Journal of Athletic Training 2023;58(11/12):1010–1020
doi: 10.4085/1062-6050-0583.22

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Organizational-Professional Conflict in the Collegiate and Secondary School Practice Settings: A Sequential, Mixed-Methods Study

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Context: Athletic trainers (ATs) are employed in various settings, which may use 1 of 3 organizational infrastructure models: (1) the sport/athletic model, (2) the medical model, and (3) the academic model. These different settings and organizational infrastructure models may result in varying levels of organizational-professional conflict (OPC). However, how OPC may differ across infrastructure models and practice settings is not known.

Objective: To examine the prevalence of OPC among ATs in various organizational infrastructures and explore ATs' perceptions of OPC, including its precipitating and mitigating factors.

Design: Sequential explanatory mixed-methods study with equal emphasis on quantitative and qualitative components.

Setting: Collegiate and secondary school institutions.

Patients or Other Participants: Five hundred ninety-four ATs from collegiate and secondary schools.

Data Collection and Analysis: We conducted a national cross-sectional survey using a validated scale to assess OPC. We then followed the quantitative survey with individual interviews. Trustworthiness was established with multiple-analyst triangulation and peer debriefing.

Results: Athletic trainers experienced low to moderate degrees of OPC with no differences across practice settings or infrastructure models. Poor communication, others' unfamiliarity with the AT's scope of practice, and lack of medical knowledge were precipitating factors for OPC. Organizational relationships founded on trust and respect for one another; administrative support in that ATs were listened to, decisions were endorsed, and appropriate resources provided; and autonomy given to the AT were key components to preventing OPC.

Conclusions: Most ATs experienced primarily low to moderate OPC. However, OPC continues to permeate professional practice to some extent in collegiate and secondary school settings, regardless of the infrastructure model used. The findings of this study highlight the role of administrative support that allows for autonomous AT practice as well as effective communication that is direct, open, and professional to decrease OPC.

Key Words: professional practice, athletic training, organizational infrastructure

Key Points

- Organizational-professional conflict can arise in athletic training, with contributing factors including poor communication, others' unfamiliarity with the athletic trainers' scope of practice, and lack of medical knowledge.
- Athletic trainers experience low to moderate degrees of organizational-professional conflict, regardless of practice settings or infrastructure models.
- Organizational-professional conflict can be minimized through trustful and respectful relationships, administrative support, and medical decision-making autonomy.

Athletic trainers (ATs) work in a variety of practice settings and are typically employed in 1 of 3 organizational infrastructures: (1) the sport/athletic model, (2) the medical model, and (3) the academic model.[1] The model of organizational infrastructure is determined by supervisory channels or lines of leadership[1] and can influence the day-to-day operations and demands placed upon an AT.

The sport/athletic model, commonly referred to as a *traditional model*,[2] represents a supervision structure whereby an AT reports to an athletic director, coach, or other sport personnel, whereas the medical model, also referred to as the patient-centered model,[2,3] represents a supervision structure whereby an AT reports to a medical director, physician panel, or other medical personnel and operates free from sport/athletic oversight.[3] The academic model typically involves ATs supervised by a department chair, dean, principal, or other academic leader.[1]

The demands imposed on ATs by others within an organization have been verified in several key studies. For example, Kroshus and colleagues[4] found that the majority of sports medicine clinicians experienced pressure from coaches to return athletes to play prematurely. A later study by Lacy et al[5] studied the presence of organizational conflict in collegiate practice settings and found, consistent

with Kroshus et al,[4] that ATs routinely received pressure from coaches to release athletes to return to sport before the athletes were ready. Kroshus et al[4] also examined their findings by supervisory structure. They found greater pressure from coaches when the ATs' supervisory line was under the purview of the athletic department (ie, sport/athletic infrastructure model) rather than a medical institution (ie, medical infrastructure model), and female clinicians experienced more pressure from coaches than their male counterparts. Similar findings have been reported for ATs working in the secondary school setting. For example, Pike Lacy et al[6] found that over half of secondary school ATs in their sample reported experiencing conflict from coaches and parents.

When professional employees, such as health care professionals, work within an organization, they will experience interactions that may or may not align with their professional standards and values, and the influences imposed upon them may interfere with the needs of their clients or patients.[7] This organizational-professional conflict (OPC) has been described as discord experienced by professionals employed in an organization between the requirements of the organization and those of their vocation.[7] The conflicts between professionals and organizational values have been studied in many disciplines and linked to professionals working within bureaucratic structures wherein professional autonomy is challenged.[8] Although we are not aware of a formal analysis of the bureaucratization of athletic training work settings, the athletic training literature has revealed many of the requisite elements,[9] including formalization (having rules and procedures in place as well as top-down authority),[10] work overload (extended hours and exceptionally high levels of administrative tasks),[11,12] and role conflict (difficulty balancing obligations associated with one's role).[13,14]

The OPC experienced by ATs, though arguably omnipresent to some extent, was brought to light in 2013 with the results of a *Chronicle of Higher Education*[15] survey of National Collegiate Athletic Association (NCAA) Football Bowl Subdivision ATs. The findings revealed that approximately half of respondents "have felt pressure from football coaches to return concussed players to action before they were medically ready."[15] When juxtaposed with the aforementioned athletic training study findings, it is clear that negative organizational influences on ATs continue to permeate the collegiate setting. What is not clear, however, is how OPC may differ across infrastructure models and other practice settings. Further, the perceived causes and mitigating factors for OPC are not clearly understood. Therefore, the purpose of this sequential explanatory mixed-methods study was to first examine the prevalence of OPC among ATs in the collegiate and secondary school (including those identifying as clinic/outreach) practice settings and then explore ATs' perceptions of OPC, including its precipitating and mitigating factors. The following research questions, organized by study phase, guided this study:

Phase I—Quantitative

1. What is the degree of OPC experienced by ATs?
2. Does the degree of perceived OPC differ by practice setting or infrastructure practice model?
3. Is there a difference in the level of perceived OPC reported by male or female ATs?
4. What is the relationship between OPC and years of experience as an AT?

Phase II—Qualitative

5. What are the perceived causes of OPC in athletic training practice settings?
6. What factors are perceived to diminish OPC in athletic training practice settings?

The collegiate and secondary school athletic training settings not only represent the 2 largest settings in the discipline but also reflect the 3 aforementioned infrastructure models[1] under examination.

METHODS

We conducted a sequential explanatory mixed-methods design[16] consisting of equally emphasized phases: (1) quantitative–cross-sectional survey and (2) qualitative–general inductive approach. An initial cross-sectional online survey design was used to examine OPC in the college and secondary school athletic training settings. Selecting the college and secondary school practice settings was purposeful, as they are collectively the largest employment settings for the athletic training profession. The subsequent phase involved individual interviews to explore ATs' perspectives on OPC to answer research questions 5 and 6. The institutional review board at Northern Illinois University approved the research protocol.

The National Athletic Trainers' Association (NATA) member research services provided the mailing list of all NATA-certified members in each practice setting (N = 5038). A total of 656 certified ATs responded to the original survey request, for a 13% response rate. Of these responses, 594 provided usable data for phase I of the study. The survey distribution occurred in November 11, 2014, with a single reminder occurring 1 week after the original distribution.

Instrumentation

Survey. The OPC in Athletic Training Settings instrument was adapted from a previously validated, 3-item scale developed by Shafer.[8] Shafer had added 1 statement to the original 2-item OPC scale developed by Aranya and Ferris.[17] We added 2 additional medical-decision conflict items to fully capture the pressures that may be exerted on ATs in practice within the organizational setting. The final OPC in Athletic Training Settings instrument consisted of 5 items with a range of scale units from 1, *strongly disagree*, to 7, *strongly agree*; thus, a higher rating is associated with higher perceived OPC. Content and face validity were established by having a panel of 3 experts with a background in organizational socialization and/or conflict examine the items for relevance and clarity. Minor adjustments to language, including inserting parenthetical examples to help clarify what was meant by the terms *organization*, *others*, and *standards* in the survey items, were completed at the direction of the panel members. The internal consistency of the 5 OPC items was acceptable (Cronbach $\alpha = .78$).

The survey also collected demographic information and requested that respondents identify the title of their direct supervisor(s) to determine the organizational infrastructure model. For example, if a respondent was supervised by an athletic director or coach, they were classified as a *sport/athletic model*; if supervised by a medical director or physician without reporting to other sport personnel, they were classified as a *medical model*; and if supervised by a department chair or dean, they were classified as an *academic model*. Respondents were also given the opportunity to select *other* and insert a different supervisor. Of importance is that individuals had the opportunity to select multiple reporting lines, if necessary, and each individual's selection of reporting lines was examined and then categorized as a mixed model where appropriate.

Interviews. At the completion of the survey in phase I of the study, individuals could volunteer to be considered for phase II, involving a personal interview.

Individuals agreeing to be interviewed were randomly organized by practice setting and contacted to schedule a phone interview. We conducted phone interviews until saturation of data was achieved. This occurred after 17 interviews. We conducted an additional 2 interviews because they had already been scheduled. A semistructured interview guide was used (see Appendix) to obtain participant perceptions regarding OPC in athletic training practice settings.

Data Analysis

Quantitative. Participant demographic data were analyzed via descriptive statistics. Means and CIs were calculated for the OPC mean scores to answer research question 1. Further, to identify the degree of OPC experienced, we used established procedures[13,14,18] to meaningfully classify the degree of OPC. This involved using the mean OPC value (3.02 ± 1.25) and 1 SD (rounding to the nearest tenth) to initially identify the cut point between low and moderate OPC and applying the same logic to identify the cut points between minimal and low and between moderate and high OPC. This resulted in the following classification scheme:

- *Minimal OPC*, ≤1.79
- *Low OPC*, 1.8–2.99
- *Moderate OPC*, 3.0–4.29
- *High OPC*, ≥4.3

To examine differences between infrastructure models and job settings (question 2), we originally planned to conduct a 1-way analysis of variance. However, the Kolmogorov-Smirnov test revealed a significant difference for the sport/athletic infrastructure model ($P < .001$) as well as the medical infrastructure model ($P = .003$), indicating a nonnormal distribution. A significant difference was observed for the collegiate and secondary school job settings ($P < .001$), indicating a nonnormal distribution as well. Thus, a nonparametric, independent-samples Kruskal-Wallis test was used to examine differences in OPC score by infrastructure model and practice setting. A Mann-Whitney *U* test was conducted to compare respondent sex and OPC score. A Pearson correlation coefficient was performed to determine the relationship between years of experience and OPC. Our a priori α was less than .05 for all analyses. Using G*Power based on a power of 0.95, α of .05, and effect size of 0.30, the target sample size for the examination of infrastructure group differences was 280, and the target sample size for the correlation coefficient was 138.

Table 1. Organizational-Professional Conflict Across Practice Settings and Infrastructure Models

Practice Setting	Model	No. (% of Total Sample)	Mean ± SD
College	Sport/athletic	160 (27)	3.0 ± 1.2
	Medical	132 (22)	3.0 ± 1.1
	Academic	41 (7)	3.3 ± 1.3
	Mixed	16 (3)	2.9 ± 1.1
	Total	349 (59)	3.0 ± 1.2
Secondary school	Sport/athletic	145 (24)	2.8 ± 1.3
	Medical	28 (5)	3.0 ± 1.5
	Academic	5 (1)	4.0 ± 1.7
	Mixed	35 (6)	3.4 ± 1.5
	Total	213 (36)	3.0 ± 1.4
Clinic outreach secondary school	Sport/athletic	6 (1)	2.4 ± 0.8
	Medical	13 (2)	3.6 ± 1.4
	Academic	1 (0)	1.4
	Mixed	12 (2)	2.9 ± 0.7
	Total	32 (5)	3.0 ± 1.2

Qualitative. A general inductive approach[19] was used to analyze the qualitative data. Consistent with Thomas,[19] this involved 5 steps: (1) formatting and preparation of raw data, (2) initial reading of all transcripts, (3) data coding, (4) creation of emergent themes, and (5) revision and refinement of emergent themes.

Credibility of the study's qualitative findings was established by a peer debriefing and multiple-analyst triangulation.[20] Our peer did not participate in interviewing the phase II participants but was provided with the coded transcripts, coding schematic, and an overview of findings to review for appropriateness. We used a peer researcher with extensive qualitative research experience and knowledge of professional issues in athletic training. Multiple-analyst triangulation involved 2 researchers (W.A.P. and another who was not an author) independently engaging in the open coding process. The researchers then came together to reach consensus on the codes applied to the textual data and the organization of the codes into emergent themes.

RESULTS

Phase I—Quantitative

Survey respondents included 308 women (51.9%), 282 men (47.5%), and 4 undisclosed (0.7%). Most respondents (n = 424, 71.4%) held a master's degree, followed by 123 (20.7%) and 39 (6.6%) having a bachelor's or doctoral degree, respectively. Respondents reported having 13 ± 10 years of experience.

The overall mean OPC score for all infrastructure models across job settings was 3.02 ± 1.25, representing low to moderate degrees of OPC experienced by the majority of ATs in the sample. Table 1 presents the mean OPC scores across infrastructure model by practice setting, and Table 2 presents the mean and CI for each infrastructure model. The largest number of ATs experiencing high levels of OPC were associated with the sport/athletic infrastructure model (Table 3). However, no significant difference was

Table 2. Organizational-Professional Conflict Scores by Infrastructure Model

Model	Mean ± SD	95% CI
Sport/athletic	2.9 ± 1.2	2.7–3.0
Medical	3.1 ± 1.2	2.9–3.2
Academic	3.3 ± 1.4	2.9–3.7
Mixed	3.2 ± 1.3	2.8–3.5

noted in OPC by infrastructure model ($H_3 = 6.03$, $P = .11$) or practice setting ($H_2 = 1.27$, $P = .53$). Table 4 presents the individual OPC questionnaire items, revealing that item 4 (having medical decisions challenged) was the item with the highest degree of OPC.

A significant but weak negative correlation was present between years of experience and OPC ($r = -0.13$, $P = .001$). The Mann-Whitney test revealed a significant difference in OPC score ($z = -2.2$, $P = .03$) between male (2.9 ± 1.3; 95% CI = 2.7, 3.1) and female (3.1 ± 1.2; 95% CI = 3.0, 3.2) ATs.

Phase II—Qualitative

A total of 19 individuals, including 7 women (37%) and 12 men (63%), with 16 ± 11 years of experience, participated in phase II of this study. A total of 10 participants worked in the secondary school setting, and 9 were from the collegiate setting. The mean OPC score for these participants was 2, with a range of 1 to 3.9. Table 5 provides additional demographic information for the interview participants.

Perceived Causes of OPC. We found 2 perceived causes of OPC: (1) other organizational personnel questioning medical decisions and (2) poor communication. When medical decisions are not understood by other parties (eg, coaches), negative encounters can occur, and thus conflict may result. Such conflict was perceived as a normal aspect of the AT role. In other instances, poor communication by the AT led to a lack of understanding of subsequent actions, which resulted in conflict. Poor communication from coaches to ATs also led to OPC. Figure 1 presents the perceived causes of OPC from the perspectives of ATs interviewed in this study.

Questioning of Medical Decisions. Common sources of conflict were centered on medical decision-making; specifically, our participants shared stories regarding their decisions on timelines for return to play or medical care for an injury. Jerald's comments summarize many of our participants' experiences:

> Common things are related to field discussion to why or why not a player is returning. Or a rehabilitation situation, when you are holding out a kid another day or week or so. It's the parent or the coach, asking [about the decision].

Lisa, when asked about experiencing OPC, said, "Yes [it happens], the thing that comes to mind the most is with parents." Lisa, an AT employed in the secondary school setting, continued with her thoughts on OPC:

> We'll make a recommendation: "I think your son or daughter would benefit from seeing a physician," and them either pushing back and saying "I don't want to do that." Or give them a recommendation: "Here's what I think is going on, I think it would be in their best interest to sit out from playing for a certain amount of time," and then the parents disagreeing with that.

We found OPC regarding medical care was centered on 2 main aspects: others' lack of understanding of the AT's scope of practice and others' lack of medical knowledge.

Role Understanding. Our participants shared experiences of OPC and reflections regarding OPC that encompassed a lack of role understanding related to the AT, especially in sports organizations. Jacob discussed how many athletic administrators are unaware of what happens behind the scenes and, at times, that unawareness can lead to issues and conflict. During his interview, Jacob shared a key facet of this issue:

> Some administrators having different ideas of how a sports medicine staff should be run and they think they have all the answers. . . and they're not in on the day-to-day grind seeing exactly what we do. There's a misconception I think that some administrators never come down to the [athletic training facility] and see us in action. They might see us out on the field because they come out to watch practice or come out to talk to a coach, so they don't see the daily grind that we go through.

Blain's reflections were more global, but again founded on a similar sentiment regarding a lack of awareness for the role of the AT. Blain shared,

> People that don't understand the role of an athletic trainer and how they work within the athletic realm. That in itself leads to a lot of conflict. Professionalism and educating folks on what the role is, that's how you overcome that.

Table 3. Degree of OPC by Practice Setting and Infrastructure Model (N = 594)[a]

	No. (% of Total Sample)				
	Sport/Athletic	Medical	Academic	Mixed	All Infrastructure
Minimal	55 (9.2)	18 (3)	8 (1.3)	7 (1.2)	88 (14.8)
Low	120 (20.2)	64 (10.8)	11 (1.8)	22 (3.7)	217 (36.5)
Moderate	90 (15.1)	61 (10.3)	18 (3)	23 (3.8)	192 (32.3)
High	46 (7.7)	30 (5)	10 (1.7)	11 (1.8)	97 (16.3)

Abbreviation: OPC, organizational-professional conflict.
[a] Minimal OPC ≤ 1.79, low OPC = 1.8–2.99, moderate OPC = 3.0–4.29, high OPC ≥ 4.3.

Table 4. Individual OPC Questionnaire Item Ratings

Questionnaire Item	Mean ± SD
1. My current employment situation gives me the opportunity to fully express myself as a professional.	2.8 ± 1.6
2. In my organization (eg, intercollegiate athletics), there is a conflict between the work standards and procedures of the organization and my ability to act according to my professional judgment.	3.0 ± 1.7
3. I often have to choose between following professional standards (eg, standard of medical care) and doing what my organization (eg, intercollegiate athletics) wants, despite the professional standards.	2.4 ± 1.7
4. I sometimes have my medical decisions challenged by nonmedical personnel (eg, coaches, administrators) in the organization.	3.8 ± 2.0
5. In my organization (eg, intercollegiate athletics), my medical decisions are always valued, appreciated, and upheld.	3.0 ± 1.6

Abbreviation: OPC, organizational-professional conflict.

When reflecting on her experiences with conflict in the work setting, Katrina described a lack of others' knowledge regarding an AT's scope of work and the value they add to the setting. She said conflict happens, particularly with athletic directors or coaches because, "sometimes. . .they just don't have a very big understanding of the medical field and what it is exactly that we/I do." Winona talked about coaches and the relationships between ATs and coaches. Conflict, in her opinion, often developed because they lacked appreciation for the role of the AT:

> So there are 19 head coaches here that we work with. There is a variety of personalities. Some of them are extremely easy to work with and some of them are extremely difficult to work with. We have the entire continuum here. By difficult I mean, coaches who downplay our abilities, are not strongly supporting their athletes visiting the athletic training room or reporting injures, where others are almost requiring their athletes to come up and participate in athletic training services.

Winona shared that being underappreciated is a major reason for conflict. She discussed inappropriate "name calling" and then having staff reductions over time reflect the underappreciation of the role they play in the athletics department. Winona said,

> From the administrative role, the university in itself, it really, really undervalues what we do here. Last week I got called a "taper" by our chief of financial officer. He referred to me as a "taper." So from that piece, like I said when I first started here there was 3 of us with the 20 sports and now there are 2½. So, their value of what our job is and what our workload is, they very much undervalue what they do.

Others' Lack of Medical Knowledge. Experiences of OPC also emerged when a coach or administrator, or in some cases a parent, lacked an appreciation and understanding of the medical field. Amy shared reflections on OPC and how the conflict that can arise can be difficult over time. She shared that ". . .dealing with it [conflict] over and over again, it is [and can be] demoralizing." Her comments were in reference to medical decisions made by ATs and the impact they can have on them, personally and professionally. Amy continued in her reflections by sharing how a peer left the profession because of the constant conflict with coaches:

> The conflict, that was a lot of it [why working can be stressful]. Then that [conflict] led to the irritability about the challenging of decisions medically. Certain kids, certain teams, certain times. Pushed back against medical decisions, which are over the line in my book. I don't know if it

Table 5. Interview Participant Demographic Information

Pseudonym	Age, y	AT Experience, y	Sex	Mean OPC Score	Practice Setting	Practice Model
Aaron	34	10	M	2.4	C	Sport/athletic
Amy	36	12	F	1.8	S	Sport/athletic
Bill	43	19	M	3.4	S	Sport/athletic
Blain	62	Undisclosed	M	1.4	S	Sport/athletic
Carlie	25	1	F	4.6	S	Sport/athletic
Charles	43	20	M	5.4	C	Medical
David	35	13	M	1.4	S	Sport/athletic
Jacob	45	21	M	3.2	C	Medical
Jaimie	39	14	F	1.8	S	Sport/athletic
James	58	35	M	3.6	C	Sport/athletic
Jerald	45	24	M	4	S	Sport/athletic
Katrina	27	5	F	4	C	Sport/athletic
Lisa	26	5	F	1.4	S	Medical
Paul	63	41	M	1	S	Sport/athletic
Robert	27	4	M	2.8	C	Medical
Samuel	47	24	M	2	C	Sport/athletic
Sierra	35	13	F	4.4	C	Sport/athletic
Tag	37	11	M	1.4	C	Sport/athletic
Winona	36	15	F	4.6	C	Mixed

Abbreviations: AT, athletic trainer; C, collegiate setting; OPC, organizational-professional conflict; S, secondary school setting.

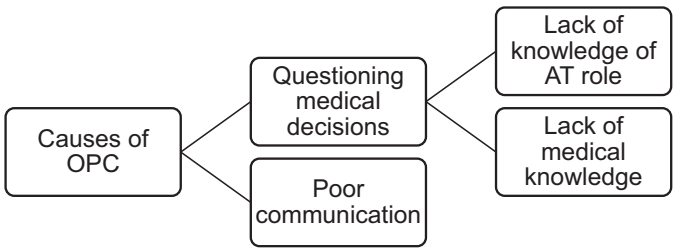

Figure 1. Perceived causes for organizational-professional conflict (OPC) in athletic training practice settings. Abbreviation: AT, athletic trainer.

was originally about that particular issue, but I know it was involved in the decision that they made to leave.

We had participants also share that a lack of knowledge related to best practices and realistic treatments for the setting was a foundation for OPC. For example, Tag shared experiences related to conflicts with coaches related to care provided for professional athletes and the applicability to college athletes. Tag reflected,

> A lot of time it [OPC] revolves around speed of diagnosis and things like that. Coaches obviously—If somebody from the Green Bay Packers is going to get an MRI [magnetic resonance imaging] 10 minutes after the game is over, they don't understand why we wouldn't do that for every single athlete. When in fact they're injured on a Thursday and the physician agreed to the MRI on a Monday—why wouldn't we just do it right now? Why aren't we doing it this very minute? I would say a lot of conflict that we have here, that I have to deal with, is in my secondary responsibilities and has to do with timing of diagnosis.

James, like Tag, talked about expectations of medical care and a lack of full understanding of what is reasonable for medical care and timelines for diagnosis and return. James shared his thoughts on OPC in athletic training as it relates to coaches:

> We talk about that a lot [conflict]. It's not so much direct conflict, it's indirect. It's subtle. It's, I won't call it undermining, but it's indirect undermining of what you're doing. It's "Why didn't you get an MRI? Why aren't you seeing the specialist?" Either to us or to the athlete or the parent or whoever. That doesn't help what we're trying to accomplish. You're always faced with that. Some coaches are worse than others, but I think you'll always have some of that. I don't know if it's a direct challenge to what we're doing, but it's the questioning kind of the slow drip of "oh my god, back off here a little bit." That's happened and that's the more subtle part of it.

Nonmedical providers in the college and secondary school settings can, at times, create conflict, as they do not possess the knowledge of the role of the AT or realistic aspects of medical care. As Katrina summed it up best, OPC happens because "a coach wants somebody back or [is] concerned about certain things with a specific athlete."

Communication. Our participants discussed poor communication among coaches, administrators, and ATs as the basis for OPC. More specifically, OPC resulted from a lack of communication between nonmedical and medical care providers. Amy shared,

> I think a lot of it [the conflict I experienced] was scheduling to tell you the truth. Things were scheduled and not communicated [with me] until the last minute. You know and I know, nobody really likes that.

Charles discussed ineffective communication from the AT to the coaches or patients as a means for OPC in athletic training; his reflections centered on when communication breaks down, conflict is inevitable. Charles described his perception with an example:

> I think one thing that tends to break down when you're burnt out is your ability to communicate effectively. When you fail to have effective communication, now all of a sudden, the student-athletes start to avoid the athletic training room. They [student-athletes] then start talking to the coaches and now the coaches are hearing these whispers of that they feel like they're not getting good care in the athletic training room, so the coaches now are questioning you. I think once you start having that breakdown in communication, that's where you start to see some of the conflict.

Bill, like Charles, shared that when communication is inefficient or deficient regarding the student-athlete's medical care, then conflict can occur. Bill talked about communication when asked about OPC in athletic training:

> If it's a situation when dealing with a student-athlete, I think the common thread is communication, or a lack of communication between the athletic trainer and the coach or the athletic trainer and the parents.

Bill continued to share how communication can break down:

> We have 350 to 400 athletes that we're dealing with and sometimes we have 3 athletic trainers, and we have 30 to 40 kids in the [athletic training] room trying to get out to practice or a game. We don't always have a chance to talk to a coach immediately. Sometimes that doesn't always get taken care of right away, it might be at the end of practice. We finally get that chance to talk to them or later on. In the meantime, the kid has told the coach one thing and we told the kid something else. It's that communication piece and that's something we're always working to improve. For the most part with the parents, we don't seem to have that problem because we do make it a point to contact the parent when we have that talk. There's certainly when the parent feels that their kid doesn't need to sit out. We try to explain our rationale and ultimately if we've made the decision—up to this point, we've had the backing where our decision is the final decision. Both from the coaches and the parents. If it gets to that level of conflict, our athletic director has been great in backing our decisions.

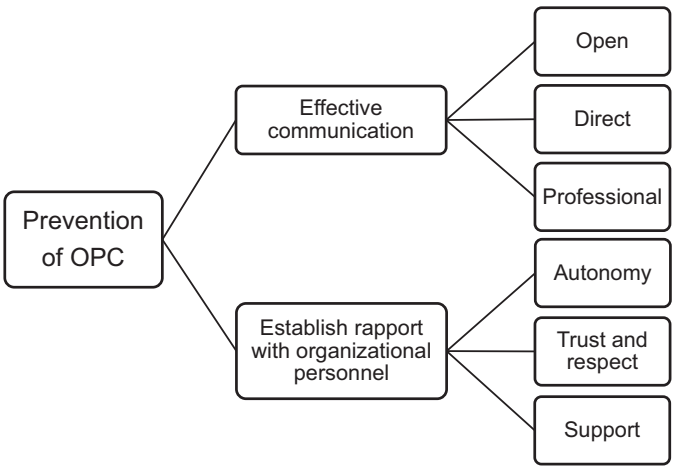

Figure 2. Practices perceived to mitigate organizational-professional conflict (OPC) in athletic training.

Sierra shared that when she communicated effectively, that conflict was avoided—something she had to learn through experience. She shared,

> As my career has progressed, I've gotten better at setting boundaries. When I didn't set as good of boundaries, I had a harder time having those difficult conversations. If boundaries can be set early on, they're understood, they're communicated, expectations are clearly communicated; problems tend not to happen.

Mitigating OPC. Two themes provide insight as to how OPC is prevented or mitigated: (1) effective communication and (2) relationship building/developing rapport with organizational personnel. Effective communication was defined as professional, open, and direct. Rapport with organizational personnel was supported by gaining trust and respect and developing organizational support. Figure 2 presents the practices perceived to mitigate OPC from the perspectives of ATs interviewed in this study.

Effective Communication. The importance of communication emerged as a means to reduce OPC that can occur between ATs and members of the athletics staff (coaches, athletic directors). The communication that was necessary to avoid or reduce OPC was described as open, direct, and professional. Effective communication was shared by all of our participants, regardless of the practice setting. Lisa's reflections on OPC included the significance of communication. She described not only a proactive, direct approach but also one that included having open communication on a regular basis. Lisa said,

> I would say to communicate with your coaches and administration. Building that relationship beyond just the scope of injury. So, hopping into practice just to say hi. We stop down at our athletic director's office every day just to check in and see how things are going. Even talking with the coaches even when they're not in season when you see them around the school. To build those relationships so they like you as a person and then they'll trust you professionally.

When sharing his experiences with OPC, Aaron reflected on the importance of communication and having a cordial, professional conversation with coaches and administrators as a means to deal with it. Aaron believed that education was the foundation to the solution and shared,

> Some of dealing with OPC is explaining the situation, from my point of view, the medical view. There's been a few conflicts where just being able to sit down with those coaches and kind of explain my decision and why and explain the medical end behind it. I think that's about as far as any of those conflicts have gone.

Aaron strongly believed that

> trying to get them [coaches] to understand some of the more complex situations in a more direct way, but layman's terms can help. Getting the coaches to understand, get us speaking the same language, is helpful.

Jacob discussed communicating frequently and using various mediums to do so:

> Just like any coach, when an injury occurs they want to know when are they going to be back, how quickly it can be and if they can play the next game. Just like any coach they get a little antsy, but for the most part communication is very good. You know, I do both computerized, email to them on a daily basis, but I also go down and take a hard copy down to the head coach and he and I, every day that he is here, we talk face to face about it. So the lines of communication here are very, very good.

Ineffective communication was discussed as a catalyst to conflict, and in contrast, many shared that when communication was open, direct, and professional, conflict was reduced or circumvented.

Rapport With Organizational Personnel. Developing professional and collegial relationships with athletic directors, head coaches, and all coaching staff members emerged as a factor limiting OPC. Our participants, regardless of the practice setting, shared that when organizational support was perceived and relationships were respectful, trusting, and supportive, OPC was not present.

Autonomy. Autonomy to make decisions, free of disagreement or resistance from coaches or administrators, emerged as a reason for a lack of OPC. Katrina reflected on the level of autonomy within her staff and the relationships with team physicians and others in her work environment and made that connection regarding low levels of OPC. She said,

> I would say our department is pretty autonomous. We do work under some team physicians that we utilize when needed. For the most part, I allow my staff to be autonomous with making decisions for the athletes—return to play decisions, when to refer them to a physician and when not to.

Paul discussed the importance of autonomy with regard to OPC, but that within that autonomy must be clear expectations and organizational hierarchy. He shared,

> The reason being [for my limited experiences with conflict]—it was very simple. The lines were very clear in the sand; you coach, he takes care of the other stuff. You can talk to each other, but you can't step on each other's side of the line, you each have your own job to do. Autonomy? Absolutely, I have total autonomy.

Other participants shared that having autonomy was a facilitator in their experiences for reducing OPC. James said, "As far as how we organize and how we conduct our own business, I think it's pretty autonomous, which is helpful [in reducing conflict]." Aaron, too, shared having "near-complete autonomy." Aaron believed it helped him function effectively and without conflict. He continued,

> My bosses here allow me to function with day-to-day operations with our athletic teams. Most in particular, the 2 teams I'm ultimately responsible for: our lacrosse team and our baseball team. I've kind of got full function with them.

Our participants reflected that having workplace autonomy over medical decisions and caring for their student-athletes assisted in their ability to avoid or reduce OPC.

Trust and Respect in Relationships. An important aspect of reducing OPC was having trusting and respectful relationships among coaches, administrators, and the AT.

Bill's experiences with OPC were limited, particularly, in his opinion, because of the relationships he has built with his athletic director and coaching staff. When asked to reflect on his ability to function as a professional as it centered on decision-making, he felt supported with limited conflict. Bill said,

> I feel—especially under my current athletic director—I feel like he really listens to what I have [to say and what I decide]. He came from a much smaller school where he didn't have an athletic training staff and coming here, he really values our opinions. The coaching staff as well. I've been there for 16 years and a lot of these coaches either started with me or after me, so they value my opinion as well. Some of them have even been former athletes that have come back to our school. I was their athletic trainer, now I'm their coach. We do have that luxury that we are able to express our opinion and they [our coaches] take it into account—they [the coaches] don't always go with our opinion, but they certainly listen to us and weigh what we're saying before they make final decision on something.

Our participants described having relationships with the administration that were viewed as trusting and respectful. That is, administrators demonstrated respect toward the AT's role and the decisions that they need to make regarding player safety and return to play. Jacob described a considerate relationship with his athletic director and attributed it to limited OPC. He shared,

> She really treats me more as an equal to her than I'm working under her. Which again, is nice and with the background that I have. . . and she knows my background and respects my background and where I've been in my career, so that makes it a much easier relationship to have.

Relationships were discussed as respectful and professional, and, as Blain reflected, "I always enjoyed the fact that the administration in my school district valued athletic trainers and basically what I said, went, whether or not the coaches agreed with that or not." Blain's experiences, in his words, reflected his behaviors. "I've always acted as a professional and I consider myself a professional. When I approached something, I did it in a medical professional way." The relationship developed, in his mind, and that led to respect and limited conflict. Blain also shared,

> Our team doctors backed me and respected what I had to say and do, and I always followed their directives and those with me. It created an era of respect and confidence toward me, and it worked, I guess would be the best way of saying it.

Support From Administrators. The development of a professional relationship, which then leads to a supportive relationship, was shared by our participants as reducing the possibility of conflict. The terms *trust* and *respect* were used to describe the rapport with administrators and coaches, which then provided the platform for support to be developed. Lisa illustrates the support she experiences and the reason for having limited conflicts,

> Yes. I honestly think it's the relationship that we've built with the coaches. The fact that we've been there for 4 to 5 years and they know that we will do everything we can to let an athlete return to play if it's safe for them to do so. When we hold them out, it's for good reason and it's for the athlete's best interest. A lot of time it's hard for the athlete too so we'll say to them, "I know you want to be out there, I know you don't want to let your team down, but you're not performing to the best of your ability right now. If you were to go out there, you would let your team down." Honestly, I think it's the relationship we've built with the coaches is a huge factor in that.

Charles shared, "If the coaches don't respect you, they don't trust you and then that's when issues and conflict arise."

Many of our participants discussed how their athletic directors and/or coaches supported their medical decisions—support shared because of their relationship. Amy discussed having support from her athletic director, even when he didn't have all the information, because he valued, trusted, and understood her training. She explained: "I'm blessed. I have some very decent people to work with, and I don't have the usual plethora of issues that I hear complaints from colleagues about their coaches." Amy even shared that "our team physician is very supportive." Robert, like Amy, described support from all members of his work setting. He shared:

> I think I have a lot of support not only from our head athletic trainer, but from our administration as well. Almost everything I bring to the coach, she will respond however, basically let me have free rein. Whatever my opinion is, she will go with. I usually have backup from the doctors

and from my head athletic trainer when I go to the coach with something I know she is not going to want to hear.

DISCUSSION

The purpose of this study was to examine the degree to which OPC is experienced by ATs across practice settings and 3 primary organizational infrastructures. Moreover, we aimed to explore the perceived causes and mitigating factors associated with OPC. Our results demonstrated low to moderate degrees of OPC experienced by ATs, with no differences across practice settings or infrastructure models. Qualitatively, we found that poor communication, others' ignorance of the AT's scope of practice, and lack of medical knowledge were precipitating factors for OPC. We also found that organizational relationships founded on trust and respect for one another and administrative support for and autonomy given to the AT were key components to preventing OPC. Indeed, effective communication from the AT that was open, professional, and direct was perceived to lessen OPC.

Based on previous studies documenting the pressure exerted on ATs[4] as well as the stress experienced by ATs in the sport/athletic infrastructure model,[2] we expected to see less OPC experienced by those ATs practicing in the medical infrastructure model compared with others. However, there was no significant or practical difference between infrastructure models. Baker and Wilkerson[21] noted that many have advocated for athletic training services to be delivered via a patient-centered care model, or medical infrastructure model, as this holds promise to avoid negative influences of nonmedical personnel, such as administrators and coaches. Though we observed low to moderate levels of OPC, one key perceived cause of OPC was a lack of medical knowledge and understanding of the AT's scope of practice among nonmedical personnel. This supports Laursen's claim that coaches and other sport personnel lack the

> necessary medical knowledge to accurately assess the relative risk of injury posed by a given sport, which is a primary consideration in scheduling medical coverage and making medical decisions.[3]

Importantly, seeing low to moderate degrees of OPC and no difference by infrastructure model in the degree to which OPC is experienced in this study does not mean it is absent. Indeed, 1 of the 5 OPC survey items, "I sometimes have my medical decisions challenged by nonmedical personnel in the organization," had a mean response (3.8) that was over the scale midpoint (3.5). However, of note is that the lowest-rated OPC survey item (mean of 2.4), "I often have to choose between following professional standards and doing what my organization wants, despite the professional standards," indicates that despite pressures pertaining to medical decisions, ATs rarely have to deviate from upholding professional standards. This finding relates to the discovery by Lacy et al[5] that external influences from coaches did not alter the AT's medical decisions. These authors also surfaced a distinction between others questioning an AT to persuade them to change a decision versus simply trying to obtain more information about a player's status.

Other authors have found low conflict in the relationships between coaches and ATs. For example, Newman and Weiss[22] studied the perspectives of injured athletes in the college setting and found low interpersonal conflict between coaches and ATs with no difference based on team or level of competition. Based on the qualitative findings in this study, perhaps the development of professional relationships, the establishment of trust, and autonomy of the AT to conduct their duties mitigates conflict and allows personnel to focus on patient welfare.

Interestingly, although not significantly different from other settings, ATs in an academic infrastructure model or mixed model reported the highest mean OPC scores. Those in an academic or mixed-model infrastructure likely have additional academic or dual-position duties, which raises important questions about dual reporting lines and dual-role positions and whether this influences OPC or other forms of conflict. Previous studies on role strain, which includes *role incongruity*—a form of OPC whereby the expectations in a role run counter to one's values—found that dual-position ATs (ie, educators and clinicians) in the college setting[23] and secondary school setting[24] had moderate role strain. Future authors should explore dual-role positions and OPC that is experienced by ATs.

We found no difference in OPC by practice settings. Previous authors have examined the conflict[4,5] and stress levels[2] occurring in the collegiate setting. This is the first study to examine the conflict experienced among ATs employed in secondary schools.

Female ATs in our sample experienced higher OPC than their male counterparts. Kroshus[4] found that "female clinicians experienced greater pressure from coaches than male clinicians experienced." Similarly, Baker and Wilkerson[21] found that high stress levels were 3 times greater for female than male ATs working in the NCAA Division I intercollegiate setting. Goodman et al,[11] specifically in the collegiate setting, highlighted the organization's cultural issues as affecting female ATs. More precisely, the authors found supervisory and coach conflict as a driving force for females leaving the work setting. Relatedly, Mazerolle et al[25] found that several organizational barriers exist that negatively influence female ATs. For example, these authors noted the perceived "good ol' boys' network" permeating the sport milieu in college athletics and that female ATs struggled to gain peer and administrator respect and had to work harder than their male counterparts to obtain work-related resources to do their job. Of note, Goodman et al[11] found that autonomy and organizational support were positive factors for female ATs in their roles and, relative to the current study's finding, may help mitigate conflict. Organizations would be well served to examine the organizational support and autonomy afforded to all ATs to ensure conflict is effectively attenuated.

We found a negative correlation between OPC and years of experience. This is consistent with what has been found in other professions. For example, Aranya and Ferris[17] explained that the length in service of accountants both in the profession and within a professional organization may enable them to effectively address conflicting demands. Seeing higher OPC among those ATs with less experience is not surprising considering that a key challenge for those

transitioning into clinical practice was communication with coaches[26]—a factor that is perceived by those in the current study to cause OPC. This underscores the continued need to emphasize communication skills in the professional preparation of ATs. Clinical supervisors of newly hired or less experienced ATs would be wise to help facilitate communication, and, given the above examples from participants in this study, this should include discussion on realistic expectations and necessary priorities associated with patient care. Further, they should monitor the conflict their supervisees are experiencing and explore strategies to ameliorate any dysfunctional conflict.

Limitations and Future Research

There are limitations to note. This study included only responses from ATs employed in 2 of the many settings in which they work. It is possible that ATs in high-OPC settings did not feel comfortable completing the survey, which may have skewed the results in the direction of low to moderate OPC. Next, this study only partly explored the systems model—the lateral conflict or conflict among parties (eg, others in the organization) to a functional relationship. Future authors should examine the bureaucratic nature of conflict and examine superior-subordinate conflicts. To identify the infrastructure model, this study allowed respondents to identify supervisory titles and select multiple supervisors. We were surprised to find that 11% of ATs had multiple reporting lines (eg, department chair and athletic director), and we classified them as being in a mixed infrastructure model. This mixed infrastructure model may not accurately capture the precise supervisor. Future researchers should explore this model further, particularly the extent to which role strain is experienced in reporting to multiple supervisors in the organization. Dual reporting lines and dual responsibilities are likely to pull clinicians in different directions and compete for time and energy. Thus, the OPC experienced by dual position ATs and educators may be fruitful to explore. Further, we classified those who identified a head AT as their supervisor in the medical infrastructure model because they reported to a health care professional. It is possible that, should the head AT report to athletic personnel, such as an athletic director, these individuals may be in the leadership chain of a sport/athletic model. The current study did not examine race as a contributor to OPC. It is reasonable to speculate that minority ATs may experience bias and microaggressions in the workplace, which could contribute to greater OPC. Future authors should examine the role of race in OPC. Finally, this study did not examine the safeguards many organizations may have put in place since the Inter-Association Consensus Statement[27] was published. Understanding the number of guidelines implemented in sport organizations, along with athletic training infrastructure models, may provide deeper insight and understanding.

Conclusions

This study's focus was on perceived OPC among ATs. We were pleased to see that the majority of ATs experienced primarily low to moderate OPC, regardless of practice setting; however, it is clear that OPC permeates professional practice, to some extent, in both collegiate and secondary school settings, regardless of the infrastructure model used.

The findings of this study underscore the role of administrative support in allowing for autonomous AT practice as well as effective communication that is direct, open, and professional. Further study is needed to more clearly compare administrative structures that minimize potential conflicts of interest. Despite seeing no difference in OPC by infrastructure model, the best practices in sports medicine management for secondary schools and colleges,[27] along with the NCAA Interassociation Consensus on Independent Medical Care for College Student-Athletes Best Practices,[28] continue to provide clear guidance for the administration of athletic training services, and the extent to which this guidance is followed should be explored.

ACKNOWLEDGEMENT

This study was made possible with the support of a grant from the Great Lakes Athletic Trainers' Association research assistance committee (W.A.P., S.M.S.).

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Appendix. Semistructured Interview Guide

1. Please describe your current employment setting.
   - Probe: To whom do you report?
   - Probe: Who is your direct supervisor?
2. Describe the extent you are able to express your professional opinions in your work setting.
3. Describe the extent you are able to act according to your professional judgment.
4. Describe any instances when you had to choose between what you thought was an appropriate step of patient care and what others in your organization thought was appropriate.
5. Can you describe any instances when your decisions were challenged by others in the organization?
   - Probe: What was the nature of the challenge?
   - Probe: What caused this issue?
   - Probe: Who was the person?
6. Describe the extent to which your role is valued in the organization.
   - Probe: Are you appreciated? Why or why not?
   - Probe: Are your decision always upheld? Why or why not?
7. Describe your level of professional autonomy you have.
   - Probe: What factors contribute to how much autonomy you have?