

#### Cedarville University DigitalCommons@Cedarville

The Research and Scholarship Symposium

The 2015 Symposium

Apr 1st, 11:00 AM - 2:00 PM

### Ohio Athletic Trainer's Reactions to New Ohio Concussion Legislation

Alexander K. Heaton *Cedarville University*, akheaton@cedarville.edu

Follow this and additional works at: http://digitalcommons.cedarville.edu/ research\_scholarship\_symposium

Part of the <u>Entertainment, Arts, and Sports Law Commons</u>, <u>Medicine and Health Sciences</u> <u>Commons</u>, and the <u>Sports Studies Commons</u>

Heaton, Alexander K., "Ohio Athletic Trainer's Reactions to New Ohio Concussion Legislation" (2015). *The Research and Scholarship Symposium*. 18.

 $http://digital commons.ced arville.edu/research_scholarship\_symposium/2015/poster\_presentations/18$ 

This Poster is brought to you for free and open access by DigitalCommons@Cedarville, a service of the Centennial Library. It has been accepted for inclusion in The Research and Scholarship Symposium by an authorized administrator of DigitalCommons@Cedarville. For more information, please contact digitalcommons@cedarville.edu.



# **OHIO ATHLETIC TRAINER'S REACTIONS TO NEW OHIO CONCUSSION LEGISLATION**

## ABSTRACT

Concussions have gained national attention over the past few years due to the severity of long-term consequences of acquiring one. In the spring of 2009, the state of Washington passed a bill that would change how concussions are handled in youth sports. According to the legislation, all athletes who display any signs and symptoms of a concussion are to be removed immediately from play and are not allowed to return to play until cleared by a licensed professional health care provider. Since then, concussion legislation of some form has been passed in every state in the U.S., with Ohio passing its own law in the spring of 2013. However, the Ohio High School Athletic Association (OHSAA) made a unique amendment to it by giving sporting officials the power to remove any athlete they deem as "concussed" without having to confirm a diagnosis with a licensed professional health care provider such as the Certified Athletic Trainers (ATCs) who are normally present during sporting competitions. The purpose of this study was to determine how Athletic Trainers who work in high schools in the state of Ohio feel about this law and its various stipulations. A 20-question survey was sent to Athletic Trainers who work in a high school setting in the state of Ohio asking for their opinion and views on various components of law. Of the 302 ATCs who received the survey, 49 (16%) submitted it completed. Results of the survey yielded a mix of positive and negative emotions related to various aspects of the legislation, and though there was some disagreement, responding ATCs agreed with the main purpose of the legislation, which was to raise awareness of concussions and prevent mishandling of cases involving concussed athletes. What it comes down to is whether ATCs feel that their knowledge and expertise in recognizing and treating concussions is not being utilized to its fullest.

### INTRODUCTION

According to the Center for Disease Control, 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 your brain normally works" (www.cdc.gov/Concussion). Some serious outcomes of a TBI include Chronic Traumatic Encephalopathy (CTE), chronic brain degeneration that occurs as a direct result of the presence of the Tau protein in the brain tissue (McKee, 2013), and Second Impact Syndrome (SIS), a possibly fatal outcome of returning to play too soon after sustaining a concussion (Bey, 2009). Back in 2006, junior high school football player Zachary Lystedt suffered from Second Impact Syndrome, an incident that brought national attention to concussions and even pushed the state of Washington to enact the country's first state concussion legislation in 2009. By 2013, every state had passed some form of concussion legislation. (www.ncsl.org) All states began to require that athletes who present with any symptoms of a concussion be immediately removed from play, evaluated, and follow proper concussion return-to-play protocol before being cleared to play. Ohio legislation is unique in that it allows game officials to remove athletes who are presenting with concussion symptoms indefinitely without the consultation of a certified professional health care provider, which poses as an issue to the Certified Athletic Trainers who are present at most sporting events. Since the passing of the legislation in the spring of 2013, there has been speculation that ATCs in the high school setting may not agree with the fact that their clinical expertise is not being utilized to the fullest so as to aid in preventing an athlete from returning to play with a concussion or without fully recovering from one.

### PURPOSE

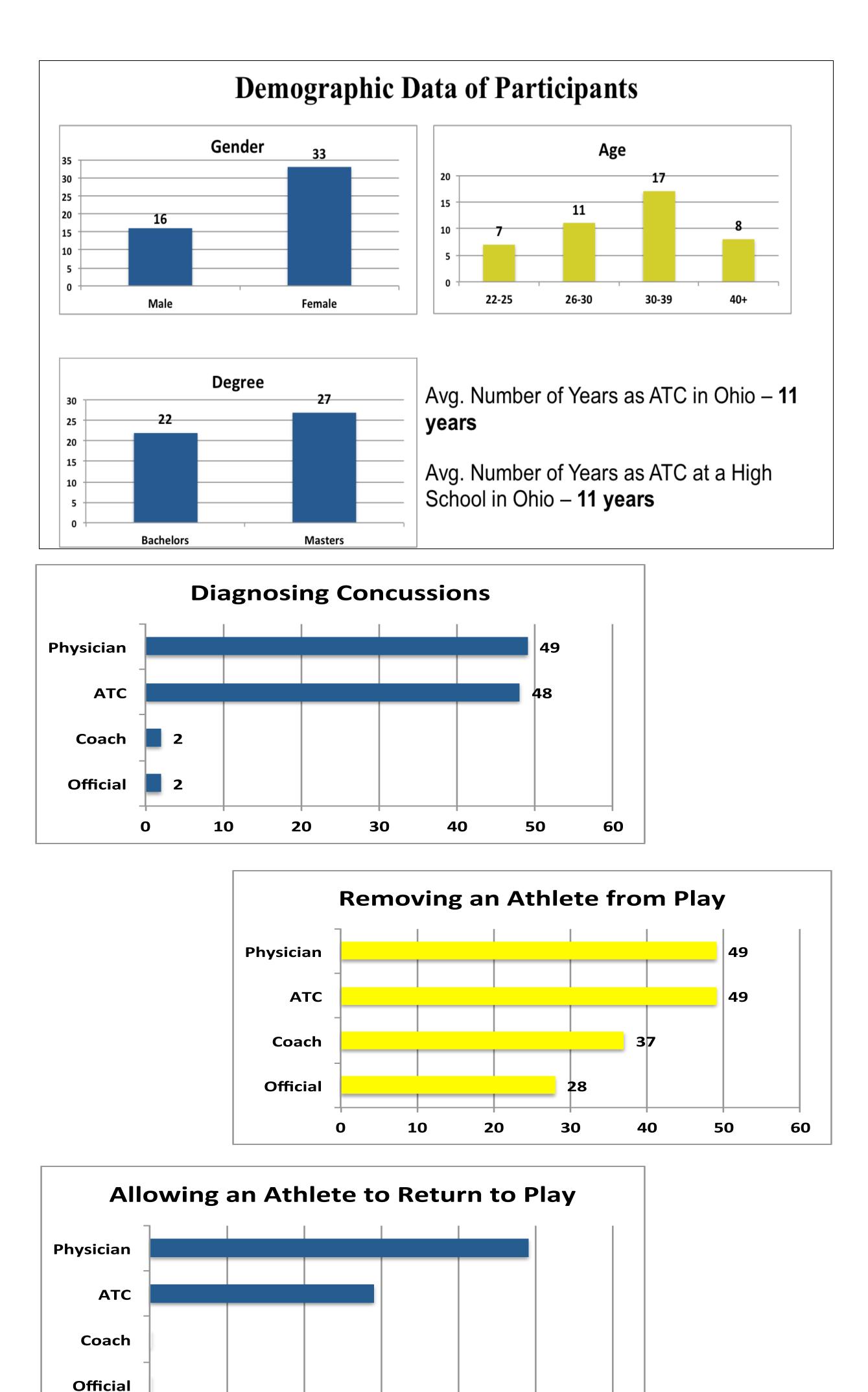
The purpose of this study was to determine how Certified Athletic Trainers who work at high schools in the state of Ohio felt about the OHSAA's legislation and whether or not they agreed with the various changes it posed.

#### **Alexander K. Heaton**

### METHODS

Data was collected via a 20-question online survey. The survey was distributed to 302 Certified Athletic Trainers who work in a high school setting in the state of Ohio. The names and email addresses of the ATCs who worked in a high school setting in the state of Ohio were found on the NATA website. Before beginning the survey, participants read and agreed to the informed consent form. The form explained the purpose of the survey while also giving a description of the law and its various stipulations. This study and the informed consent form were approved by the university's Institutional Review Board for the Protection of Human Subjects.

The survey consisted of demographic questions and both open- and closed-ended questions that determined whether or not there was a general agreement or disagreement with the way the OHSAA and state legislature has addressed concussion management and return to play protocol in their legislation. The closed-ended questions allowed the ATCs' to answer about their familiarity with concussions and whether or not they agree with certain aspects of the legislation without having them go into detail. The open-ended questions allowed them to go into further detail about their answers.



20

10

30

40

60

50

# **STATISTICAL ANALYSIS**

After grouping the respondent's answers to the survey questions, the answers were compiled according to their topic and qualitatively analyzed for common themes that conveyed either a positive or negative reaction to the question. Based on the answers given, an analysis was done on the surveys to determine whether there was a general consensus of agreement or disagreement with the legislation as a whole, while also determining individual aspects of the legislation that were controversial.

#### RESULTS

#### **Role of Diagnosing Concussions**

When asked who should play a role in diagnosing an athlete with a suspected concussion, all 49 (100%) agreed that a physician should be able to diagnose, 48 (98%) agreed that ATCs should be able to diagnose, and only 2 (4%) believed that coaches and officials should play a role in the process of diagnosing a concussion. When asked who should have the authority to remove an athlete suspected of a having a concussion, all 49 (100%) agreed that a physician and ATC should be allowed to remove an athlete from play, but only 37 (76%) believed coaches should have say, and 28 (50%) believed that officials should also have a say in whether an athlete should be allowed to continue to play. In terms of returning to play, all 49 (100%) agreed that physicians have the ultimate authority to clear athletes to return to play, whereas 29 (59%) believed ATCs should have ultimate authority to return an athlete to play. No one believed that coaches or officials should have the authority to determine whether an athlete can return to play following a concussion.

#### **Diagnostic and RTP Aspects of the Legislation**

When ATCs were asked how they felt about the legislation in terms of who it allows to make diagnostic and Return to Play (RTP) decisions, 6 of the 44 (14%) disagreed entirely with what the legislation stated, believing that there are "too many cooks in the kitchen" in terms of who is involved in the process of making the decision to remove an athlete from play and then allowing them to return. The remaining 38 (86%) agreed with the general idea, but disagreed with aspects pertaining to game official's involvement.

#### **ATC and Physician Relationship**

30 out of the 46 (65%) who responded to the questions regarding ATC-Physicians relations answered that they work in conjunction with one or more physicians and have a mutual agreement that it is the physician's role to officially asses an athlete who is suspected to have a concussion and then diagnose accordingly. 29 out of 46 (63%) indicated that they work in close conjunction with another professional health care provider, whereas 15 (27%) work solo or do not work in tandem with a specific professional health care provider.

#### **Training Knowledge of Officials**

12 of the 45 respondents (27%) said they were not familiar with the concussion education process required by the legislation for coaches and game officials and the remaining 33 (73%) were familiar with it. An example of the required concussion education was included in the survey. After reading it, the ATCs were asked if they believed the education sample was adequate enough to prepare coaches and game officials for the responsibilities they now hold. 21 (44%) answer yes, it was adequate and 27 (56%) answered no, it was not enough to allow game officials to make the calls they can now make on the field. Many compared the course's "inadequate" two hours to their "more than adequate" hundreds of hours of experience with concussions in the classroom and in the field.

#### **Real Life Experiences of ATCs**

Athletes were looked at by the ATC, and in some cases a physician who is present at the game, and they would agree that the athlete, though they may have been showing "concussion-like" symptoms", did not actually have a concussion. Though they tried to communicate this to the official in order to get the athlete back in the game, the official stood his ground on what the legislation stated and would not allow the athlete to return to play since 24 hours have not passed since the athlete was removed.

### DISCUSSION

Many ATCs believe that they are being limited in what they can do as certified professional healthcare providers and that their talents are not being utilized as they should be. Many ATCs used terms such as "unqualified" and "overly conservative" when asked to describe how they felt about how coaches and officials can now make calls regarding the removal and immediate return to play of an athlete. Conversely, many of them believe that it is a step in the right direction since that the whole point of the legislation was to first and foremost look out for the well being of the athlete by raising awareness of concussion signs and symptoms and putting more eyes on the field to help detect possible Mild Traumatic Brain Injuries (MTBIs). However, even those who agree with it believe that there are better ways to implement such legislation.

Since every state and the District of Columbia has passed legislation in an effort to increase awareness of concussions, there are bound to be similar feelings of agreement and disagreement about the legislation among ATCs around the country. With the stringent rules that are now in place demanding proper identification and management of concussion, even more pressure is on the ATC to be able to carry out their job effectively and correctly. This should not be an issue for them in most cases, but it most certainly does not help that they are now "competing" with game officials on the diagnosis of an athlete and whether or not he or she is concussed. There is nothing wrong with the inclusion of game officials and coaches in recognizing possible concussions and bringing them to the attention of the ATC because the ATC cannot keep their eye on every single athlete simultaneously.

Future research should be conducted on finding a more effective way to rework the legislation or at least certain aspects of it so that there is not clash between the roles of a game official and an ATC. One way to do this would be to look into other state's legislation and examine the outcomes of their legislation and whether or not there is a general consensus of being for or against the legislation. Keeping in mind that the concept of concussion legislation is rather new, one can expect that there are bound to be changes at all levels, from each state's legislation to the schools and sports programs that they effect, in terms of making the most effective rules for managing concussions.

### CONCLUSION

The implementation of the concussion legislation was first put into effect with the main purpose of raising awareness of concussions by educating those involved in sports at the youth, middle school, high school, college, and even professional level. The decision to involve game officials in removing athletes came as one that was meant to put another set of eyes on the field, not to step on the toes of professional health care providers such as ATCs. However, with these changes there should also come an increased appreciation for the talents that ATCs bring to the realm of health care in the form of recognizing and diagnosing concussions, and therefore their role in concussion management should include being involved in the final say of whether or not an athlete is concussed and needs to sit out while further observations and assessments are done.