

Athletic Trainers' Psychosocial Experiences During the COVID-19 Pandemic: A Qualitative Research Study

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Context: Despite the many challenges posed by the COVID-19 pandemic, athletic programs have sought ways to persevere and deliver sport programming. This process has strained the psychosocial health of all sport stakeholders but especially those entrusted with promoting the health of participants and enforcing safety protocols. Athletic trainers (ATs) have been a major influence in striving to achieve these goals by expanding their typical roles to lead in promoting the safe delivery of sport programs.

Objective: To examine the psychosocial lived experiences of ATs as they practiced during the COVID-19 pandemic.

Design: Qualitative study.

Setting: National Collegiate Athletic Association Divisions I, II, and III.

Patients or Other Participants: A total of 27 ATs practicing at the collegiate level (Divisions I, II, and III) who were actively involved in planning and implementing return-to-sport protocols during the COVID-19 pandemic.

Data Collection and Analysis: Semi-structured interviews were conducted via Zoom. Inductive conventional content analysis identified emerging themes that characterized participants'

narratives. Three members of the research team were involved in the analysis process and used field notes, continuous member checking, peer review, and multiple-researcher triangulation to establish data credibility and confirmability.

Results: Three higher-order themes related to ATs' psychosocial lived experiences emerged: (1) internalized experience, (2) interpersonal interactions, and (3) AT identity. Several sub-themes were also identified to further organize elements that characterized or differentiated participants' lived experiences.

Conclusions: Athletic trainers encountered significant challenges in maintaining their psychosocial health during the pandemic as they strived to assist others in this regard. Providing effective psychological and social support resources and strategies for ATs may not only allow them to better support themselves but may also enhance their ability to deliver professional services and promote psychosocial health among their athletes and other stakeholders in their respective sport systems in the future.

Key Words: coronavirus, inductive qualitative approach, mental health, professional burnout

Key Points

- The efforts of collegiate athletic trainers (ATs) to contribute to a safe, effective return to sports during the COVID-19 pandemic were accompanied by challenges to the quality of their own psychosocial health—specifically in terms of their internal feelings and emotions, interpersonal dynamics, and disruption to their identity as ATs.
- The lessons learned from the COVID-19 pandemic have raised awareness of psychosocial health in the AT population, which in turn may lead to more visible and effective psychosocial health promotion strategies for themselves and their patients in the future.
- The ATs' testimonies indicated an embodied sense of resiliency throughout the pandemic to ensure that their sport programs resumed. However, further exploration is merited to determine the long-term effects of the collective stress experienced by ATs during this time.

The ongoing COVID-19 pandemic has challenged the health of stakeholders across the sports world and society at large.^{1,2} Initial research efforts during these novel circumstances tended to focus on the health of athletes^{3–5} and have identified threats to physical health such as deconditioning, diminished respiratory health, and increased risk of injury,^{4,6} as well as psychosocial challenges including social isolation, depression, anxiety, and burnout.^{7,8} However, less is known about the pandemic's effects on the psychosocial

health of sports medicine clinicians. It is logical to believe that experiences of psychosocial distress may have been exacerbated for those who were not only responsible for maintaining their own well-being but also for promoting the health of their athletes and other stakeholders in their system.^{1,2,9–11}

Among these supporting stakeholders, athletic trainers (ATs) employed in collegiate clinical settings played an ongoing vital role in the safe resumption of sport programming amid the COVID-19 pandemic. Recently published research^{10–12} has

made clear that ATs have faced, and continue to face, a unique set of challenges to their mental and social well-being throughout the course of the pandemic. These challenges included being asked to apply novel public health skills amid constantly changing information and navigating uncooperative stakeholders at their institutions (eg, coaches, administrators, student-athletes).¹¹ The incidence of COVID-19 remains an important concern, yet attitudes, norms, and health protocols have evolved as society has learned more about the virus and aimed to return to a sense of normality. As that progression occurs and as plans for moving forward are formulated, it is important to take stock of how practitioners' psychosocial health has been affected by the demands, successes, and failures they experienced during this time. *Psychosocial health* has been variably defined in the literature as this term has emerged and evolved in scholarly and public discourse, though common elements tend to include a person's mental, emotional, and social health.^{13,14}

Whereas the testimonies provided by National Collegiate Athletic Association (NCAA) ATs in previous qualitative studies^{10,11} detailed the responsibilities, challenges, and successes associated with practicing during the pandemic, how this time affected their own perceived psychosocial experiences is unknown. Therefore, the purpose of our study was to examine, through a semi-structured qualitative interview design, the psychosocial lived experiences of ATs as they practiced during the COVID-19 pandemic. The exploratory, inductive nature of this research enabled the novel generation of rich data to detail the lived experiences of ATs during the pandemic to permit a more thorough understanding of the current state of the field and to identify potentially effective strategies for promoting ATs' psychosocial health in the future.^{15,16}

METHODS

Given the generative, exploratory focus of this investigation, as well as our emphasis on the participants' in-depth lived experiences, we selected an inductive conventional content analysis approach to identify emerging themes common to our participants' narratives of their psychosocial experiences over the course of the pandemic.^{15,16} Inductive conventional content analysis is used to explore questions for which structured theory or frameworks do not exist or are not well-developed,¹⁵ which aligned with the current state of knowledge regarding our purpose. Data were generated during the summer of 2021, which allowed participants to reflect on their experiences as they planned for, executed, and adjusted to the resumption of sports on their campuses in the previous months. The study was approved by the San Diego State University Institutional Review Board before the study began.

Participants

The total sample comprised 27 ATs; a summary of the participant demographics is presented in Table 1, whereas detailed individual participant characteristics are provided in Table 2. All participants were employed at the Division I, II, or III level with diverse sociodemographic and institutional characteristics. To be included, participants were required to self-affirm that they (1) were employed as an AT at an NCAA-affiliated institution during the COVID-19 pandemic and (2) were involved in the planning and execution of their university's return-to-sport policies and procedures. Initial recruitment occurred via

Table 1. Participant Demographics

Variable	No. (%) or Mean \pm SD
Sex	
Male	18 (66.7)
Female	9 (33.3)
Age, y	47.74 \pm 9.30
Years of experience	24.96 \pm 10.69
Athletic trainer staff members	8.96 \pm 5.71
Student-athletes at the institution	485.11 \pm 204.28
National Collegiate Athletic Association Division	
I—Football Bowl Subdivision	8 (29.63)
I—Football Championship Subdivision	7 (25.93)
I—no football	2 (7.41)
II	5 (18.52)
III	5 (18.52)

our professional networks and was supplemented by snowball sampling. We then applied purposive sampling to “round out” the group in terms of personal, institutional, and contextual characteristics.¹¹

Study Design

A semi-structured interview design was used to elicit participant responses in alignment with the study's purpose. Participants were interviewed regarding their perceived experiences throughout the implementation of their athletic department's COVID-19 return protocols. The general flow of the interview guide prompted participant responses related to (1) the individual's background, demographic, and work context; (2) planning for return to sport; (3) successful and unsuccessful outcomes; and (4) lived psychosocial experiences. Though only the final section explicitly probed participants to detail their mental, emotional, and social health, they often described components of their psychosocial experiences in addressing sections 1 through 3; thus, data generated from the full interview guide were included when deemed relevant to the participant's psychosocial experience. This interview guide was previously validated by scholars and practitioners with expertise in the psychosocial health domain^{10,11} and was used and published in research detailing the roles and responsibilities of ATs during the COVID-19 pandemic.¹¹ The full interview guide is included as Supplemental Material (see <https://doi.org/10.4085/1062-0517.22.S1>).

Procedure

Each participant completed 1 interview session, which was scheduled for 60 minutes. Interviews were conducted via Zoom (Zoom Video Communications) and were recorded and transcribed automatically. All but 1 interview (participant 17 due to scheduling logistics) was conducted by 2 members of the research team, with the interviewers alternating questions while prompting follow-up and probing questions when they deemed appropriate. Purposive recruitment was used to create a contextually and demographically diverse sample across characteristics such as geographic regions, school size, and years of experience. Recruitment concluded when we deemed that data saturation had been reached on the basis of minimal information being yielded by ongoing interviews.¹⁵ Those who agreed to participate were emailed a form that gave an overview of the study's purpose and requested their consent before the interview.

Table 2. Individual Participants' Characteristics

Participant	Age, y	Gender	National Collegiate Athletic Association Division	Years of Experience	No. of Athletic Trainer Staff	No. of Student-Athletes
1	63	Male	I	43	24	600
2	62	Male	I-FCS	41	7	600
3	39	Male	I-FCS	18	5	285
4	49	Male	I-FCS	27	14	450
5	38	Male	I-no football	17	6	420
6	56	Female	III	32	4	575
7	48	Male	II	25	8	400
8	52	Male	III	31	4	600
9	52	Male	I	36	19	500
10	54	Male	II	31	11	550
11	53	Male	I	30	17	500
12	54	Male	I-FCS	32	7	500
13	37	Female	II	16	13	1300
14	50	Male	I	26	3	250
15	39	Female	I-no football	18	7	250
16	62	Male	I	39	18	550
17	49	Male	I	26	13	400
18	34	Male	I	11	8	300
19	43	Female	I-FCS	21	3	340
20	42	Female	I	14	12	500
21	34	Female	I-FCS	8	11	550
22	29	Male	I-FCS	2	6	475
23	37	Female	II	7	5	325
24	52	Female	II	32	4	328
25	53	Female	III	28	6	500
26	53	Male	III	31	0	325
27	55	Male	III	32	7	725

Abbreviation: FCS, Football Championship Subdivision.

Several strategies aided in establishing credibility and confirmability.^{15,16} Continuous echoing and comprehension probing were used for within-interview member checking to ensure clear, accurate communication of the participant's intended messaging.¹⁷ In addition, field notes were taken by the interviewers during and after each interview session; multiple-researcher triangulation and peer review (as described in the Analysis section) were also used to establish trustworthiness of the results.^{15,16}

Analysis

To begin the inductive conventional content analysis process, a single member of the research team (J.S.D. or T.E.A.) completed an initial wave of independent coding to examine each transcript and determine a preliminary thematic structure. Next, a secondary coder on the research team (H.J.R.) conducted an independent internal review of the transcripts and met with the initial coder to hone the thematic guide and discuss, confirm, and challenge the generated themes. Transcripts were then peer reviewed by a third member of the research team (E.G.P.), who was not involved in the previous steps of the analysis; this coder integrated themes from review of the transcript into the existing thematic structure, at which point the other members of the research team discussed how these new themes aligned or challenged their more in-depth experience during their full review of the transcripts. We also discussed and came to a consensus on how best to label each theme and subtheme: when possible, we selected terminology that was explicitly used by the participants or was viewed as common language in health science domains.^{15,16} Last, an external auditor with expertise in the

psychosocial elements of health care conducted a peer review by independently analyzing a randomly selected transcript to ensure reliability of the results in relation to the transcript and codebook.^{15,16} This auditor's feedback was then distributed to the full group once more to obtain validation of the emerging themes, resulting in the final thematic structure (Figure).

RESULTS

The inductive analysis process generated 3 higher-order themes that characterized our participants' psychosocial experiences: (1) internalized experience, (2) interpersonal interactions, and (3) AT identity. Through these themes and their associated subthemes (Figure 1), meaningful factors that enhanced and challenged the psychosocial well-being of these ATs during the pandemic were identified.

Internalized Experience

The first overarching theme of participants' narratives pertained to the ATs' internalized psychosocial experiences, such as their emotions, thoughts, and attitudes. Whereas these internal factors were likely affected by those around them and the environment in which they worked, this theme emphasized narrative elements that were isolated from the ATs' larger social spheres, instead centering on constructs within the individual.

Burnout. The first internalized experience subtheme that was commonly mentioned was a sense of burnout. Consistent with the qualitative nature of this study, we did not identify burnout using any objective measure but the term was used frequently and explicitly by the ATs (Table 3). Common causes of this perceived burnout included working long, inconsistent

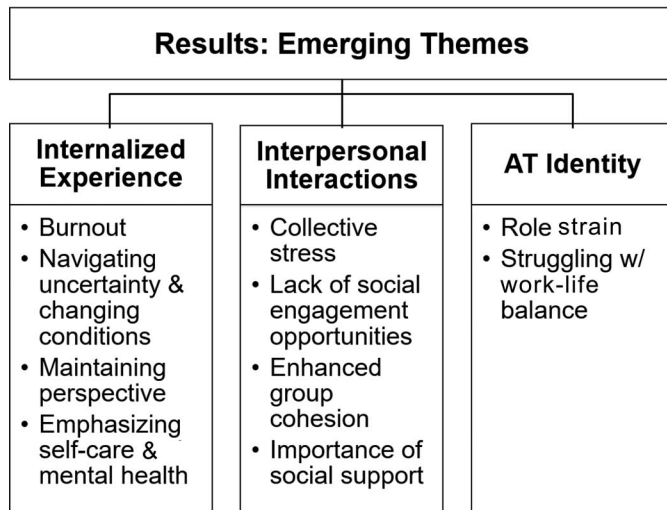


Figure. Thematic structure of results. Abbreviation: AT, athletic trainer.

hours and the feeling that they were unable to take any time off to recharge. “You look back at it today and [think] ‘where did the year go?’ I am so ready, just like I believe a lot of ATs are, for a break. Because . . . it has been a long year” (Participant 3).

This accumulated pressure, as well as a self-imposed expectation to rise to this novel challenge, left many ATs feeling as if “their tank was empty”: “When things were bad and people were relying on me and I kept getting more and more added to my plate, that got very frustrating for me . . . because I couldn’t do it all and . . . I was just breaking down” (Participant 14).

Whereas this feeling of burnout was discussed in an internalized sense, our participants’ burnout was often affected by uncooperative or unsupportive stakeholders: “It’s bad enough already being burned out in a regular year . . . then you add COVID, and then a crazy coach is breathing down your neck—it makes the situation worse” (Participant 18).

Navigating Uncertainty and Changing Conditions. The challenge of navigating the constantly shifting landscape related to the pandemic was commonly described. Respondents noted the counterintuitive nature of being asked to make decisions and recommendations that would affect the health of those in their setting without the requisite evidence to strongly support these plans. Given ATs’ emphasis on implementing evidence-based practice, the lack of empirical evidence and the questions that arose from identifying gaps in knowledge appeared to create a uniquely taxing situation: “What stood out to me was our lack of readiness with our written policies, our lack of readiness to answer questions that came up during the implementation process—there was just so much we didn’t know yet” (Participant 3).

The frustration caused by the lack of high-quality research evidence was compounded by pressure from other stakeholders to make immediate, precise, and effective decisions. When new information became available, plans needed to be adjusted and refined. Integrating novel and at times conflicting incoming information was a major source of stress across our sample, especially in the preparation phase: “I am reading daily updates and recommendations, procedural guidelines and things like that, and they’re changing daily—so I think the most frustrating [thing] for me has been the lack of consistency” (Participant 5). To best navigate this uncertainty, our

respondents learned to practice acceptance of their evolving situation, even linking this approach to their role as an AT: “A lot of uncertainty, but I think we deal with uncertainty every day. Part of being an AT is being comfortable being uncomfortable” (Participant 3). One individual provided a mantra for overcoming this uncertainty: “Adapt, adjust, improvise” (Participant 8). Whereas participants appeared to perceive this attitude as helpful in mitigating the psychosocial distress they experienced, it was also clear that dealing with constant uncertainty without reprieve was a challenge: “[It] takes a toll over and over again, to keep waiting for something to get better—nope, things are worse . . . so there was no light at the end of the tunnel” (Participant 4).

Maintaining Perspective. Another key influence on our participants’ internalized experiences was their ability, or lack thereof, to maintain a positive, adaptive perspective during the challenging, and at times dire, circumstances. One respondent cited the mantra of “don’t sweat the small stuff” as a reminder of what was important and what was not (Participant 7). More broadly, the ATs benefited from recognizing that they could not control everything; despite their best efforts to plan and deliver health and safety protocols and create a controlled environment, a multitude of variables outside their control existed that threatened the effectiveness of these plans. Recognizing what could be addressed and then preparing for speed bumps along the way by “controlling what you can control” (Participant 6) appeared to be an optimal approach for maintaining the necessary perspective to benefit their psychosocial health.

An additional attitude that assisted in maintaining perspective was to look for any “silver linings” among the many difficulties of the pandemic. These included the enhanced trust that ATs built in themselves and received from others as they navigated the novel circumstances of COVID-19 and allowed athletes to participate in a safe manner: “Once you get to the top of the mountain, people saw what we were doing and how successful we were, and if you look at our numbers, we didn’t have a lot of positive cases” (Participant 26). In addition, it was common for respondents to show enthusiasm for the positive changes to their clinical practice that had taken place in response to COVID-19, such as more streamlined clinical procedures and structures (Participant 2), greater flexibility and effectiveness in working together virtually, and an enhanced knowledge of public health and infectious disease. Many ATs also expressed optimism that the changes and growth experienced during the pandemic would carry over into future endeavors:

I hope this past year and a half wasn’t just a blip in everyone’s lives. . . . I hope they take a moment to consider the powerful impact it had and some of the changes that have been made, because I think [with] those changes, the department is going to be better and people are going to . . . feel better about being there and what they’re doing. (Participant 7)

However, 1 participant concisely summarized the simplest silver lining for several of the ATs in our sample: “I survived” (Participant 10).

Emphasizing Self-Care and Mental Health. As the final internalized experience subtheme, our sample emphasized their increased awareness about the importance of self-care and managing their mental health. Beyond this awareness, several participants mentioned that they sought resources or direct assistance in managing their mental health, something

Table 3. Supplemental Supporting Quotes for Emerging Themes

Theme	Supporting Quote
1. Internalized experience Burnout	<p>“I want to be able to look back and say, ‘I gave it my best shot.’ Now the downfall of that is, we will do too much, and we will spread ourselves too thin, and we experience burnout.” (Participant 11)</p> <p>“Typically, in a college athletics setting you have your summers—kind of [a] get away, have a vacation, have a recharge. I’m very much someone that likes to travel to new places, explore places. And last summer, you couldn’t travel, you can’t go anywhere, you are just constantly waiting to find out if you’re going to have a job in the fall. And so that was, you know, that was hard, because I don’t think I got the relaxation last summer that normally I would get.” (Participant 21)</p> <p>“I told my coworker . . . back in March, ‘Look I need a break. I haven’t had a break since last winter because of all the policy writing and everything’ . . . I told him, ‘I need you to take over for me for a couple weeks during the summer, just so that I can take a break.’” (Participant 25)</p>
Navigating uncertainty and changing conditions	<p>“I mean with all of that [information] coming in, it was a roller coaster mentally.” (Participant 5)</p> <p>“There were different avenues we needed to go down . . . different questions. And we were running on a treadmill, trying to figure out which way to go. But it felt like running in place.” (Participant 9)</p> <p>“Not all the coaches, but most of them . . . they got frustrated the rules kept changing. And you’d look at every conference, and it seemed like everyone was doing something different. So as it changed, for them it was like ‘what are we actually supposed to do?’ And I knew that [my answer] was going to change.” (Participant 18)</p>
Maintaining perspective	<p>“I’ve overcome a lot in my life, and I will overcome this . . . and I’ve learned better how to organize things, how to prioritize things.” (Participant 14)</p> <p>“[If] nobody’s bleeding out right there, if there’s no emergent life-threatening situation that you have to solve today, even though there are questions . . . just take a breath and be cool.” (Participant 21)</p>
Emphasizing self-care and mental health	<p>“The mental health part has been something that I’ve really tried to push myself on making sure that I do what I can control: Get up every morning, and even if it’s just going for a walk, doing some sort of exercise, and trying to stick to a routine.” (Participant 6)</p> <p>“You know, it’s been a real challenge, and you know, it’s been the most challenging year of my career, but it’s also been the most rewarding year in my career.” (Participant 10)</p> <p>“Just being more proactive in seeking out help. Because I think that a lot of athletic trainers were so successful in COVID because that’s—we’re problem solvers, right? So we’re going to bury our heads and find a way to get it done right.” (Participant 20)</p>
2. Interpersonal interactions Collective stress	<p>“This was a huge concern . . . and I felt sick to my stomach as a leader that, despite all our protocols, this happened, and this happened—with other coaches on the staff, pregnant wives at home, the coach got it. Did the wife get it or not? You know, young kids at home, some older parents living at home, all the things we read about in society across the nation, were alive and well with us here with coaches and home living situations and all that. So it was a stressful time because you’re trying to figure out how to keep them healthy.” (Participant 12)</p> <p>“I don’t think we really understood the mental health toll it was going to take not only on us as a staff, but on our athletes. So we definitely saw an increase in mental health issues . . . when everything was shut down, a lot more anxiety, depression because we were all so isolated.” (Participant 15)</p> <p>“The morale for athletic training right now is pretty low—we just did a ton and we’re not getting anything out of it. You know, it’s like it’s rough for an assistant athletic trainer. This was the biggest thing they could have ever done, probably in their career. And to get that pay raise, that kind of stuff, and because of COVID budget cuts, they’re not going to ever see it. So that’s frustrating to tell my staff, ‘You did an amazing job, I wish I had anything more for you, you did amazing, you did everything possible. I cannot benefit you financially in any of this and actually wait, you’re going to work more now because we’re down another athlete trainer.’” (Participant 23)</p>
Lack of social engagement opportunities	<p>“I get to work at 6:30 in the morning, and . . . I say minimum it’s about, averaging around 11–12 hours a day. You know I didn’t see my kids much, barely saw my wife, and then I’d be at home. And we sit down at dinner and get a call about a positive case now, I have to go, when I’m in the garage until 1:00 trying to contact trace and identify [who]ever needs to go into quarantine.” (Participant 5)</p> <p>“To not see people for so long, was really tough on me personally, because I am a social butterfly and was not able to see people. I mean I literally could not sleep the night before we were allowing kids back in. The day before our athletes came on campus, I was here at 3:30 in the morning, like to open the door. I couldn’t wait to see faces. I didn’t get to see patients because we’re in masks but nonetheless, I get to see other human beings, which was nice.” (Participant 23)</p>

Table 3. Continued.

Theme	Supporting Quote
Enhanced group cohesion	<p>“Your relationships have always been important, but they are absolutely vital when facing something like this.” (Participant 17)</p> <p>“And you know, one of the things that I think as a department . . . I have a great staff and no one is selfish, and we did what we had to do for the greater good. We all have to chip in, cover other teams and do things we’re not used to. So for our department, to continue to keep our athletes safe and [on campus], that’s helped us.” (Participant 2)</p> <p>“I also would say communication with coaches and staff was critical. I ended up really becoming the COVID point person for our department, so everything got directed to me if they had a relative or a family [with or concerned about COVID].” (Participant 27)</p>
Importance of social support	<p>“[Our administration] were just on board with what we’re doing, with the research and all that kind of stuff. Looking back on it, if I had to force it, I think we would not have had as much buy-in.” (Participant 18)</p> <p>“At times, I felt like I wasn’t part of the decision-making process, so that was really difficult . . . I really wasn’t part of the decision-making process. You know I’m the guy [with] 30 years of collegiate health care experience, and to not have a seat at the table and constantly hearing stories of ‘This is how it’s going to be,’ that was very frustrating.” (Participant 26)</p>
3. Athletic trainer identity	
Role strain	<p>“We’re constantly having these [COVID-related] discussions . . . as our main focus, and it’s like, ‘when can we go back to being athletic trainers?’” (Participant 4)</p> <p>“Everyone [in the athletic department] is together on a daily basis—coaches, sport administrators, athletic trainers, conditioning staff—[but] no administrators were there. And I think the coaches felt a little bit of leeway to do what they wanted to do, and you know, when you give them a little, they’re going to take a lot, and it’s hard to rein them back in.” (Participant 7)</p>
Struggling with work-life balance	<p>“Before, I think I did a better job of going home and being able to disconnect a little bit, but I don’t think that happens anymore, because COVID just became so urgent, so [it] was always, ‘What do we need to do?’” (Participant 20)</p> <p>“It seemed like it was COVID, all the time . . . We tried to have set hours, but of course somebody is going to show up late, or you get a phone call like ‘hey, can you come let me in, or hey, I need to get checked . . . so that was kind of a pain.’” (Participant 15)</p> <p>“We had [a plan] so that we felt happy, very comfortable . . . one of the reasons I did this was my wife is immunocompromised and my mom lives with us and she’s elderly, so I did not want to [spread the virus] . . . so the way this played out was very unusual for me.” (Participant 14)</p>

that was a new experience for them: “I think it’s been very difficult, I struggled with my mental health during this period . . . mentally it took a really heavy toll on me, I had to seek mental health assistance myself” (Participant 27).

One frequently cited method for mental health support was virtual counseling, which was generally well-received by ATs. However, this was not universally accepted by student-athletes, which led to more perceived stress on the ATs’ part:

A lot of our athletes did not like their virtual counseling, so they didn’t feel like they were getting anything out of it, so now they weren’t getting the counseling they needed, yet were still struggling with the anxiety and depression. (Participant 15)

Individuals did not clarify specific factors or characteristics that led to the virtual counseling being viewed as more effective by ATs than by their athletes.

Interpersonal Interactions

The second overarching theme related to the social component of our participants’ experience was interpersonal interactions. These themes characterized how COVID-linked challenges and limitations affected the participants’ ability to engage with their surrounding social systems, as well as how

these limitations affected the perceived quality of their social connections throughout the course of the pandemic.

Collective Stress. The ATs in our study often detailed an implicit awareness of the heightened stress levels of those in their social circles. This sense of collective stress was multifaceted (ie, intrapersonal, interpersonal, emotional, cognitive) but ever-present, meaning that the vast challenges of the pandemic were palpable in interactions with others:

Everybody was just in this constant stress level of “Am I going to get COVID? What if my family gets COVID? Are we going to play sports? Am I going to be employed next month?” So you had all this stress going on, and just a lot of mental and emotional fatigue. (Participant 2)

As the previous quote illustrates, sources of stress varied based on a person’s role and unique characteristics, but it was clear that this stress was widespread across campus and clinical settings, outside of work, and in society as a whole. A frustrating part of this experience for ATs was the inability to control how others were managing their stress; when managed poorly, it had a compounding effect: “[Our administrators] were facing pressures from the university as well . . . so I think there was kind of a trickle-down effect. I think everyone’s feeling that that pressure” (Participant 7).

Lack of Social Engagement Opportunities. Another challenge to the psychosocial experiences of our participants

was the inability to connect through social engagement. This included “not being able to see friends” (Participant 14), as well as a perceived lack of quality social interactions that occurred virtually. Also evident was hesitancy to engage in opportunities for in-person socializing due to a fear of spreading the virus, which was especially true for those who had family members or friends with elevated COVID-19 risk factors:

We always had issues . . . with someone [saying] “my grandma’s going to have her 90th birthday party, I really want to go home.” And we just explained to them, “Well, if you do, you’re going to have to quarantine before . . . and when you get back.” That was hard because they don’t want to do that, and we tried to explain, “hey, Facetime the celebration or Zoom” . . . that worked for a few, but we still had a few issues. (Participant 16)

Enhanced Group Cohesion. On a more positive interpersonal note, ATs commonly described an increased sense of cohesion among themselves and their staffs, institutional stakeholders, and professional networks. A key way in which this manifested was through frequent communication and collaboration with ATs at other institutions, partnerships that lessened our participants’ mental strain:

From an athletic training standpoint, it was very easy to reach out to other colleagues and say, “Hey, what are you guys doing?” You would just get emails of policies that they’ve already started putting together . . . kind of read through it and learn [from it], so that concept—that was great. (Participant 19)

It is important to acknowledge that although these close partnerships had an overwhelmingly positive effect, having to rely so closely on these interpersonal relationships involved certain drawbacks. As one participant put it: “I’ve never been more salty with a lot of coworkers, but I’ve also never been more appreciative. I run the gamut of emotions throughout this thing; [it’s] been unprecedented” (Participant 17). Several respondents identified enhanced cohesion as a critical aspect of their experience that they hoped would carry on in their interpersonal interactions even as the pandemic subsides and clinical settings moved closer to their pre-COVID-19 state.

Importance of Social Support. Last, our ATs indicated that their awareness of the importance of social support and how that support affected their well-being also increased throughout the pandemic: “That helped an awful lot in getting us through this . . . you never felt like you were alone, and you always had a big group of people supporting you to help you through this thing, so that was really cool” (Participant 4).

Similar to enhanced group cohesion, this heightened awareness of the influence of social support appeared to be in direct response to the challenges of the pandemic, which present another silver lining for future interpersonal interactions moving forward: “We’ve been through a lot and been able to . . . keep going to persevere and push through, and we’ve had support and got a lot of positive feedback from our coaches and administration in the job that we’ve done. So that should help [in the future]” (Participant 5).

The AT Identity

The third higher-order emerging theme detailed the pandemic’s effect on how our participants viewed themselves and their role as an AT. Whereas these themes are related to and affected by the previously detailed internal and interpersonal factors, the AT identity theme differed in its emphasis on participants’ perceptions of their role, value, and tasks as an AT, as well as how their professional responsibilities influenced their experience as a holistic person outside of their clinical setting.

Role Strain. A typical element of our participants’ narratives related to their AT identity was the feeling that the novel demands of the pandemic had strained their ability to effectively fulfill all the tasks and responsibilities they associated with their role as an AT. Respondents discussed how they needed to “wear a lot of hats” (Participant 7), which included more public health–focused responsibilities as well as serving as a conduit for communication among various stakeholders and campus entities. This latter responsibility was especially difficult when translating policy and practical guidelines to campus stakeholders who were not supportive or were not accustomed to receiving instruction on how to manage their team from the AT: “Student-athletes, parents, coaches—who do they go to? I became the resource for all things COVID for athletics . . . so I’m taking the bullet on things I didn’t really have control of. I was just the messenger. So the messenger got beat up” (Participant 2).

In addition to communicating policy and recommendations, ATs often found themselves in the position of enforcing protective protocols, or as 1 individual termed it, being “the COVID cop” (Participant 1). This role was universally viewed as undesirable by our participants, and being forced into this responsibility was a key differentiator in their positive and negative psychosocial experiences:

There was a time during the year [when] I thought I was the most hated person on campus amongst the athletic department . . . because I was shutting things down, I was saying “no, we can’t do that, the health department won’t allow it.” (Participant 3)

Struggling With Work-Life Balance. Next, it was common for participants to describe the struggle of maintaining work-life balance, meaning that it was difficult to feel fulfilled and successful as both a professional and as a person outside of professional settings:

I think that every single emotion a human can experience, I’ve experienced this year . . . and I always try to keep [emotions] in check, especially when I’m at work . . . but this year it’s been tough. I’m not happy right now, we’re not happy [as a staff] right now, we’re not enjoying our job, and we’re all experiencing the same feeling that we cannot function at the high level that we expect when it comes to the care of our athletes. (Participant 5)

A main factor that contributed to these challenges was the inability to “clock out” of a professional mindset due to around-the-clock occupational demands and new information updates:

I would come home, and some work situation would come up just as we’re about to sit down for dinner. And 4

[or] 5 hours later, I have not eaten dinner, and I've worked on this until 11:00 at night. Those scenarios happen across the board and . . . that type of stress takes a toll." (Participant 4)

DISCUSSION

Previous researchers^{10,11} explored the successes and challenges of policy and procedure development and implementation for ATs working in the collegiate setting during the COVID-19 pandemic. Our findings add to the literature by revealing the perceptions of psychosocial health and in-depth lived experiences of ATs during that period of time. The 3 emerging overarching themes were (1) internalized experience, or the emotions, thoughts, and attitudes of the clinicians; (2) interpersonal interactions, or the quality of participants' engagement with their surrounding social systems; and (3) AT identity, or how the participants perceived their value and role as both an AT and as a person to be influenced by the pandemic.

Internalized-experience factors were the emotions and attitudes of clinicians that encompassed burnout, navigating uncertainty and changing conditions, and managing their health and self-care. Our ATs and many other health professionals had already identified professional burnout as a wide-reaching challenge before COVID-19.¹⁸⁻²¹ Of note, we did not specifically measure burnout with an objective scale. However, participants often implicitly described elements of burnout during their interviews—such as experiencing emotional exhaustion and depersonalization of patients—and several individuals explicitly used this term to describe their psychosocial state. Earlier investigators²⁰ linked burnout with decreased sleep quality in clinicians and increased irritability, depression, anger, and frustration. Equally concerning, burnout can lead to decreased quality of patient care and more medical errors.^{23,24} Concerns related to burnout are likely to be exacerbated by the pandemic, and it is critical to anticipate a rising rate of professional burnout in order to create effective interventions and systems to address the sources of burnout. These sources likely stem from the greater demands and pressures and new responsibilities in the workplace as a direct result of the pandemic but also from the added collective stress of daily living during the pandemic.^{10,11,25} Whereas organizational factors have been shown to affect work-family conflict (a predictor of burnout) of collegiate ATs,²⁶ we are also continuing to learn how personal health, relationships, and financial stresses can contribute to workplace performance and burnout.²⁷ It is unrealistic for ATs to completely "leave their stress at the door" when they are at work or at home or to expect that those stressors would not affect their well-being and perceptions of burnout.

An apparent unintended benefit of the COVID-19 pandemic for ATs was an increased sense of their own capabilities, such that many participants felt they could get through anything after navigating the pandemic. This juxtaposition of respondents describing perceived clinical burnout while also feeling more capable of handling adversity in their settings is an interesting nuance that brings to light a potential silver lining of the pandemic: as ATs became more aware, educated, and effective in navigating their own psychosocial challenges, it stands to reason that they would also be more effective in addressing these components of their patients' health. Although not measured explicitly in this qualitative study, this finding is conceptually linked to professional resiliency, a construct that has

shown negative correlations with work-family conflict and positive correlations with work-family enrichment.²⁸ Those who are able to demonstrate resiliency in times of high stress are better equipped to "weather the storm" and navigate conflicts in their professional and personal lives.²⁹ Similarly, because patients needed more assistance in the area of mental health, clinicians may have developed increased awareness of resources and strategies for managing that area of health care.

The second emerging theme detailed interpersonal interactions and highlighted the participants' quality of social engagement with their surrounding systems. A major subtheme was the role of collective stress: the clinicians themselves, coworkers and administrators, athletes, and other stakeholders were all experiencing stress, which compounded into an emotional weight larger than the sum of its parts. Our participants indicated that this prolonged intensive contact with patients and exposure to multidimensional stressors led to exhaustion and a decreased ability to empathize with patients, characteristics that align with the construct of *compassion fatigue*.³⁰ Participants also described a lack of social engagement opportunities as a barrier to stress relief because physical distancing restrictions and increased professional demands limited opportunities to see friends and colleagues outside of professional settings—often a vital component of personal self-care and wellness.¹⁰ At the time of the interviews, the ATs felt that as physical environment restrictions decreased and interactions increased, this would be less of a problem. However, many individuals also felt that socialization would likely feel strange or create anxiety while establishing a *new normal*, a social experience that has been previously identified in health care clinicians working during the pandemic.³¹ Alternatively, coworkers who were able to continue interacting regularly during the pandemic felt that they had strengthened bonds and created systems and communication strategies that would improve their work environment in the future. Earlier researchers³² highlighted the role that social support plays in decreasing work-family conflict, and our results underscore the importance of collaborative relationships. Overall, participants emphasized the importance of social support and group cohesion moving forward: in other words, the need for system-level strategies to combat work- and life-related needs.

The third theme encompassed AT identity and how the pandemic influenced how participants viewed themselves and their role as both a professional and a person. Athletic trainers are often spread thin with normally assigned tasks, duties, and responsibilities.^{19,22} During the pandemic, demands were higher and resources were lower, which further disrupted the ATs' established identities. For example, whereas public health elements are woven throughout the athletic training accreditation standards, many clinicians did not anticipate serving in the role of an infectious disease expert; yet during this time, they were often the "point person" for multiple stakeholders in terms of translating information and best practices.

In addition, ATs frequently became the "COVID police" to enforce health and safety protocols that they had created because no designated system existed for enforcement. This required ATs to divert their time and attention from more typical operations to monitor and enforce protocols. In previous research,^{10,11,25} ATs reported that they encountered stress at various stages of resuming sport, with people in their environment not following protocols and a lack of administrative support identified as stressors. At all levels, ATs experienced a compromise in their ability to be personally and professionally fulfilled

as they navigated these challenges. Earlier work³³ not specifically related to the COVID-19 pandemic indicated that a higher professional self-concept was associated with lower levels of stress, which was supported by our results. The additions to daily job functions, outside of those typical of the profession, further heightened stress due to the increased hours needed for the new responsibilities and a lack of conventional home and work settings due to remote work and physical distancing. This made work-life balance even more difficult to achieve.³³ Also, because ATs served as leaders at their institutions for policy creation and implementation, the success and failure of these plans influenced how the participants valued themselves as ATs. Positively, respondents expressed pride in their role in reopening campuses and sport programming, which served to lessen feelings of burnout and psychosocial distress. Negatively, having low administrator or stakeholder buy-in and policing the implementation of policies exacerbated feelings of stress and led to devaluation of their own perceived value as health care providers.

Limitations

Whereas the qualitative, inductive approach for this study yielded novel insights and depth of data, several important limitations must be considered. Participants were recruited on the basis of convenience and snowball sampling of individuals in our extended professional networks. Thus, the testimonies of these participants may not reflect those of ATs who were not approached or chose not to engage in the study. It is also possible that this recruitment procedure, though logistically practical, led to a degree of homogeneity in the sample. For example, most participants who completed interviews were men over the age of 50 years (Table 2). Moreover, to be included in this study, participants must have indicated that they were “involved in the planning and execution of their university’s return-to-sport policies and procedures.” However, included participants were not delineated by their specific job title (eg, head AT, assistant AT); given that their staff position may have influenced their psychosocial experience, this lack of role specificity in the analysis approach may be an important consideration when characterizing our sample and interpreting the emerging results.

Future Directions

Future researchers should evaluate psychosocial constructs (eg, burnout, self-efficacy, self-concept) in ATs using objective, quantifiable measures to inform associations and relationships between the characteristics of the participant, the setting, and these various psychosocial factors. Understanding the precursors to psychosocial distress can then inform the creation of testable psychosocial interventions and resources aimed at promoting clinician health and well-being. Furthermore, tracking the mental health trajectories of ATs and the athletes they treat—through direct, longitudinal tracking—is an important step in clarifying the degree to which the psychosocial experiences of our participants are isolated occurrences due to the pandemic or the new norm for the profession.

CONCLUSIONS

The role of collegiate ATs during the COVID-19 pandemic was associated with perceived strain on their psychosocial well-being, both professionally and personally.

Psychosocial distress has been linked to job attrition and career departure; it would be prudent to consider the potential implications of clinician turnover on patient care and outcomes. For clinicians who stay in the field, psychosocial distress can lead to poorer patient outcomes and an increase in medical errors, so it is critical to characterize and understand these constructs in athletic training. Of note, clinicians were open to talking about these psychosocial stressors and the effects on their mental well-being, signifying a possible shift in the stigma that is often associated with mental health. This recognition of their own mental health and well-being may also help clinicians raise awareness among their patients. We identified key themes to outline these ATs’ experiences (eg, role strain, navigating uncertainty, burnout), emphasizing the need to create and test sustainable strategies and resources for enhancing stakeholder health as they rebound from the pandemic, as well as in navigating future challenges.

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SUPPLEMENTAL MATERIAL

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