

Challenges Faced by Collegiate Athletic Trainers, Part I: Organizational Conflict and Clinical Decision Making

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Context: Organizational conflict, particularly between coaches and medical professionals, has been reported in collegiate athletics. Different values create room for conflict between coaches and athletic trainers (ATs); however, ATs' experiences when making medical decisions are not fully understood.

Objective: To investigate the presence of organizational conflict regarding medical decision making and determine if differences exist across athletic affiliations.

Design: Cross-sectional study.

Setting: Collegiate athletics (National Collegiate Athletic Association [NCAA], National Association of Intercollegiate Athletics [NAIA], National Junior College Athletic Association [NJCAA]).

Patients or Other Participants: A total of 434 ATs responded (age = 27.7 ± 3.2 years, years certified = 5.2 ± 2.7), representing the NCAA Division I (DI; $n = 199$), Division II (DII; $n = 67$), Division III (DIII; $n = 108$); NAIA ($n = 37$); and NJCAA ($n = 23$) settings.

Main Outcome Measure(s): The survey instrument contained quantitative measures and open-ended questions, with affiliation as our primary independent variable. Responses to Likert-scale questions (1 = *strongly agree*, 5 = *strongly disagree*)

regarding organizational pressures within athletics served as the dependent variables. Kruskal-Wallis analysis-of-variance and Mann-Whitney *U* post hoc tests assessed differences in organizational conflict across affiliations. Open-ended questions were analyzed inductively.

Results: We obtained a 14.47% (434 of 3000) response rate. National Collegiate Athletic Association DI ATs disagreed less than NCAA DII and DIII and NJCAA ATs that they would worry about job security if turnover in the head coaching position occurred ($P < .05$). Regarding the influence of coaches on job performance, differences were found between NCAA DI and DIII and between DI and NJCAA ATs ($P < .01$). Visibility of the injury and situational factors influenced the level of perceived pressure.

Conclusions: Athletic trainers perceived pressure from coaches regarding medical decision making. Division I ATs placed greater emphasis on the role that coaches played in their job performance and job security. Athletic departments should consider transitioning to patient-centered models of care to better align values and reduce the external pressures placed on ATs.

Key Words: organizational structure, interpersonal conflict

Key Points

- Compared with other athletic trainers (ATs), NCAA DI ATs felt that coaches had a greater influence on job performance and job security.
- The pressure ATs faced from coaches to allow athletes to play before they were comfortable did not differ across athletic affiliations ($P = .56$).
- Across collegiate affiliations, ATs faced pressure from coaches to let student-athletes play before they were comfortable; visibility of the injury and other situational factors influenced the level of pressure perceived.

Athletic trainers (ATs) are often faced with difficult decisions, specifically pertaining to athletes' readiness to return to play after injury.¹ These decisions not only have the potential to affect student-athletes but also can create conflict between ATs and athletic department personnel, specifically coaching staffs. *Organizational conflict* is a dynamic process that occurs when 2 individuals working interdependently within an organization have different values and goals.² In the athletic training literature, *workplace bullying* has also been used to describe negative interactions between ATs and the individuals they work with, including coaches.^{3–5} The values of ATs and coaches are often dichotomous, and pressure to make premature return-to-play decisions, either

to satisfy a coach or for job security, does not allow ATs to operate in the best interests of athletes. For this reason, as indicated by the National Athletic Trainers' Association (NATA) and 5 other medical associations,¹ a coach should never be the primary supervisor of team physicians or ATs or have influence on the employment status of these medical professionals. Athletic trainers who report directly to athletic directors and subsequently to coaches have experienced pressure to make timely decisions that affected not only their job status but also their quality of life.⁶

Despite the advice of the NATA on the appropriate supervisory structure, ATs and team physicians are still reporting to athletic administration, particularly at the more competitive intercollegiate athletics levels.⁶ Previous au-

thors⁶⁻⁹ have shown that the role of the supervisory structure in interpersonal conflict remains problematic. An article in the *Chronicle of Higher Education*⁷ highlighted the pressures ATs face regarding return-to-play decisions: more than half of responding collegiate football ATs reported feeling pressure from their football coaches to return concussed players to action before the players were medically ready. In many cases, these pressures led to perceived conflict between the coach and AT. Empirical support for this editorial was demonstrated when 53.7% of ATs felt pressure to prematurely clear an athlete to return to play after a concussion.⁸ The foundation of this conflict may be new evidence that health care professionals did not have the autonomy to make proper medical decisions.⁷⁻⁹ A majority of athletic training services were delivered via a sport or athletic model, whereby the AT was hired, evaluated, and employed by the department's athletic administration.^{10,11} Ultimately, the primary concern with this organizational structure is the position medical personnel are placed in, as they must balance prioritizing the health and safety of athletes, meeting the expectations of their employer, and adhering to their responsibilities as medical providers.

A greater understanding of this organizational bureaucracy at all levels is warranted and may present strategies to mitigate and eventually eliminate coaches' rights to intervene in medical-related decision making. Therefore, the purpose of our study was to investigate the presence of organizational conflict regarding the medical decision making of collegiate ATs. Our work was guided by the following research question: Are there differences in perceived conflict among ATs working at institutions with various athletic affiliations, including the National Collegiate Athletic Association (NCAA) Division I (DI), Division II (DII), and Division III (DIII), as well as the National Association of Intercollegiate Athletics (NAIA) and National Junior College Athletic Association (NJCAA) settings? We hypothesized that ATs working in the NCAA DI setting would perceive greater conflict and external sources of pressure regarding patient care and return-to-play decisions.

METHODS

We used a survey-based research design to examine experiences of conflict among collegiate ATs and athletics staff (ie, coaches and administration) regarding medical decision making. We distributed the questionnaire to collegiate ATs currently employed in NCAA, NAIA, and NJCAA colleges and universities. The purpose of the questionnaire was to gather data on organizational conflict, particularly between ATs and coaching staffs, and its effect on treatment decisions from a large group of participants across a diverse demographic sample. The NATA provided a randomized list of 3000 e-mail addresses for ATs on staff and currently employed in the collegiate setting. A recruitment e-mail with a link to the survey (QuestionPro Inc, Beaverton, OR) was sent to potential respondents in January 2017. Reminder e-mails were distributed 1 and 3 weeks after the initial e-mail to encourage participation. All study procedures were reviewed and approved by the University of Lynchburg Institutional Review Board.

Survey Instrument

Two members of the 3-person research team (T.G.B., S.M.S.) developed the instrument and sought feedback from a content and methodologic expert in the field. The survey was composed of 3 sections: (1) demographic information, including sex, age, years certified, highest degree earned, and primary sports covered; (2) 5-point Likert-scale questions (1 = *strongly agree*, 5 = *strongly disagree*) related to organizational pressures within athletic departments; and (3) open-ended questions for the respondents to provide more thorough context related to their experiences with pressures and conflict when making return-to-play decisions.

Multiple steps outlined by Turocy¹² were taken to validate the survey instrument before distribution. After survey development, we shared the instrument with experts who had knowledge of the topic and methods and provided them with a content-validity tool. Using this tool, they were asked to provide feedback on the clarity of each question, as well as the relevance and importance of each question to the study's purpose. Each question or item was graded on three 4-point scales (1 = *not relevant* to 4 = *highly relevant*, 1 = *not clear* to 4 = *very clear*, 1 = *not important* to 4 = *very important*). A cutoff score ≥ 3 was used to determine which questions or items were relevant and important enough to include in the final instrument. If all reviewers graded an item as < 3 for importance, relevance, or both, the item was removed. If clarity of an item was the reviewer's only concern, modifications were made based on the reviewer's feedback. This process allowed us to refine question wording and remove questions that would result in the collection of nonessential data. After the content-validity process, a member of the research team (A.M.P.L.) created an electronic version of the refined instrument using QuestionPro software. To ensure face validity, the final step in our validation process, a member of the research team completed the survey as a respondent would, to ensure there were no errors that would compromise the validity of the data.

Quantitative Data Analysis

Survey data were analyzed using SPSS (version 25; IBM Corp, Armonk, NY). Descriptive statistics were calculated, and demographic data are reported as means and overall percentages. Likert-scale data with median scores are reported where appropriate. Because of a nonnormal distribution and the ordinal nature of the Likert-scale data, we performed nonparametric statistical analyses. The primary independent variable of interest was athletic affiliation. Therefore, we conducted Kruskal-Wallis 1-way analysis of variance to examine differences in perceived conflict across athletic affiliations (NCAA DI, NCAA DII, NCAA DIII, NAIA, NJCAA), followed by Mann-Whitney *U* post hoc tests to determine where specific differences occurred. Responses to Likert-scale questions were compared between groups. The α level of significance was set at $P < .05$.

Qualitative Data Analysis

We analyzed open-ended survey responses (Table 1) through the general inductive approach.¹³ Two members of

Table 1. Open-Ended Survey Questions^a

1. Have you ever felt pressure from coaches to let a patient play before you were comfortable?
 - a. What injury or condition was at the center of the situation?
2. When do coaches and/or patients question your decisions regarding participation the most?
 - a. Is there a particular injury where you feel pressured the most to let patients participate?
3. Do any of your coaches question your decisions on a regular basis? If so, which sport? Under what circumstances?

^a Items are presented in their original format.

the research team (A.M.P.L., T.G.B.) independently analyzed the responses before meeting to determine the final emerging themes, a process known as *multiple-analyst triangulation*.¹⁴ Any discrepancies in the researchers' interpretation of the data were discussed until agreement was reached. During the data analysis, the 2 researchers read the responses to better understand the ATs' perceptions and experiences. After this immersive period, the researchers read the data critically, assigning codes to chunks of data that related to our purpose. Codes were compared, and the researchers discussed their overall impressions of the data. During this discussion, like codes were combined to form overarching categories, which were then defined to represent emerging themes and commonalities across the open-ended responses.

RESULTS

Phase I—Quantitative Findings

A total of 434 collegiate ATs responded to our survey, yielding a 14.47% (434 of 3000) response rate. Approximately 38% ($n = 166$) of respondents were male, and 62% ($n = 267$) were female. One respondent elected not to disclose sex. The average age of our participants was 27.7 ± 3.2 years, and they had been certified as ATs for an average of 5.2 ± 2.7 years. The breakdown of respondents by athletic affiliation is shown in Figure 1.

Kruskal-Wallis tests revealed differences across athletic affiliations for "If a new head coach were hired, I would worry about my job security" ($P = .001$; Table 2). Post hoc analysis showed that NCAA DI ATs disagreed less than NCAA DII (DI mean rank = 126.73, DII mean rank = 153.60; $U = 5319.5$, $P = .01$), DIII (DI mean rank = 141.25, DIII mean rank = 177.49; $U = 8209$, $P < .001$), and NJCAA ATs (DI mean rank = 108.76, NJCAA mean rank = 135.20; $U = 1743.5$, $P = .05$) that they would worry about their job security if a new head coach was hired. Differences across athletic affiliations were also observed for "My job depends on pleasing coaches" ($P = .01$; Table 2). Regarding the influence of coaches on job performance, differences were found between NCAA DI and DIII (DI mean rank = 144.33, DIII mean rank = 171.81; $U = 8822.5$, $P < .01$) as well as DI and NJCAA ATs (DI mean rank = 107.67, NJCAA mean rank = 144.63; $U = 1526.5$, $P < .01$), indicating that DI ATs felt coaches had a greater influence on job performance and job security.

No differences across athletic affiliations existed regarding the pressures ATs faced from coaches to allow athletes to play before they were comfortable doing so ($P = .56$, median = 4 for NCAA DI, NCAA DIII, NAIA, and NJCAA, median = 3 for NCAA DII) or the level of support

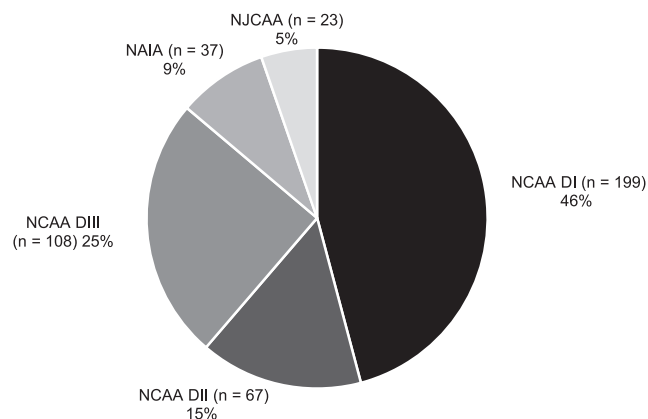


Figure 1. Breakdown of respondents by athletic affiliation. Abbreviations: DI, Division I; DII, Division II; DIII, Division III; NAIA, National Association of Intercollegiate Athletics; NCAA, National Collegiate Athletic Association; NJCAA, National Junior College Athletic Association.

they received from coaching staffs regarding their clinical decision making ($P = .22$, median = 2 for all affiliations; Table 2).

Phase II—Qualitative Findings

We found 3 main themes after analyzing the open-ended responses (Figure 2): (1) Across collegiate affiliations, ATs faced pressure from coaches to let student-athletes play before they were comfortable doing so, (2) the visibility of the injury influenced the amount of pressure received, and (3) the pressure was situationally specific. The findings, along with subthemes, are defined and supported with quotes below.

Across Collegiate Affiliations, ATs Faced Pressure From Coaches to Let Student-Athletes Play Before They Were Comfortable Doing So. Our participants noted repeatedly that they had experienced pressure from coaches to clear patients for participation before they felt comfortable doing so. Indeed, facing pressure from various stakeholders was "part of the culture" of working in athletics. The majority of our participants agreed with "Yes, I have felt pressure from coaches." Interestingly, these pressures transcended athletic affiliation.

We identified 2 subthemes that further defined and explained the pressures that ATs felt. First, the pressure felt from coaches did not affect the *final outcome or decision* made. The priority for our participants was always the health and safety of the student-athletes. Pressure occurred, but it was different from an attempt to overrule clinicians. Although coaches might have wanted an athlete to return to play earlier, they understood that ATs were there for the best interests of all parties. For example, one participant said, "I feel it is normal for coaches to apply a reasonable amount [of] pressure. It is our job to give where you can and be firm where you can't so long as patient safety is the priority." A similar response came from another participant:

They [coaches] communicate the importance of the need of the student-athlete but want what is best for them and trust my decision. They know I will push when necessary but always protect the individual.

Table 2. Mean Rank Scores by Athletic Affiliation^a

Item ^b	Affiliation					
	National Collegiate Athletic Association Division			National Association of Intercollegiate Athletics	National Junior College Athletic Association	P Value
	I	II	III			
Coaching staff is supportive of the clinical decisions I make.	215.26	201.27	225.88	247.55	196.46	.223
If a new head coach were hired, I would worry about job security.	193.20	236.53	244.37	217.19	246.65	.001 ^c
My job depends on pleasing coaches.	198.34	227.14	236.97	212.00	272.63	.008 ^c
I feel pressure to let athletes play before I am comfortable.	213.48	203.53	229.44	215.89	239.54	.562
Coaches question my clinical decisions on a regular basis.	212.37	224.78	220.04	219.55	225.46	.935
Coaches criticize me in front of athletic training and sports medicine staff.	221.50	195.63	223.40	220.95	213.33	.523
I need to choose between job security and the well-being of my patients.	211.12	204.66	229.10	234.34	228.54	.421
After communicating return-to-play decisions, my coaches understand.	217.72	206.52	226.24	217.58	206.39	.801
Coaches overrule my decision to remove players during games.	216.10	216.34	215.67	221.58	235.04	.957
Head coaches have too much power over health care professionals.	200.73	228.22	239.04	228.12	213.11	.089

^a Higher mean rank indicates a greater degree of disagreement with the statement.

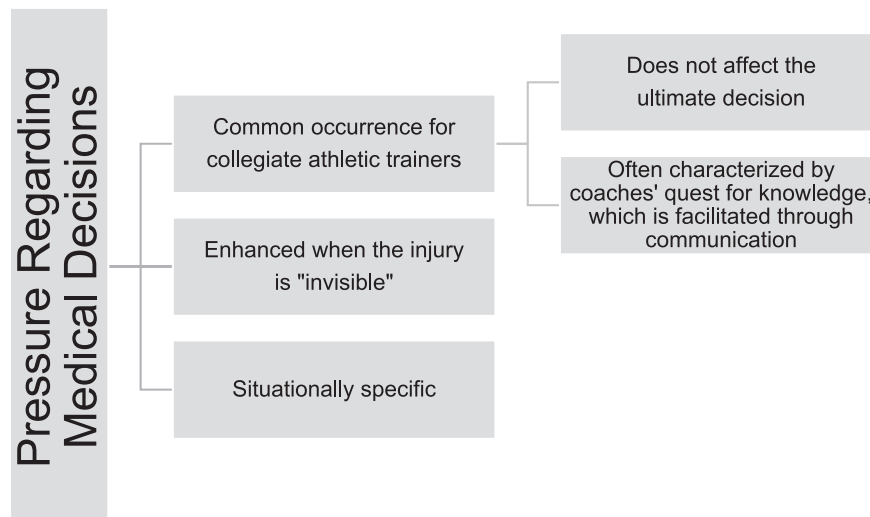
^b Items are presented in their original format.

^c $P < .05$.

An AT referenced a specific circumstance in which her coach was unhappy with the decision made to hold an athlete out of participation because of an injury. This ultimately led to the AT's being reassigned to a new sport. She recalled,

I recently had an athlete see our overseeing physician who cleared the athlete to return to play. The injury was a lingering high ankle sprain, which was continuously getting reinjured. After seeing the athlete later that day, it was clear that the athlete would not be able to safely return to play, as the athlete verbally admitted they didn't feel ready and they were not able to perform sport

functional testing. At that time, I chose to make the decision to hold the athlete out. The coach became very upset and tried to bargain with me, asking if they can just be noncontact or just do 25% of practice. The athlete ultimately did not return to play. The coach was very, very upset with me. My head athletic trainer gave me a talking to about this incident, saying that I appeared as though I was "overruling" the physician. Which I was, but for the safety of the athlete. I had to make a decision quickly and did not have time to consult [on] this decision with the physician. Ultimately, the overseeing physician agreed with my decision. I was reassigned sports at the university shortly thereafter.

**Figure 2. Emerging themes.**

Other participants explained that higher administration supported them, making it easier for them to do their jobs. For example,

I don't think any AT can say they've never felt pressure from a coach to have someone back ASAP [as soon as possible]. It can be over anything. Where I work, we have the ability to make these decisions and not get overruled by a coach. We operate with full support of our head athletic trainer and athletic director.

Finally, a respondent explained how a coach would push back but understood that clinicians had authority over all medical decisions:

I think all coaches pressure athletic trainers to get student-athletes back quickly. Sometimes coaches and staff do not know when to stop the pressure. Working basketball at a NAIA school, our men's basketball head coach did not believe concussions occurred in the sport. We had a long lengthy discussion in my office, closed door, and at the end of it, he said, "I don't agree with you at all, but this is your job, so I won't ever question you. But know, I won't be happy or appreciative when you take a kid out for a concussion." To which I replied, "Coach, you are absolutely entitled to your opinion. I am the AT and will take care of all medical issues. You're coach and I will never question you on what you do in that area. As long as you DO NOT question what I do to student-athletes, tell student-athletes to hide injuries from me, question me to your coaches or the athletic director, we are going to be fine."

Overall, participants did feel pressure from coaches to return patients to play but did not cave to this pressure if it would put patients at a "moderate or high risk of reinjury."

They clarified that pressure was not malicious under the second subtheme and "it's within the coaches' rights to ask questions about the return-to-play process." Rather, most circumstances involved coaches asking questions to obtain more information or knowledge regarding an athlete's injury or participation status, which was facilitated by communication. One participant stated that asking questions about an injury was

not outside the role of a coach. The coach's job is to put the best group of athletes in competition to win. I believe it is in their right to ask questions about the health and status of an athlete if done so respectfully. At the end of the day, I feel my coaches respect my decisions and continue to do their job.

Education from ATs seemed to be key; coaches needed and wanted it to better understand clinicians' decisions. When health care providers educated coaches, they seemed to comprehend the decisions made and backed down from pressuring or questioning. One AT stated that he thought

...education plays a large role in these situations; information from the greater body of research, as well as the education that I am able to provide to the student-athletes and coaching staff. I think most of the pressure stems from a lack of understanding and communication.

I have found success when the coaches are really informed on the return-to-play process and there are many opportunities for questions during the progression.

A similar response came from another clinician. In response to the question regarding frequency of receiving pressure from coaches, he said,

Most of the coaches I have worked with question decisions on a regular basis, but I've been fortunate in that they have almost all done so respectfully. I have no issue with this, as it comes from a desire to understand rather than a desire to change the decision.

Other respondents noted that communication and relationship building facilitated the flow of information, and thus education, to coaching staffs. For example, one participant stated that he was not often challenged on decisions, but coaches "most of the time just want an explanation and a possible timeline. Verbal and written communication with coaches and patients regularly are best to avoid any confrontations." Finally, one AT explained the benefit of working to establish good relationships through effective communication to avoid pressure and confrontation regarding medical decisions. She responded,

No, I think that most of our coaches respect my judgment and that goes into how much time myself and my staff have spent relationship building with our coaches. We both have the same goals. I understand where they come from as a coach and they understand where I come from as a clinician. We have constant communication about how to stay healthier and perform better. I think it's a great practice to reflect at the end of the season with them. To see what went well and what did not and how we can both improve. I have experienced a lot of success on the field and in relationship forming by doing this that increases coaches' trust in my decision-making process.

Our participants persistently stated that coaching staffs did pressure them on some medical choices, but "explanations" allowed coaches to fully appreciate medical decisions and thorough communication assisted with information transfer.

The Visibility of the Injury Influenced the Amount of Pressure Received. Coaches seemed to have a difficult time understanding a player taking time off when there did not appear to be an injury, according to our ATs. These "invisible injuries" were more difficult for coaches to appreciate and were often "the most highly questioned," leading to pressure. Coaches undermined the severity of such injuries and thought athletes could participate, leading to a rushed return-to-play timeline. One AT explained the difference between "visible" and "invisible" injuries:

If an injury requires surgery or equipment of any kind (crutches, boot, cast), they [coaches] are very understanding and work with me very well; however, if they cannot visibly see what is wrong or the athlete is only out of some sport activities, they tend to question it, press the athlete to do more than they are supposed to, and often

say the athlete is just trying to get out of something or is weak.

Another participant echoed this statement. She described coaches' questioning her decisions when holding patients out because of invisible injuries:

Any time an athlete is injured who shows no major outward signs of said injury will usually lead to a coach questioning why that athlete is not full go for participation. This happened to me recently with an athlete who was rehabbing from a stress fracture in her fibula, who had no clear signs or symptoms of that injury a couple weeks postdiagnosis.

Reflecting on his experiences, an NAIA AT emphasized the visibility factor when he wrote, "I feel that general sprains are questioned the most. Where there is no visible deficit, but the athlete is not able to participate in activity." Interestingly, many participants specifically cited concussions as injuries that were questioned more frequently than others. Concussion is less visible than musculoskeletal injuries; therefore, coaches could not physically see the effects of concussion on student-athletes, leading to the need for explanation. One AT noted, "Concussions are hard injuries for coaches to grasp because it is an injury to the brain. If they can't see it, they have a hard time believing that it is an injury." We heard a similar message from a different AT, who specifically stated that the coach threatened an athlete who had sustained a concussion. She explained, "We had a long-term concussion and the coach obviously couldn't 'see' the injury so she would pressure me to get her to play or she threatened to kick her off the team." Several participants commented that pressure regarding concussion injuries had decreased in recent years because of increased education and media attention. One AT summed this up well:

I think the injury that I most commonly feel pressure from coaches [about] is concussions. I think that has decreased since I started as an athletic trainer, but concussions are still the injury that involved pressure from coaches in return-to-play decisions.

The Pressure Was Situationally Specific. Our respondents spoke at length about the fact that the pressure they received from coaches to return athletes to play depended on the situation. Pressure increased with "important" players, especially during playoffs and big games. One AT summed up the balance that must be struck when making participation decisions:

I think that it is less about the injury and more about the moment. There is always more pressure at the end of the season when games matter more. Clinically, it is about striking a balance between allowing athletes to play through injury or pain without allowing them to harm themselves further. It needs to be managed and there needs to be a balance. It is about creating trust with your athletes, so that they understand I get no satisfaction by seeing them sidelined and out. I'm there to protect them from themselves because I know they would attempt to play through any injury.

Another respondent agreed, stating she was questioned the most "when the athlete is a high-caliber athlete that is essential to the success of the team." An NCAA DI AT echoed this sentiment: "They [coaches] usually question my participation decisions the most when it is a high-profile athlete, or an upperclassman—someone who is needed on the field." In addition to key players, the time of the sport season was also a factor. When asked to identify when coaches questioned the AT's decisions the most, one participant replied, "Would have to be while in conference play. [The] athlete wants to be able to play and coaches as well." Similarly, another AT stated, "Coaches and patients occasionally try to persuade my decision as more important races come around, and participation is wanted." Several respondents provided specific examples of how the stress of making decisions was situationally specific. An AT alluded to the fact that he was overruled by a coach at an away game because no administrator was available to support the clinician's decision:

[There] was a possible concussion sustained by the libero. She had a small handful of symptoms that she graded low on the pain scale but was otherwise fine. We were at an away preseason tournament, the coach heavily relies on her, the student-athlete was going to play regardless of what I said because she didn't feel bad, and I didn't have anyone around to back up my decision.

Finally, a former professional sport AT explained how medical decisions and conflict ended up causing him to be terminated from his job:

In a previous position with professional sports, the demand for playing was significantly higher. There was an edict from management that players cleared by physicians would be available to play. Clearance and ability to play were different things, but this concept was lost on management. This cost me my job.

The circumstances surrounding clinical decision making had a large effect on the pressure our participants felt from coaching staffs. Despite perceived pressure being a frequent occurrence across this sample, ATs reported that the health and safety of the athlete was always their number-one priority, regardless of the outcome.

DISCUSSION

We aimed to investigate organizational conflict across athletic affiliations, specifically at the AT-coach level, and determine whether ATs faced pressure from coaches regarding their medical decisions. Our results demonstrated that collegiate ATs indeed faced pressure from coaches to return athletes to play after injury. The extent and frequency of the perceived pressure did not differ across athletic affiliations; however, the coaches' role in job security and job-related performance was evident in the NCAA DI setting. We were surprised to find that ATs felt similar pressures regardless of athletic affiliation. This was contrary to our hypothesis that ATs working in the NCAA DI setting would report a greater degree of perceived pressure from coaches than ATs employed at colleges and universities with other athletic affiliations. Our hypothesis

was based on previous research^{7,8} that highlighted the pressure ATs faced from coaches regarding premature return-to-play decisions. Kroshus et al.⁸ in their investigation of the pressure ATs and physicians experienced to allow athletes to return to play prematurely after a concussion, determined that more than half of clinicians faced such pressure. Furthermore, in a report in the *Chronicle of Higher Education*,⁷ more than half of responding football ATs described experiencing pressure from coaches to return concussed athletes to play before they were medically cleared. Our results add to the growing body of literature and confirm that collegiate ATs across competition levels have faced pressure from coaches, regardless of the sport or injury.

The value of a mixed-methods approach was apparent in this study, as the open-ended questions allowed our participants to expand on their experiences and provide further details that we would not have captured using only quantitative methods. Collectively, the median score for “I feel pressure from coaches to let student-athletes play before I am comfortable” was 4 (*disagree*), but when our participants expanded on this topic in the open-ended format, it became clear that they did, in fact, face pressure from coaches to prematurely return athletes to play. An explanation for this difference in responses between the question formats may lie in how our participants’ perceived pressure. The ATs stayed true to their role by prioritizing the health and safety of the student-athletes and, therefore, knew that holding athletes out of play until they were medically ready was morally and ethically correct. Coaches’ eagerness to learn about an athlete’s injury and status put pressure on ATs to return the athlete to play as quickly as possible but not at the expense of athlete safety.

Although athletic affiliation did not play a significant role in the level of pressure ATs received from coaches, feelings of job security differed across competition levels. Athletic trainers employed in the NCAA DI setting placed a greater emphasis on the importance of job performance in securing the position. This finding aligned with previous literature⁷ highlighting the power of coaches and athletic administration over health care professionals, specifically at the more competitive levels. Athletic trainers, particularly at the NCAA DI level, have been fired or demoted over medical decisions with which the coaches and athletic administration did not agree.⁷ With this occurring repeatedly, it is understandable that some ATs in this setting may choose to conform to the expectations of coaches for fear of losing their jobs.

Organizational conflict has been described as inevitable because of the innate differences in perceptions, goals, and values of members within an organization.¹⁵ In an athletics organization, the misalignment of values between coaches and ATs creates room for such conflict and can place ATs in positions to make decisions that compromise the long-term health and safety of student-athletes. Organizational-conflict models have been discussed² dating back to 1967. Athletic departments align with a *systems model* of organizational conflict, which is “directed at lateral conflict, or conflict among the parties to a functional relationship.”^{2(p298)} This model is characterized by conflict between 2 individuals (eg, AT, coach) who hold formal positions with intersecting roles within an organization (athletics department).² In a goal-oriented organization, such as

athletics, 2 individuals working interdependently toward different goals is a recipe for conflict.² Therefore, aligning values within an organization so that both parties are working toward a common goal (ie, the health and safety of the student-athletes) is paramount in promoting a conflict-free environment.

An encouraging finding, and one that fills a gap in the literature, was that although coaches pressured ATs, the consensus among our sample was that the external influences did not alter the final medical decision. More importantly, the health and safety of the individual athlete remained the highest priority for the ATs. Although reassuring, this outcome was not surprising, as various governing bodies and associations, including the NATA,¹⁶ the Board of Certification for the Athletic Trainer,¹⁷ and the NCAA, have emphasized the importance of prioritizing the patient-athlete above all else.¹⁸ The way in which coaches questioned the ATs may explain how the primacy of the patient was prioritized. A distinction was made between questioning ATs to overrule or persuade them to change the decision and questioning to obtain more information and knowledge related to the injured athlete’s participation status. More often than not, our respondents clarified that the questions they received from their coaches were inquisitive in nature and not malicious attempts to overrule their medical judgment. This is contrary to recent findings from a survey¹⁹ in which 19% of collegiate ATs reported that a coach elected to play an athlete even though the athlete was “medically out of participation.” Furthermore, 58% of collegiate ATs had been pressured by a coach to make a decision that jeopardized the health and safety of a student-athlete.¹⁹ Ultimately, these results raise concerns that despite the overall positive experiences of the ATs in this study, some coaches continue to intervene in decisions that should be made solely by health care professionals.

Interestingly, we found the pressure and questioning that ATs experienced from coaches was situationally specific. Our participants reported that their medical decisions were questioned the most when (1) the injury was “invisible,” (2) a star athlete or more experienced player was injured, or (3) the injury occurred at an important time in the season, such as the playoffs. Kroshus et al.⁸ assessed factors that might influence variability in pressure regarding return to play after concussion, including clinician sex, supervisory structure of the institution, and division of competition. Researchers should continue to investigate the variables identified in our study to identify solutions to alleviate external pressures. We know the ultimate decision, despite the presence of pressure, remains unchanged, but we do not know how the external influence of coaches affects job-related stress and the quality of life for ATs. Athletic training researchers^{20–22} have started to examine this phenomenon through organizational infrastructure, reporting structure, and hierarchy within an athletics department. Although we cannot make a direct statement related to supervisory structure and its effect on the pressure ATs receive, previous authors^{1,6,10,11} have encouraged programs to transition to a patient-centered model of care to reduce stress, improve job satisfaction, and promote the primacy of the patient. Baker and Wilkerson⁶ found a greater degree of professional respect and less self-reported stress for ATs working in the patient-centered model. Sports medicine departments should consider this transition to reduce

conflicts of interest and align values and goals, which has been shown to ultimately reduce the amount of pressure clinicians face.⁸

Limitations

Although we took steps to ensure the validity and reliability of our findings, limitations of the study methods should be addressed. The demographic sample was purposeful; however, it is important to note that the results can be applied only to ATs employed in the collegiate setting (NCAA DI, NCAA DII, NCAA DIII, NAIA, NJCAA). We caution against generalizing the findings to ATs working in other settings such as the middle school, high school, professional, and club sport settings. Another limitation was the potential for response bias, whereby ATs who had negative experiences or more interest in the topic might have been more inclined to participate in the study. Although we cannot say so with absolute certainty, the variety of experiences reported by our participants, both positive and negative, and representation of all collegiate athletic affiliations lead us to believe we collected data from a well-rounded and diverse sample of collegiate ATs.

Future Directions

Opportunities for future investigations of ATs' experiences with pressure and conflict regarding medical decision making are widespread. Much of the focus in this area has been on the NCAA DI setting because of the high level of competition and inherent pressure on coaches and athletic administration to succeed. Our study addressed a gap in the literature by obtaining the experiences of collegiate ATs across all athletic affiliations; however, it is also important to gain insight into the extent and source of pressures faced by ATs employed in other settings. There is no single recipe for conflict, so the multifactorial nature of high school and other nontraditional settings that employ ATs warrants investigation. What are the experiences of ATs in the performing arts, military, industrial, occupational, or high school settings? Do they face pressure, conflict, or both regarding their medical decisions? In addition to understanding the extent of pressure, we must learn about the circumstances surrounding these pressures, as well as where (or from whom) the pressure or conflict is stemming. It is important to understand the experiences of ATs in these settings to ensure they are working in environments that value patient-centered health care. Future research regarding the effectiveness of patient-centered models of care on reducing conflict, as well as how to implement such models in an athletics department, would be beneficial. Furthermore, it would be interesting to investigate whether clinician sex, personality types of coaches and clinicians, or both play a role in the extent of conflict or pressures regarding return to play and other medical care decisions.

Survey-based research designs are beneficial in that data can be collected from a large and diverse demographic sample. We believe, however, that investigating this area of research from a different methodologic perspective is valuable. For a true understanding of the experiences of ATs surrounding medical decision making, future authors should incorporate one-on-one interviews, focus groups, and other qualitative techniques as avenues to obtaining

rich and meaningful data. The use of mixed-methods research to investigate external sources of pressure and conflict for ATs in all settings would provide a holistic view of their experiences surrounding medical decision making and a deeper understanding of the strategies and solutions that can mitigate such conflict.

CONCLUSIONS

The extent of pressure faced by ATs regarding their medical decisions did not differ across the various athletic affiliations. However, ATs in the NCAA DI setting placed more emphasis on the role of job performance in securing the position. Although the health and safety of student-athletes remained a priority for the ATs in this study when facing pressure from coaches, which is an encouraging finding, certain strategies can be incorporated to remove coaches' influence from medically related decisions. Athletics departments should consider adopting a patient-centered model of care to better align the values and goals of medical personnel, reduce the external influences of coaches and athletic personnel on job-related performance, and prioritize the health and safety of the patient-athletes.

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