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Pay, Pressure, and Persistence: Factors Influencing Retention for Athletic Trainers in the College/University Setting

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Context: Emerging evidence has suggested a distinct decrease in the number of early-career (0–6 years of experience) and career-advancing (7–12 years of experience) athletic trainers (ATs) practicing in the college/university setting (CAT). Attrition of CATs has been linked to factors including low salary, poor work-life balance, and a perception that CATs' contributions are undervalued by employers.

Objective: To explore perspectives of early-career and career-advancing CATs regarding the factors influencing their decisions to remain in or leave the college/university practice setting.

Design: Qualitative study.

Setting: Individual virtual interviews.

Patients or Other Participants: Twenty-four CATs (16 female, 8 male; 6.33 ± 3.05 years of experience) employed across 23 colleges and universities of various competitive levels.

Data Collection and Analysis: Individual semistructured interviews were conducted with participants using a validated interview guide. Interview data were analyzed to identify recurring themes and categories using the consensual gualitative research framework. To ensure accuracy and credibility, data triangulation was achieved through member checking and collaboration among 7 researchers during the analysis process.

Results: Data analysis revealed 2 major themes: compensation and job demands. Participants expressed dissatisfaction with salaries that failed to reflect their education, experience, and workload, citing compensation as a key factor affecting long-term retention. Additionally, participants highlighted excessive workloads, understaffing, and blurred professional boundaries as barriers to maintaining adequate work-life balance and subsequently long-term retention. Competitive compensation packages, enhanced benefits, and supervisors who formally and informally reinforced professional boundaries supporting work-life balance were seen as strategies employers can use to encourage long-term retention.

Conclusions: The sustainability of the college/university practice setting rests in the ability of institutions to offer sustainable employment practices. By prioritizing creative, competitive compensation packages and implementing structural and cultural changes that promote work-life balance, employers can not only improve CAT retention but also encourage recruitment of ATs to the college/university setting.

Key Words: Employment, compensation, work-life balance, job satisfaction, attrition

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KEY POINTS

- Athletic trainers expressed dissatisfaction with salaries that failed to reflect their education, experience, and workload.
- Competitive pay structures and attractive benefits packages were highlighted as essential for improving job satisfaction and retention among athletic trainers.
- Athletic trainers reported that long work hours, extensive travel, high athlete-to-clinician ratios, and inadequate staffing contributed to feelings of burnout and desires to leave the college/university setting.
- Supportive workplace cultures including supervisors who advocated for professional boundaries and supported personal well-being were seen as vital for long-term retention.

INTRODUCTION

Since fall 2019, employment in collegiate athletics has experienced a turnover rate of nearly 50%, almost double the turnover rate seen in corporate and higher education settings over the same period. Difficulty retaining employees has been accompanied by a decrease in the job growth rate in collegiate athletics. Regardless of the role within athletic departments, employers have incurred challenges related to hiring, retaining, and advancing personnel at the collegiate level. Careers in collegiate athletics are often associated with demanding and unconventional work schedules, pressure to achieve success, shaky job stability, frequent travel obligations, and an expectation that employees prioritize their work above other personal commitments. These features of workplace culture are conducive to workaholism and the perpetual burnout of employees.

Emerging evidence supports the extension of these challenges to athletic trainers (ATs) practicing in the college/university setting (CATs). CATs report minimal control over their weekly work schedule, often working 60 or more hours per week, with many of those hours accompanied by travel.³ The demanding nature of the profession, combined with the pressures of the work environment, naturally creates conditions that make CATs more prone to experiencing burnout.³ This burnout can cause individuals to become overwhelmed with their work. As burnout intensifies, individuals may become increasingly dissatisfied, ultimately fueling a desire to leave their workplace, the college/university setting, and/or the athletic training profession altogether.

Employers should be concerned about the professional longevity of CATs. In a study of 1146 CATs, only 12% reported being employed in the college/university setting for more than 10 years. This demonstrates a lack of mature and seasoned professionals to role model professional longevity. Nearly 48% of all CATs possess 0 to 9 years of certification. Thus, the durability of the profession and the college/university practice setting heavily depends on early career (0–6 years of certification experience)

and career-advancing (7–12 years of certification experience) professionals.⁶ Harris et al reported a 46.2% (n = 67 of 145) decrease in early career and career-advancing CATs from the beginning to the end of the COVID-19 pandemic.⁶ Athletic trainers who had separated from a collegiate position in the past 5 years indicated their reasons to include low salary, poor worklife balance, a lack of perceived value and support from their employer, inadequate staffing volume, and burnout.⁴

To overcome factors contributing to CAT attrition, employers should recognize their role and responsibility in fostering employee satisfaction. Whereas existing literature has emphasized the importance of individual efforts in combating factors contributing to attrition, many factors influencing CAT retention extend beyond the individual's control to organizational and systemic dynamics. Decision-makers and those in leadership positions play a critical role in addressing these factors and creating supportive and sustainable work environments. Although prior authors have identified factors contributing to CAT attrition, few have explored actionable strategies from the perspective of the employees themselves. Therefore, this study seeks to examine the perspectives of early-career and career-advancing CATs regarding their experiences in the college/university setting and the factors influencing their decisions to remain in or leave the college/university practice setting. By identifying key influences on job satisfaction, burnout, and professional longevity, we aim to provide insights that inform employers with strategies for improving retention and promoting sustainable employment practices within the college/university practice setting.

METHODS

Design

We used the consensual qualitative research (CQR) tradition, a well-established qualitative method in athletic training literature, to guide this study. The CQR method was selected for this study for its ability to systematically identify recurring themes and patterns across participants' narratives and explore the contextual factors specific to the college/university setting, with the hope of yielding practical, relevant, and actionable recommendations for institutions employing ATs. This study was determined to be exempt research by the sponsoring institution.

Participants

Participants were recruited through 3 primary methods. First, we created digital recruitment posts detailing the study and shared them across social media platforms, specifically Facebook, Instagram, and X. Second, we distributed printed recruitment flyers during the National Athletic Trainers' Association (NATA), Intercollegiate Council for Sports Medicine (ICSM), Early Professionals' Committee, and Career

Table 1. Participant Demographics

| | • | <u> </u> | | | | | |
|--------------------|-----------|--------------------|-------------------------|-------------------|----------|--------------------|---------------------------|
| Participant No. | Pseudonym | Gender Identity | Relationship Status | Competitive Level | Model | No. of Athletes | Years of Certification |
| 1 | Jane | Female | Single | NCAA Division I | Athletic | 31–45 | 1 |
| 2 | Carole | Female | Single | NCAA Division III | Athletic | 91–125 | 3 |
| 3 | Anna | Female | Single | NCAA Division I | Athletic | 1–15 | 4 |
| 4 | Rhonda | Female | Single | NCAA Division I | Athletic | 16–30 | 4 |
| 5 | lan | Male | Single | HBCU | Athletic | 61–75 | 5 |
| 6 | Simone | Female | Single | NCAA Division III | Medical | 200+ | 11 |
| 7 | Lola | Female | Married | NCAA Division I | Athletic | 176–199 | 10 |
| 8 | Jean | Female | Married | NCAA Division III | Athletic | 200+ | 7 |
| 9 | Mae | Female | Single | HBCU | Athletic | 91–125 | 7 |
| 10 | Cramer | Male | Married | NCAA Division II | Medical | 76–90 | 9 |
| 11 | Ernie | Male | Single | NCAA Division III | Athletic | 126–175 | 7 |
| 12 | Debra | Female | Single | NCAA Division I | Medical | 31–45 | 3 |
| 13 | Greg | Male | Single | NCAA Division III | Athletic | 126–175 | 1 |
| 14 | Britney | Female | Single | NAIA | Athletic | 200+ | 5 |
| 15 | Scott | Male | Single | NCAA Division III | Medical | 200+ | 8 |
| 16 | Tara | Female | Domestic Partnership | NCAA Division III | Athletic | 200+ | 4 |
| 17 | Stephanie | Female | Single | NCAA Division III | Athletic | 200+ | 6 |
| 18 | Andrew | Male | Single | NCAA Division I | Athletic | 16–30 | 11 |
| 19 | Jaye | Female | Engaged | NAIA | Medical | 91–125 | 6 |
| 20 | Anna | Female | Single | NCAA Division I | Athletic | 46–60 | 7 |
| 21 | Nicole | Female | Married | NAIA | Academic | 76–90 | 6 |
| 22 | Alexa | Female | Single | NCAA Division I | Athletic | 1–15 | 11 |
| 23 | Plum | Male | Single | NCAA Division I | Athletic | 61–75 | 11 |
| 24 | Jack | Male | Married | NAIA | Medical | 200+ | 5 |

Abbreviations: HBCU, Historically Black Colleges and Universities; NAIA, National Association of Intercollegiate Athletics; NCAA, National Collegiate Athletic Association.

Advancement Committee Town Hall events at the 2024 NATA Convention in New Orleans, Louisiana. Lastly, we emailed a convenience sample of CATs from our professional networks, requesting they share the flyer with members of their staff or other interested and eligible participants. To ensure data saturation, we followed the guidelines outlined by Hill et al and aimed to interview between 10 and 15 participants for both the early professional and career-advancing participant groups.¹¹

In total, 24 CATs (16 female, 8 male) from 23 colleges and universities across the United States were interviewed before data saturation was achieved. Colleges and universities represented were diverse in competitive level, with 37.5% (n = 9 of 24) of participants from National Collegiate Athletic Association (NCAA) Division I, 4.2% (n = 1 of 24) from NCAA Division II, 33.3% (n = 8 of 24) from NCAA Division III, and 16.7% (n = 4 of 24) from National Association of Intercollegiate Athletics (NAIA) institutions and 8.3% (n = 2 of 24) from Historically Black Colleges and Universities. Overall, participants had 6.33 \pm 3.05 years of experience and were responsible for providing care to 92.1 \pm 68.1 athletes. Participant pseudonyms and additional demographics can be found in Table 1.

Instrumentation

After an extensive literature search, we could not locate an existing instrument to address this study's purpose. Thus, 7 members of the research team (N.H., T.B., E.M.S., B.B., G.F., M.S., and K.M.) collaborated to develop a semistructured interview guide consisting of 25 open-ended questions

designed to capture the factors influencing CATs' decisions to remain in or leave the college/university setting. After development, the interview guide was reviewed by 9 unique CATs who were all members of the NATA ICSM. Each question was scored on a scale of 1 to 4 for relevance, clarity, and importance. Questions with an average below 3.0 in importance or relevance were automatically discarded. The remaining 12 questions were reviewed for clarity and then further collapsed into 6 open-ended questions, with follow-up questions to be used for probing if necessary.

The original 6-question semistructured interview guide was reviewed in multiple stages to enhance its validity. First, 2 ATs currently practicing in the college/university setting assessed the guide for face validity. One suggested a minor grammatical change, and the other recommended the addition of a new question. This suggestion was incorporated, resulting in a 7-question interview guide. Next, the revised guide was reviewed by 2 ATs with substantial experience in the CQR tradition, though neither had current or prior experience practicing in the college/university setting. These reviewers did not recommend any further modifications. Finally, 2 additional ATs with over 10 years of experience in the college/university setting and doctoral-level research training evaluated the guide for content validity. To formalize this process, we used the content validity index (CVI) methodology as described by Yusoff. ¹² Each expert independently rated the relevance of each item using a 4-point scale. We calculated both item-level CVIs and the scale-level average CVI, resulting in an scale-level average CVI of 0.94, indicating

Table 2. Interview Guide

- 1. What factors made you initially select the college/university setting?
- 2. What does career advancement in the collegiate setting mean to you?
 - In what ways have you advanced your career while practicing in the college/university setting?
- 3. What factors of career growth or advancement are important to you within the collegiate setting?
 - Can you describe your outlook on your longevity as an athletic trainer in the collegiate setting?
- 4. Can you talk about the impact your supervisor has on you and your collegiate career goals?
 - Do you have examples of administrative decisions that have impacted your experience in collegiate athletics? What type
 of impact did these decisions have?
- 5. What are some defining factors of your position that make you want to stay or leave the collegiate setting and why are they significant for you?
- 6. Can you describe what makes you feel valued in your position or the athletic training profession as a whole?
- 7. What do you believe makes an institution desirable for a long-term collegiate athletic training position?
 - If you are considering leaving the college/university setting within the next 5 years, what are 3 changes your institution could implement to make you reconsider?

excellent content validity, as values ≥ 0.80 are considered acceptable when 2 experts are involved.¹³

Although a larger panel would have improved generalizability, validation by 2 experts was acceptable. All reviewers involved in the validation process were excluded from study participation. The final interview guide is presented in Table 2.

Procedures

Participant recruitment for this study began in May 2024 and concluded in August 2024 after 24 interviews were completed. Interested individuals were asked to complete a brief demographic questionnaire to verify eligibility based on the study's inclusion criteria. Once eligibility was confirmed, a member of the research team (X.X. or X.X.) contacted the participant to schedule an interview via Zoom (Zoom Video Communications). All interviews were conducted by the principal investigators and lasted between 30 and 45 minutes.

Before each session, participants provided verbal consent to participate and for the interview to be digitally recorded. After each interview, the audio recordings and raw transcripts generated by Zoom were downloaded and securely stored. The principal investigators reviewed all transcripts against video recordings and made edits as necessary to ensure accuracy. Likewise, the principal investigators ensured that proper names, locations, and all identifying details were anonymized in transcripts to protect participant confidentiality. Finalized transcripts were then sent to participants for member checking. As part of this process, participants were invited to confirm their demographics, review their transcripts for accuracy, and provide any additional information needed to clarify responses included within the transcript.

Data Analysis

This study used the multiphase data analysis process outlined by Hill et al. ¹⁴ The analysis team comprised 6 ATs: 2 with experience in CQR and qualitative research, 1 with qualitative research experience but new to CQR, and 3 who were novices to both qualitative research and CQR. The novice researchers received focused CQR training before the study began and again before starting the data analysis process. A seventh athletic training researcher (N.H.) with expertise in CQR served as the internal auditor for the study.

The data analysis followed 4 progressive phases, described by Welch et al: (1) establishing initial code domains, (2) extracting core ideas, (3) cross-analyzing themes and categories across multiple participant interviews, and (4) determining the frequency of participant cases per category. The first 3 phases involved all 7 team members independently reviewing transcripts before meeting to discuss coding and reach consensus, ensuring a collaborative approach throughout the analysis process. The final step was performed by the internal auditor.

Upon completion of the cross-analysis, the frequency of each category was calculated to provide a sense of representativeness within the sample. Categories were defined as general if they applied to all or all but 1 participant, typical if they applied to more than half, variant if they applied to fewer than half, and rare if they applied to only 1 or 2 participants. After all 4 phases were concluded, the coded transcripts were reviewed by the internal auditor. The internal auditing process enhanced the trustworthiness of the data by incorporating multiple perspectives and ensuring the final results accurately represented the collective voice of the participants.

Thematic analysis revealed 6 overarching themes. Due to the volume and complexity of the data, themes were grouped into 2 sets for dissemination. This decision, made for increased analytic clarity, was supported by the internal auditor (N.H.), a content validity expert (R.G.) involved in the initial interview guide validation, and an external qualitative researcher (C.W.B.) with over 15 years of experience. This manuscript presents findings related to compensation and job demands and expectations, which are domains reflecting more concrete and structurally defined aspects of work. The remaining themes, centered on social, cultural, and organizational dynamics, will be discussed in a subsequent manuscript.

RESULTS

Participant responses revealed 6 major themes related to the retention of CATs: compensation package, job demands and expectations, relationships, support, workplace culture, and professional growth. To support analytic depth and clarity, these themes were grouped into 2 groups for dissemination. Group 1, presented here, includes the compensation package as well as job demands and expectations. These themes were deemed to be more concrete and structural aspects of work that could be quantified and externally defined. Group 2 consists of

Table 3. Participant Cases by Category for Compensation Package Theme

| Category | Frequency | No. of Participant Cases | No. of Total Codes |
|---|-----------|--------------------------------|--------------------------|
| Salary Fringe benefits Extra benefits Location of institution Terms of contract | General | 24 | 99 |
| | Typical | 15 | 23 |
| | Typical | 20 | 45 |
| | Variant | 9 | 14 |
| | Typical | 15 | 29 |

professional growth, relationships, support, and workplace culture, which are findings that reflect the social and cultural dynamics of the work environment. These themes will be presented in a separate manuscript.

The compensation package was used to refer to the compensation and benefits that CATs receive in exchange for their work. This theme included 5 categories: competitive salary, fringe benefits, extra benefits, terms of contract, and location of the institution. Participant cases by category for the compensation package theme can be found in Table 3. Furthermore, the *job demands and expectations* theme encompassed 3 categories: workload, boundaries, and work-life balance. Participant cases by subtheme for the job demands and expectations theme are located in Table 4.

Compensation Package

Competitive Salary. The collective sentiment among participants highlighted widespread dissatisfaction with the salary for CATs, emphasizing that current salaries were insufficient to justify the demanding hours, travel, and personal sacrifices required by the practice setting. Participants frequently expressed frustration with their inability to meet basic living expenses, despite their dedication to the job. Jane noted, "I don't mind working long hours. But it's kind of difficult to want to work long hours and make that sacrifice of your time when it's a struggle to pay rent every month." Others echoed this concern, citing low salaries that failed to align with the required education and workload, with Anna stating, "I could make money to where I could live comfortably. I could do this forever like that's like, genuinely." Many participants emphasized that the lack of competitive pay compared with other practice settings and professions undermined their perceived value and fuels dissatisfaction. "There are people at our institution that have less, like a lesser education requirement, that are making more money than us. [...] I think with a master's degree, I should be paid more" (Anna). The discrepancy between workload and compensation left some participants feeling undervalued; Simone stated, "You don't value me if you're not gonna put your money where your mouth is." This perception of being undervalued not only affects morale but also drives ATs to consider leaving the collegiate setting in pursuit of better-paying opportunities.

Several participants stressed the need for systemic salary reforms to retain ATs in the college/university setting. Suggestions included implementing structured raises based on tenure, merit-based pay increases, and salary adjustments that account for inflation and cost-of-living differences. Cramer recommended, "I think like if there were goals to hit, like at 5 years you are like

Table 4. Participant Cases by Category for Job Demands and Expectations Theme

| Category | Frequency | No. of Participant Cases | No. of Total Codes |
|-------------------|-----------|--------------------------------|--------------------------|
| Workload | General | 24 | 79 |
| Boundaries | Variant | 8 | 13 |
| Work-life balance | Typical | 20 | 69 |

guaranteed, you know, X amount of raise or something. [...] That would provide more incentive for people to stay." Others highlighted the importance of offering additional earning opportunities, such as adjunct teaching roles or per diem work. "If there's opportunity to get adjunct work or opportunity to pick up some extra little contracts. We'll do it" (Simone). Incentive pay structures were also proposed, such as providing additional compensation for evening, weekend, or summer work. "On the weekends we get extra hourly pay. Then in the evenings we get extra pay as well. [...] It's an incentive to want to work" (Jack). Furthermore, participants emphasized the need for institutions to recognize ATs as health care providers and provide salaries that reflect their qualifications and responsibilities. "We are health care providers and want to be treated as such" (Jean). Ultimately, participants stressed that improving salaries and offering clearer paths for salary growth would enhance retention. Additional select supporting quotations regarding salary can be found in Table 5.

Fringe Benefits. Fringe benefits were defined as additional compensation provided by employers beyond regular salary and wages. These benefits included health insurance, retirement contributions, and tuition reimbursement. Select participant quotes regarding fringe benefits are in Table 6. Participants highlighted the importance of fringe benefits and their effect on retention in collegiate athletic training positions. Health insurance emerged as a critical factor, with participants noting both positive and negative experiences. Although some appreciated robust insurance packages, others expressed dissatisfaction with limited mental health coverage and high out-of-pocket costs, which added financial strain. Retirement benefits also played a significant role in job satisfaction. Scott reflected on how recent reductions in retirement matching influenced the decision to leave, stating:

You know, and part of me leaving now or looking to leave, now is our retirement match got slashed this year because of bad enrollment numbers. We didn't hit enrollment this year. So you know, while I'm 30 years old and I don't like contributing to my retirement. But it, you know, in the long run that that's a that's a decent chunk of money that you know in the long term I'm gonna be missing out on when my retirement gets slashed.

Conversely, Alexa shared how strong retirement contributions helped offset frustrations with salary limitations:

They [employer] do really well with investment, and like 401 (k) matchings for some reason. So now here I am, a little bit more like wiser in my career, not the wisest by any means, that means a lot to me. It's like, shoot. You won't pay me. But you're gonna vest 9%. Okay. I can live with that, I guess, and just see, hopefully, I can live it out to see that 9 because you guys are wearing me down.

| Table 5. | Select Quotations for Compensation Package Theme |
|----------------|---|
| Jane | "I don't mind working long hours. But it's kind of difficult to want to work long hours and make that sacrifice of your time when it's a struggle to pay rent every month." |
| Anna Rhonda | "If I could make money to where I could live comfortably. I could do this forever like that's like, genuinely." "I saw that Amazon was hiring for 31 hours a week and it was like, no, no, 31 hours, 31 hours a week for like \$30 000 more than I'm making right now." |
| lan | "I've noticed a lot of institutions complaining about athletic trainers not wanting to work, which I don't think is the truth. I don't think that's the case. I think if you're going to hire athletic trainers who are now required to have their master's, you have to make the salary competitive with similar health care professions who have their master's." |
| Simone | "You don't value me if you're not gonna put them your money where your mouth is, especially as you work your way up, and you learn what other people in other realms are making even on campus like, you know, people talk. I know enough about what others are making on this campus, and I have former student athletes making more than me in different departments. And I'm like, that's not gonna fly anymore." |
| Jean | "Cause we're going all the time, like we are working 6 to 7 days a week for 10 months and then we have to work per diem and camps in the summers and off days because we don't make enough money at our full-time job to pay the bills." |
| Cramer | "Like I didn't choose athletic training to be a millionaire like that's what people say. But like you need to be able to survive. You need to like not be in debt." |
| Tara | "This past year was really, really tough for me just because the demands are getting so much more, from athletes, from coaches, from institutions implementing NIL changes. And then you look at things like that. And you look at how much money you're not getting paid. It makes it hard. And then again back to you know, kids calling you at 10 o'clock at night and having to be up at 7 AM, and then not leaving until midnight, and it makes [it] hard." |
| Andrew | "Across the board, not just in one particular state, but I think across the board, we need to do a better job at increasing athletic trainer salaries. That would be a big thing for keeping people long term. People also want to, I don't wanna say make an astronomical amount of money, but they actually want to be comfortable in their living. And I know, like especially coming from [former institution], where it was like the cost of living in [large metro city] was steadily increasing but we were only getting like the 4% increase salary increase, but it wasn't comparable to other positions. As well as especially when you have in the [state] area in particular, especially when you have new grads coming out, going to high schools and getting \$70 000. I think that's one of the biggest things." |
| Anna | "I would like there to be a salary increase. Just so it seems to be more on par with the other people that are working in athletics more similar. There's just a very big pay discrepancy between coaches, assistant coaches, administrators, and then the support staff. So having a salary that would be more equitable to those positions would make this job more sustainable, I think, and just more, I don't know, worth it, I guess." |
| Alexa | "There's nothing more disappointing to me than the salary situation at for athletic trainers. Even my job was posted at a pretty big salary range. And I was at the top of the experience they wanted. And I was like, Yeah, I have the most experience I've been ahead at. I've worked this for I'm extremely dedicated. These are the things I've done so. I want the top of the salary cap like, oh, no, like no, that's that. We just put that up like there's no way. If I was a man. Maybe that would be different. I could probably almost guarantee that. But that's neither here nor there. But you know so and I still get the salary or the notifications from [] and CATS when an institution of any sorts oh, posts the job, and it's actually more shocking and alarming that you get these big-time schools that are like that are offering or need 5 to 10 years' experience. And they're offering barely 50 and like a person can even live off of that. I can't even buy a house, I mean, I live in a cardboard box." |
| Jack | "People that are salaried shouldn't be working 10, 15, 20 hours of overtime every week and not seeing any extra money for it." |

Abbreviations: CATS, college athletic trainers' Society; NIL, name, image, likeness.

Tuition reimbursement was also identified as a powerful incentive for retention, particularly for those seeking to pursue further education without taking on debt. Participants also emphasized the appeal of tuition benefits that could extend to their children, making positions at academic institutions more attractive. Lastly, maternity leave policies were widely criticized as inadequate, with participants reporting limited paid leave options. Many expressed frustrations over having to use all of their paid time off or sick leave, followed by unpaid temporary disability, to cover maternity leave.

Extra Benefits. Extra benefits were defined as perks such as funds for certification, licensure, or continuing education/

professional development, as well as meals, technology stipends, clothing, and other forms of institutional support. Select supporting quotations about extra benefits are in Table 7. Several participants emphasized the importance of professional development funding, noting that opportunities to attend conferences and pursue certifications helped offset salary discrepancies and contributed to career growth. However, others expressed frustration with the lack of structured budgets for professional development and a lack of transparency regarding available funding. Participants highlighted the need for clear policies specifying annual allocations for continuing education to improve access to these resources.

Table 6. Select Quotations for Fringe Benefits Jane "As a graduate assistant at bare minimum health insurance, we do get a discount, but it's still [a] significant amount of money that comes out of my paycheck every month to pay for health insurance." Lola "I didn't want to dabble in loans and things like that. So, one of the things that they offered was tuition reimbursement and so that like made it [current position] a lot more attractive." Cramer "If you're getting hired directly by a school then definitely tuition reimbursement. If you want to further your education or if, like, you have kids or whatever, if you're working there long term, if there's a promise of like your kids there, yeah, your kids go for free to that college like that would be a good." "I have a [mental health] therapist. I can only schedule to see maybe once a month, maybe once every 6 weeks, Scott and not at a time that works for me. You know. So now I'm paying out of pocket through my HSA every month to go see my therapist, which is \$120 out-of-network out-of-pocket costs. So you know, I've had to budget that into my HSA, which is coming out of my paycheck every month. So at least I save pretax, you know, like a little bit. But yeah, I mean it. It's crazy, you know. I'm paying at least \$240 a month to go to therapy that I would hope would get covered by health insurance. So yeah, that's kind of been the biggest. I honestly, I think I am shocked because I had pretty good insurance before. You know. And since making this change to my current job, it's been a little bit of a wakeup call for sure." Andrew "Also like just having those different opportunities whether it would be getting the DAT and the school or the institution, paying, or reimbursing you for the tuition so that you're not having to come out of pocket for that ... I think I have more of an idea of what I wanna do going forward, which is getting my DAT, which is a doctor of athletic training and then probably going more into the academic side of athletic training as well as being a clinician as well. So, I think that's something. That's what kind of drew me to my current employer, being that they have a DAT program, and that I'd be able to do that as well as be a clinician." "We have really good insurance coverage, and that is something. They even purchase like a secondary Jaye insurance plan, so like our deductible for the primary [insurance] is pretty high, but they cover everything with the exception of like, my responsibility, is \$500 as a deductible but like so that is something that I feel like at my past jobs. I didn't really understand how much really does like, how much that does play into, or that benefit really does make a difference when it comes to like yeah, maybe my salary doesn't look as high, but I'm getting that additional piece there that I haven't gotten in the past. So that was, I would say, that is something. But then, yeah, kind of I really in the future when I'm looking at jobs." Nicole "The maternity leave, at least for us, is not good at all. You can definitely tell. I think it's 2 weeks, which is absolutely ridiculous, and so I am thankful for my program director and the people I work with because they definitely found ways around that basically, they told administration that I was working, and I was doing stuff at home, and they would give me some stuff to do. That was reasonable, and I can kind of work from home a little bit, but that way I could still get paid, because that was definitely something that was written a long time ago, probably not by a female." "I thought it was just our institution, but that does maternity leave at all. So you either you have to use all of your Alexa PTO. All of your sick time, and then, if you use that, and you don't have enough, you have to go on temporary disability, which that was something that like shocked me." "I mean at my current institution the retirement and benefits package is actually really, really nice. They do a Plum good job there. So it's I don't know any place that would like have a better retirement package than we get here like, you talk to friends in the private sector or at other institutions, and they're kind of dumbfounded about what we get. So it's that's really that is really good."

Abbreviations: HSA, health savings account; PTO, paid time off.

Gaps in tangible support, including work-related gear and technology, were also noted. Some participants expressed frustration about having to purchase their own work attire and athletic training supplies, whereas others emphasized the desire for stipends to cover phones and laptops or the provision of institutional devices to support job responsibilities. Additionally, participants pointed out the need for practical benefits such as transportation assistance, meal stipends, and compensation for overtime hours, especially when traveling with teams. Participants further identified social and community-building activities as opportunities to enhance workplace culture within the athletic or sports medicine department and foster team cohesion. Suggestions included holiday parties, barbecues, and other informal gatherings to create a sense of community. Employee wellness initiatives, such as mental health counseling, financial advising, and access to on-campus dining services, were also mentioned as ways to promote employee well-being and demonstrate institutional support.

Terms of Contract. Terms of contract referred to the length of an employee's agreement (eg, 9-month, 10-month, or 12-month contracts) and included considerations such as overtime, leave time, and flexibility in work hours. Supporting quotations regarding terms of contract are located in Table 8. Several participants expressed a preference for reduced workloads and limited team assignments, favoring positions in which they could work more closely with fewer teams rather than being spread across multiple responsibilities.

Paid time off and work-hour flexibility were recurring themes. Participants highlighted the importance of having structured time off to recover after busy seasons, especially in positions with heavy travel schedules. Flexible paid-time-off systems that allowed employees to preserve leave time for personal use, rather than requiring them to use it during slower periods, were seen as highly desirable.

| Table 7. | Select Quotes Regarding Extra Benefits |
|-----------|---|
| Jane | "So, we kind of don't just don't even expect to ask for them. I just think that there's like this natural understanding that our current place of employment is just not very open to pay for things financially. So we don't really ask for those opportunities." |
| Carole | "So definitely that professional development. I would love to have a little budget for that, even if it was, you know, just a hundred bucks a year like that's still something that I could put towards anything. Also, this might be like kind of weird, but clothing. I've had to buy my own clothing where I am. Usually teams will like give you stuff. But in terms of like actual athletic training stuff, I've had to buy my own gear. To have that and I think, like, technology would be nice like if I would get a stipend for a phone and laptop, or even just be presented with one. I know some places do that where I work we don't get that at all. So that would definitely be beneficial, since I'm definitely using it for work. At least 50% of the time." |
| Anna | "I would like to see like a monetary value of like you have this amount of money for CEUs kind of thing instead of this, like arbitrary. Oh, yeah, there's money for CEUs, but like no one knows how much and no one knows. Like, if you're gonna get things approved and things like that. So, I would love like a monetary value of CEUs." |
| Lola | "So, most of the time our staff gets told yes if we want to do something and they're willing to cover it. So, it does help with the like discrepancy in pay like knowing that I can say, Hey, I want to get this certification, or I want to do this. They're always willing to cover it. or have been at least." |
| Mae | "We do have opportunities to attend NATA. They did give us the opportunity to do that. That's 1 thing I can definitely vouch for them concerning that, that they allocated money to explore other continuing education opportunities outside of where we were. So, whether we wanted to go to NATA. If we wanted to get dry needling or any other certification, they did allot money for that." |
| Debra | "I personally like to gather with people. So, if we could have a Christmas party, or like holiday parties, or even I don't know. I don't really like Valentine's Day. I don't know why that popped into my head. Maybe like a Fourth of July barbecue with you know, like our sports medicine staff. Just like a community or family like, energy is not the word I want to say, but I'm going to say it just for lack of me, not thinking of another one, but having that community feeling like." |
| Greg | "I think my current setting, my like professional development package is really good. There's like, my institution pays for the full NATA membership dues, registration, flights. That's about as good it gets for D3 pretty much. And then, for example, like, if I didn't want to do NATA, I could use some money to do something else on my own. So, it's kind of like that allotted amount roughly. So yeah, I think that that's big, and then I think depending on the person there can be flexibility on what someone wants to do because it's not always going to be NATA for someone." |
| Stephanie | "I work for [local hospital system] which [current institution] is a contract under. So through [local hospital system] we have meetings, I think, once a month, where CEUs are offered on various like all kinds of topics that you could think of, and you're welcome to go, or you're welcome to not go based on if you're interested or not. So those are always available, which has not always been the case for me. So, I think that's really awesome, that they provide that opportunity. And it's a free opportunity where they bring in a lot of different professionals and companies to kind of discuss different topics within athletic training and sports medicine." |
| Andrew | "They did a good job at my previous institution as far as like helping their athletic trainers advance in their careers. We were able to take any certification course that you wanted to take, I took the PES while I was there, I took dry needling while I was there, and just whatever you wanted to do or however you wanted to advance your career. They were open to that. Even if you wanted to get into teaching, they had some times where you could teach and be a preceptor, well we all were preceptors, but you can also teach in the program, or teach other courses throughout the school, and it was like advance your career by seeing what other things you can do." |
| Alexa | "Just small benefits that I don't think we really talk about a lot. Obviously, it's like the appreciation, gear, if you get gear, like man. So I don't have to pay for my own work uniform. You guys are like providing it. Thank you I appreciate that, or you know the nice winter coats that usually are 150 bucks if I buy them out of my own pocket and like food is the same way. You know, when they travel, you travel and you get a meal. Like this is the first institution I've gone to where like we are not feeding staff anymore because of like the budget cuts. And I'm like man that sucks because I'm not even home enough to buy groceries. And when I buy groceries, |

Abbreviations: CEU, continuing education unit; NATA, National Athletic Trainers' Association; PES, Performance Enhancement Specialist.

they go bad. So I'm wasting money, and ... that's the money that I no longer have in my pocket."

Some participants also expressed frustration with inconsistent workloads and scheduling practices, citing dramatic fluctuations between peak-season hours and off-season schedules. Concerns about administrative decisions affecting pay structures and the enforcement of strict 40-hour workweeks were noted as areas of dissatisfaction. These changes were perceived as limiting flexibility

and forcing staff into rigid schedules, further complicating workloads and travel demands.

Participants emphasized the need for extended recovery periods after intense seasonal demands. They suggested that longer, structured breaks after high-demand periods could improve

Table 8. Select Quotations Regarding Terms of Contract

Carole "I've really looked for and enjoyed schools where I get to have kind of more of that one-on-one with the team, instead of just being super spread out so something that would be really attractive for me personally is having a load of maybe only 1 or 2 teams, that would be really great for me."

Ian "I'm in a position where I'm OPS and I'm hourly versus salary, but it would be nice for kind of having a position where paid days off, or an allotted paid days off like, especially during the summer, where you can just take those days that kind of unwind from the season, travel days, and stuff like that."

Lola "I think the other part is, PTO is not really like we get PTO. We get time off, but if the season is off we don't necessarily have to put in PTO. We don't have to like waste our PTO on time that we're already gonna have off in the summer, or something."

Cramer "I know that I feel like lucky that I was able to get into the hospital system and not like have to go through the physical therapy like system, where they pay even less. And like it's like you work 4 days in the clinic, and then you have to go to the school, or whatever like that, like. I'm happy that I never had to deal with that."

Greg "The constant like whiplash of like 70-hour work week to a 20-hour week like that kind of drives me crazy a little bit. So, I think that 10 month can be attractive for many people."

Tara "Yeah. I think most recently the biggest thing is the conversation of pay and hours. With the upper administration wanting to approve the increase in pay and if you're not meeting the increase in pay, then you're becoming a 40-hour week employee and that's directly affecting a lot of athletic trainers. And so, it's a ton of questions and conversations that we've had. And the most recent conversation kind of was just well, we don't have money to pay you. So, you're just going to become a 40-hour week employee, and everybody is just going to work in shifts and nobody is going to travel."

Abbreviations: OPS, other personnel services; PTO, paid time off.

work-life balance and reduce burnout. For example, Plum explained:

Really just the biggest one would be kind of maybe better opportunities as soon as like we're out of season to kind of step away, especially like for an extended period of time not like pick 3 days off after season, and maybe it'd be beneficial to have a little bit longer period kind of built in like. We know, you just worked more than 40 hours a week for the last 14–16 weeks of the season, like you've built in a lot of that time like, go take some time off.

Finally, contract structures were linked to turnover concerns. Twelve-month contracts and hourly pay models were viewed by some as contributing to high turnover rates, particularly in positions in which workload expectations did not align with the compensation package or recovery time needed.

Location of Institution. Participants emphasized that location plays a significant role in retention decisions for CATs. Select quotations related to the location of the institution can be found in Table 9. Proximity to family and friends was noted as a reason to remain in a position, whereas limited job opportunities nearby made leaving the collegiate setting more likely. Others highlighted the importance of lifestyle preferences, such as access to entertainment and amenities, as influencing job satisfaction. Commuting challenges, particularly long travel times and traffic, contributed to burnout, making location a key factor in managing work-life balance. Financial challenges, including the cost of living and housing affordability, were additional concerns. Participants expressed frustration over the lack of financial progress, making it difficult to see a sustainable future in their positions. Some participants acknowledged that although they earned lower salaries in their current roles, lower living expenses helped offset the pay discrepancy, suggesting that location can sometimes balance financial concerns. However, without significant improvements in pay and other benefits, location alone may not be sufficient to ensure long-term retention.

Job Demands and Expectations

Workload. Participants highlighted that the workload for CATs was substantial and often unsustainable, contributing to burnout and affecting retention. Select quotations regarding workload are provided in Table 10. Many described feeling overextended due to high patient loads, long hours, extensive travel, and being responsible for multiple sports or additional roles outside of their primary job description. Athletic trainers in the college/university setting frequently cited unrealistic expectations, such as working 60 to 70 hours per week, covering multiple teams, and having to be available year-round without sufficient breaks. Others noted the lack of clear policies, insufficient staffing, and the expectation to take on "other duties as assigned" as compounding factors that led to stress and dissatisfaction. Travel demands, crossover sports seasons, and inconsistent scheduling were also noted as contributors to fatigue and burnout, making it difficult for CATs to balance personal and professional lives. Additionally, participants expressed frustration with being unable to provide the level of care they desired due to being stretched too thin.

Boundaries. The participants highlighted the importance of establishing and enforcing boundaries to manage job demands and expectations in the college/university setting. Select quotations regarding boundaries are in Table 11. Effective boundary setting was often linked to institutional support, administrative policies, and personal advocacy. Several participants described how administrative backing allowed them to set clear boundaries, particularly during off-seasons, which helped protect work-life balance. For example, Carole stated, "So my boss and admin are pretty good about establishing those boundaries ... we are allowed to establish those boundaries and like hold them." However, many participants emphasized the difficulty of learning to say no and breaking patterns of overcommitment. Simone reflected, "It's hard when you've always been the person that said yes, to learn how to say no," indicating the challenge of shifting toward boundary setting after years of overextending oneself. Similarly,

Table 9. Select Quotations for Location of Institution

"I have a lot of friends here in [state of residence], and my parents are like, my family's only 3 hours away, so it's Rhonda a good opportunity to, like, I would see myself staying here, but it kind of just depends when that sport, like I would want to work softball or volleyball. So it kind of just depends when those sports would be readily available through [my institution]. But there's not really any other schools around here that I would want to go to. So I think if I would leave [my institution], I probably would not be in college athletics anymore." lan "I'm a city person. So, it'd be nice to be in a bigger city. But location is just having things to do outside of work. Nobody comes to [current city of employment], so there's no concerts or anything when I check for [current city]." "As time went on working just evenings. I was the only person that lived almost an hour away in [larger city] Debra traffic. So, I lived 20 miles away, which other people were like, Oh, it's not that bad. The 20 miles away on a certain freeway is an hour and a half going home one way. So, I spent like maybe a lot of time in traffic getting to and coming from work. I would get to work at like after 12, which is when traffic was a little heavy, and then I would leave, maybe around like 9 or 10 o'clock sometimes, and that's when, like my kind of burnout started." "I still live with my parents. So, I'm paying off loans so that's very huge. . . . I guess part of my advocacy this year Greg has been like I live with my parents right now, and if I'm looking at moving out like as a single adult like it's looking challenging. And I was like, that's just shouldn't be the case. And so, I think that has to be there. And look it's a tough economy, I think, to enter as a young professional. So, it's kinda hard for people like me to see hope in that of like, you know, it feels like it's just gonna keep getting worse, which we really don't know. But that's just the way it feels. So, it's like, hey, if I don't see financial progress like I'm screwed." Tara "I mean absolutely a pay increase across the board. I mean, it's so hard to justify my job when I lived in a place where the cost of living was ridiculous, where people with full-time jobs making 6 figures are struggling to get by, and I'm not even making \$50 000 and rent is ridiculous. Car payments are ridiculous. Gas is ridiculous. Groceries are ridiculous. So, I'm spending more than I'm taking in, so I'm living well outside of my means, because I have to. Because I was trying to do a job that I loved. I hands down loved my job. Alexa "I was making more money at a previous institution. Technically, this was a title change and opportunity to make more money, you know, in the future. But you're like, well, the living expenses are better here, so like it kind of evens out."

Jaye noted that administrative support played a critical role in enforcing boundaries, especially regarding work hours and availability: "Unless it's an emergency, like, I'm not available 24/7. And at other schools, I have been basically required to be available 24/7."

Participants also expressed how a lack of boundaries could negatively affect care quality. Simone shared,

Student-athletes, returners especially, will not understand why I'm suddenly saying no. And that's what disappoints me at the end of the day is knowing that it's the quality of care that gets affected more than anything else.

Although several participants working at the NAIA level had experienced improvements in boundary enforcement through recent policies, such as mandatory off days (eg, NAIA regulations mentioned by Jaye) others stressed that institutional culture and leadership still required ongoing reminders to respect boundaries.

Work-Life Balance. Participants emphasized the critical need for improved work-life balance to promote retention in the college/university setting. Many participants highlighted the personal and professional sacrifices they made due to demanding schedules, often missing important life events such as weddings, vacations, and birthdays. Tara expressed the toll of this imbalance, stating, "I don't get to take vacations. I don't get to go to my friends' weddings because we have an event. So, it's really hard to justify it." Similarly, Anna questioned the sustainability of the profession for those with families, saying, "The amount of time that goes into being a collegiate athletic trainer—I don't know if that's sustainable for having a healthy work-life balance, and having a family."

Several participants proposed strategies to enhance work-life balance. Carole suggested investing in benefits for families, including resources for spouses and children, as a way to retain employees long-term. Jaye appreciated a supervisor who prioritized work-life balance, stating, "He'll look at our schedules and be like ... you've worked for the past 10 days like you're not working." This approach provided muchneeded rest and allowed CATs to maintain a personal life outside of work. Flexibility and support from supervisors and coworkers also played a role in improving work-life balance. Jean shared that their head AT emphasized not missing important personal events, saying, "I don't want you to miss everything in your life to cover a football game or to cover a volleyball game." Jaye reinforced this sentiment, noting, "If you have a day that you have a wedding, but you have a game, I'll cover for you. You go."

Other participants stressed the importance of scheduled breaks and longer periods off between seasons to help prevent burnout. Stephanie suggested developing master schedules that incorporate extra time off during low seasons to help employees recharge. Similarly, Plum recommended "extended time off to go home ... or travel and engage in things that allow me to disconnect and turn off my phone for a little bit." Despite these strategies, concerns about short staffing often limited the ability to step away. Again, Stephanie noted, "You want to take time for yourself. But you also don't necessarily have the ability to because of the short staff." Additional quotations regarding work-life balance can be found in Table 12.

DISCUSSION

Athletic trainers in the college/university setting continue to suffer from insufficient compensation packages exacerbated

| Table 10. | Select Quotations for Workload Category |
|-----------|---|
| Jane | "I think the workload is a significant amount. I don't think at times it doesn't seem like it's healthy, I mean don't get me wrong. I do love it but I feel like I'm just, you know, burning at both ends." |
| Rhonda | "We have 16 on staff and I think we only have like 16 sports, so it's pretty even. The only ones that we have 2 people assigned to is tennis and golf. Everyone else has their own sport, which is very, very helpful because we are not overworked [like] at the school I was at before this." |
| lan | "Right now, I'm helping out with football during camp, taking care of volleyball women's basketball, baseball, and even then, it's still not enough with all 3 of those teams." |
| Simone | "And our patient load has increased pretty dramatically. I think when I was first at my school, we were probably around a population of like 450 student athletes. We're over 600 now. Because at the Division III level, I mean, I've seen articles on it in these higher education journals that report they are leaning heavy on student athletes to drive enrollment. I think, my first year we probably were about a third of the student body were student athletes. We are now at over 60% student athletes. So, because of that student, the patient to clinician ratio has gone wacky. We're looking at about 200 to 1." |
| Debra | "This is like working until 9 or 10 [PM] and then sometimes athletes want stuff. So, I'm not really probably getting out till like 10:30 and that was the first year, and the second year we lost an assistant. So, it was all 24 sports spread across 2 full-times for 6 to 7 months of my second year working there, and that was like, I just didn't have time for friends." |
| Greg | "Not from a person-to-person aspect necessarily, but the lack of updated policies and procedures and not being, in my opinion, as efficient or proper as they should be. That made my work a lot harder, because I had to do a lot more." |
| Scott | "I think my struggle with career advancement is those other duties as assigned. You know. I think that it comes down like, where? What do I juggle? What do I juggle with my job? Expectations?" |
| Tara | "I mean workload is still immense. If I describe my job to anyone, they look at me like I have 3 heads because it's insane. Especially, you know, working baseball, which is a year-round sport. Right? We have inner squads multiple times a week, so we have games every single week all the time. We're traveling all the time. Sometimes we're gone for 7 days a week, like it's nuts, and it's very, very draining. There was a point where the entire month of April we had 1 home midweek game, and 1 home series. Everything else was on the road, and so I wasn't home, and it was a lot." |
| Stephanie | "So, I think in terms of that, I find myself getting very frustrated with my current role and feeling like I have to pick up a lot of responsibilities that aren't necessarily in my role. Which is just very taxing and very draining and kind of leads to the burnout aspect more than the actual job itself." |
| Andrew | "Another aspect, the amount of travel involved with working basketball. Being that basketball is played over the course of both semesters gets tiresome, as I have done it for 10+ years now. But that may be more of a personal thing, and not much on the profession, but I feel it still plays a factor in my decision on wanting to stay in the profession as well." |
| Nicole | "So there are definitely times that it's like, Oh, yeah, I should have a weekend off because my fall sports not going. But then that just so happens to be the time that the spring sports decide to do something. So and I feel like that can kind of be hard to juggle and also know when personally, when to like ask for a break or ask for time, because again, like the spring coaches don't pay attention to the fall. Fall coaches don't pay attention to the spring coaches, but we have to be here. We are stuck here." |
| Alexa | "It's cost me a lot you know, personally, not to get like too involved. But that's cost me a lot of personal life choices. Right? So I'm a single cat lady. So you know, you can only imagine you know, the internet goes crazy over that right now, but in my whole life is this and these individuals that I work with right now?" |
| Jack | "It's taking time away from the [collegiate] athletes, which I am technically supposed to be working full-time 40 h a week there in addition. So it's like there's just not enough. There's not enough. A is enough hours in a day, and B, I don't have the ability to be in 2 places at once. You know it's hard to provide the highest-quality patient care, the care that I want to give to these kids when I'm you know, I'm stretched so thin." |

by excessive and unrealistic job demands. These factors affect their satisfaction with their jobs and the college/university setting. The findings of this study reinforce the critical need for structural and cultural changes within collegiate athletics to promote sustainable employment practices for CATs.

Previous researchers have determined compensation is a key determinant influencing employees' decisions to remain with or leave an organization.¹⁵ A well-structured compensation package plays a vital role in retaining key employees in any discipline, as employees who perceive they are not receiving sufficient pay for their work are more likely to reduce the quantity and quality of their work and eventually to leave their job.¹⁵ Employee turnover can be expensive for institutions, particularly

when departure of a key employee leads to reduced productivity. Turnover among CATs can create a ripple effect that disrupts patient care, undermines team cohesion, increases burden on remaining staff, and ultimately affects the overall productivity and success of the CAT's assigned team(s). Furthermore, recruiting and training a replacement demands considerable time and financial investment. As a result, this is a call for action for employers of CATs to take responsibility for providing competitive compensation to ensure employees feel valued for their contributions.

Inadequate salaries and perceived pay inequities relative to education and experience were commonly reported concerns among CATs in this study. According to the 2023 NATA

Table 11. Supporting Quotations About Boundaries

Lola "I think if I hadn't developed like really good relationships, and hadn't set like good boundaries over time, and I think early on. Had I not like done that and I just like allow people to just I mean, you know how it is like schedules will change, and they expect you there like when they just told you an hour ago, or something. I think if that continued, and there was like not a like, respect for my time."

Ernie "And just making sure that I'm making and putting up boundaries, and that they're respected."

Scott "I mean administratively being, what's the word, you know, aligned under health and wellness really helped us, and just being able to say, hey, our practices end at 9 every day. We're not working Sundays, you know, being able to kind of set a little bit of limits and have a little bit of a work. Life balance is helped."

Tara "They encouraged if you don't have to be here, don't be here. And so, I utilized that. I set my boundaries. I said, you are all scheduling appointments to come see me. I'm not getting up here at 9 o'clock and staring at myself for no reason when you're going to be asleep. I'm not doing it because I don't get paid enough to do that because I'm going to be here at 9 o'clock at night, right? I'm going to put that boundary in place and I it worked very well."

Jaye "I think if my clinic didn't make those boundaries, then they wouldn't be enforced, or they wouldn't be there. There's been we just so that I don't know if it's the NAIA as a whole. I think it is they just implemented new rule where in a 7 day span you have to have 1 off day and I know the NCAA has done that for a while, but so like now they just started it, I think, last year, or that they were like requiring it. And so our AD was one of the people who was like in violation of it, or like was like, had to continuously be reminded of it. And that kind of stuff. And so it really like, I know that it would be a lot worse for sure when it comes to scheduling hours. Workload that kind of stuff if it were solely up to him, or just like an athletic model versus the medical model."

Abbreviations: AD, athletic director; NAIA, National Association of Intercollegiate Athletics; NCAA, National Collegiate Athletic Association.

Salary Survey, CATs rank among the lowest paid within the athletic training profession, with average annual earnings ranging from \$53 258 to \$67 266 depending on competitive level. Participants frequently expressed dissatisfaction with their monetary compensation, noting that their salaries did not align with the demands of their roles or the cost of living in their respective geographic regions. To help address these concerns and develop an effective compensation package, employers of CATs should consider a range of diverse monetary reward practices that best suit institutional resources.

From a recruitment perspective, institutions should first work to ensure that CAT salaries are aligned with current market rates for athletic training positions in their geographic area, as recent salary data suggest that many collegiate positions fall below this baseline. ^{16,17} Once alignment is achieved,

institutions should then aim to offer salaries that are approximately 10% above the market rate. 18 Doing so may enhance their ability to attract and retain high-quality candidates whose contributions are likely to positively affect departmental performance. 18 Quality candidates are likely to bring an ability to positively affect department performance in a way that outweighs the added expense. 18 Likewise, institutions should consider how they can implement skill-based pay scales as a method of rewarding CATs for the knowledge, skills, and experience they possess that can help the athletic department and institution in meeting their strategic goals. 19 Participants frequently mentioned feelings that their compensation was not adequate for their educational or experience level; thus, it may be particularly important to improve CATs' salaries as the requirements for entering the athletic training profession and remaining competitive in the job market continue to rise.

Table 12. Select Quotations for Work-Life Balance

| Jane | "But at this point I just kind of I mean with things that has happened to like, you know, mentors like [my former boss and preceptor], and even my mom. She has nothing to do with athletic training, but she has. She had a very demanding job and then, due to medical reasons, she just couldn't continue. Then she had to retire early to so just seeing, like 2 very influential women in my life, having to retire early. And then seeing how? What a |
|-----------|---|
| | positive impact that balance in life has just like restored in them, has opened my eyes significantly." |
| Rhonda | "Work life balance and just making sure that you the university you're at, they understand and care that you have a life outside of here." |
| lan | "Ensure we are getting enough breaks, ensure we're getting enough time away from work to not to be overworked, basically." |
| Lola | "They were able to like find a PRN to cover that week. So, I think that they were willing to find someone to cover." |
| Jean | "Being able to like be a person outside of just being an athletic trainer is what I look for." |
| Mae | "Scheduling so much of our life around our work, and then, like you wake up. You don't even know what day it is." |
| Debra | "I didn't even get to celebrate my birthday because I was working a lot, I know, and it was a milestone." |
| Stephanie | "You know we always speak about. Oh, take time for yourself. But realistically things go completely uncovered when they shouldn't be, because we just don't have the staff to do so." |
| Andrew | "Just make sure that your athletic trainers have a great work-life balance. And making sure your coaches understand it as well." |
| Nicole | "Life balance is not a real thing in athletic training, but to at least have something where you can have your family time in general." |

As for retention, employers should also consider the use of monetary bonuses to reward employees beyond base salary for strong performance and goal accomplishment. 18 Implementing pay structures based on individual performance has been proposed to serve as a powerful motivator that directly affects employee performance and indirectly affects the retention of employees. Furthermore, it may be beneficial for athletic departments to consider including CATs in monetary bonuses based on team performance, especially in situations in which their services extend into the postseason (eg, bowl games, championship tournaments). 19 This is not a new concept, as colleges and universities commonly use bonus provisions and incentive-focused contracts as a practical tool to ensure coaches are being compensated beyond base salary and retained based on their performance, creating value for the employers and also potentially deferring costs.²⁰ When designed thoughtfully, such bonuses can recognize the critical role CATs play in team outcomes and reinforce institutional investment in the athletic training staff.

With that, it is important to acknowledge the ethical complexities these incentives may present. First, performance-based bonuses should not be viewed as substitutes for appropriate base salary increases. Second, when tied directly to team success, such bonuses have the potential to introduce conflicts of interest, particularly in areas such as return-to-play decisionmaking. As licensed health care providers, CATs must maintain autonomy and always prioritize athlete health and safety. To ensure that professional ethics and patient care remain the top priority, institutions considering such incentive structures must implement clear safeguards and oversight. Ethical guidelines, transparent communication, and administrative support will be essential to prevent undue pressure or perceived conflicts in clinical decision-making. With these protections in place, performance-based bonuses may serve as a supplemental strategy to enhance CAT recognition and compensation.

Fringe benefits also emerged as a significant component of the compensation package. To enhance the longevity of CAT positions, employers should prioritize strengthening the benefit packages available at their institutions. Participants appreciated high-quality health insurance plans that covered physical and mental health needs with minimal out-of-pocket costs. Likewise, robust retirement plans with competitive employer matching contributions were attractive to participants and appeared to give early-career and career-advancing professionals optimism about their long-term financial future. Although the value of tuition waivers and reimbursement were dependent on the employee's personal educational goals, supporting the continuing education of employees through institutional tuition waivers or reimbursement was also identified as a benefit that could help CAT retention. Lastly, providing adequate paid parental leave for employees with children was not only identified as a monetary benefit but suggested as a way for employers to develop a support culture of work-life balance. Strengthening the fringe benefits offered to employees can serve as a reasonable option for employers to supplement fixed monetary wages, as many of these benefits offer significant tax advantages for both employers and employees. Additionally, group discounts can make these benefits more affordable and accessible to all employees.²¹ In line with fringe benefits, extra benefits including funding for credentialing (eg., certification, licensure) as well as professional memberships and development were identified as notable perks

for CATs. Institutions should formalize budgets and offer specific stipends for continuing education to support professional growth. Additionally, providing resources such as work-related technology (eg, cell phone, iPad, laptop), meals/meal plans, and apparel can help alleviate out-of-pocket expenses for CATs and foster a sense of institutional investment.

Although only a handful of participants in this study reported taking on additional work to supplement their income, this strategy may reflect a broader trend in the profession. With many CATs expressing dissatisfaction with compensation and facing rising living costs, some may seek external employment opportunities or increase their workload in an effort to obtain a livable wage and money for discretionary spending. However, this approach introduces a compounding issue. Collegiate ATs already face substantial job demands, and adding more work hours through per diem coverage, teaching roles, or extra responsibilities may accelerate burnout, inhibit work-life balance, and ultimately contribute to professional attrition. These findings reinforce the importance of systemic solutions, such as increasing base pay and expanding institutional benefits, rather than placing the burden on individual ATs to work more to meet basic financial needs.

Institutions must take care to avoid perpetuating a cycle in which financial strain leads to unsustainable workloads and diminished long-term retention. Collegiate ATs in this study underscored a need to reduce their workload to support personal well-being. In line with previous research, workload concerns were expressed by nearly all participants, with concerns centered around excessive hours, understaffing, and increased athlete-to-clinician ratios. Addressing these issues should prioritize structural and cultural changes to support professional boundaries and promote work-life balance. Work-life balance policies are defined as any benefit or work condition offered by the employer that assists employees in balancing work and nonwork demands.²² These policies have been shown to provide benefits, including but not limited to increased job satisfaction and commitment as well as decreased work-family conflict and turnover rates.²² Work-life balance policies provide structural support that allows the CAT to address both professional and personal responsibilities. Athletic departments should promote work-life balance through equitable structured time-off policies, mandatory rest days, and coverage systems that allow ATs to step away without jeopardizing athlete care. More specifically, Mazerolle et al recommended the implementation of formal, structured policies regarding work scheduling.²³ We suggest that employers consider flexible work scheduling options, such as split shifts and compressed work weeks, to help CATs manage time commitments.²³ Furthermore, it has been suggested that supervisors develop specific rules concerning practice times and changes to those practice times as a means of reinforcing boundaries and reducing the harmful effects of irregular schedules, lack of control over work schedules, and working long hours on the CAT.²³

Consistent with prior studies, even when formal policies are in place, CATs reported difficulty establishing and enforcing boundaries due to departmental culture prioritizing athletic performance over personal well-being. Lamane-Harim et al highlighted that work-life balance policies alone are often insufficient without a complementary supportive workplace culture. ²² Cultural support reflects the informal dynamics of a workplace, including the social and relational norms shaped by interactions between supervisors and coworkers. Workplace

culture is often influenced by leadership, not only through leaders' personal views on work-life balance but also by how they demonstrate its importance through their actions.²³ When supervisors actively promote and support work-life balance among their staff, employees tend to experience higher job satisfaction and are more likely to remain in their roles.²³ The findings of this study reinforced this notion, as participants specifically appreciated and found value in supervisors who supported work-life balance, helped to set or reinforce professional boundaries, and modeled appropriate work-life balance behaviors. Leaders' efforts to foster cultural support can take several forms, beginning with clear communication about workload expectations and ensuring that sufficient time is allocated to complete tasks effectively.²⁴ Employers can promote regular breaks and provide flexibility for work to be completed in various locations, whether on-site or remotely. Reviewing workloads to confirm that responsibilities are manageable and realistic is also essential.²⁴ Additionally, employers should encourage staff to take lunch breaks; use vacation time; and avoid working excessive hours, dedicating personal time to work, and withdrawing from set boundaries around work hours when working remotely or traveling.²⁴ By prioritizing these strategies, institutions can create sustainable employment practices that not only support the well-being of CATs but also enhance the quality of care provided to student-athletes.

LIMITATIONS AND FUTURE DIRECTIONS

This study has several limitations that should be acknowledged. First, participants were recruited using a convenience sampling method using professional networks, social media, and conference events associated with the NATA Early Professionals' Committee, Career Advancement Committee, and ICSM. This may have introduced selection bias and limited the diversity of perspectives included. Findings were consistent across NCAA, NAIA, Historically Black Colleges and Universities, and 2-year/junior college institutions. However, we acknowledge that variations in institutional policies, budgets, geographic locations, and competitive levels may affect the applicability of results to institutions with different resources or organizational cultures.

Additionally, although we collected information on participants' model of care (eg, whether they reported through an athleticsbased or medical-based organizational structure), we did not analyze findings by this variable. This decision was based on the strong thematic consistency observed across participants, regardless of model of care or demographic characteristics. However, it is important to recognize that organizational structure may influence job satisfaction, clinical autonomy, and the feasibility of implementing many of the retention strategies identified in this study. As noted by Thompson, medical models of care may reduce conflicts of interest, enhance clinical decision-making authority, and support more patient-centered practices. ²⁵ Future researchers should examine how different reporting structures explicitly affect the experiences and retention of CATs. Likewise, future researchers should evaluate how models of care and organizational structure affect the implementation and sustainability of retention-focused initiatives in the college/university setting. Thompson outlined the benefits of the medical model, including reduced conflicts of interest, enhanced clinical autonomy, and more consistent standards of care. 25 These features may support several of the reforms proposed in this study, such as clearer workload expectations, formalized job boundaries, and increased institutional investment in athletic training programs and services.

Exploring this relationship could help identify system-level changes that foster more supportive work environments for CATs.

Given previous research indicating increased attrition of early-career and career-advancing CATs, this study intentionally focused on early-career and career-advancing professionals. We acknowledge that we did not make direct within-groups comparisons between early-career and career-advancing professionals; therefore, we were unable to determine whether identified factors contributing to the intention to stay or leave the college/university significantly varied between groups. This comparison could have led to the development of more targeted interventions to improve retention. Likewise, the decision to focus on this demographic could have excluded insights from more experienced ATs with longer career tenures. Future researchers should examine and compare retention factors across experience levels to determine whether findings can be generalized to CATs with greater experience levels.

Because of the limited time frame for data collection (May to August 2024), our study may not have captured evolving workforce trends or long-term effects of broader societal changes, such as those resulting from the COVID-19 pandemic. Future authors should use longitudinal designs to capture trends over time and assess how workforce adaptations influence job satisfaction and retention. Also related to time, authors of further research should also focus on evaluating the effectiveness of interventions, including flexible scheduling policies, workload redistribution, and enhanced compensation packages, in reducing burnout and improving job satisfaction.

Finally, future authors should consider conducting cost-benefit analyses to examine the financial implications of implementing competitive pay structures, expanded benefits, and increased staffing levels from the perspective of the institution. Such research could provide practical data to support sustainable employment practices and guide policy decisions within collegiate athletic programs.

CONCLUSIONS

Athletic trainers in the college and university setting suffer from inadequate compensation packages combined with excessive and unrealistic job expectations and workloads. These challenges negatively affect their job satisfaction and often contribute to a desire to leave the college/university practice setting. Competitive compensation packages, enhanced fringe benefits, and flexible scheduling options can reduce turnover and improve job satisfaction among CATs. Moreover, fostering a supportive workplace culture through effective leadership and clear expectations reinforces work-life balance and promotes employee well-being. By implementing these strategies, institutions can create sustainable employment practices that not only enhance staff retention but also improve the quality of care provided to student-athletes.

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