Role Strain, Part 2: Perceptions Among Athletic Trainers Employed in the Professional Practice Setting

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Context: Athletic trainers (ATs) employed in the professional sport setting (ATPSSs) demonstrate moderate to high degrees of role strain. The experiences and perceptions of these ATs provide insight regarding the sources of role strain as well as ways to reduce it.

Objective: To investigate the perceptions of ATPSSs regarding role strain.

Design: Qualitative study.

Patients or Other Participants: From a purposeful sampling of 389 ATs employed in the 5 major sport leagues (Major League Baseball, Major League Soccer, National Basketball Association, National Football League, and National Hockey League), we identified 34 participants willing to participate in phone interviews.

Data Collection and Procedures: Semistructured phone interviews. Inductive data analysis was based on a grounded theory approach. Credibility was addressed with member checks and a peer debriefing.

Results: Three first-order emergent themes materialized from the data: (1) sources of role strain, (2) consequences of

role strain, and (3) strategies to alleviate role strain in ATPSSs. Participants described the antecedents of role strain as emerging from the competing expectations of the professional athlete, the organization, and the sport league. Consequences of role strain included effects on direct patient care and work-life imbalance. Improving organizational factors such as inadequate staffing and poor communication within the organization were strategies described by participants for decreasing role strain in the professional sports setting.

Conclusions: Our participants discussed experiencing role strain, which was facilitated by trying to meet the competing demands placed on them with limited time and often with an inadequate support staff. Participant role strain affected health care and contributed to work-life imbalance. Participants described changing the organizational factors that contributed to role strain as a strategy to alleviate the perceived stress.

Key Words: work-life imbalance, role stress, interrole conflict, role overload, role incongruity

Key Points

- Role strain existed at a moderate to high level in athletic trainers employed in the professional sport setting (ATPSSs).
- Role strain in the ATPSS affected health care and contributed to work-life imbalance.
- One strategy to alleviate role strain in the ATPSS is changing organizational factors in the work setting.

he role of the athletic trainer (AT) is described as complex and demanding, as ATs must balance a variety of obligations and expectations simultaneously.¹ Role strain is a concern for ATs, especially ATs employed in the professional sport setting (ATPSSs),¹⁻³ who are required to meet the expectations, demands, and responsibilities outlined by the organization and the league as well as provide health care to the athletes they serve.

Role strain is based on organizational role theory and is defined as a desire to fulfill the expectations and demands, regardless of the role, such as providing direct patient care and managing travel logistics.⁴ Strain and conflict manifest when the individual is unable to meet or fulfill the role expectations because of a perception that the expectations are competing or impossible to meet.⁴ Eight subcomponents of role strain exist, with many factors that may contribute to strain (Table 1).⁵ However, stress from the

organization, including role ambiguity, role overload, and role conflict, most often precipitates conflict for the ATPSS. 6

Currently, the literature^{1–3,7–12} is rich on the experiences of ATs employed in the collegiate setting regarding role strain, as ATs manage elements within the workplace that can set the platform for role strain. The professional sports setting (PSS), much like the collegiate setting, places the AT in the unique situation of balancing health care responsibilities and obligations with the obligations and expectations of the organization.³ In sport organizations, a hierarchical, top-down management structure is often in place, which may limit the decision-making process or restrict the abilities of the employee, potentially leading to ATPSS role strain.^{13,14} Moreover, the "win-at-all costs"¹⁵ mentality of organizations can place the ATPSS in conflict with health care provider obligations, creating role strain.

Table 1. Descriptions of Role-Strain Subscales

Role-Strain Subscale	Definition
Role overload	Difficulty fulfilling role obligations because role expectations are too complex, too excessive, or too time consuming
Role ambiguity	Unclear or vague role expectations
Role incongruity	A person's perception of himself or herself runs counter to the demands or expectations (or both) of the role occupied
Role incompetence	Lacking the skills, knowledge, or ability to take on the responsibilities of the role assumed
Role conflict	Athletic training roles are clear but are competing or incompatible with the expectations of those roles
Intersender conflict	The demands of a member in a role set are incompatible with the demands of another in that same role set
Intrasender conflict	The demands of a given role are incompatible or mutually exclusive
Interrole conflict	A situation when a role occupant simultaneously has more than 1 role and the demands of one role conflict with the demands of another role

Role strain, although facilitated by organizational factors, is an individualized experience; therefore, understanding the individual perception of the ATPSS is important. Role strain may manifest as a decrease in job satisfaction and performance, as well as in an increase in burnout and retention concerns.^{1–4} The purpose of this study was to investigate the perceptions ATPSSs had of the concept of role strain: specifically, their opinions on role strain in ATPSSs and the practices they used to reduce the amount of perceived stress associated with role strain.

METHODS

Research Design

We used a sequential mixed-methods approach¹⁶ to understand role strain in the PSS. Because of the large volume of data collected, we decided to present the qualitative findings here, whereas the prevalence of role strain in this setting is addressed elsewhere.⁶

Participants

Thirty-four ATs employed in Major League Baseball (MLB; n = 6), Major League Soccer (MLS; n = 9), the National Basketball Association (NBA; n = 10), the National Football League (NFL; n = 6), or the National Hockey League (NHL; n = 3) completed a phone interview with the primary author (M.G.R.). We recruited these individuals from our larger sample of ATs who completed a Web-based online survey.⁶

We recruited the participants using a purposeful sampling strategy,¹⁷ based on each ATPSS's respective degree of role strain, to provide maximum variations and experiences of role strain.⁶ We selected our participants from each category of role strain: high, moderate, low, and minimal. Sample size was determined by saturation of the data¹⁸ and equity among the 4 levels of role strain as a means to balance information gained from the interviews. We

wanted to gain a comprehensive perspective of the individuals who self-reported each level of strain. We used pseudonyms to protect the identities of the participants (Table 2).

Instrumentation

The primary author developed the interview questions (Appendix) using the results from the quantitative data collected in the larger study,⁶ as well as from the existing literature^{2–4} on role strain in athletic training. Predetermined questions were purposeful to stimulate discussion and maintain consistency among the interviews. However, a semistructured interview format was used so the primary author could engage in conversations freely with the participant to gather more in-depth data through follow-up questioning when appropriate. Before data collection, a second author provided feedback in the areas of content, flow, and grammar.

Data-Collection Procedures

We obtained institutional review board approval before the launch of the Web-based survey instrument and began recruitment of our participants once data had been analyzed as part of a larger study investigating the experiences of role strain on the ATPSS.⁶ Potential participants were contacted via e-mail. We scheduled interviews once we had obtained informed consent. The average time for the interviews was approximately 30 minutes. All the interviews were audio recorded and transcribed using a Webbased transcription company.

Data Analysis

We used inductive data analysis based on a grounded theory approach to analyze the data. During each interview, the primary author audio recorded and took notes in a reflexive journal. The primary author reviewed the interview transcripts between 48 and 72 hours later. We used a constant comparative method to compare data from the interviews to generate a common category, theme, or pattern while still collecting data.¹⁹ After the first week of coding the data from the interviews, the framework of common themes emerged. Themes were maintained in the primary author's reflexive journal to organize and control bias. Each week, the data were coded and central themes were discovered through data saturation.²⁰ Validation of perceived role strain was established and compared with the quantitative data collected in the larger study for the central themes.6

Trustworthiness of Data Analysis

We controlled bias by establishing trustworthiness using peer debriefing, multiple-analyst triangulation, member checking,^{17–19} and bracketing.²¹ The second author (W.A.P.) has an established scholarly record and expertise in professional topics in athletic training and qualitative methodology. The second author provided debriefing by verifying emergent themes through review of the transcripts and coding schematics. The first and second authors engaged in professional discourse about the emergent themes during data collection and analysis to

			No. of Years				
Pseudonym	Role-Strain Degree	Professional Affiliation	As a Board of Certification-Certified Athletic Trainer	In Current Position	Working in Professional Sports League	Working in Current Professional Sport Organization	In Professional Sports
Ben	Moderate	MLB	18	5	18	18	18
Bill	Moderate	NBA	23	7	13	7	13
Bob	Low	MLB	28	10	28	18	28
Brad	Low	MLB	13	4	13	13	13
Bret	Minimal	NFL	20	3	14	17	18
Chad	High	NBA	16	11	18	11	18
Dan	Low	NBA	18	10	10	10	10
Don	Minimal	MLB	25	12	27	23	27
Ed	Low	MLB	19	5	20	5	20
Eric	High	MLS	5	1	2	2	2
Flip	Moderate	MLS	5	1	1	1	1
Fred	Moderate	NHL	30	21	21	21	21
Jack	High	MLS	7	1	2	2	2
Jay	High	MLS	18	8	16	8	17
Joe	High	MLS	14	1	5	1	8
Jon	High	NHL	21	5	7	5	14
Mack	Moderate	NFL	6	3	4	4	4
Marty	Moderate	NHL	6	3	3	3	4
Mat	Low	MLS	7	2	4	4	5
Monte	Low	NBA	37	15	33	15	33
Pat	Low	NFL	14	12	12	12	13
Paul	Minimal	NFL	12	3	5	3	5
Peter	High	NFL	8	5	6	6	7
Rip	High	NBA	22	15	21	15	21
Ron	Low	NBA	12	10	11	11	11
Sam	High	NBA	11	2	5	5	5
Saul	Minimal	NFL	27	19	19	19	19
Skip	Moderate	NBA	25	19	22	22	31
Stan	Minimal	MLS	4	1	1	1	3
Steve	Low	NBA	23	11	15	11	15
Tad	Low	NBA	6	1	4	1	5
Tim	High	MLS	4	3	5	4	6
Todd	Low	MLS	4	3	3	3	3
Tom	Moderate	NHL	22	17	17	15	20

Abbreviations: MLB, Major League Baseball; MLS, Major League Soccer; NBA, National Basketball Association; NFL, National Football League; NHL, National Hockey League.

complete the peer-debriefing process. During the peer debriefing, agreement between the first and second authors occurred; this process was ongoing during the collection, analysis, and confirmation of the findings. A researcher independent from the data-collection process and the first author completed the data analyses after the stepwise procedure to establish multiple-analyst triangulation. We reached agreement during the multiple-analyst—triangulation process, which included exchanging the coding schematic and coded transcripts.

Bracketing is a technique used to diminish a researcher's preconceptions that may taint the qualitative findings.²¹ The primary author completed a reflexive journal throughout the study to establish bracketing. During and after each interview, the primary author wrote down potential themes and notes pertaining to the research questions and answers. This journal was also used to organize emergent themes after the transcripts were coded. By keeping the journal, the primary author was continuously reexamining potential bias against emergent themes. Our selected themes were determined emergently and finalized through member checking.

RESULTS

Based on the inductive data analysis, 3 higher-order themes emerged from the interviews: sources of role strain, consequences of role strain, and strategies to alleviate role strain. Each higher-order theme contained several lowerorder themes, which will be described in detail. The Figure provides a schematic diagram of the emergent themes.

Sources of Role Strain

The higher-order theme of sources of role strain was derived from the expectations and demands of 3 entities: the athlete, the organization, and the league. Over time, each entity increased the expectations of and demands on the ATPSS. Participants described competing demands regardless of age, years of experience, or league affiliation.

Expectations of the Professional Athlete. A lower-order theme in sources of role strain was expectations of the professional athlete. Participants described the competitive nature of professional sports as increasing the expectations placed on the ATPSS, simply because the athletes wanted to receive the best care at all times. Jay, an MLS AT with

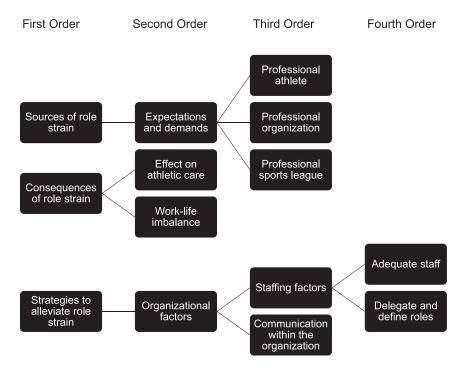


Figure. Schematic of emergent themes.

more than 10 years of experience, felt the demands and expectations placed on him from the athletes' high expectations for success and medical care. These expectations of health care created implications for the AT's workload. He shared,

The current generation of athletes is more aware, whether it be through the Internet or personal experience, of what is out there in the health care field, including mainstream medicine, or alternative medicine, and athletes are now coming in asking for specific treatments, or asking for specific procedures, whereas in years past they would just simply come into the room and say, "I'm hurt, what do I need to do?" At times they already have looked at what is going on. As soon as they know what's hurt they start looking things up, and then they come with some request of, "Can we do this?" "Can we do that?" And that has increased over the years.

Athletes depended on the ATPSS to monitor emergent techniques and technology to improve their health. Recording, managing, and analyzing health data and implementing prevention protocols are areas an ATPSS needs to be familiar with to meet these expectations. Flip described a variety of metrics that he monitors on a daily basis:

... and again, injury tracking and injury observation and also, from [a] preventative standpoint, which also includes... keeping track of certain parameters on a daily basis with those athletes' workloads, such as heart rate, GPS [global positioning satellite] tracking, and even, to some extent, blood work, as well as yearly analysis and also sleep patterns... Rip, who had been employed in the NBA for more than 20 years, commented on the increased workload from the athlete that extended beyond direct patient care:

I'd say the increase[d] work from a day to day... helping with just basic treatment and care of athletic injury, then rehabilitation is growing exponentially into not only a health care provider but a time management coordinator, a personal assistant, baby sitter, school nurse... it has gone beyond athletic care to complete personal service.

Athletic trainers employed in the PSS explained how external influences, including individuals who acted as athlete advocates such as families or agents, influenced demands from the athlete. For example, several participants stated that the athletes' agents pushed for the best care, the most advanced and progressive care available to them. Brad, who worked in MLB, illustrated a situation in which the athletic demands were driven by others:

I also think that their agent tells them, you need this and this and this. Or the situation where they will seek out care like a chiropractor and they're the one being told, "Yeah you need this, you need this and you need this."

Ron also expressed familiarity with external influencers while working in the NBA:

...these guys getting outside advice from everybody that you have to sift through just to do the basic care ... now you have to educate their parents and their agents and their financial advisor. Just the education of the athletes and [those] kind of demands that they place has gone up even during my time that I've been here. Athletes in the PSS were more aware of the role the AT could play in the management of their health care; thus, their high expectations placed a greater strain on the ATPSS.

Expectations From the Professional Organization. Another lower-order theme derived from sources of role strain was expectations from the professional organization. The ATPSS must abide by the professional organization and league governance.¹⁵ Most organizations' demands are similar, irrespective of team and league affiliation. Sam, an assistant AT in the NBA whose role-strain score was in the high category, shared his thoughts on the increased expectations from the management in his organization:

The management definitely has higher expectations on [the] athletic training staff... Just making sure there is control over a player in the off-season. Many of those inseason tasks and expectations are similar but in the off-season I think it's where it's definitely enhanced and grown [from a] management perspective. I think they are definitely people who have expectations that we need to control what this player is doing, we want to know who he's working out with, and if it's at all possible, we want them working out with us and train[ing] with us and being treated medically from us. So that's definitely... the biggest [thing], I mean, that's a 4- to 5-month increase in time with an athlete from the management.

Management has also required ATs to adopt additional roles, as Jon, an NHL AT, described: "I think there have been additional roles that I have been put on. For example, we have... a performance group which I'm a part of." Fred, another NHL AT, noted an increase in administrative work:

Well, there has been more administrative work, paperwork, more documentation that is needed, more involvement with the CFO [chief financial officer], not only with my budget but hockey's operation budget. The fact that I am the liaison between ownership, management, and my position [there] is more work involved with that.

The ATPSS is also asked to participate in researching and monitoring athletes for the organization, as Ed, a head AT in MLB observed:

From the front office, I have seen those increase[s] and demands as well, those increases are more or less in the range in area of medical files and reviewing of medical files for potential previewing or [a] trade candidate, for players, those things to help them, maybe offset some of the decision making that they are having to get through and go through and then also making the decision for a long-term commitment as well for a player.

As the main health care providers for the team, ATs such as Jay were often asked to be a medical liaison for coaches, staff, and management within the organization:

... to take care of staff members as well, establishing and coordinating different appointment and follow-up for staff members for all manner of things whether they actually be more of an orthopaedics... sports medicalrelated tasks to general dentistry... to appointments for... wives and kids... scheduling and then liaison between health care provider that they are seeing... whether it's a doctor or someone else...

Joe, an MLS AT, said,

Sometimes that strain [manifests], "Hey my wife needs an appointment, can you help me, or the coach needs help" and I'm like, "You are a grown man, you have insurance, I can point you to the right direction, but I don't know your schedule." You can make an appointment yourself, but you try and be helpful because the expectation is... you are going to help everybody and anything medical falls under the umbrella of "It's your responsibility and you should be knowledgeable about it."

Participants described experiencing role strain as the demands and expectations from the organization extended beyond direct patient care of the athlete to patient care of the families, the coaches, and the staff.

Expectations From the Professional Sport League. The final lower-order theme emerging from the higherorder theme sources of role strain was expectations from the professional sport league. Professional sport leagues are the governing bodies for each professional sport organization. Professional sport leagues make decisions on the league structure, including format (the method of scheduling matches or games to determine a champion), hierarchy (the relationships among leagues of higher or lower quality), multiplicity (the number of leagues at the same level of hierarchy), membership (the conditions under which a team enters or exits the league), and governance (the method for deciding and enforcing league policies).¹⁵ Role strain manifests in the PSS when the league increases expectations by developing new policies or procedures. Each year brings new expectations that compete for the AT's time and resources. Todd, who worked in MLS, spoke to the increased demands on the ATPSS from the league: "So every year there is always added demand from the league in terms of what data we are inputting into the system..." Eric, also from MLS, provided, "This constant change in protocol [from the league] and things like that, so yeah there is always actually a little bit more every year." Overwhelmingly, league demands were tied to administrative duties and data collection, as Dan, an NBA assistant AT, commented:

I think they have increased most markedly in the electronic medical records and... some of the statistical information that they try to use for injury data and those kind of things... I also think there is an increase [in] need from the league for more information.

Steve, who had worked in the NBA for more than a decade, echoed the sentiment of being liaison and data collector: "... in that time, I feel like the athletic trainer has become much more of a clerical cleaning house for the league to achieve certain administrative contact communication efforts with the players." Tom, from the NHL, added,

... data analysis on injuries. We have a tracking system; we have an EMR [electronic medical record] system that tracks different data for injury analysis league-wide... EMR, drug inventory, concussion management, emergency response preparedness...

These mandates and administrative duties added up and increased the workload on the AT trying to balance them with direct patient care, as Bret, an AT from the NFL, remarked: "...again they are good programs but it still picks up extra time that you are not dealing with the athletes..." Fellow NFL AT Peter agreed:

Whether it be the drug programs, the prescription drug programs. Whether it be our new electronic medical records. There is always something coming that... demands extra time or take time away from training athletes... or whatever other responsibilities I have in the building.

Jon, who had been working in professional sports for almost 15 years and had a role-strain score in the high category, concurred:

Those types of things, that have been for sure without question the biggest change is ... all these new policies, procedures, and way to do things, and we're the ones that have to implement it...we have to end up being at our desk more and...in the training room less. I've seen my role go from... 80% in the training room to probably 40% in the training room and the other, the now remaining 60% has been with the league, either computer programs or paperwork or...

Competing demands negatively affected the ATPSS's ability to adequately address job expectations. Peter, who worked in the NFL, explained how the administrative work necessary for the league conflicted with direct patient care: "A perfect example would be this last... yesterday actually... I couldn't even go out to practice because ...the league wants all of our medical records put in the system ASAP [as soon as possible]..."

The demands associated with league obligations often conflicted with the other demands on the ATPSS. Participants described a feeling of frustration because these demands were often imposed with minimal or no input from the ATPSS. Rip conveyed his feelings when he addressed dealing with the mandates from the league: "... having no say into the decision making yet being responsible for ... carrying out [all] the orders and the implementations is one of the main stressors." Skip, also from the NBA, depicted the litigious nature of the leagues as a reason for the increased administrative duties requested of the ATPSS:

The league is becoming more legal. I think it's the best way to put it ... keep up with standards of practice regarding cardiology and head trauma. There is more scrutiny from the league I think on those things. It's up to the athletic trainer to make sure every step along the way is signed up, I's are dotted, and T's are crossed... and they use the excuse of course that the athletic trainer has the most contact with the player on a daily basis and get[s] in touch with the player quicker than anybody. That's the reason I am [involved] in the drug testing.

Skip also indicated, "It does feel overwhelming, especially during training camp time when all the deadlines have to be met."

Participants observed that the stresses associated with the league demands seemed to be linked to the time commitment of mandated duties without consideration for the time constraints of the ATPSS.

Consequences of Role Strain

Although some demands were within the scope of practice of the ATPSS, the administrative workload and excessive demands could supersede direct attention to athletes' needs and health care services. The ATPSS often sacrificed personal and family obligations when trying to meet these excessive demands.

Effect on Athletic Care. Participants described the effect on direct patient care as a lower-order theme of the consequences of role strain. Ben, from MLB, remarked on how role strain interfered with his primary role as a health care provider: "There's a bunch of little pieces add[ing] up throughout the season where you just kind of get pulled away from actually just doing your main goal, just taking care of the players, that kind of add[s] up." Jay, an AT in MLS, agreed,

I don't think many people in sports medicine, no matter what level they are at, went into this business to fill out forms and do paperwork. We went in to treat people and make them better and you look at these things as additional barriers to having the time to do what you think your job is, which is to treat athletes.

Jay's and Ben's experiences showed that time for direct patient care was reduced because of other responsibilities in the PSS. Bill, an AT in the NBA, captured the interference that can happen in this setting: "I think there is more and more mandates that are... affecting where we do our dayto-day business... it takes away from the clinical aspect of what the players need." Rip, also from the NBA, said,

[The] main objective is to be a health care provider and care for the athletes the best way you can ... you could take the ability to try and treat and care for your athletes can be completely undermined by the fact that you can't be in 2 places at 1 time ...

When asked how he felt about being given responsibilities that interfered with direct patient care, Stan, who had a minimal role-strain score, responded:

Well, I wouldn't necessarily say that I'm feeling overwhelmed when it comes to these situations... it is like, "Okay, we'll get it done kind of mentality" and then it's kind of afterwards that you realize that the workload... you had in the past versus the workload that you have now has increased significantly and that's a little bit more of an annoyance but I also understand where the clubs and where the leagues comes from in terms of the legal standpoint to have the injury tracking more thorough and more specific... it's a little bit of a burden to the time that we have... that we can't necessarily invest in the athletes, which is at the end of the day what we're there for as well.

Participants voiced concerns that over time the administrative demands from the organization and the league accumulated and could interfere with direct patient care.

Work-Life Imbalance. The participants also described work-life imbalance as a lower-order theme that was a consequence of role strain. Excessive demands could interfere with the clinical practice of the ATPSS, but ATs still tried to provide individualized attention to their athletes. Athletic trainers employed in the PSS were able to continue to provide care by working excessive hours, which directly limited the amount of time they could spend with family or on outside personal interests. Jon, an AT working in professional hockey, pointed out,

It's just the time constraints because it's 24/7 and you don't get a... very rarely you get a break during your season. And so, I think that's just a factor of all these roles have increased the volume so much that it's so hard to get personal time.

Saul, an NFL AT who had minimal role strain, identified the time demands on the ATPSS: "Time demand, big time. So, if they're here, we're here. So, really there is no offseason for the athletic trainer." The consequence of excessive demands and limited time can be stress associated with trying to balance life outside the workplace. Don, an experienced AT working in MLB, highlighted this fact: "The hardest part about our job is balancing our lives with our family, work, and kids and friends and finding free time for ourselves." Chad, an assistant AT working in professional basketball, agreed: "Oh yeah. I mean you take it down to the personal level where you know you're gone so much that ... you're gone so much that it affects your family life and your home life." All the stress associated with the job could lead to adverse effects on the ATPSS, as Bret suggested regarding a fellow AT: "But that is part of the reason why he retired was that he said, he goes, 'I just tired of the league adding something that added 10 minutes to my day every year." Athletic trainers employed in the PSS described balancing workplace expectations and responsibilities by working long hours, which directly reduced the time available for their families, friends, and personal interests.

Strategies to Alleviate Role Strain

The most common strategies to alleviate role strain among ATPSSs were organizational in nature. Our results are consistent with previous findings^{7,11,14,22,23} regarding the sources of role strain, which come from entities within (athlete and management) and above (league) the organization. The higher-order theme strategies to alleviate role strain can be divided into the organizational lower-order themes of staffing factors and communication within the organization. The lower-order theme of staffing factors is further delineated into having an adequate staff and delegating and defining roles. **Staffing Factors.** The lower-order themes for staffing factors were having adequate staff and delegating and defining roles. Most participants alleviated perceived rolestrain stress with staffing strategies. Athletic trainers employed in the PSS who believed they had adequate staffs typically had lower mean role-strain scores than those who perceived inadequate staffing. Participants also perceived that the quality of the staff was an important factor in staff dynamics. Many participants suggested delegating and defining roles as another approach to decreasing role strain among staff.

Adequate Staff. Overwhelmingly, almost all participants agreed that adequate staffing would help alleviate role strain for the ATPSS. They described both the quantity and the quality of staff. Skip gave the rationale for increasing the staff to his organization: "The first thing would be definitely increase staff because the workload is going to be increased annually and staff should proportionately be increased." Jack described how teams overlooked the simplicity of adequate staffing: "But I think that there is a lot to do and these teams aren't necessarily looking to staff as well as they should"; he also commented that having "adequate staff members to try to take care of everything would be helpful." Pat, an AT in the NFL whose staff consisted of 4 ATs, identified the benefits of adequate staffing:

Us adding another staff person, giving us more personnel... has been vital for us, and taking a lot of the strain off me as far as [being] an athletic trainer. To be very honest with you, it's been great. I think staffing is vital. If you look 5 years ago, you still had athletic training staff in this league that had 3 athletic trainers. That is gone by the wayside, now you have staff up to 4 or 5. Literally, I remember people used to think 4 is too many and it's vital because you give more hands-on and more quality care to [the] athlete. It goes back to what I talked about. The administrative responsibilities are so immense that you can't do it...you need more hands and more help.

Jay, who perceived that he had an inadequate staff, commented from his experience as an AT in MLS,

...initially when I joined this league, there was only 1 athletic trainer required. I did everything. I made the water bottles, I treated the athletes, I referred to the doc, I drove them to the appointment, I got the paperwork, and I shipped the bill off. Now with an assistant, some of those things cut down and we've had that for a number of years, probably almost a decade now, but there is still a need for more staff to help handle what goes on, on a regular basis, and as I am sure you are aware, any other athletic trainers are aware the ratio of medical staff to player is nowhere near the same as coach to player.

Many ATs also suggested that a dedicated administrative assistant is beneficial:

... having an administration-specific person who's just in charge of any added work, whether it would be orders or doctor's notes, travel plans and/or possibly looking up records for other teams and players that you have to loan out and some things of that sort. (Flip)

[W]e were talking about trying to find [an] admin position just to handle the billing, the work comps like all that kind of stuff administrative ... we can handle just the clinical side of it and focus on just the athlete... so we wouldn't have to deal with the paperwork you know. (Marty)

They're not working [on the] field but they're dealing with some of the administrative duties, the scouting reports, some of the budget stuff that normally you [would] have to go to your assistant GM [general manager] [with]. (Don)

[H]iring a dedicated administrator would help balance some of [the] scheduling... putting things in EMR system that could be done by a nonmedical personnel, as well as helping keep abreast on what your schedules [are] like ... (Bill)

All that stuff takes up an immense amount of time to organize ... and it ends up using all your free time ... because that's so tedious ... it'd be great to have an administrative assistant that can do that kind of stuff, and that is their only responsibilities so that we're free to take care of the players. (Ben)

Paul, an AT in the NFL, felt he had management support and an adequate staff, which may have resulted in his minimal score on the role-strain survey:

[I]f you don't have the resources and you have higher expectations [and] high demand, that would be very difficult... I think the team that I am with...we have adequate resources and... I think that we are staffed very, very well.

Ron, of the NBA, stated simply: "You have to bring in other people with all this stuff... you can't do it [all] by yourself."

In addition to an adequate staff, the quality of the staff is important to decrease strain, as stated by Monte of the NBA: "First of all, you need to hire you a great staff and in that they got to be people that you can trust and depend on." Rip, of the NBA, expressed the belief that to "have a competent staff that work together well will really decrease role strain." Quality staff who valued teamwork embodied the adequate staff theme. Tim, of MLS, reflected that when he was first hired,

I know when I first came into the league, my first 2 and a half years... I was fighting tooth and nail just to be able to think on the same wavelength as everybody else and have... both the fitness staff and the medical staff or rehab [staff]... all come together and start looking forward into being more proactive as opposed to reactive... now we are much more proactive and we are reaping... [the] benefits from it overall as a club...

Paul, of the NFL, who had a minimal degree of role strain, worked with an ideal staff, "... it's a pretty

[cohesive] team... we ultimately have our responsibilities and we work well together, there is clear understanding... I don't think that overload would occur ultimately." Ed, an AT in MLB, put it directly, "I think that we are only as good as the people that we have working with us and around us."

Participants described maintaining adequate numbers of staff members whose expertise was maximized as a viable strategy for reducing the perceived stress associated with the competing roles of the ATPSS.

Delegating and Defining Roles. Ensuring that all individuals on the staff understood and accepted their roles within the organization was a strategy for managing role strain. Jon, a head AT in the NHL, recognized that during times of high demands, delegating roles was beneficial: "...acknowledge and accept that there will be high time demands. And then from there, try and use the people around you to delegate different roles that you don't have to do." When asked about staffing as a way to reduce role strain, Jack, an AT from MLS, concurred that an increase in the number of staff improved efficiency:

... numbers of staff members and then their competency, and being able to delegate specific tasks for specific people, so that everyone knows what their role is with the team, and how everything is going to get done.

Marty, of the NHL, identified what can happen if roles were not delegated:

A lot of guys just want to do everything themselves, which is great, but then you add so much strain on yourself and you know if you have the assistants ... that could help reduce some of [these] things, you know, to disperse some responsibilities a little bit.

Ben, an AT in MLB, noted, "Clearly identifying what everybody's expectations is and what your role is, so that there is not you know... any kind of an overlap."

Ed described how a defined role within the organization helped reduce the stress associated with role strain among his staff:

I think that having a big understanding of what my role is, and being able to accept that responsibility [has reduced my role strain] ... understanding your role within the management and what the management's overall objective and plan is allows you to have ... less of a strain on your role. And in the last 3 years of the 3 organizations I have worked with, I have had a pretty good understanding of it.

Tad shared his thoughts on combining an adequate staff with defined and delegated roles, leading to a decrease in workload and a more efficient model of health care:

I think if you can put [together] a good staff for the team [and] distributed the workloads a little bit more equally... with the right amount of people I extremely agree that that can be a great deal. [Then] you can distribute the responsibilities [from the] athletes and duties in a better way... Generally, participants articulated that defining and delegating staff's roles could maximize expertise and improve efficiency.

Communication Within the Organization. Participants associated improvements in communication with a lower degree of role-strain-associated stress. Participants suggested that efficacy in the workplace was achieved by improved communication with management and staff. Joe, an MLS AT, addressed the effect of communication on role strain: "The better the communication, the less...the issues, but the worse in communication... that's when things become a real problem." Dan, an NBA assistant AT, identified the benefits of communication in reducing the amount of perceived stress associated with role strain:

I think making sure that everybody has good communication and everybody is on the same page as far as what is going on with the team, with athlete[s] and with management so that your expectations are known and so that you can meet those expectations.

He described how communication with management improved support for his department: "They organize and try to give us all these tools we need to do well in our jobs... [having] a good model of efficiency with regards to how roles are delegated..."

Mack, an NFL AT, also recognized the value of communicating with management to improve support:

It's having [an] upper management group that has an understanding and appreciation for what happens ... because they know what is going on and they can get behind it and they can understand why we do the things we do ... So, informing the management, the coaching staff has a huge [benefit] rather than just asking them for things.

Stan, an AT in MLS, offered, "I think regular meetings with the management would be a massive [improvement]—just to see how things can be run more efficiently." Fred, from the NHL, echoed Stan's sentiments:

And it keeps off stress amongst coaching staff... it keeps off stress among myself, my assistant and my equipment staff... Being open and having communication, having... meetings... [or] going to dinner or something like that, or whatever, forces that communication... And everybody feels more comfortable.

Communication with staff was also a major factor that reduced stress associated with role strain, as illustrated by Paul, an NFL AT:

[C]ommunication, I think that is the biggest thing, clear and precise guidelines ... I think that having that communication is the key, obviously there is going to be disagreement in the philosophy but the fact that we are working towards one goal I think is a very, very big thing...

Todd explained how communication improved the efficiency in his workplace:

Me personally we have a very good setup here... where the head athletic trainer deals a lot with the doctor's appointments and kind of acts as a director more... then I'm able to deal a lot with... the day-to-day stuff... when you have the communication with everyone, it makes that process a lot easier.

Steve, a head AT in the NBA, correlated his low rolestrain score with communication and support from staff and management:

... I think the 2 primary factors... the support I get from my coworkers [and] the support I get from my management and ownership... [they] provide me with structure to accomplish working smart. I feel that the staff that surrounds me... primarily my coworkers or my subordinates help assist in reducing that type of strain for me.

Ron explained how thoughtful communication with management was effective:

So management most likely doesn't understand the number of hats we have to wear unless we take it to them and explain it, but it's a real tricky line to explain it in a way where you are not just whining about your job [because] that won't be well received.

Participants stated that efficiency in the workplace improved with effective communication within the staff and among administrative superiors. The participants associated this improvement with a lower degree of stress related to role strain.

DISCUSSION

Role strain is a concern in athletic training,^{1–3,7} and most recently, it has been documented among ATs in the PSS.⁶ Although the number of ATs in the PSS is low compared with other employment settings, a better understanding of the occurrence of role strain is important because of the unique role an AT can play. Role strain has been linked to a variety of factors but most notably to career planning and longevity.^{8,9} Professional problems in athletic training and sport have been described as occurring in a multi-level framework.²⁴ The organizational and structural aspects of the job in the PSS can stimulate conflict and lead to role strain.

Sources of Strain

An excessive workload has been identified as a catalyst to role strain in the athletic training population and has been linked to other forms of role conflict, such as work-family conflict.^{3,6,10} Role strain occurs when excessive time demands limit the ability of an individual to balance multiple roles,²⁵ and for our participants, excessive workloads (ie, time, demands) precipitated their perceptions of strain. Role overload was the leading contributor to role strain in the ATPSS.⁶ Therefore, when an AT or any working professional has demanding work hours, role strain is likely to occur.^{3,6,9,10,25}

Unique to the PSS are the external influences (ie, athletes' expectations, spectators, etc) and the expectations of the organization, which are often characterized as unrelenting. Participants described sources such as an athlete's agent, family members, and friends who influenced medical decisions. The ATPSS is often tasked with providing services, information, or research to satisfy members of an athlete's inner circle. Meeting the excessive expectations of an athlete's sphere of influence is a source of perceived stress associated with role strain. Athletic trainers working in a sport culture or organizational infrastructure are likely to experience some degree of role complexity.² Role complexity is a catchall term used to describe stress and its influence on an individual. Role overload occurs because of the hours required to complete the professional responsibilities of an AT in the PSS,^{2,6} but in addition, role incongruity and conflict are present. Our participants discussed performing duties that extended beyond their training, as well as providing care that could at times contradict their professional experiences or beliefs.

For our participants, organizational duties extended beyond direct patient care. They described duties including responsibility as the primary travel and practice coordinator for the team, workers' compensation contact, and data collector and analyst, along with other administrative tasks. Additional expectations involved providing service to individuals associated with the organization, including staff, coaches, management, and occasionally immediate and extended league family. Services included treatment, therapy, scheduling medical appointments, and medical referrals. Mandates also included unique demands on the ATPSS when the culture created obligations that did not specifically align with AT's skill set, training, and scope of practice. These factors stimulated strain in the form of role conflict and incongruity.⁵ Incongruity may persist in being a concern as the discussions of the best model for athletic training services continue and as long as athletic training services remain in the sport model.^{7,11,22}

Consequences of Role Strain

Effect on Care. Athletic trainers are characterized as health care providers who care about their athletes and patients²⁶ and often display affective traits such as empathy, compassion, and sympathy. These qualities are viewed as necessary to provide quality and expert care but can also lead to moderate to high levels of stress and strain, as ATs often depleted themselves of their own resources and time. The ATPSSs wanted to provide quality care yet experienced strain from not being able to meet all the demands. Our participants' descriptions aligned with the findings from other studies,^{3,6,24} which identified interrole conflict as the most prominent component of role strain.

Work-Life Imbalance. Interestingly, most sources of ATPSS strain were caused by organizational factors; however, one consequence that emerged demonstrated a spillover effect, whereby workplace strain affected the personal lives of our participants. Role strain exists when time demands become excessive and limit the time available to engage in and enjoy other roles,²⁵ so it is understandable that work-life imbalance emerged. Based on the literature, ^{8–10,23} we expected work-family-life conflict to be common in the athletic training profession. Participants described a lack of time in the day to

meet all work expectations and also have personal and family time. Professional ATs worked an average of 70 to 120 hours a week during the in-season. The hours accrued by this subgroup of ATs well surpassed those of ATs working in the collegiate setting and were a major contributor to work-life conflict, consistent with the literature.^{9,10} Work overload was a major contributor to work-life conflict in the collegiate setting, much like our findings in the professional setting.^{8,10,22}

Strategies to Alleviate Role Strain

Staffing Factors. Role strain manifests when the demands exceed the resources available to cope with them. For our sample, role strain occurred because of the large number of responsibilities, which were excessive for the individual. Our participants incurred role strain primarily because of the significant responsibilities to and expectations of the organizations. Consistent with the literature, job complexity is a founding factor in role strain, and therefore, strategies used to reduce the effect of role strain must specifically target the sources of the stress.^{1–3,9} Work-life imbalance, a form of role strain, is lessened when strategies, such as reduced work hours or supervisor support for work schedule autonomy, align with the source of the conflict.^{10,23}

Organizational support is one strategy to moderate jobrelated stress through informal and formal mechanisms.²⁷ Informal support can be as rudimentary as allowing the staff freedom to develop their own schedules, which can offer control over when responsibilities are completed.²³ Emotional support (ie, from supervisors and coworkers) had a beneficial effect on the health of the employee and may reduce strain.^{28,29} Providing additional staff to alleviate role strain in the PSS was cited by the participants in the present study. Inadequate staffing was not unique to the PSS; however, as detailed in the demographic data, ATPSSs have few auxiliary staff as a means to reduce the burden of balancing multiple workplace roles.⁶

Delegating and defining roles were also recognized as ways to reduce strain in the PSS. Fundamentally, these strategies align with ways to establish work-life balance and reduce role strain. Role sequencing and prioritization²⁵ are documented strategies used to reduce role strain, and, as described by our participants, delegating some of their responsibilities was a way to mediate role strain. Role ambiguity can lead to strain if one is unaware of what is expected in one's role and what tasks need to be done; thus, if the AT is able to define his or her role clearly in the organization, strain can be reduced.

Communication. Communication within the organization may decrease the perceived role strain. The literature³ suggested that ATs who clarified their roles with administrators and coaches had less role strain. Communication with management was suggested by the ATPSSs as a strategy to alleviate the stress associated with role strain. Participants described increasing organizational support by effectively communicating the AT's role within the organization. Better understanding of the AT's role within the organizational hierarchy is imperative to decreasing role strain.^{3,8} Research³⁰ has indicated a lack of consensus regarding the roles of health care professionals in a variety of settings. Providing management with a clear understanding of the role of the AT and the demands and expectations placed on ATs may improve the efficiency of the workplace. 3,8,30

Communicating with staff is also a strategy for alleviating strain. In nursing, communication was essential in reducing the amount of perceived stress due to role conflict, role overload, and role ambiguity. It was significantly positively correlated with the organizational climate and with easing role strain.^{31,32} The staff's ability to communicate effectively can reduce the amount of perceived role strain by defining roles and improving workplace efficiency. Participants described communication as key to improving staff dynamics. Having everyone on the "same page" reduced role ambiguity and role conflict. The data collected from the interviews described how communication among staff was vital in reducing the perceived stress associated with role strain.

LIMITATIONS AND FUTURE DIRECTIONS

We recognize that our sample reflects only ATPSSs, and although 34 is a large sample for a qualitative study, the findings may speak only to ATPSSs. Future authors should investigate ATs in all practice settings, particularly ATs within the sport organizational model, as a means to better appreciate its effect on role strain.

CONCLUSIONS

The purpose of our study was to examine the perceptions ATPSSs had of role strain. The 3 sources of role strain described by the participants as the antecedents of role strain were the competing expectations of and obligations to the athlete, the organization, and the league. The perceptions of ATs with regard to role strain indicated that organizational factors contributed most to an increase in the stress associated with role strain. Trying to meet role demands within the confines of time and staffing increased strain on the ATPSS. Strategies to alleviate the perceived stress associated with role strain included modifying the organizational factors that were the antecedents of the strain, which may also affect other sources of role strain from the league and the athlete by improving the ATPSS's workload. Having an adequate number of quality staff whose roles are delegated and defined was a way to reduce the amount of strain in the workplace. Communication within the organization, especially with management and among medical staff, was another strategy to alleviate strain. Although not directly stated by the participants, communication with the league regarding competing expectations may decrease the amount of perceived stress associated with role strain. Decreasing the perceived stress associated with role strain would improve the environment for those working in the PSS. The practices associated with reducing role strain will also improve the efficient delivery of health care to the professional athlete by allowing ATs to focus their expertise on the primary aspect of their profession.

Appendix. Semistructured Interview Questions^a

1. During your career as an athletic trainer in professional sports have you seen an increase in the responsibilities

^a Questions are presented in their original form.

and/or demands of the athletes, management, and/or the league? If so, explain.

- 2. When you are given extra responsibilities or roles from the league or the organization you work for, can you describe your feeling? Probes (generally accepting, generally annoyed, overwhelmed, etc).
- 3. According to the survey you took with regard to role strain, you had (high, moderate, low, minimal) degree of role strain. What factors do you think contribute to that?
- 4. The results of the survey identified (role subscale) as the most prominent component of role strain. Do you agree or disagree with this finding? Explain.
- 5. The results of the statistical analysis also revealed that (variable from demographic scale) predicted (role strain and or subscale). Do you agree or disagree with this finding? Explain.
- 6. What do you think are ways to alleviate role strain in athletic trainers in professional sport?

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