Coaches, who control what happens on and off the field, and who have leadership traits, lack the proper knowledge in understanding what

concussions, entail and how they are properly diagnosed and treated. Research has shown the lack of knowledge and this study also shows it, which is a huge issue. The same goes for athletes, research has shown that athletes simply just want to play the game, they want to win and they do not want to lose their playing time. But further research needs to be done to look at why coaches and athletes are not being properly educated on concussions.

Implications for Future Research

Future research could help identify why proper steps have not been taken in the college athletic world concerning the recognition and proper diagnosis of concussions. Also, future research can hopefully look at why it has taken this long for concussions to even become an issue since sports have been around for so long. Research would also be useful looking at post-concussion symptoms and why they happen months, even years after an athlete has recovered from a concussion. Future research could also help by setting one standard that could be used for all colleges instead of each college/university having their own standard.

Conducting research using a broader sample of colleges and universities, inclusive of both Division 1 and Division 3 entities would also be recommended. Such research would need to include a broader range of sports and include both male and female athletes.

Summary

Concussions have been on the increase over the past few years because more data is coming out about concussions and the serious complications that can potentially effect athletes if not properly evaluated and treated. Colleges have set guidelines for returning athletes back to play safely after they've sustained a concussion. The problem lies in the attitudes and behaviors exhibited by athletes and coaches when dealing with concussions and the return to play process.

Coaches have become more demanding regarding injuries and have forced members of the sports medicine staff to release players back into play too quickly after sustaining a concussion.

Athletes are also known to ignore injuries and play through pain because that's what is expected and most fear losing their sport or position on the team if they suffer from an injury.

As seen in the surveys administered for this study, it can be concluded that education is a key factor in the detection and recognition of concussions by both coaches and athletes. Most athletes and coaches are only somewhat educated regarding concussions. This conclusion is unacceptable because both athletes and coaches need to be fully aware of concussions and the serious complications that can arise from concussions.

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Appendix A:

Coaches Survey

1. Circle your level of awareness concerning concussions
 - a. Extremely aware
 - b. Very aware
 - c. Somewhat aware
 - d. Slightly aware
 - e. Not at all aware
2. Have you witnessed a concussion during your duration as a coach
 - a. Yes
 - b. No
3. Does the school you work for have established set of guidelines pertaining concussions
 - a. Yes
 - b. No
 - c. Unsure
4. Have you received training or education about concussions within the past year
 - a. Yes
 - b. No
5. Do you feel as though athletes hide their concussions so they don't miss playing time
 - a. Yes
 - b. No
6. Can you list at least 5 symptoms of a concussion
 - a. Yes
 - b. No
 - i. If yes- please list
7. Do you think concussions are a serious injury
 - a. Yes
 - b. No
8. Do you feel as though there are negative stigmas associated with concussions
 - a. Yes
 - b. No
9. Are you familiar with Second Impact Syndrome or CTE?
 - a. Yes
 - b. No
10. Do you have any suggestions, ideas, or thoughts concerning concussions and your experiences with sports?

Appendix B:

Student Athlete Survey

- 1.) Circle your level of awareness concerning concussions
 - a. Extremely aware
 - b. Very aware
 - c. Somewhat aware
 - d. Slightly aware
 - e. Not at all aware
- 2.) Does your school have an established set of guidelines/protocols pertaining concussions
 - a. Yes
 - b. No
 - c. Unsure
- 3.) Does your school require medical clearance before returning to play
 - a. Yes
 - b. No
- 4.) Has your coach received any training on how to identify the signs and symptoms of a concussion
 - a. Yes
 - b. No
- 5.) Have you played with a known concussion or symptoms consistent with a concussion
 - a. Yes
 - b. No
- 6.) Have you felt pressured by any coach or member of a coaching staff to play with a concussion
 - a. Yes
 - b. No
- 7.) Do you feel as though a concussion is a serious injury
 - a. Yes
 - b. No
- 8.) How many concussions have you been diagnosed with over your whole sports career
 - a. 1-2
 - b. 3
 - c. 4
 - d. 5+
- 9.) If you've sustained a concussion- have you or do you currently suffer from any post-concussion symptoms?
 - a. Yes
 - i. If yes- list symptoms
 - b. No
- 10.) Do you have suggestions, ideas, or thoughts concerning concussions and your experiences with sports?

Appendix C:

Questions: Do you have suggestions, ideas, or thoughts concerning concussions and your experiences with sports?

Athlete Survey Answers:

- I feel like coaches need to take concussions seriously as trainers. A more open dialogue with coaches might be helpful- depending on the coach
- I have been lucky and usually only had mild concussions, but I find it is hard to determine the difference between a headache and the symptoms of a minor concussion
- I have never experienced a concussion but from what I have seen and heard, concussions are very serious. You will only be competing in your sport for a short period of your life. People who continue to play with concussions jeopardize their living conditions beyond playing in their respective sport. Deciding whether to play with a concussion or not could be the difference between living a normal life and living one with a disability as a result.
- Protect your head
- Encourage students to report on teammates condition
- Using common sense can still help protect athletes from further injury
- I think people are just becoming more careless/reckless with how they conduct themselves on the field
- If you think you might be suffering from a concussion, get checked out right away and don't play if you do because it will only get worse
- I have never had a concussion but if I did I would definitely wait until I was cleared by a doctor before returning to my sport
- It is tough to make an athlete decide to not compete if they have the symptoms of a concussion, so just make sure coaches and players recognize the symptoms and force the player to step up out and see a trainer
- I believe that concussions are something we should treat with seriousness and due diligence before allowing an athlete to return to a game of the season. Research shows us that sustaining multiple concussions over a long period of time could lead to complications later in life as well as current lifestyles
- ATC is the most important part of the concussion management team
- I don't think I was educated enough about concussions
- Coaches do not see concussions as serious injuries
- Tell the truth and your ATC's are there to help
- Continue to increase awareness
- Rest is important
- I don't fully understand what happens if you play with a concussion. I feel like athletes might be more responsive and responsible with their own injuries if they understand how serious the affects can be. When we take concussion tests, we do not hear much about what the point is. I also think I would have been more responsible with reporting concussions if I understood why we have to wait a full 5 days before returning to practices.
- I believe for schools that have the ability, having a general medical physician assist the sports medicine staff when evaluating a concussion is extremely beneficial. The sports medicine staff may also feel the pressure to get a student athlete back into competition whereas the team doctor may not.

Coaches Answers:

- ATC's and other medical professionals I feel are too quick in sidelining athletes with only headaches- I think there needs to be a set standard in place when holding out athletes with that they believe is a concussion
- Athletes don't tell the truth, some lie in order to play, some lie in order to get out of playing. It's a huge topic but I think there is a wide variety of symptoms that could potentially be tough to differentiate
- As a coach, I am finding different concussion procedures and guidelines used at each school being varied. Some athletes with concussions sit out two days with symptom free than able to play. While other schools have to wait 7 days to be symptom free than start a progression. Why not have a standard for every school

Appendix D:

Question: If you've sustained a concussion- have you or do you currently suffer from post-concussion symptoms?

Answers:

- Trouble falling asleep
- Trouble Studying
- Difficulty remembering class material
- Headaches
- Dizziness
- Black Outs
- Depression
- Balance Problems
- Sensitivity to light
- Memory Loss
- Confusion
- Stuttering
- Forgetting words
- Sadness
- Concentration problems