

# Professional Master's Athletic Training Students' Career Influences Part I: Perceptions of Athletic Training

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**Context:** As athletic training education transitions to a professional master's degree, understanding the perceptions professional master's athletic training students have of athletic training is important.

**Objective:** To examine second-year professional master's students' perceptions of the athletic training profession, a career in the profession, and identify the factors that influence their perceptions.

**Design:** Convergent mixed methods.

**Setting:** Online surveys and individual phone interviews.

**Patients or Other Participants:** A total of 80 second-year professional master's students (63 female, 13 male, 4 no response, age =  $24.63 \pm 2.29$  years), who were enrolled in the final semester of their program in the spring of 2019, completed the online survey. Ten survey respondents completed the follow-up phone interviews.

**Data Collection and Analysis:** A survey instrument and a semistructured interview guide were developed to answer the research questions. Both were validated externally by 3 independent researchers using a content-validity indexing tool. The data from the survey and interviews were woven together and merged to provide 1 comprehensive results section. Trustworthiness was established using triangulation, member checks, memos, and peer debriefing.

**Results:** Three higher-order themes emerged from the data: (1) perceptions of the athletic training profession: lack of appreciation and awareness for the profession from others, rewarding profession, and dynamic profession; (2) perceptions of a career in athletic training: low pay, long hours and inconsistent schedules, and inability to have work-life balance; (3) factors influencing perceptions: clinical experiences and interactions with athletic trainers.

**Conclusions:** Second-year professional master's athletic training students developed positive and negative perceptions about the profession and a career in the profession during their professional education experiences. The factors identified were professional socializing agents and should be considered when designing clinical education experiences.

**Key Words:** Socialization, clinical experiences, athletic training programs

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## KEY POINTS

- Second-year professional master's athletic training students have positive perceptions of the athletic training profession but negative perceptions of a career in athletic training.
- Students' perceptions were influenced by their clinical experiences and their interactions with athletic trainers.
- The anticipatory socialization process plays a vital role in the development of perceptions of the athletic training profession and a career in the profession.

## INTRODUCTION

Professional socialization can be defined as the process in which an individual learns the knowledge and skills required to function in the profession he or she intends to enter.<sup>1-4</sup> Though professional socialization is a continuous process, it can be separated into 3 phases: (1) recruitment, (2) professional preparation, and (3) organizational socialization.<sup>5</sup> The first 2 phases are most commonly referred to as the anticipatory phase, where an individual undergoes professional education or formal training required in his or her prospective field.<sup>3-5</sup> During the anticipatory phase, the individual learns about the roles, responsibilities, and values of the field he or she intends to enter.<sup>4,6</sup> Organizational socialization occurs after the individual has entered his or her respective career field and is facilitated through various formal and informal interactions and educational experiences. It most commonly occurs during day-to-day activities where the individual learns about his or her roles and responsibilities in his or her respective setting.<sup>3-6</sup>

In athletic training education research, professional socialization is commonly used as a theoretical framework to understand how an athletic training student develops into his or her professional role.<sup>6</sup> More specifically, the anticipatory phase of professional socialization is used to identify the effects that formal educational experiences have on an athletic training student's ability to socialize into the profession adequately. There is evidence<sup>6-10</sup> to suggest these experiences play a critical role in the development of positive and negative perceptions of the athletic training profession and ultimately influence a student's career decisions after graduation.

Relating to athletic training students' perceptions of the athletic training profession, previous researchers<sup>6-10</sup> have primarily focused on professional bachelor's athletic training students. Benes and Mazerolle<sup>7</sup> found that athletic training students believe the profession is dynamic, and there is an optimistic future for the profession. However, these students also felt that the profession was burdened with long hours and inconsistent schedules, low salary, the potential for family conflicts, and a general lack of understanding of the profession. Mazerolle et al<sup>9</sup> found similar results when examining the postgraduation decisions of senior athletic

training students. Reasons to persist in athletic training included marketability and the potential for growth within the profession. Reasons to leave the profession included lack of respect, inadequate compensation, a significant time commitment, and the use of the profession as a stepping stone to progress to other health care professions.<sup>9</sup>

Authors of multiple studies<sup>6-10</sup> have investigated the influential factors that contributed to the development of the perceptions listed above. Preceptor and faculty support or mentorship is widely considered to be one of the most significant influential factors contributing to positive perceptions of the profession and persistence in athletic training after graduation.<sup>6-10</sup> Robust clinical experiences that incorporate a variety of settings are believed to be another contributing factor to the development of positive and negative perceptions of the profession and can influence a student's preparedness to enter the workforce.<sup>6-10</sup> Benes and Mazerolle<sup>7</sup> found that the individuals athletic training students encountered during their clinical rotations exposed them to the positives and negatives of the profession and were foundational to the development of their perceptions of athletic training.

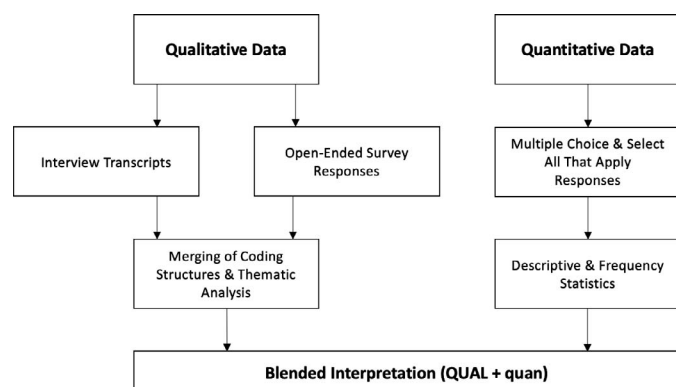
Athletic training students' perceptions of the athletic training profession and a career in the profession can contribute to their postgraduation plans and their decision to persist in an athletic training career.<sup>6-10</sup> Though there is a substantial amount of research on the perceptions of professional bachelor's athletic training students, little research exists on the perceptions of professional master's athletic training students. Understanding the perceptions of those who are preparing to graduate from a professional master's athletic training program (ATP) is important, as athletic training education completes its transition to a professional master's degree in 2022.<sup>11</sup>

As the programmatic and clinical requirements often differ from a professional bachelor's program to a professional master's program, the way students socialize into the profession through didactic and clinical experiences may differ from their professional bachelor's counterparts. This socialization may have a profound effect on their perceptions of the profession, a career in the profession, and ultimately their career decisions after graduation. Therefore, the purpose of this study was to examine second-year professional master's students' perceptions of the athletic training profession, a career in the profession, and identify the factors that influence their perceptions.

## METHODS

In this research study, we present the first part of a broader investigation, in which we examine the influential factors contributing to second-year professional master's athletic training students' perceptions of careers in athletic training and their career intentions after graduation. Due to the

**Figure 1. Convergent mixed methods design.**



volume of the data collected, the complete findings of this study are presented in 2 parts (Part I and Part II).

## Research Design

In this study, we used a convergent mixed methods research design (Figure 1).<sup>12,13</sup> The researchers collected the quantitative and qualitative data simultaneously, and the qualitative component had higher priority (QUAL + quan). The findings from each approach were merged to provide a complete understanding of the perceptions second-year professional master's athletic training students have toward athletic training and the factors that influence these perceptions.<sup>12,13</sup> We chose this research design to triangulate the data and cross-validate the findings. Additionally, this design allowed us to offset the limitations that exist with each research design alone.<sup>12,13</sup> This study was approved by an institutional review board before the start of data collection. Survey respondents and interview participants gave informed consent to participate in this study.

## Participants

A total of 109 second-year professional master's athletic training students accessed the online survey. One individual declined to participate in the study, 2 individuals did not meet the inclusion criteria, and 26 individuals did not achieve a 100% clickthrough rate on the survey. Therefore, 80 surveys (63 female, 13 male, 4 no response, age = 24.63 ± 2.29 years) were used for data analysis. Additional demographic data can be viewed in Table 1. We included participants if they were in the final semester of a Commission on Accreditation of Athletic Training Education (CAATE)-accredited professional master's ATP at the start of data collection in April 2019. Ten participants (8 female, 2 male) from the initial survey respondents elected to participate in follow-up phone interviews. We achieved data saturation after 10 interviews.

## Recruitment

The recruitment plan for this study was threefold: (1) email recruitment via program directors, (2) email recruitment via the Board of Certification (BOC), and (3) self-identification of interest to participate in follow-up phone interviews. We developed the first phase of participant recruitment using a modified version of the combined work of Bowman et al<sup>14</sup> and Ostrowski et al,<sup>15</sup> where participants were recruited via email. First, we identified program directors of CAATE-accredited

**Table 1. Survey Respondent Demographic Data**

NATA District	No. (%)
District 4	18 (22.5)
District 9	12 (15)
District 3	11 (13.8)
District 10	8 (10)
District 6	8 (10)
District 2	7 (8.8)
District 8	7 (8.8)
District 5	5 (6.3)
District 1	2 (2.5)
District 7	2 (2.5)
Total	80 (100)

Abbreviation: NATA, National Athletic Trainers' Association.

professional master's ATPs using the CAATE directory that is publicly available on the Website. Then a recruitment email was sent to 102 program directors whose professional master's ATPs were listed as "in good standing" in the CAATE directory. The recruitment email described the purpose of the study, the specific aims, the study participants, and a link to an online survey. We instructed program directors to distribute the recruitment email to students who met the inclusion criteria. We sent 2 follow-up emails to program directors 1 week and 2 weeks after the initial email asking them to resend the recruitment email to their students who met the inclusion criteria.

The second phase of participant recruitment included multiple email blasts via the BOC to second-year professional master's athletic training students who were enrolled in the final semester of their program at the start of data collection in April 2019 and had signed up to take the BOC exam during the March–April 2019 or May–June 2019 testing windows. This email described the purpose of the study, its specific aims, the inclusion criteria, and a link to the online survey. The BOC sent our email blast a total of 3 times over 3 weeks to all individuals who met the inclusion criteria. To control for duplicate responses from recruitment methods, we examined the dataset for duplicate Internet Protocol addresses and found none.

The final phase of participant recruitment was self-identification of interest in participating in the follow-up phone interviews. We asked participants at the end of the survey if they would like to participate in a follow-up phone interview. Those who were interested submitted a separate contact information form so we could contact them to schedule a phone interview. The contact information form was not tied to their survey results.

## Data Collection Procedures

**Survey Instrument.** We created a survey to answer the research questions of the more extensive study. We developed the survey using the specific aims of the study and previous literature relating to our research questions.<sup>6–10,16–18</sup> The survey consisted of 22 questions, including multiple-choice, select all that apply, and open-ended or short-answer responses. We also asked questions relating to basic demographic data, including age, gender, and geographic location.



The survey was administered using Qualtrics software (version July 2019; Qualtrics).

We validated the survey using a content validity index (CVI) tool as described by Lynn.<sup>19</sup> The survey was sent to a panel of 3 content experts. We selected content experts based on their contribution to previous research in athletic training education and expertise in survey research. The panel of content experts rated each question based on clarity and relevance using a scale of 1 to 4 (1 = *not clear or relevant*, 2 = *somewhat clear or relevant*, 3 = *quite clear or relevant*, 4 = *highly clear or relevant*).<sup>20</sup> For the survey to be deemed valid, each question must have had a mean rating of greater than or less than 3 for clarity and relevance.<sup>20,21</sup> Questions were revised if they had a mean score less than 3 for clarity or relevance. We sent our revised questions back to the content experts until they met the threshold to be considered valid. Our survey instrument had an overall CVI score of 0.98 ( $3.92 \pm 0.16$ ) for relevance and an overall CVI score of 0.91 ( $3.64 \pm 0.32$ ) for clarity.

**Interview Guide.** Like the survey instrument, we created a semistructured interview guide to answer the research questions of the larger study. We developed questions and their respective subquestions and probes using the specific aims of the study and previous research relating to our research questions.<sup>6–10,16–18</sup> The interview guide consisted of 13 open-ended questions. Additionally, we used a series of subquestions and probing questions to gather additional information from the participants. The interviews were conducted by 1 researcher (R.D.N.) and were audio-recorded using the NoNotes mobile application. Each interview lasted approximately 40 minutes. We chose to have the interviews transcribed by a third-party service (NoNotes) to reduce any potential biases.

We chose to validate the interview guide using the same CVI method<sup>19</sup> and tool as the survey. We used 3 new content experts who had experience in athletic training education research and qualitative research design. Our interview guide had an overall CVI score of 0.91 ( $3.66 \pm 0.33$ ) for relevance and an overall CVI score of 0.83 ( $3.32 \pm 0.34$ ) for clarity.

We piloted the interview guide with 2 students to ensure each question's clarity and relevance. We used convenience sampling to select students who were like those who met the inclusion criteria for the study. The pilot interviews allowed us to refine the wording of questions as needed and remove questions that provided nonessential data. After the pilot interviews, we believed rich data could be obtained from the interview guide.

## Data Analysis and Trustworthiness

We used descriptive statistics, frequencies, and percentages to analyze the survey data to determine the survey respondents' perceptions of the athletic training profession and a career in the profession. Additionally, frequencies and percentages were used to identify the factors that influenced their perceptions. We included open-ended survey questions in the qualitative data analysis.

An inductive content analysis was used for the open-ended survey responses and interview transcripts.<sup>22</sup> One member

from the research team (R.D.N.) served as the primary coder for the open-ended survey responses and interview transcripts. The survey responses and interview transcripts were read several times, and then the data were coded accordingly (R.D.N.).<sup>23,24</sup> We merged common codes from the survey responses and interviews when appropriate.<sup>12,13</sup> After coding the data, the coding structure, along with common codes, were discussed with another member of the research team until both agreed. Then we placed common codes into conceptual categories and created emergent themes arising from the data.<sup>22–24</sup>

We compared the emergent themes from the qualitative data with the descriptive statistics of the survey responses and further merged the data when similarities were found or when the findings complemented each other.<sup>12</sup> As a result, the quantitative and qualitative data were woven together and blended to provide an integration of both methodical approaches into 1 comprehensive results section.<sup>13</sup>

Trustworthiness was established through triangulation, memos, member checking, and peer debriefing.<sup>23,24</sup> We triangulated the data by using 2 different methodological approaches to data collection. We merged the findings to provide a more comprehensive understanding of the research questions and, in turn, enhanced the credibility of the data being presented.<sup>12,13,23</sup> During the interview process, 1 member of the research team (R.D.N.) kept memos in which he wrote down notes and any key themes he noticed during each interview. Throughout each interview, he provided summaries of what was said in the interview. He then asked the participant if the summary was accurate or if he or she would like to clarify or elaborate further.

We conducted member checks by sending a copy of the transcribed interview to each participant to ensure accuracy in what was said by the participant. If the participant rejected the accuracy of his or her data, he or she was allowed to clarify his or her view and elaborate further.<sup>23,24</sup> The participants were given 10 days to respond to address any data accuracy concerns. If they did not respond within 10 days, their original transcripts were used for data analysis.

Once the open-ended survey responses and interview transcripts underwent an inductive content analysis, the coded data, the quantitative survey data, the thematic analysis, and the blended findings were sent to a peer debriefer. The peer debriefer (S.N.) examined the data for consistencies in the findings and ensured the survey respondents' and participants' views were accurately captured.<sup>23,24</sup> We selected a peer debriefer (S.N.) based on their contribution to previous research in athletic training education and expertise in qualitative research.

## RESULTS

Because we used a convergent mixed methods design, the results below portray an integration of the quantitative and qualitative findings from the survey and the interviews. Frequency statistics of the survey responses can be viewed in Tables 2 and 3. We derived 3 higher-order themes from the data: (1) perceptions of the athletic training profession, (2) perceptions of a career in athletic training, and (3) factors influencing perceptions. Three lower-order themes emerged

**Table 2. How Do You Perceive the Athletic Training Profession? (Select All That Apply)**

Perception	No. (%) <sup>a</sup>
Lack of awareness or appreciation for the profession	65 (81.3)
Rewarding profession	62 (77.5)
Dynamic profession	53 (66.3)
Profession people are passionate about and enjoy	52 (65)
Team oriented work environment	49 (61.3)
Positive outlook for the profession (ie, optimistic future)	38 (47.5)
Supportive work environment	30 (37.5)
Stepping-stone profession (ie, people use it to pursue another profession)	20 (25)
Negative public perception of the profession	17 (21.3)
Prestigious profession	7 (8.8)
Secluded work environment	7 (8.8)
Other (write-in)	7 (8.8)
Negative work environment	6 (7.5)

<sup>a</sup> The total response percentage is greater than 100% due to respondents' ability to select multiple responses simultaneously.

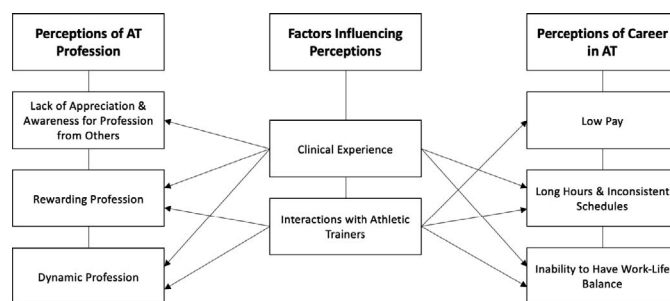
from the higher-order theme perceptions of the athletic training profession: (1) lack of appreciation and awareness for the profession from others, (2) rewarding profession, and (3) dynamic profession. For the higher-order theme perceptions of a career in athletic training, 3 lower-order themes emerged: (1) low pay, (2) long hours and inconsistent schedule, and (3) inability to have work-life balance. The last higher-order theme factors influencing perceptions had 2 lower-order themes emerge: (1) educational experiences and (2) interactions with athletic trainers. Figure 2 depicts each higher-order theme and its lower-order themes along with the relationship each theme has with another. We gave the participants pseudonyms when presenting the qualitative data.

**Table 3. How Do You Perceive Athletic Training as a Potential Career? (Select All That Apply)**

Perception	No. (%) <sup>a</sup>
Low salary	68 (85)
Inconsistent hours or schedules	68 (85)
Inability to have work-life balance	46 (57.5)
Potential for career advancement within the profession	36 (45)
Marketability as a health care professional	34 (42.5)
Inability to have a family	31 (38.8)
Potential for career advancement outside the profession	19 (23.8)
Ability to have a family	12 (15)
Ability to have work-life balance	11 (13.8)
Consistent hours or schedule	8 (10)
Other (write-in)	7 (8.8)
High salary	3 (3.8)

<sup>a</sup> The total response percentage is greater than 100% due to respondents' ability to select multiple responses simultaneously.

**Figure 2. Perceptions of the profession, a career in the profession, and factors influencing perceptions.**



### Perceptions of the Athletic Training Profession

**Lack of Appreciation and Awareness for the Profession from Others.** Eighty-one percent of the survey respondents selected *lack of appreciation and awareness for the profession from others* as a negative perception of the athletic training profession. Additionally, the most discussed negative aspect of the athletic training profession among our interview participants was the lack of appreciation and awareness for athletic training by the public and other health care professionals.

Our interview participants shared firsthand experiences of how the public does not fully understand the professional role of an athletic trainer. Rachael said, “The biggest negative aspect of the profession is that people don’t really understand what we do.” She went on by saying:

*Parents would pull their child out of the clinic and say they were going to see a real doctor or a real health care professional. That was a shocking moment for me because I’m working my butt off to become a health care professional, but that’s something that happened often.*

Aaron responded, “You still meet people who have no idea what we do. I still meet people who think I’m a personal trainer when I explain to them what I do.” Dana added:

*I definitely feel like there are times where people still don’t understand what we do. You say the word athletic trainer, and more often than not, they think I am the strength and conditioning coach for the team.*

Many of our interview participants shared their beliefs that the athletic training profession was misunderstood by other health care professions as well. For example, Shawn said:

*There is a lack of respect or just a lack of understanding about what we do within the broader health care community. I’m not sure if it’s a lack of recognition or just a lack of respect, but either way, people just don’t seem to know what we do.*

Julie added, “I’ve never met a physical therapist that didn’t have something against me.” Dana said:

*Some of the physical therapists I have come across don’t understand why we are needed, and they think they can do everything that we can do. That was really hard to hear that’s how they felt, unfortunately.*

Some interview participants shared stories of being misunderstood by other health care professional students during

interprofessional educational experiences between programs. Rachael said:

*We had a day where we could work with other health professional students. We would get a scenario, and you had to solve it with a pharmacist, a physical therapist, a nurse, and an occupational therapist. Then we sat down and had a roundtable discussion. Students in these fields had no idea what I did. They had no idea how I could contribute to the situation. So during our simulation, they didn't let me do anything because they didn't trust that I knew how to do anything. And it was shocking like, wow, even people who are growing up in this generation, who have been athletes and maybe had an athletic trainer have no idea what I can do.*

Corroborating this, Denise added:

*There were so many times where my peers and I would go to our interprofessional education day with nursing students, pharmacy students, respiratory therapy students, and physician assistant students, and none of those people knew what athletic trainers could do.*

Shawn said:

*One day we had a crossover class with the physical therapy students, and I had to spend the entire class explaining to the physical therapy students what exactly our scope of practice is and none of them knew.*

These experiences only furthered their perception that there was a lack of appreciation and awareness of athletic training from other health care professionals.

**Rewarding Profession.** Seventy-seven percent of the survey respondents selected *rewarding profession* as a positive perception of the athletic training profession. In the interviews, the participants elaborated on what makes the profession rewarding by saying it was due to the ability to build relationships and make a difference in people's lives. Many of our participants described the ability to build relationships as one of the most rewarding aspects of the athletic training profession. For example, Shawn said, "The relationships you build, that is hands down one of the best parts of this profession." Corroborating this, Julie responded:

*You don't get a thank you every day, but you get those moments, and you get those connections with people that I don't think any other health profession really gets to make. I see these people every single day. I'm there for the victories. I'm there for their failures. I cry with them, and I laugh with them. I'm part of their life. I ask them about their families, and I know their normal behavior. There's no other health profession where you're going to see your patients enough that you become their family, and that's a huge, huge benefit.*

Kristen said:

*You get to talk to your patients while doing your evaluation and get to know them a little bit. . . Even when you're doing rehab, you get to talk to them and chat about their day. You get to know them and also make them feel better. I think that's the coolest part.*

Along with building relationships, the ability to make a difference in the lives of their patients and student-athletes was another rewarding aspect of the athletic training profession. Supporting this, Kristen said:

*I think the most rewarding part of athletic training is seeing an athlete or someone get back to what they love doing. They had an injury that took them away from their sport, and then they were able to get back and play. That is super awesome and super fun to see.*

Denise responded:

*Seeing people healthy and happy is really exciting. In postoperative rehab, you get to see someone go from not being able to do anything, not even walking, to finally getting them back to be their amazing, glorious self.*

Shawn specifically spoke about athletic training in the high school setting by saying:

*I kind of get to help raise these young men and women. I get to help injured students and instill a work ethic in them, maybe help them with general manners. Maybe I can prevent something and help a student keep their grades up so they can continue playing. Whatever it is, I get to help with the growth of these young men and women who are in my care, and I think that's a pretty remarkable thing.*

**Dynamic Profession.** Sixty-six percent of the survey respondents selected *dynamic profession* as a positive perception of the athletic training profession. Our interview participants also spoke of athletic training's dynamism when asked to describe their perceptions of the profession. For example, Denise said:

*[Athletic training] can build into a lot of different careers, and it's kind of whatever you want to do. There's the traditional route where you work at a high school, university, or professional setting. . . then there's an industrial career. There are physician extenders [sic]. You can do so many things with it. . . my teachers were talking about athletic trainers working in law enforcement and military.*

Kristen responded:

*[Athletic training] is not just confined to university and high school sports teams anymore. We have people working with the fire department and working in physical therapy clinics. I think that's really cool because you have 2 people who are athletic trainers but do 2 really different things in 2 really different settings.*

Sarah added, "You can put an athletic trainer anywhere. You can put an athletic trainer in a clinic, in any type of rehabilitation center, in an emergency setting, and they're going to be useful." The survey respondents mimicked these perceptions, as 42.5% of them indicated that marketability as a health care professional was a positive perception of the profession.

Additionally, multiple interview participants indicated the profession's dynamism was one of the main attractors to them choosing to pursue a degree in athletic training. Shawn said, "A variety of roles in a medical setting really attracted me. You're not doing the same thing every day." Aaron responded:

*My main desire came from the freedom you get working with patients in an athletic training setting. A lot of health care providers work on an insurance-based system, and they are very limited in what they can and cannot do for their patients.*



*I realized many athletic training settings weren't insurance-based and had a lot more freedom to do what they thought was best for the athlete/patient.*

Kelsey added, "It sounded like athletic training was the perfect hybrid of patient care with the rehab component that you typically associate with physical therapy."

## Perceptions of a Career in Athletic Training

**Low Pay.** Eighty-five percent of the survey respondents selected *low pay* as a negative perception of a career in athletic training. Aaron, an interview participant, elaborated on low pay by saying:

*We're moving into the entry-level master's [sic] where people coming out of a master's program don't want to do a fellowship and get paid \$20,000 to \$25,000 because they already have a bunch of student loan debt.*

Rachael shared similar thoughts, saying:

*The biggest challenge of having a career in athletic training is that people are now coming out with their master's degrees, which takes more money to get, but then to start out your career, you are left having to take an internship or a residency that is not paying enough money to take a dent out of your loans or pay for your life. So I feel like that's the one thing about a career in athletic training that is worrisome. You can never get your feet underneath you financially in order to continue that career.*

Rachael then followed her previous comments by saying, "People who graduated before me continue to struggle with their finances. It's just hard to see that." Sarah shared a story of witnessing her preceptor struggle financially. She said:

*She wasn't a full-time associate athletic trainer, so she was paid hourly. I knew her salary was so low that she had to supplement income by cleaning houses. So that kind of career isn't something that is optimal for a student, especially when you're looking at spending another \$50,000 for graduate school to get a master's degree.*

**Long Hours and Inconsistent Schedules.** Eighty-five percent of the survey respondents selected long hours and inconsistent schedules as a negative perception of a career in athletic training. The interview participants had similar perceptions and often discussed the long hours and inconsistent schedules as one of the most significant negatives of the profession. Kristen said, "The hours can definitely be a negative because you don't get that typical 9 to 5 job. That doesn't happen with this profession, and you have to be okay with that if you are going into it." Julie said, "When athletes are practicing, you got to be there. You don't have standard office hours, and you're just expected to be on call 24/7." Aaron suggested, to avoid burnout, one must be passionate about his or her job due to the hour requirements. He said:

*I had previously talked about how easy it is to burn out. I think that working in professional sports, big schools, and even high schools that you will work really long hours. A lot of the times you're getting paid salary, so you're working an 80-hour week or a 60-hour week, but you're getting paid for 40 hours. Unless you're truly passionate about what you do, a lot of the times, the long hours or repetitive motions or situations*

*that you go through can get boring and stale. I think people can easily get tired of that.*

Kelsey suggested legislative efforts are needed to correct the long hours and inconsistent schedules faced by athletic trainers by saying, "You're going to be working long and odd hours for the rest of your life for less (money) than you probably deserve. I think that's something that legislation wise we need to work on."

**Inability to Have Work-Life Balance.** Fifty-seven percent of the survey respondents selected the inability to have work-life balance as a negative perception of a career in athletic training. Those who were interviewed described that the inability to have work-life balance was because athletic trainers have long hours and inconsistent schedules. Rachael believed the inability to have work-life balance was due to an athletic trainer's role in the athletics department. She said, "I think it's a negative that athletic trainers are at the will of the coaches and athletic department. We're just another piece of their puzzle, and so many other people control our schedules." Kristen said:

*An athlete can call their athletic trainer on a Sunday night asking about their knee. It's not just the time they are in the clinic providing care. They are sometimes getting calls from athletes outside of what they are actually getting paid for.*

Natalie said, "I would eventually like to get married, have a family, and have a more stable work schedule. Athletic training, 90% of the time, doesn't allow for that." Julie said:

*In college football, it didn't matter if it was 2:00 in the morning. You'd have athletes calling you. There's an expectation that, when they [athletes] need you, you're supposed to be there 100% of the time, and there's a lot of sacrificed work-life balance.*

## Factors Influencing Perceptions

**Clinical Experiences.** Our participants' clinical experiences influenced some of their positive and negative perceptions of the athletic training profession. Their clinical experiences allowed them to see the profession as rewarding and dynamic. Many were able to observe the strong bonds their preceptors had with their student-athletes and the impact they had on their lives. In fact, some of our participants were able to build strong relationships with the student-athletes themselves. Additionally, our survey respondents indicated that the "variety of clinical rotations" they had during their professional master's ATP played a major role in the way they viewed the profession as dynamic. However, their clinical experiences also influenced their negative perceptions of the profession. During clinical rotations, our participants saw the general lack of appreciation and awareness for the profession from the public and other health care professionals. These interactions appeared to have a lasting impact on our participants, as it was the most frequently selected perception of the athletic training profession.

Some of our participants' negative perceptions of a career in athletic training were influenced by clinical experiences as well. Their clinical rotations allowed them to see the long hours and inconsistent schedules many athletic trainers face in clinical practice along with the inability for athletic trainers to have work-life balance. For example, 1 survey respondent

said, “Clinical experiences showed me you have to make an effort to have a life outside of work. We work long hours, and compared to other health care professions, we are not paid well.” Another survey respondent said, “In clinic, our game and practice schedules are always changing with little notice. We must work weekends and [our] hours jump all over the place.”

**Interactions with Athletic Trainers.** Interactions with athletic trainers influenced our participants’ positive perceptions of the athletic training profession. For example, 1 survey respondent said, “Listening to other athletic trainers describe the profession or talk about their job shaped my perceptions of the profession.” Another survey respondent said, “The biggest factors [for the development of my perceptions] were the athletic trainers that I worked with while I was a student.” A third survey respondent said, “Hearing about the experiences from other athletic trainers was probably the most influential factor.”

However, we found that interactions with athletic trainers also contributed to their negative perceptions of a career in athletic training including low pay, long hours and inconsistent schedules, and the inability to have work-life balance. For example, a survey respondent said, “Hearing about experiences from other athletic trainers shaped my perceptions of the [long] hours and [low] salary.” Some of our participants had preceptors who discussed the difficulty of obtaining a high salary as an athletic trainer. Other participants saw their preceptors struggle with long hours and inconsistent schedules. One survey respondent said, “As a student, I saw some athletic trainers who were responsible for covering everything for their high school and were not given the option of having someone else cover an event.” Some of the struggles their preceptors encountered negatively influenced our participants’ perceptions of a career in athletic training.

## DISCUSSION

The purpose of this study was to examine second-year professional master’s students’ perceptions of the athletic training profession, a career in the profession, and identify the factors that influenced their perceptions. In this study, we sought to expand on the current literature examining athletic training students’ perceptions of the athletic training profession and its implications on their career intentions. Previous researchers<sup>6–10</sup> have primarily focused on professional bachelor’s athletic training students, whereas in this study, we specifically examined second-year professional master’s athletic training students. Our findings revealed that second-year professional master’s athletic training students have both positive and negative perceptions of the athletic training profession and a career in the profession. These perceptions were primarily influenced by clinical experiences and interactions with athletic trainers.

### Perceptions of the Athletic Training Profession

Consistent with previous research on professional bachelor’s athletic training students,<sup>7–9</sup> second-year professional master’s athletic training students view the lack of appreciation and awareness for the profession from others as a negative perception of the athletic training profession. The participants in our study described the lack of appreciation and awareness

of the profession stemming from the public and other health care professionals. They described how the public had a misconception of the roles and responsibilities of an athletic trainer and often confused athletic trainers with personal trainers. Additionally, our participants described how the lack of awareness of athletic training from the public gave them the desire to promote the profession and increase awareness of the profession. In fact, many of them believed promoting the profession was part of their core responsibilities as athletic trainers. Since one of the new core competencies in the 2020 CAATE standards<sup>25</sup> is advocacy for the profession, professional master’s ATPs should prepare students to promote the profession once they transition to professional practice. Early exposure to importance of advocacy may help students better navigate opportunities to educate the public about athletic training.

What may be surprising is that, even though athletic training is becoming more established in the medical community, there is still a lack of appreciation and awareness for the profession from other health care professionals. Our participants described interactions with other health care professionals such as physicians, physical therapists, and physician assistants that highlighted this lack of appreciation for athletic trainers. Additionally, they reported negative interactions with students from other health care professions during interprofessional education opportunities. While our participants viewed these anticipatory socialization experiences as negative, they were still significant because they increased the awareness and appreciation for the athletic training profession to health care students who may not have been exposed to athletic training otherwise. It is important to note that other scholars<sup>26,27</sup> have found that interprofessional education can lead to positive interactions with other health care students as well as the development of positive perceptions toward other health care professions when done well. Perhaps one area of focus should be to educate students on the potential benefits of interprofessional education and the need to collaborate with students from other health care professions to solve complex health care problems. This is an area that will undoubtedly be expanded upon in the future due to the new CAATE standards.<sup>25</sup> In fact, professional master’s ATPs should integrate more interprofessional education opportunities into their curriculum to help bridge the gap seen by our participants between athletic trainers and other health care professions.

The perception that athletic training is a rewarding profession has not previously emerged in athletic training education research but is commonly seen in nursing education research.<sup>28–36</sup> Our participants believed athletic training was a rewarding profession because of the ability to make a difference in their patients’ lives and the ability to build relationships with their patients. The desire to make a difference in the lives of patients is a perception that is shared by many nursing students.<sup>28–36</sup> In nursing education literature, it is believed that this perception stems from a student’s past personal experience of being taken care of by a nurse or an experience of a student taking caring of a loved one while they were sick. Because of this, nursing students often view nursing as a very rewarding career and a caring and nurturing profession.<sup>28,30</sup> Unique to the athletic training profession is the ability to build strong relationships with patients. The participants in our study discussed how athletic trainers can



build strong relationships with their athletes because they interact with them daily. Our participants believed watching an athlete return to play after a long rehabilitation process to be the most rewarding aspect of athletic training.

Like previous research,<sup>7-9</sup> our participants viewed the dynamic nature of the profession as a positive perception. The participants in our study defined the dynamic nature of the profession as the ability to serve in a variety of roles across health care settings. Additionally, they believed athletic trainers have a broad scope of practice that provides versatility during patient care and makes every day in athletic training practice unique. Their perceptions are consistent with those of their professional bachelor counterparts. Authors of multiple studies<sup>7-9</sup> have shown the dynamic nature of the profession and the marketability of an athletic trainer as positive perceptions of the profession and influential factors for persistence in the profession. When discussing the dynamic nature of the profession, our participants spoke of emerging settings in athletic training practice. They viewed the growth in emerging settings like industrial, performing arts, and military as a positive aspect of the profession. They were attracted to job opportunities in emerging settings that allow them practice outside of traditional employment settings (eg, high school, college, professional sports) and with different patient populations.

### Perceptions of a Career in Athletic Training

When asked about a career in athletic training, the participants in this study mentioned negative perceptions more often than positive perceptions. Low pay, long and inconsistent hours, and inability to have work-life balance were the 3 most discussed negative perceptions of a career in athletic training. Unfortunately, both professional bachelor's and postprofessional athletic training students hold these negative perceptions as well.<sup>7,9,14</sup> According to Benes and Mazerolle,<sup>7</sup> though professional bachelor's athletic training students recognize the negative aspects of a career in athletic training, the positive aspects appear to have a more significant impact on them. Similarly, the interview participants in our study believed the positives of athletic training outweighed the negatives. In fact, all our interview participants intended to persist in athletic training to some degree after graduation. However, postprofessional athletic training students tended to depart from the profession entirely due to the negative aspects of a career in athletic training.<sup>14</sup> This may be because postprofessional students are immersed in the athletic training workforce as graduate assistants. Therefore, they could be experiencing the hardships of a career in athletic training more directly than professional program students would through clinical rotations.

There is hope for optimism, as the negative perceptions of a career in athletic training do not seem to affect students enrolled in professional programs the same way as postprofessional students. However, the findings of our study should cause some concern, as professional master's athletic training students most associated a career in athletic training with negative perceptions. This only further supports the importance of adequately socializing students into the profession during their profession education programs. According to Mazerolle et al,<sup>9</sup> early socialization into the profession is key to the development of positive perceptions of the profession

and improving career retention rates after graduation. Athletic training educators should facilitate socialization into the profession by providing students with realistic expectations of positives and negatives associated with a career in athletic training. Additionally, they should guide students as they make career decisions and explore employment settings within and outside of the profession. Perhaps professional master's ATPs should make more desirable working conditions an area of focus when discussing advocacy for the profession with their students. This could help improve long-term career retention rates in the profession if this becomes the forefront of advocacy efforts.

### Factors Influencing Perceptions

Our participants developed positive and negative perceptions of the athletic training profession and a career in the profession through clinical experiences and interactions with athletic trainers. It appears that these influential factors gave them a realistic understanding of athletic training and a career in the profession. Additionally, these socialization agents showed our participants that the positives of athletic training can outweigh the negatives and encouraged them to enter the profession after graduation.

Our findings are supported by previous research<sup>7-9</sup> and suggest that second-year professional master's athletic training students need positive clinical experiences and strong faculty and preceptor support to develop positive perceptions of the profession and a career in the profession. In fact, athletic training students are socialized best into the profession after having strong clinical education experiences and undergoing some form of mentorship by their clinical preceptors.<sup>33</sup> Therefore, finding quality clinical sites that have positive and healthy work environments and employ preceptors who advocate for the profession and model healthy behaviors in the workplace are critical to the development of athletic training students. Clinical education coordinators should search for clinical sites with qualities like the ones listed above to ensure students are adequately socialized into the profession. It is important that professional master's ATPs provide clinical sites and preceptors with the skills and knowledge necessary to provide quality clinical education experiences for their students. Therefore, clinical education coordinators should train clinical preceptors how to model these socializing behaviors and maintain healthy work environments during annual preceptor training.

### LIMITATIONS AND FUTURE RESEARCH

Our participants were a small sample of all second-year professional master's athletic training students. Although 2 sampling methods were used to obtain survey responses, our response rate was estimated to be 16.2%. Though we had a diverse population from across the country (Table 1), a larger sample would have provided more robust evidence of second-year professional master's athletic training students' perceptions of the athletic training profession and a career in the profession. Additionally, 82% of our survey respondents were female, which is 20% higher than the female-to-male ratio, according to the 2017–2018 CAATE Analytic Report.<sup>37</sup> A sample that better represents the gender ratio in professional master's ATPs could further strengthen the findings.

Future researchers should examine the influential factors contributing to students pursuing a professional master's program, as they are likely to be different from prospective high school students looking to enroll in a professional bachelor's program. Secondly, additional research is needed to explore the differences in perceptions between genders or those who identify as LGBTQ+. Lastly, future researchers should investigate how perceptions of the profession and a career in the profession mature as graduates from professional master's programs undergo organizational socialization in their professional work settings.

## CONCLUSIONS

The results of our study suggest that second-year professional master's athletic training students have similar perceptions of the athletic training profession and a career in the profession as professional bachelor's athletic training students.<sup>6–10</sup> However, a new perception emerged from our findings that has yet to be seen in the literature. Our participants viewed the athletic training profession as rewarding because of an athletic trainer's ability to build relationships with their athletes and make a difference in their lives.

We found that clinical experiences and interactions with athletic trainers were the 2 factors that contributed to the development of our participants' perceptions. Additionally, it is evident that these factors heavily influence the anticipatory socialization process of second-year professional master's athletic training students. Therefore, professional master's ATPs should offer robust clinical experiences that model a healthy and positive work environment. Additionally, these programs need to ensure that their clinical preceptors can model socialization behaviors and are willing to mentor their students.

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