

# Internet Journal of Allied Health Sciences and Practice

Volume 20 | Number 4

Article 13

September 2022

# An Examination of Emotional Resilience among Athletic Trainers Working in the Secondary School Setting

Shaine Henert Northern Illinois University, shenert@niu.edu

William Pitney Northern Illinois University, wpitney@niu.edu

Bethany Wood Life University, bwood@life.edu

Nicholas E. Grahovec Northern Illinois University, NGrahovec@niu.edu

Tyler A. Wood Northern Illinois University, twood1@niu.edu

Follow this and additional works at: https://nsuworks.nova.edu/ijahsp

Part of the Adult and Continuing Education Commons, Educational Leadership Commons, Higher Education Administration Commons, Higher Education and Teaching Commons, Industrial and Organizational Psychology Commons, Kinesiotherapy Commons, Other Mental and Social Health Commons, Social Psychology Commons, and the Sports Medicine Commons

# **Recommended Citation**

Henert S, Pitney W, Wood B, Grahovec NE, Wood TA. An Examination of Emotional Resilience among Athletic Trainers Working in the Secondary School Setting. The Internet Journal of Allied Health Sciences and Practice. 2022 Sep 26;20(4), Article 13.

This Manuscript is brought to you for free and open access by the College of Health Care Sciences at NSUWorks. It has been accepted for inclusion in Internet Journal of Allied Health Sciences and Practice by an authorized editor of NSUWorks. For more information, please contact nsuworks@nova.edu.

# An Examination of Emotional Resilience among Athletic Trainers Working in the Secondary School Setting

# Abstract

Purpose: Athletic training is a demanding profession that is a stressor for many practitioners. Emotional resilience allows Athletic Trainers (ATs) to persist in their roles and benefit from long and successful careers. The purpose of this study was to explore the level of emotional resilience of ATs working in secondary school settings and identify factors perceived to contribute to or mitigate one's emotional resilience. Method: A sequential explanatory mixed-method design using a cross-sectional online survey followed by in-depth interviews was used to gather information from 160 (16% response rate) secondary school NATA members - 97 (60.6%) female; 63 (39.4%) male with 13.28+9.46 years of experience. Six individuals (5 female, 1 male) participated in a follow-up semi-structured interview. The Connor Davidson Resilience Scale (CD-RISC) was used to measure perceptions of individual emotional resilience. Openended questions were also used to gather information from the participants who agreed to participate in a follow-up semi-structured interview about the factors perceived to both facilitate or reduce emotional resilience. Results: The mean emotional resilience score (79.84 ± 11.38) for the sample was consistent with the average US adult population. Only 14.1% of the sample reported high emotional resilience scores. There was a significant positive correlation between emotional resilience scores and years of experience as an AT (r(158) = .16, P = .048) and age in years (r(158) = .16, P = .048). There was no significant difference between emotional resilience and academic degree earned (F(2,157) = .775, P = .83). The inductive analysis resulted in the following emergent themes that were perceived to facilitate ones' emotional resilience: social support, communication, self-care, and past experiences. Also, the following emergent themes were perceived to reduce ones' emotional resilience: emotional responses and role overload. Conclusion: The results of this study help understand secondary school ATs' perceptions of and factors that contribute to their emotional resilience. Strategies are suggested to help ATs develop emotional resilience to manage their occupational stress and reduce feelings of burnout.

# Author Bio(s)

Shaine Henert, PhD, ACSM-EP, is an Associate Professor in the Kinesiology & Physical Education Department at Northern Illinois University in Dekalb, IL. His research interests include the effect of psychological skills training on performance enhancement, the psychology of athletic injury and rehabilitation, and exercise behavior and adherence.

William Pitney, EdD, ATC, FNATA, is an Associate Dean in the College of Education at Northern Illinois University in Dekalb, IL. His research interests include Athletic Training education, professional development, administration and management, as well as professional socialization in athletic training practice settings.

Bethany Wood, MS, ATC is a graduate student at Life University in Marietta, GA. Her research interests include student-athlete development and the effect of psychological skills training on performance enhancement.

Nicholas E. Grahovec, PhD, LAT, ATC, CSCS is an Assistant Professor in the Kinesiology & Physical Education Department at Northern Illinois University in Dekalb, IL. His research interests include athletic training intervention effectiveness and innovative practices in athletic training education.

Tyler Wood, PhD, ATC, is an Assistant Professor in the Kinesiology & Physical Education Department at Northern Illinois University in Dekalb, IL. His research interests include understanding movement impairment with an emphasis on rehabilitation and innovative pedagogical practices to enhance soft skills in athlatics training education nernet Journal of Allied Health Sciences and Practice:

https://nsuworks.nova.edu/ijahsp/vol20/iss4/13



# The Internet Journal of Allied Health Sciences and Practice Dedicated to allied health professional practice and education Vol. 20 No. 4 ISSN 1540-580X

# An Examination of Emotional Resilience among Athletic Trainers Working in the Secondary School Setting

Shaine Henert<sup>1</sup> William Pitney<sup>1</sup> Bethany Wood<sup>2</sup> Nicholas E. Grahovec<sup>1</sup> Tyler A. Wood<sup>1</sup>

- 1. Northern Illinois University
- 2. Life University

United States

# ABSTRACT

Purpose: Athletic training is a demanding profession that is a stressor for many practitioners. Emotional resilience allows Athletic Trainers (ATs) to persist in their roles and benefit from long and successful careers. The purpose of this study was to explore the level of emotional resilience of ATs working in secondary school settings and identify factors perceived to contribute to or mitigate one's emotional resilience. Method: A sequential explanatory mixed-method design using a cross-sectional online survey followed by in-depth interviews was used to gather information from 160 (16% response rate) secondary school NATA members - 97 (60.6%) female; 63 (39.4%) male with 13.28+9.46 years of experience. Six individuals (5 female, 1 male) participated in a followup semi-structured interview. The Connor Davidson Resilience Scale (CD-RISC) was used to measure perceptions of individual emotional resilience. Open-ended questions were also used to gather information from the participants who agreed to participate in a follow-up semi-structured interview about the factors perceived to both facilitate or reduce emotional resilience. Results: The mean emotional resilience score (79.84 ± 11.38) for the sample was consistent with the average US adult population. Only 14.1% of the sample reported high emotional resilience scores. There was a significant positive correlation between emotional resilience scores and years of experience as an AT (r(158) = .16, P = .048) and age in years (r(158) = .16, P = .048). Emotional resilience scores did not vary by academic degree (F(2,157) = .775, P = .83). The inductive analysis resulted in the following emergent themes that were perceived to facilitate ones' emotional resilience: social support, communication, self-care, and past experiences. Also, the following emergent themes were perceived to reduce ones' emotional resilience: emotional responses and role overload. Conclusion: The results of this study help understand secondary school ATs' perceptions of and factors that contribute to their emotional resilience. Strategies are suggested to help ATs develop emotional resilience to manage their occupational stress and reduce feelings of burnout.

Key Words: emotional resilience, secondary school, athletic trainers, mixed methods

# INTRODUCTION

Working in the health care professions is rewarding yet can be stressful.<sup>1,2</sup> One group of health care professionals who experience a significant amount of stress due to their job setting is athletic trainers (ATs).<sup>1,2</sup> Indeed, athletic training researchers have consistently reported that athletic trainers face high levels of stress.<sup>3</sup> There are many physical, psychological, and occupational consequences associated with stress. Physical consequences from negative stress include obesity, cardiovascular disease, musculoskeletal pain, prolonged fatigue, headaches, respiratory infections, and gastrointestinal problems.<sup>4</sup> Psychological consequences include insomnia, depression, and other mental health disorders.<sup>4</sup> Occupational consequences include burnout, job dissatisfaction, absenteeism, and presenteeism.<sup>4-7</sup>

One of the largest employment settings for ATs is secondary schools, with over 18% of ATs employed in this setting.<sup>8</sup> The number of ATs employed in secondary settings is second only to those employed in the collegiate setting.<sup>8</sup> Secondary school ATs may provide health care for high school athletics, along with district elementary and middle school(s), specifically for high-risk sports like American football and wrestling.<sup>9</sup> The responsibilities of the high school AT are similar to that of a collegiate AT; however, there are additional time constraints with a traditional school day.<sup>10</sup> Given the large number of secondary school ATs, there is a need to identify potential characteristics which may mitigate the negative effects of workplace stress.

There are a large number of occupational stressors which have been characterized as extremely challenging for ATs; these stressors include: 1) extensive time demands, such as long and/or irregular hours; 2) competing demands and expectations for patient care, student supervision, administrative obligations, communication with coaches, supervisors, and sports medicine staff; 3) role strain, including role overload, in which the role expectations are too time-consuming; and 4) work setting issues such as organizational support, compensation, opportunities for advancement, work-life support, and bullying.<sup>1,5,11-13</sup>

Despite the number of occupational stressors present in their day-to-day work lives, many professionals flourish in their work roles as ATs and provide exemplary health care services while working in demanding environments.<sup>1,14</sup> One potential explanation for why some ATs flourish in stressful roles may be high emotional resilience.<sup>2</sup> Emotional resilience is defined as the ability to positively adjust to an adverse, stressful, or difficult situation and maintain one's good mental health.<sup>2,15</sup> Research has shown that high emotional resilience in health care professionals can prevent burnout associated with workplace stress, lead to the development of positive adaptation, and facilitate personal resources which help to maintain health and well-being.<sup>16-19</sup> In countering the occupational stressors, resilience may indirectly influence the retention of athletic trainers in practice settings—a key priority of the Athletic Training Research Agenda—to enhancing the vitality of the profession.<sup>20</sup>

High emotional resilience may contribute to secondary school ATs' ability to maintain work-life balance, mental health, and general well-being while decreasing burnout.<sup>1,2,15-19</sup> Unfortunately, while attention has been given to prevelance and outcomes of burnout in athletic training, little research has examined emotional resilience in secondary school ATs. Thus, the purpose of this preliminary study was to explore the level of emotional resilience of ATs working in the secondary school setting and identify the factors that contribute to emotional resilience. The following central questions guided this study:

- 1. What is the current level of emotional resilience among athletic trainers in the secondary school setting?
- 2. Is there a relationship between age or years of experience and emotional resilience scores?
- Is there a difference between highest degree earned (i.e., bachelor's, master's, doctorate) and emotional resilience?
- 4. What factors are perceived by athletic trainers to influence emotional resilience?

### **METHODS**

This study used a mixed-methods sequential explanatory design with 2 phases.<sup>21</sup> This design allowed the researchers to first obtain emotional resilience scores to answer research question 1, followed by obtaining qualitative data to answer research question 4 and provide understanding to the phenomenon of emotional resilience among athletic trainers. Phase I involved a cross-sectional survey of ATs in the secondary school setting to quantify their emotional resilience. Phase II involved collecting qualitative data from participants who completed phase I and volunteered to engage in an interview regarding their perceptions of both factors that facilitated and reduced their emotional resilience. The study received institutional review board approval prior to data collection.

# **Participants and Procedures**

Phase I consisted of an online survey. The NATA Member Services Department provided a randomized list of 1000 deliverable email addresses of NATA members whose primary work setting was secondary school. An initial e-mail invitation containing a Qualtrics survey link was sent to these individuals. A total of 160 ATs (16% response rate) volunteered to participate and completed the survey. The participant sample was comprised of 63 men (39.4%) and 97 women (60.6%). Table 1 provides the participants' demographic data.

Table 1. Demographic Variables	
Age	36.83 <u>+</u> 10.68
Years of AT experience	13.28 ± 9.46
Highest degree earned	
Bachelors	61 (38.1%)
Masters	94 (58.8%)
Doctorate	3 (1.9%)

At the conclusion of the online survey, interested individuals were invited to participate in phase II of the study, which involved confidential telephone interviews related to perceptions of factors that facilitated and reduced emotional resilience. Participants interested in the qualitative aspect of the study were instructed to provide confidential contact information (phone number and preferred time of day to be reached) to members of the research team. Individuals were contacted with a consent form and, once we received the completed consent form, a formal interview was scheduled and completed using a semi-structured interview guide (Appendix).

## Instrumentation

The first part of the online survey consisted of demographic questions and the second part of the online survey consisted of questions related to perceptions of one's emotional resilience. The demographic questions contained items pertaining to age, sex, years of experience as an AT, and educational level. The Connor-Davidson Resilience Scale (CD-RISC)<sup>22</sup> was used with permission to measure participant's perceptions of their emotional resilience. The CD-RISC comprises 25 self-report items, each rated on a 5-points scale (0 = not true at all, 4 = true nearly all the time), with higher scores reflecting greater resilience. Responses to the 25 items are scored and summed to provide a measure of one's resilience. Scores range from 0-100; scores of  $\geq$ 82 are indicative of positive resilience while scores of  $\geq$ 92 indicate high resilience. The scale demonstrates sound psychometric properties and distinguishes between those with greater and lesser resilience. A test of the instrument's reliability with the data from this study resulted in a Cronbach's  $\alpha$  of .92, indicating excellent internal consistency.

The semi-structured interview guide was based on the study's purpose as well as preexisting literature on emotional resilience in the healthcare and athletic training professions.<sup>17,23-25</sup> All of the questions were constructed using the open-ended format. This was done to encourage reflection and discussion regarding the participant's experiences and to provide the interviewer with the opportunity to probe further with additional questioning, if needed. A semi-structured interview format was used because it has been shown to provide methodologic rigor while allowing for flexibility in the event that an unexpected theme emerged from data collection.<sup>26,27</sup> Before data collection, the validity of the interview guide was assessed using peer debriefing. That is, the guide was shared with two social science researchers to ensure the questions were appropriate and reflected the study's purpose. Revisions were made, based on the feedback received, to enhance the clarity and flow of the interview guide.

### **Data Analysis**

To determine the emotional resilience of the ATs working in secondary school settings, descriptive statistical analyses were performed. Pearson product moment correlations were conducted to evaluate the relationships between emotional resilience and demographics data, specifically age and years of experience. An ANOVA was performed to determine whether there were any differences in emotional resilience amongst levels of education.

The interview transcripts were transcribed, and a general inductive approach was used for the qualitative data analysis.<sup>28</sup> Trustworthiness of findings was addressed with a peer debriefing process applied to the initial data coding and construction of emergent themes.<sup>26</sup> In this process, the debriefer was a qualitative researcher with over 15 years of experience with qualitative analysis.

# RESULTS

The mean resilience score for the sample was 79.84  $\pm$  11.38, with 14.1% of the sampled reporting high emotional resilience scores (i.e.,  $\geq$ 92). Pearson correlation analyses revealed that there was a significant positive correlation between emotional resilience scores and both age in years - r(158) = .16, P = .048, and years of experience as an AT - r(158) = .20, P=.012. The ANOVA revealed that there were no significant differences in emotional resilience scores among the levels of education - F(2,157) = .775, P = .83.

The qualitative analysis resulted in a total of six ATs (5 females, 1 male) aged  $36 \pm 14$  years old with an average of  $11 \pm 9.8$  years of work experience as an AT participating in the semi-structured, follow-up interview. For these individuals, the resilience score was  $80.8 \pm 12$ . Table 2 provides demographic information for each participant, including the assigned pseudonym.

	Total Resilience Score	Age	Sex	Years of Experience	NATA District
Michael	88	65	Male	30	5
Angelina	87	25	Female	3	1
Hanna	94	26	Female	4	4
Shawna	84	35	Female	12	4
Denise	60	36	Female	8	1
Louis	72	30	Female	10	8

#### Table 2. Interview Participant Demographics

The inductive content analysis resulted in six emergent themes which were then organized into two dimensions: 1) Facilitators of Emotional Resilience and 2) Inhibitors of Emotional Resilience (Fig 1). Four facilitators of emotional resilience emerged: 1) social support, 2) communication, 3) self-care, and 4) past experiences. Two inhibitors of emotional resilience emerged: 1) emotional responses and 2) role overload. Below we present the emergent themes associated with these dimensions. Quotes from participants (using pseudonyms) are used to support each of the emergent themes along with relevant sub-themes.

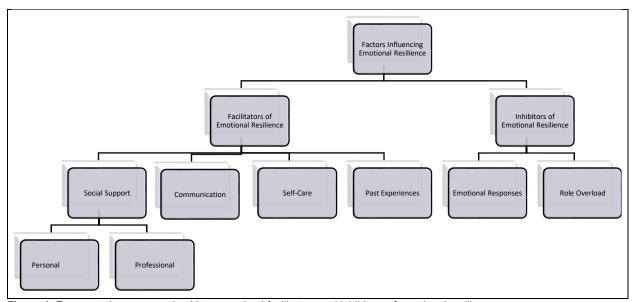


Figure 1. Emergent themes organized into perceived facilitators and inhibitors of emotional resilience.

# **Facilitators of Emotional Resilience**

# Social Support

Social support was found from individuals at both a professional and personal level. Professional social support was obtained from other ATs as well as supervisors. These individuals were able to understand the circumstances the AT is dealing with and offer empathy and encouragement. For example, Louis explained:

Talking with my supervisor really helps. Not because he is directly my supervisor, but because he is a friend. Having worked with him as the head football coach for the past 8 years, we have gotten to know each other quite well, and worked with a lot of kids quite well. There's been a lot of ups and downs, and good seasons and bad seasons, and very bad injuries and death of student's parents and such, so we have gotten to know each other quite well so when I- when something is particularly stressing me out, I usually go in, sit down in his office, and talk to him about the stressful situation, or even if it is not work related, I can always go in, talk to him, and share that with him, and be able to vent it to someone who understands the situation versus a family member who is outside of it and also be able to get ideas from someone who is several decades older than me and has a lot of experience.

Angelina also offered a perspective on having professional social support, particularly from other ATs. She described that "I definitely feel like my manager has my best interest at heart, and I think that he takes into account my circumstances, and my needs and what is best for patients, which at the secondary school level is difficult. I think it is often a challenge to work with the Athletic Director in some capacity because they are not as aware of athletic training services at times."

Social support was also obtained at a personal level. For example, Angelina expressed that friends and family are available to offer encouragement and empathy. She explained "I can talk about...obviously not breaking patient confidentiality-- any issues that I might have that I want to talk through and say, Did I do the right thing? Did I make the right decision?" This was corroborated by others who also explained friends and family offered support. For example, Shawna explained the benefit of having someone to vent frustration to: "...I have my partner with me, so, you know he is my sounding board, and when I am cranky, I yell at him." Denise shared that personal social support is provided by both her significant other when she stated "I have my girlfriend who is very supportive... I would say my biggest support is my girlfriend."

Finally, Louis explained that resilience is something she has worked on over-time "I think it is something that I have worked on a lot over the years. It was not something that came naturally to me when I was younger, but I've made an effort to improve my life overall, both inside and outside, of work to become more resilient. I mean, finding support systems definitely has helped with that."

### Communication

Communication was described as an essential facilitator of emotional resilience as it was associated with addressing conflict. Hanna explained the role of communication when facing a difficult situation and how it helped with her resilience:

I try to work through communication and getting all points of view. I think that's helped out a lot. It's just once you build trust and respect, a lot of that [conflict] kind of goes away, and you don't handle- you don't have those situations pop up as much. It's just a matter of kind of opening all the lines of communication and showing that you actually care about what you do instead of just showing up and getting a paycheck.

Angelina also described communication as key to dealing with conflict and maintaining resilience:

We have definitely had a couple circumstances that where high stress situations and after the fact, I would, you know, talk. Talk with the athletic Director; talk with my manager; talk with the coach and just really make sure that everyone is on the same page because I think there could be some negative feelings from some of those situations, and the last thing I want is for that to continue on and to feel like I'm going to work and entering into a negative environment.

To be emotionally resilient, Louis advised other ATs to "[work] on their communication because having good communication skills go a long, long way in being able to resolve conflicts before they- either before they start or keep them from becoming overly tense situations. If you got good communication, then you can keep things from becoming super stressful."

# Self-Care

Athletic trainers in this study discussed self-care as a critical component to keeping job-related stress at bay to maintain emotional resilience. Self-care, for these participants, involved taking the personal time one needs to engage in physical activity, hobbies, leisure, or family functions. Hanna, for example, explained how she dealt with work-related adversity when she said "I either work out, watch T.V., read; I try to find things to do outside of athletic training to help kind of relieve [stress]. And the nice thing is I don't take all of my work home with me at this job, which has been great." Michael explained how resilience changed over the years in terms of personal care: "Early on, it wasn't so good. There was a lot of missed family functions...I managed to avail myself to more family things and what not over the years. A change of perspective I guess." Angelina described how engaging in self-care by having time outside of work was important to maintain resilience: "And I've found in the past that if I'm not doing things outside of work, then I am actually less productive at work because I'm actually so focus on, you know- that, so I've been training for a half marathon. I do a lot of physical activity. I do yoga often, and I try and get together with friends and co-workers as often as possible. So, I do feel like I have freedom and time to have a hobby and be physically active which is important to me."

Although participants discussed the importance of personal time to address stress and maintain resilience, they also situated their resilience with an understanding of the athletic training lifestyle. The lifestyle associated with athletic training involves long hours of medical care, lack of schedule control, and dealing with non-routine circumstances. Participants in this study explained that their ability to maintain resilience was the ability to engage in self-care, including having personal time, but also accept the lifestyle as part of their job along with genuinely enjoying the role. For example, Shawna explained that her family understands the long hours: "They just kind of know it comes with the job, and especially in the Fall- sometimes I'm home, and sometimes I'm not. It's just the

way it is." Denise reflected on the athletic training occupation lifestyle and said "...I realized, you know. I'm happy where I am. Every now and then you are away... then I realize, you know, I'm happy where I am."

# **Past Experiences**

The final emergent theme, past experiences, explains how emotional resilience is built or maintained by these ATs. Hanna explained: "I have experienced a lot of situations. Even in the last year that most people probably wouldn't be able to handle, and just bounce back from. And I, personally, had a lot of situations happen growing up that has led to me being able to just kind of keep going when things get tough. And that has helped me as an AT, but it also- it wears on you when all these things are going on at once." Shawna also situated her resilience in relation to her past experience working through adversity: "I've got several learning disabilities that I actually wasn't diagnosed until I was in college, so just learning how to deal with struggling in school, you know, as I was growing up and knowing something wasn't quite right, but not necessarily knowing what it was. I just really- I learned how to cope with things that I was trying to deal with that."

# Inhibitors of Emotional Resilience

Participants in this study identified two areas that were perceived to erode their emotional resilience. These included: 1) emotional responses and 2) role overload.

### **Emotional Responses**

One's ability to deal with stress and thus maintain resilience was seen as being dependent upon being objective. When emotions enter the picture, objectivity wanes and erodes resilience. For example, Michael explained that "Emotions [are factors that have inhibited my ability to deal with stress]. Sometimes you let your emotions get carried away whether it's anger or grief...you have to remain objective most of the time. And remember that-you know- you can't feel all of them. You don't have an answer for everything. In other words, stay humble." Angelina explained how an emotional response influences her resilience: "I would say sometimes I can get a little over emotional. Then things really start to get to me. Heightened emotions can negatively impact resilience..."

# **Role Overload**

Participants in this study described how multiple responsibilities exceeded the available time to complete the role as an inhibitor of emotional resilience. Angelina, for example, described key stressors that reduce emotional resilience: "I think sometimes, the hours of the job. I mean, there are some days that I work 14-hour days...I think some of the job being in the secondary school [AT] there's a lot of moving parts, and you can get 10 athletes injured at one time and different sports." Hanna corroborated this and reinforced the need for balance with one's personal time when she compared her current position with her previous role:

When you are working really long hours, and it really is how you unwind before you get to start the next day. When you are home only to maybe eat, shower, and sleep, then you go back to work. But I think that is all about –you know- finding the balance, and for me, I get-I get to have that, and at my site I have a little bit more structured settings now. Whereas before, I would have to get through 3 or 4 [months] and then even without a day off. And you feel like you have to push through that, and sometimes you don't see an end in sight because you pretty much ...they might have a post season, and then a hockey season after, and then they are going down to State Finals, which was good, but for me that was the longest streak of not having- you know- of not having a day off that I've had in a long time since I came up there. I couldn't believe that-how tired I was when I used to go 3 months without a day off, and now it is like 2 or 3 weeks without a day off.

#### DISCUSSION

Athletic training is a demanding profession that can be stressful for many practitioners. Indeed, ATs are often witness to serious injury and illness during the sport seasons and the Athletic Training profession has been characterized as extremely challenging with a great number of occupational stressors.<sup>29</sup> Prolonged occupational stress can increase one's risk of experiencing burnout, but developing emotional resilience has shown to prevent burnout in healthcare professionals.<sup>6,24,30-32</sup> However, little is known about the levels of, and factors associated with the emotional resilience of ATs working in secondary school settings. Therefore, the purpose of our study was to explore not only the levels of emotional resilience of ATs working in the secondary school setting, but also identify factors that are perceived to either contribute to or mitigate one's emotional resilience.

In the general US adult population, a CD-RISC score of 82 or higher is considered positive.<sup>33</sup> The results of our study revealed that, on average, our secondary school ATs scored slightly below this, however, a small portion of them (14%) reported high levels (CD-RISC score of  $\geq$  92) of emotional resilience. Comparatively, Mealer found that 22% of intensive care nurses were highly resilient.<sup>23</sup> One finding in the current study is that more experienced ATs reported higher levels of emotional resilience. This suggests that as one gains practical experience, they also develop the necessary levels of emotional resilience to endure the

demands of their job. Whether this is due to systematic training or lessons learned along the way is unclear; however, the qualitative findings revealed that learning from past experiences did facilitate the development of emotional resilience.

An advantage of the current study is that we used a mixed method design utilizing follow-up interviews that allowed us to get a deeper understanding of the factors influencing one's feelings of emotional resilience. This allows for the identification of strategies to increase/maintain emotional resilience. Participants reported that social support, both at work and in their personal lives, as well as effective communication facilitated their emotional resilience. Social support resources and effective communication are important coping strategies when dealing with stress. Previous research revealed that a social support system offered the potential for managing burnout in ATs.<sup>29,34,35</sup> This social support system could include friends, family, coworkers, and others, supporting the findings of the current study that both work and personal support facilitates one's emotional resilience.<sup>6</sup>

Based on the interview responses in our study, the following are examples of specific forms of social support that may be perceived by ATs to facilitate their emotional resilience: 1) Listening support – the perception that others listen to you without giving advice or judgment, 2) Emotional support – the perception that that others are on your side, 3) Task appreciation – the perception that others appreciate the work that you do, 4) Reality confirmation – the perception that others are similar to you and see things the way you do. The encouragement that one receives when these forms of support are provided enhances their emotional well-being and resilience.<sup>36</sup>

Self-care and past experiences were also two themes that emerged from the qualitative analysis that facilitated one's emotional resilience. Taking time for oneself to engage in physical activity and social interactions with friends and family helped balance the hectic schedule often maintained by ATs. This supports recommendations by then National Athletic Trainers' Association to promote healthy work-life balance for ATs.<sup>1</sup> Learning from past experiences was also revealed as a factor that contributes to emotional resilience. In addition to these facilitative factors, there were also factors that inhibited the AT's emotional resilience.

One of the factors perceived by the ATs to inhibit one's emotional resilience was intense emotional responses to stressful situations. This frequently occurs when one experiences chronic stress and/or is unable to effectively communicate their reactions to stressful situations. In athletic training, chronic stress is often caused by experiences of role overload. Role overload was identified as another of the factors reducing one's emotional resilience. Role overload refers to a situation in which job requirements exceeded the time and energy availability of the individual.<sup>14</sup> This is consistent with previous research that identified role strain (which includes role overload) as one of the primary causes of burnout in ATs.<sup>6</sup> Further, this is consistent with a systematic review by Robertson and colleagues of reslience among healthcare professionals found that workload and working hours were associated with less emotional resilience organizational factors, such as a workplace that demands long and intensive hours, ATs report a positive relationship between excessive workloads (measured by hours worked per week) and feelings of role strain and burnout.<sup>18,30,31,37</sup>

# Limitations

The sequential explanatory mixed-method design used was advantageous in getting a deeper understanding of factors contributing to secondary school AT's emotional resilience, but the current study is not without limitations. The CD-RISC instrument is a self-report instrument which has the potential for social desirability and inaccurate recall among participants.<sup>38</sup> Even though the participants were assured that their responses were confidential, they may have under- or over-estimated their levels of emotional resilience. It is possible that the sample in this study may not accurately represent ATs experiencing the most significant amount of burnout. Those suffering the most burnout may not have completed the survey because they felt overwhelmed already or have already left the profession. We were only able to recruit a small portion of the total sample of ATs for follow-up interviews, and therefore the qualitative responses that we collected may not adequately represent the larger secondary school AT population. Thus, the qualitative findings must be considered preliminary. Because we focused our research specifically on ATs in secondary school settings, our findings may not apply to ATs in other settings (e.g., college, physical therapy clinics). Our study used a cross-sectional design which may have affected the results regarding ratings of emotional resilience.

# Recommendations

Future research should recruit larger sample sizes and collect data over the course of the competitive athletic season to better understand changes in one's perception of their emotional resilience over time. In addition, future research should explore whether more experienced ATs have received formal training to enhance their emotional resilience, thereby supporting their career longevity. The relationship between one's emotional resilience and ratings of job satisfaction, work-life balance, and burnout should also be studied further. Recruiting participants who have left the AT profession may also help us better the relationship between emotional resilience and burnout. If such relationships are found, intervention research could examine the effect of systematic training to increase emotional resilience on retention, emotional health outcomes (e.g., burnout, stress, depression) and work experiences (e.g., job satisfaction, commitment, intent to leave, work-life/family conflict) in various athletic training practice settings.

This information can be used by athletic training academic programs to help students strengthen their emotional resilience while completing their classroom and practical experiences to prepare to enter the workforce.

### Implications

There are a number of practical implications from the current study. Developing emotional resilience training is recommended for other healthcare professionals, like physicians and intensive care unit nurses to reduce feelings of depression and burnout.<sup>23,39</sup> In addition, a systematic review of the role of resilience in healthcare professionals contends that it goes beyond just preventing negative emotions caused by stressful work conditions.<sup>18</sup> Research suggests that maintaining emotional resilience can also modulate positive adaptations to stressful work conditions; develop personal resources and promote personal growth.<sup>16,24,25</sup> This is consistent with positive psychology approaches which focus on how to help people prosper and lead healthy, happy lives.<sup>40,41</sup> The following are suggested strategies based on the results of the current study.

ATs should make sure that they are a part of a support network that satisfies their needs – e.g., listening, emotional, taks appreciation, and reality confirmation support.<sup>42</sup> Understanding the importance of social support in one's professional and personal lives can help ATs remember to seek out satisfying social support, especially during periods of high stress. Being able to identify the persons in your life that provide you with the necessary support is key to meeting one's needs. Effectively communicating with supervisors, peers, athletes, family and friends is an important part of securing an essential support network.

Developing self-care skills is another strategy to improve emotional resilience. One example would be to enhance one's personal sense of purpose by balancing work commitments and time spent on personal endeavors that matter to them.<sup>42</sup> This might include spending time with friends and family outside of work, participating in a hobby, exercise or volunteering one's time for a local charity. Another example would be to maintain focus on the things that one has direct control over (e.g., food choices, sleep hygiene, emotional responses) in order to reduce stress and improve emotional resilience. Having a positive mindset and using positive self-talk can be effectice strategies to help the AT remain focused.<sup>43</sup> Lastly, increasing one's emotional awareness can help to improve one's emotional resilience. This involves increasing one's mindfulness of their (and others') emotional responses to stressful situations and using this information to improve communications with others. For example, cognitive restructuring, a psychological skills technique by which one objectively identifies and disputes their own irrational response and subsequently replaces it with a more adaptive response, helps provide a healthier perspective and supports one emotional resilience.<sup>44</sup>

Role overload has been well-established as a significant contributing factor in the experience of burnout in ATs.<sup>6,14,29,34,35</sup> A practical suggestion to balance the job requirements with time and energy available is modified job-sharing where ATs switch schedules to cover events when a co-worker has a personal obligation or opportunity.<sup>1</sup> Some ATs may not have co-workers who they can switch schedules with. A recommendation in that case is for that school's administration to fund a sufficient number of ATs and/or contract-based ATs. If funding is not available, another suggestion would be the use of AT student aides or other coaching/teaching staff who can manage menial job responsibilities so that ATs can reduce their workload and number of hours worked per week. Another helpful suggestion is to set boundaries with student-athletes and coaches by defining what situations are emergencies that require your attention and establishing appropriate hours to contact you outside of work.<sup>1</sup>

#### Conclusion

Secondary school ATs experience a significant amount of occupational stress that increases their risk for burnout. The current study and previous research support the notion that increasing one's personal feelings of emotional resilience can help manage stress and promote personal health and well-being leading to successful careers. Information regarding factors that contribute to one's feelings of emotional resilience were used to present practical suggestions for ATs to better manage their occupational stress.

### REFERENCES

- Mazerolle SM, Pitney WA, Goodman A, et al. National Athletic Trainers' Association position statement: Facilitating work-life balance in athletic training practice settings. J Athl Train. 2018;53(8):796-811.
- Pitney WA. Emotional resilience in athletic training. National Athletic Trainers' Association Meeting and Clinical Symposium; 2015; St. Louis, MO.
- Gnacinski SL, Nai M, Brady M, Meyer BB, Newman N. An Examination of athletic trainers' occupational recovery experiences during time after work. J Athl Train. 2020;55(5):532-537.
- Salvagioni DAJ, Melanda FN, Mesas AE, González AD, Gabani FL, Andrade SMD. Physical, psychological, and occupational consequences of job burnout: A systematic review of prospective studies. *PLOS ONE*. 2017;12(10):e0185781.

- 5. Pitney WA, Mazerolle SM, Pagnotta KD. Work–family conflict among athletic trainers in the secondary school setting. *J Athl Train*. 2011;46(2):185-193.
- Oglesby LW, Gallucci AR, Wynveen CJ. Athletic trainer burnout: A systematic review of the literature. J Athl Train. 2020;55(4):416-430.
- Defreese JD, Mihalik JP. Work-based social interactions, perceived stress, and workload incongruence as antecedents of athletic trainer burnout. J Athl Train. 2016;51(1):28-34.
- 8. Where ATs work. nata.org. Accessed April 15, 2021. https://www.nata.org/about/athletic-training/job-settings.
- Recommendations and guidelines for appropriate medical coverage of intercollegiate athletics. nata.org. Published 2007. Accessed November 19, 2021. <u>http://www.nata.org/sites/default/files/AMCIARecsandGuides.pdf</u>..
- 10. Cooper L, Harper R, Wham GS, et al. Appropriate medical care standards for organizations sponsoring athletic activity for the secondary school–aged athlete: A summary statement. *J Athl Train*. 2019;54(7):741-748.
- 11. Dixon MA, Bruening JE. Work–family conflict in coaching I: A top-down perspective. J Sport Manag. 2007;21(3):377-406.
- 12. Eberman LE, Kahanov L. Athletic trainer perceptions of life-work balance and parenting concerns. *J Athl Train*. 2013;48(3):416-423.
- 13. Weuve C, Pitney WA, Martin M, Mazerolle SM. Experiences with workplace bullying among athletic trainers in the collegiate setting. *J Athl Train*. 2014;49(5):696-705.
- Pitney WA, Stuart ME, Parker J. Role strain among dual position physical educators and athletic trainers working in the high school setting. J Phys Educ. 2008;65(3):157–168.
- Grant L, Kinman G. Emotional resilience in the helping professions and how it can be enhanced. *Health and Social Care Education*. 2014;3(1):23-34.
- 16. Fertleman C, Carroll W. Protecting students and promoting resilience. BMJ (Online). 2013;347.
- Jackson D, Firtko A, Edenborough M. Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: a literature review. J Adv Nurs. 2007;60(1):1-9.
- Robertson HD, Elliott AM, Burton C, et al. Resilience of primary healthcare professionals: a systematic review. Br J Gen Pract. 2016;66(647):e423-e433.
- 19. Kunzler AM, Helmreich I, Chmitorz A, et al. Psychological interventions to foster resilience in healthcare professionals. *Cochrane Database Syst Rev.* 2020;7(7):Cd012527.
- 20. Athletic Training Research Agenda. natafoundation.org. Accessed March 30, 2022. https://www.natafoundation.org/research/atresearchagenda/.
- 21. Creswell JW. Research design: Qualitative, quantitative, and mixed methods approaches. 2nd ed. Thousand Oaks, CA: Sage; 2003.
- Connor KM, Davidson JRT. Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). Depress Anxiety. 2003;18(2):76-82.
- 23. Mealer M, Conrad D, Evans J, et al. Feasibility and acceptability of a resilience training program for intensive care unit nurses. *Am J Crit Care*. 2014;23(6):e97-e105.
- 24. Taku K. Relationships among perceived psychological growth, resilience, and burnout in physicians. *Pers Individ Dif.* 2014;59:120-123.
- 25. Wagnild GM, Young HM. Development and psychometric. J Nurs Meas. 1993;1(2):165-178.
- 26. Creswell JW. Qualitative inquiry and research design: Choosing among five approaches. 4th ed. Thousand Oaks, CA: Sage; 2017.
- 27. Merriam SB. Qualitative research and case study applications in education. ERIC; 1998.
- 28. Thomas DR. A general inductive approach for analyzing qualitative evaluation data. Am J Eval. 2006;27(2):237-246.
- 29. Reed S, Giacobbi Jr PR. The stress and coping responses of certified graduate athletic training students. *J Athl Train*. 2004;39(2):193.
- DeFreese J, Mihalik JP. Work-based social interactions, perceived stress, and workload incongruence as antecedents of athletic trainer burnout. J Athl Train. 2016;51(1):28-34.
- Gaffney B, Hardin R, Fitzhugh E, Koo G. The relationship between burnout and job satisfaction in certified athletic trainers. Int J Sport Manage. 2012;13(1):73-86.
- 32. Kutluturkan S, Sozeri E, Uysal N, Bay F. Resilience and burnout status among nurses working in oncology. *Ann Gen Psychiatry*. 2016;15(1):1-9.
- Davidson J. Connor-Davidson Resilience Scale (CDRISC) Manual. Unpublished Web site. www.cdrisc.com. Published 2018. Accessed November 15, 2021.
- 34. Mazerolle SM, Pitney WA, Casa DJ, Pagnotta KD. Assessing strategies to manage work and life balance of athletic trainers working in the National Collegiate Athletic Association Division I setting. *J Athl Train*. 2011;46(2):194-205.
- 35. Mazerolle SM, Pagnotta KD. Student perspectives on burnout. Athl Train Educ J. 2011;6(2):60-68.

- 36. Rosenfeld LB, Richman JM. Developing effective social support: Team building and the social support process. *J Appl Sport Psychol*. 1997;9(1):133-153.
- Dorrel B, Symonds ML, Lammert J. Role strain in dual role collegiate athletic trainers. MO J Health Phys Educ Rec Dance. 2014;24:40-54.
- Schwarz N. Self-reports: How the questions shape the answers. Am Psychol. 1999;54(2):93.
- 39. Horsfall S. Doctors who commit suicide while under GMC fitness to practise investigation. *General Medical Council.* 2014.
- Seligman ME, Steen TA, Park N, Peterson C. Positive psychology progress: Empirical validation of interventions. Am Psychol. 2005;60(5):410.
- 41. Csikszentmihalyi M, Seligman M. Positive psychology. Am Psychol. 2000;55(1):5-14.
- 42. Pitney WA. Emotional resilience in athletic training. In: Mazerolle SM, Pitney WA, eds. *Workplace concepts in athletic training*. Thoroughfare, NJ: SLACK Inc.; 2015.
- 43. Williams J, Zinsser N, Bunker L. Cognitive techniques for building confidence and enhancing performance. In: Williams J, Krane V, eds. *Applied sport psychology: Personal growth to peak performance*. 2015:274-303.
- 44. Turner MJ. Rational Emotive Behavior Therapy (REBT), irrational and rational beliefs, and the mental health of athletes. *Front Psychol.* 2016;7:1423.

# APPENDIX Semi-Structured Interview Guide

- 1. Please describe your current employment setting
  - a. to whom do you report?
  - b. Who is your direct supervisor?
- 2. How do you handle conflict with your supervisors and coaches/co-workers?
  - a. Do you feel that your needs are considered by your supervisors when conflict arises?
- 3. Where in work do you find stress the most?
- 4. How would you describe your ability to deal with adversity in the job setting?
  - a. What are some things you do to cope with your stress?
    - b. What has allowed you to be successful, despite the demanding career as an athletic trainer?
    - c. What factors have inhibited your ability to deal with stress?
- 5. Describe your support system.
- 6. How have your family/friends reacted to your career and the challenges that come with it?
- 7. Have you ever considered switching to a different career or Athletic Training setting?
  - a. If so, what made you consider the switch?
  - b. What would you have considered the "positives" of switching?
  - c. What would you have considered the "negatives" of switching?
- 8. How active are you outside of work.
  - a. Examples: volunteer activities, exercise, hobbies?
  - b. Do you set aside time for family and friends? If so, how much?