Academic Employers' Impressions Regarding the Qualifications of Athletic Trainers With the Doctor of Athletic Training Degree

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Context: The emergence of the doctor of athletic training (DAT) degree creates opportunities to develop advanced practice leaders in athletic training. Preliminary data suggest academic employers are likely to hire and believe it would be beneficial to hire someone with a DAT degree; however, it remains unclear how academic employers perceive the DAT degree.

Objectives: To explore the impressions of academic employers regarding the qualifications of athletic trainers (ATs) with the DAT degree for employment in the academic setting.

Design: Qualitative study.

Setting: Individual video interviews.

Participants: A total of 11 employers who are ATs (8 women, 3 men; age = 42 ± 8.5 years; years as an educator = 10.3 ± 5.9 years).

Data Collection and Analysis: The primary investigator interviewed participants via individual video conferences using a semistructured interview guide to gather perceptions of the DAT degree and the role of ATs with the DAT in academic settings. Data were analyzed and coded into common themes and categories, followed by triangulation of data via the research team and member checking to ensure data accuracy.

Results: One predominant theme emerged relative to the employers' impressions regarding qualifications of ATs with the DAT degree. Participants characterized those with the DAT degree as being capable of conducting practice-based research and implementing innovative practices in and outside of the classroom. Participants also described DAT-credentialed ATs as individuals who embodied advanced practice characteristics demonstrated through leadership, soft skills, core competencies, and advanced application of knowledge and skills.

Conclusions: Although academic employers' impressions toward hiring DAT-credentialed ATs were positive, the focus and role of the DAT degree remains unclear. Further education is needed within the athletic training community to clarify the goal and focus of the DAT degree and its role in athletic training education.

Key Words: Retention, advancement, postprofessional education, qualitative research

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KEY POINTS

- Academic employers perceived that DAT degree holders would have some level of expertise, advanced practice, and innovation that could positively contribute to student learning, specifically in clinical practice.
- Doctor of athletic training degree holders are thought to be well trained in practice-based research with the ability to bridge the gap between evidence and clinical practice.
- Overall, academic employers had positive global impressions about the opportunities for professional advancement through the DAT degree, but they also expressed uncertainty about the overall outcomes of the degree and its potential to contribute to a team of athletic training faculty.

INTRODUCTION

From the time that postprofessional athletic training programs were established as advanced education, students had opportunities to obtain a master's degree at the postprofessional level. To evolve athletic training education, the Strategic Alliance, which comprises the Board of Certification, Commission on Accreditation of Athletic Training Education (CAATE), National Athletic Trainers' Association (NATA), and NATA Foundation, analyzed athletic training education, instituted a degree-level change, and announced that athletic training programs must deliver professional education at the level of the master's degree by 2022.¹ The result of the degree change aligned with other health care professions in that they require postbaccalaureate education for entry into health care practice.² This shift to the entry-level master's degree created space for new opportunities in postprofessional education.³ Historically, postprofessional master's degree programs have been the most common route of advanced athletic training education. However, the transition of the professional degree will eventually eliminate the postprofessional master's degree option. Thus, the decline in postprofessional master's degree programs will lead to opportunities of advanced education through accredited athletic training residency programs and postprofessional doctor of athletic training (DAT) degree programs.

Whereas the overarching aim of accredited athletic training residencies is to create clinical specialists in 1 of 8 specialty areas of athletic training (prevention and wellness, primary care, orthopedics, rehabilitation, behavioral health, pediatrics, performance enhancement, and urgent and emergent care),⁴ the focus of the DAT degree is to create advanced practice leaders.⁵ Identified in the framework for the future of athletic training education, the facilitation of advanced practice leaders in athletic training through doctoral degrees is desirable.^{5,6} Doctoral opportunities in athletic training education consist of both the academic doctorate (eg, PhD, EdD, DHSc) and the clinical doctorate (ie, DAT). Specifically, the DAT is a postprofessional career pathway that gives

individuals the opportunity to advance their practice as an athletic trainer (AT) in the clinical, academic, and leadership realms.³

Employers have expressed a desire to hire candidates with a DAT degree because they are perceived to have the ability to enhance patient care.^{7,8} However, employers have also expressed uncertainty about whether the possession of the DAT degree would be considered more important during the hiring process than the amount of an applicant's clinical experience.⁷ Furthermore, whereas some clinicians perceived that the possession of a higher degree, such as the DAT, would correlate with a higher salary based on other doctoral education trends, employers have expressed concerns that the clinical doctorate may be difficult to compensate.^{2,3,7} On the basis of the perceptions of employers, ATs will need to display the value added by the DAT to show a meaningful difference between those who possess and do not possess the clinical doctoral degree.⁷ ATs who have expressed interest in the DAT have highlighted it as an opportunity to gain more advanced clinical skills and the ability to provide better patient-centered care during their time as clinicians.^{7,9} Finally, administrative employers have reported that for universities that accept clinical doctorates as a terminal degree, DAT graduates would be well suited to teach professional students due to their recognized qualifications to teach in clinical or tenure-track positions.7,8

Although there appears to be positive associations with the DAT among a variety of stakeholders, misconceptions about the degree may still exist. Furthermore, most of the research conducted among employers to date has been survey-based in nature and was conducted before the proliferation of numerous DAT programs.^{7,8} Whereas survey research is essential to understand baseline perceptions, most survey instruments tend to limit respondents' ability to provide additional insights. Therefore, the purpose of this study was to explore academic employers' impressions regarding qualifications of ATs with the DAT degree for academic positions.

METHODS

Design

The design of this study was guided by the consensual qualitative research (CQR) approach.^{10,11} The cornerstone of the CQR approach is inclusion of a multianalyst research team that aims to reach a consensus throughout all phases of data analysis to ensure a comprehensive representation of the results.¹⁰ We selected the CQR approach for this qualitative study to determine academic employers' impressions and overall theories of ATs who possess the DAT degree for employment in an academic setting.

Because the CQR process relies on the consensus of the research team, it is imperative that multiple researchers are

Table 1. Demographics of Participants

Participant Pseudonym	Job Title	Years at Current Academic Institution	Carnegie Classification of Institution	No. of ATs Hired ^a
Olivia	Associate professor	13	Doctoral Universities: High Research Activity	4
Mellie	Program director	12	Doctoral Universities: High Research Activity	3
Jake	Department chair	5	Master's Colleges & Universities: Small Programs	1
Quinn	Department chair	14	Doctoral Universities: Very High Research Activity	5
Fitz	Program director	21	Master's Colleges & Universities: Larger Programs	6
Abby	Program director	4	Master's Colleges & Universities: Larger Programs	2
Sally	Program director	14	Master's Colleges & Universities: Larger Programs	8
Elizabeth	Program director	7	Doctoral Universities: High Research Activity	3
Maya	Program director	3	Doctoral or Professional Universities	1
Julia	Department chair	8	Baccalaureate Colleges: Diverse Fields	4
David	Coordinator of athletic training program	11	Master's Colleges & Universities: Larger Programs	3

^a This value represents the number of athletic trainers hired at the current academic institution in which the participant was involved in the hiring decisions.

selected to ensure that perspectives, opinions, or levels of awareness are present to improve the approximation of truth within the data.^{10,11} The research team for this study consisted of 5 ATs with various levels of CQR experience. One member of the research team (B.L.V.L.) primarily served as the internal auditor. The internal auditor was responsible for the verification of interpretations made by the research team while providing continual appraisal during the data analysis process,¹⁰ ensuring that data were appropriately cross analyzed through categorical development to describe core consistencies.¹⁰ In addition, an athletic training educator with expertise in qualitative research, who was not a member of the research team, served as the external auditor. The inclusion of an external auditor created additional trustworthiness, ensuring the minimization of researcher bias throughout the CQR data analysis process.¹⁰

Participants

Potential participants were purposefully recruited by reviewing job postings for open faculty positions for an athletic training program on the NATA Career Center website from 2017–2019 and contacting the search committee chair listed on the respective posting. Criterion-based sampling was used for participant selection. Participants were employers of ATs, had a role in the hiring decisions, were hiring for an academic setting, and had indicated that the DAT degree was a viable degree for available positions. Data saturation was achieved after individual interviews with a total of 11 employers, who were all ATs (8 women, 3 men; Table 1).

Instrumentation

A semistructured interview protocol (Table 2) was created that included a series of 14 open-response questions relevant to the participants' overall perceived expectations, benefits, and impact that the DAT degree has for ATs pursuing employment in the academic setting. The design of the interview guide allowed for flexibility to seek further clarification of participant responses and create potential for new conversation topics that were not thought of.^{10,11} Upon completion of interview development, the protocol was reviewed by a qualitative and content expert to ensure face validity. Pilot testing occurred with 2 individuals who met the inclusion criteria but were not participants during actual data collection. Pilot interviews were conducted to confirm clarity and comprehensibility of each interview question. Two questions were modified based on pilot-interview participant feedback to improve overall understanding and clarity.

Procedures

Before data collection, this project was deemed as exempt research by the university institutional review board. The Figure displays a flowchart of the methods and data analysis process for this study. To recruit employers, the principal investigator (C.E.W.B.) contacted potential participants via email once individuals who met the inclusion criteria were identified. The recruitment email detailed the purpose of the study being conducted with an invitation to participate. Upon agreement to take part in the study, each participant completed a brief demographic questionnaire and a video conference interview, lasting 30–45 minutes. All interviews were conducted by the principal investigator. Before the start of each interview, the participant provided verbal consent to digital recording of the interview conversation.

Individual interviews were audio recorded via Zoom software (Zoom Video Communications, Inc). Audio files were saved after completion of the video interview. Each audio file was then transcribed and proofed, masking proper names, places, or any identifying information to protect confidentiality of the participant. As a means of enhancing trustworthiness, the transcribed interview was sent to the participant allowing for final additions or clarifications while providing the participant clear instruction that no information may be deleted or altered at this time.¹² This strategy of trustworthiness is commonly referred to as *member checking*.

Data Analysis and Management

The data analysis process was conducted using the CQR data analysis guidelines by Hill et al^{10,11} The data analysis team for this study included 4 athletic training researchers (C.E.W.B., S.C., L.E.E., B.L.V.L.) with previous experience in CQR and 1 novice athletic training researcher new to the CQR data

Table 2. Semistructured Interview Protocol

- 1. To begin, tell me about your background as an athletic trainer.
- 2. Tell me about the setting in which you are currently employed.
- 3. In what ways, if any, do you influence the hiring process at your place of employment?
- 4. What roles do athletic trainers have and what are their primary responsibilities at your place of employment?
- 5. What, if any, additional roles and responsibilities do you believe would be beneficial for an athletic trainer to assume at your place of employment?
 - a. In what ways, if any, do you foresee an athletic trainer with a DAT degree having different role or responsibilities than other athletic trainers at your place of employment?
- 6. What expectations do you have for employees that serve in the role of athletic training faculty?
- 7. Please discuss your familiarity with the DAT degree.
- 8. In what ways, if any, do you feel the DAT degree will impact the profession?
- 9. What knowledge and skills, if any, do you believe an employee with a DAT degree should possess?
- 10. In what ways, if any, do you feel employees with a DAT degree will help your organization?
- 11. What, if any, reservations do you have about employing individuals with a DAT degree?
- 12. Please discuss your perceptions of advanced clinical practice education in athletic training.
- 13. What value, if any, do you feel advanced clinical practice education has in athletic training?
- 14. Is there anything else you would like to add related to this topic or are there any issues you think would be important for us to understand about your perceptions of the DAT degree?

Abbreviation: DAT, doctor of athletic training.

analysis process (N.R.S.). Before data analysis, the principal investigator conducted a training session, as outlined by Hill et al,^{10,11} with the novice team member to ensure familiarity with CQR data analysis. The data analysis approach for this study, which has been described thoroughly in athletic training research,¹³⁻¹⁶ was conducted throughout 4 stages: (1) identifying initial coded domains, (2) pulling core ideas within each domain, (3) conducting cross-analyses of multiple participant interviews through the development of new categories, and (4) establishing frequencies presented within the data in each category.^{10,11} For this study, categories were described as general if mentioned by 10 or more participants, typical if mentioned by 6-9 participants, or variant if mentioned by 5 or fewer participants. To ensure a comprehensive reporting of the study findings, we used the Consolidated Criteria for Reporting Qualitative Research.¹⁷ To confirm accuracy of the results and further ensure trustworthiness of the findings, both the internal and external auditors were consulted throughout the phases of data analysis (Figure).

RESULTS

One prominent theme that emerged during data analysis, impressions of the DAT, centered around academic employers' perceptions of ATs with the DAT degree. This theme captured participants' ideas, feelings or views and opinions of ATs with the DAT degree for academic employment. Within this theme, 6 categories were identified: clinical expertise, innovative practices, advanced practice, practicebased research, global impressions, and uncertainty. The frequency count of participant cases per category is displayed in Table 3.

Clinical Expertise

Participants discussed the need for clinical expertise after professional education in the field and expressed hope for DAT programs to provide advanced clinical education that differs among programs to create options for varying career choices and expertise. Sally commented,

Figure. Study procedures and analysis flowchart. Abbreviation: CQR, consensual qualitative research.

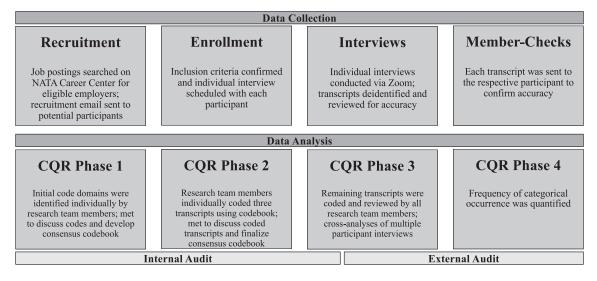


Table 3. Frequency of Participant Cases per Category

Theme or Category	Frequency	No. of Cases per Domain
Impressions of the DAT Clinical expertise Innovative practices Advanced practice Practice-based research Global impressions Uncertainty	Typical Typical General Typical General Typical	6 8 10 7 10 7

We need to be experts in our field, and I hope that those programs help create those experts. With more DAT programs coming along, hopefully the content of the DAT programs will differ. If somebody knows that they want to be in a clinic and they want to focus on manual therapy they can go to the school for that; if somebody knows that they want to do performing arts or something like that, they can go to a DAT [program] that fits with their career goals.

Abby described the need for an advanced degree and developing clinical expertise after professional education by stating,

I think we never can teach our students in the professional programs everything that there is to learn and so we need an advanced degree were people can specialize and become clinical experts. I feel like [DAT-credentialed ATs] would be able to teach much better than those that are doctorally trained to do research.

Innovative Practices

As innovative practice aims to create new ideas and methods or new learning environments, participants were hopeful that ATs with the DAT degree could improve the impact of the outcomes from preceptors in a clinical or academic environment. Jake stated,

The DAT [degree] could really help maybe change some of those preceptors' philosophies as far as how they engage students. Sometimes preceptorship has not been overly effective, so maybe the DAT [-credentialed AT] will just bring in a different viewpoint on some of those practices. I think it will help our students to be better clinicians.

Some participants reported that ATs from DAT programs had advanced critical thinking skills and their thought processes had challenged them and their students. Olivia remarked,

I have been around some of the students from some of the DAT programs and they are really pushed in their thought process. They are challenged in the ways that were taught in professional education. They are challenged to think differently. They are challenged to get out of their comfort zone. And they are challenged as to why they believe what they believe.

Fitz also discussed his perception of DAT graduates and their ability to think outside of the box. He noted,

I'm looking for a DAT graduate to come in and challenge the way we are currently doing things. We're not looking for someone that says "yes, that is a great idea"; we're looking for someone who will challenge the status quo and push us to think differently about how we teach our students to be effective [ATs].

Participants went on to discuss how they believe the education and training received as a part of the DAT degree would be beneficial to provide a fresh perspective within institutions. Quinn commented,

I see these individuals having the capability to be more innovative, even entrepreneurial, which will allow them to rise in the ranks of the various systems or institutions in which they are employed so that they can be better equipped with leadership positions. I also foresee DAT graduates being innovators in the sense of expanding our professional reach and even creating new and additional employment opportunities for ATs.

Advanced Practice

Participants perceived ATs with the DAT credential to possess characteristics of advanced practice including leadership, core competencies, soft skills, and an advanced application of their knowledge and skills concerning different topics within clinical practice. Sally mentioned,

I think [the DAT-credentialed AT] should be able to bring to the table a skillset that could enhance clinical practice and advance us as clinicians and recognized health care providers in terms of implementing evidence-based practice and using patient-reported outcomes and using some of those skills.

Other participants discussed a more specific clinical skill set that is more specialized than what is learned in professional programs. Mellie explained,

I think looking at higher level skill knowledge in terms of specific clinical skills and maybe looking more at patientrated outcomes, quality improvement, some of those pieces that you're not necessarily going to get from a professional program, and maybe other skillsets that are unique what they're learning. Maybe a better handle on how to actually incorporate evidence-based practice and implement it within their own clinical practice.

Participants also discussed the impact DAT-credentialed ATs could have on advancing the athletic training profession. Maya reported,

The DAT degree is first and foremost a clinical degree, with the aim of improving clinical practice. The intent is not to teach someone how to be a better educator per se but rather how to advance clinical practice in our field. . . . That focus [on clinical practice] will develop clinicians who will embrace the medical model and do really good things that will really impact their local culture, which will help patients but also model good practice to future generations of ATs.

Similarly, Quinn remarked that DAT-credentialed ATs may help create a

whole better overall system to where we function more along the lines of other health care providers, which would allow us more recognition, elevate our reputation as a whole and therefore hopefully better position us to be more effective interprofessional practitioners.

Practice-Based Research

Participants indicated a need for clinical research and suggested that DAT degree holders may be better trained in practice-based research methods. Mellie explained,

Well, I definitely think there is a value to the DAT [degree]. We want to promote lifelong learners and advancing our knowledge, and I think where we have fallen short as a profession is on the clinical side getting more research on techniques that actually are working, or not working, and collecting some of that information. I see the DAT [degree] potentially meeting those needs for our profession.

Not only did participants perceive the DAT degree to serve as a solution to improve clinical research at the point of care, but they also discussed the degree as a potential solution to bridge the gap between foundational knowledge and clinical application. Jake commented,

I imagine the basic understanding of research methods and everything would be the same, just different with the DAT being more focused on the clinical side of things. Whereas the PhD may be more of the foundation of knowledge or trying to figure out the answer to why the clinical knowledge works. The DAT [degree] will hopefully bridge that gap between the two.

Julia discussed the disadvantages of traditional PhD-credentialed faculty typically needing to focus on large-scale research for promotion purposes and identified how DAT-credentialed faculty may help fill a void in the type of research being published. She explained,

PhD-trained researchers typically need to focus on lab equipment, large-scale research projects, and securing grant funds for promotion. [PhD-trained] faculty may look to answer questions by doing randomized-controlled trials, systematic reviews, and meta-analyses. DAT-credentialed faculty may not need to conduct research at that level and could instead focus their research on the things actually occurring in clinical practice. We need more research on the actual technique being used in practice to see if they actually work and are actually helping people. So, I don't think one type of research is better than the other; I think it's just about how we can all work together to conduct research.

Similarly, Olivia went on to discuss how DAT-credentialed and PhD-credential ATs could work together to conduct practice-based research. She remarked,

[DAT graduates] should be partnered with [PhD] researchers so together they can appreciate that research is really messy. If we want good research that an actually impact athletic training practice and in non-healthy subjects we ATs who can collect data systematically during practice. We need clinicians who are not just ATs but are also scholars that can work alongside researchers to collect meaningful patient data.

Global Impressions

In addition to sharing their impressions of DAT-credentialed ATs, many participants shared global impressions of the DAT degree, discussing the sides of clinical improvement and emphasis on both clinical and academic aspects. Maya remarked,

Across the different programs, I've noticed that different DAT programs have different levels of emphasis on clinical versus academic versus research components of their degrees. But I would say as a whole, looking across all of them, it's a doctoral-level degree that really focuses on advancing individuals.

Some view the DAT degree as the opportunity to create additional opportunities to advance in the profession of athletic training. Quinn commented,

As a practice of athletic training, I would say all of the DAT programs really have a clinical focus, but some of them have more of a focus on academics and/or research. I think that there are opportunities right now to get terminal degrees as an athletic trainer, but most of them really focus on individuals who want to go on to do research or be involved in academics. I think that the DAT degree is going to provide an additional opportunity that is good for the evolution of athletic training.

Specific to the role in academia, many participants discussed how DAT-level training can create advanced clinicians who can then affect the training of future ATs. Olivia noted the purpose of the DAT degree is to "elevate and provide more advanced knowledge and training in athletic training clinical practice . . . which could lead to individuals better suited to do really well in a clinical education teaching or coordinator role." Julie explained, "I feel like DAT graduates can be better at clinical teaching rather than having to focus on research and getting grant dollars like [PhD-trained faculty]."

Uncertainty

Some participants described the uncertainty of DAT degree programs based on global understanding of the overall focus, as well as the quantity of available DAT programs currently established. Quinn noted, "I think one of the difficulties is that there is not a great understanding of what the DAT degree involves, and that it can vary from institution to institution. I have been unable to find a very clear description of what the degree is." Participants also discussed a lack of understanding about how the degree would influence the future of the athletic training profession. Maya mentioned,

The DAT [degree] is new in a sense, so it is unknown how it is going to play out. I wish I had a crystal ball so I could see how the DAT [degree] would influence the employability, the salary earning potential, etc. of athletic trainers but that is going to take time to play out. I think that is going to be probably one of those things that is just going to take a lot of time, which is something that as a profession we have been kind of battling.

Specific to athletic training education, Mellie noted,

Without a better understanding of the actual skillset [DAT-credentialed ATs] can bring to the table, it is difficult to piece

together how we can best incorporate their skillset to enhance out curricular offerings and help bridge the gap between the academic side and the clinical side. I think it could be a huge selling point, but we need a better understanding of what it actually all could mean.

For positions in academia, some participants commented on uncertainties whether DAT-credentialed faculty can meet expectations for promotion and tenure. Jake explained,

I think there is a certain lack of clarity about what the education of a DAT program entails and whether it produces individuals who are ready for [an academic] job, particularly if they are stepping into a tenure-track position. So, I'd say my hesitation about the DAT degree is probably more about the lack of familiarity and information on what [DAT graduates] can actually do.

DISCUSSION

After an analysis of the landscape of athletic training education, the Strategic Alliance instituted a degree-level change that mandates the delivery of professional athletic training programs at the master's degree.¹ The shift of athletic training education creates new space for postprofessional education, which results in the need to focus on residencies and doctoral programs within athletic training education, including the DAT degree.⁵ These postprofessional opportunities promote the development of lifelong learners and clinical specialties, which allow ATs to continuously seek advancement and enrichment in their careers.⁵ The DAT sparked interest among clinicians to gain advanced clinical skills and the ability to provide enhanced patient-centered care.⁷ In addition to the desire to gain advanced clinical skills, other health care professions have suggested that an advanced practice doctoral degree would create graduates who are well suited to teach professional students on the basis of their recognized qualifications.^{2,3} Whereas the DAT has positive associations among academic employers^{7,8} and has been established as an opportunity for postprofessional education and the creation of advanced practice leaders,⁵ it is clear that the impressions regarding the DAT and DAT-credentialed ATs may not accurately align with the primary intent of DAT programs to develop advanced practice leaders.

Academic employers in our study described their impressions regarding the DAT degree, including the enhancement of clinical expertise, knowledge and implementation of innovative practices, and the application of practice-based research. Participants also explained global impressions of the DAT degree and its application to both the clinical and academic realms of the profession. However, uncertainty related to the unknown of salary earning potential, employability, and general understanding of the degree were also noted amongst participants.

Clinical Expertise, Advanced Practice, and Innovative Practice

Participants in our study noted that, although there are several modes of postprofessional education, their hope was for DAT programs to provide the clinical expertise and advanced clinical education that was needed because of the degree transition. The opportunity of completing a DAT

program was idealized to provide clinical experts and specialists within athletic training. This idea of structured curricula to build on previous knowledge and experience in specific areas creates the clinical experts.^{4,5} The findings of our study identify those misconceptions about the role and intent of the DAT degree exist and may be ambiguous to many stakeholder groups. It is necessary to emphasize that the expressed desire and need for clinical specialists and experts, as suggested by our participants, are not the outcomes of the DAT degree but are rather aimed toward the outcomes and goals of accredited athletic training residency programs and the 8 identified specialty areas of athletic training practice (prevention and wellness, primary care, orthopedics, rehabilitation, behavioral health, pediatrics, performance enhancement, and urgent and emergent care).⁴ The expected outcomes for the DAT programs are to produce and facilitate advanced practice leadership which is identified as desirable for those ATs earning doctoral degrees.^{5,6}

In addition to identifying the need for clinical expertise, academic employers highlighted several perceived characteristics of advanced practice for DAT-credentialed athletic trainers. Advanced clinical practice has been defined by the Strategic Alliance:¹⁸

A level of athletic training practice that utilizes extended and expanded skills, experience and knowledge in assessment, planning, implementation, diagnosis and evaluation of the care required. Athletic trainers practicing at this level are educationally prepared at the post-professional level with advanced education and training within athletic training and may work in either a specialist or generalist capacity.

Participants in our study specifically thought the DAT would enhance clinical practice and advance their ability to implement evidence-based practice (EBP) concepts, which has been noted as an expectation for faculty with a DAT degree.⁷ Specifically, Huxel Bliven et al⁷ reported that stakeholders' believed DAT-credentialed faculty members are expected to be up to date with using EBP concepts and how to encourage or influence others on how to incorporate EBP into clinical practice. Similarly, in nursing practice, advanced-practice degree holders (those with a doctor of nursing practice [DNP] degree) are expected to learn about and embody EBP upon degree completion.¹⁹ Ultimately, because the DAT degree aims to create advanced practice ATs, DAT-credentialed faculty may be better suited to model evidence-based clinical skills; whereas, a doctoraltrained faculty via an academic doctorate (eg, PhD) serve the profession differently, through the scholarship of discovery. This complementary relationship has been long established in nursing, between PhD- and DNP-trained nurses.²⁰ On the contrary, as an entry-level degree into the profession the doctor of physical therapy practice is not designated for advanced practice and as such does not lead to the same expectation of leadership in EBP.

In addition to characteristics of advanced practice, the use of innovative practices were also identified by our participants as an area that would flourish after the completion of a DAT program. Graduates of DNP programs have indicated their advanced-practice training enhanced their self-perceptions as leaders and innovators,²¹ a clear need in an ever-evolving health care system.²² Participants also noted the DAT-

credentialed faculty may help to minimize the gap between didactic and clinical learning environments by effectively modeling best practices in both the classroom and clinical environment. Although not the original intention of the DNP degree, the same evolution to fill the gap of quality educators able to characterize clinical practice in the classroom occurred in nursing.²³

Thus, whereas the creation of clinical specialists and experts with specific skill sets is expected of accredited athletic training residencies, the facilitation of advanced-practice leadership allows for individuals with a DAT degree to fill the numerous clinical leader roles the profession offers such as clinical education coordinators, preceptors, and other academic positions.⁵ Not only do advanced practice leaders improve clinical leadership, but they embody the leadership and soft skills to promote and continue the advancement of the athletic training profession.²⁴ Again, the DAT runs parallel to the DNP in its aim to develop practice leaders and agents of change in health care delivery.²⁵

Practice-Based Research

Practice-based research is the final step of translational research that is conducted in clinical practice to advance individuals' knowledge through clinical application.^{26,27} The overarching goal of practice-based research is to translate research findings to the implementation of research recommended practices.²⁷ The translation of research to clinical practice is important in enhancing care and identifying new clinical questions to address gaps in care.²⁷

To produce evidence to guide clinical decision-making, clinicians and researchers should come together to engage in this translational research, improving the point of care.^{26,28-30} As an element of most DAT programs, practice-based research may be the conduit to bring DATcredentialed ATs and PhD-trained researchers together to produce meaningful research studies conducted at the point of care as well as assess the effectiveness of preventative and health care provided to diverse populations.^{26,29} It would be ideal to translate the bench and bedside findings to clinical practice while also bringing the problems encountered in clinical practice to somewhat controlled research environments to more effectively produce patient care solutions that are meaningful for both patients and providers.²⁸ Not only would the translation of bedside and bench findings to clinical practice be ideal, the DAT-credentialed ATs can share their practice-based research skills in the classroom. Teaching students to find value in clinically meaningful research and how to disseminate that information into clinical decisions as they continue with their education and future careers will advance the profession and ensure practice is truly based in the evidence. DAT-credentialed ATs are well positioned to fill this role in conducting and implementing practice-based research, but they are also prepared as potential educators with knowledge of implementing practice-based research into athletic training programs to help students understand the concepts and establish a basis for their careers.^{3,7} The DAT-credentialed ATs are qualified to teach in athletic training education programs due to their ability to bridge this gap between theory and application.^{3,7}

Global Impressions and Uncertainty

Many academic employers shared their global impressions regarding the DAT degree and its emphasis on clinical versus academic considerations, its ability to advance practicing ATs, and its ability to evolve athletic training education. The DAT is a route that provides the ability to educate the upcoming generation and provide excelled leadership within the profession itself. A complementary and hybrid approach to education and clinical practice can benefit the larger profession, as it has in nursing.²⁰ The global impressions of the DAT degree are well accepted and create potential for additional opportunities to advance the profession as a whole; however, there is also a need to know and understand more about the degree as it shifts a longstanding paradigm in education.²

Although the global impressions regarding the DAT are accepted, the uncertainty detailed by participants outlines the need for further clarification regarding the degree programs. Participants discussed their impression of uncertainty in regard to the global understanding, quantity of available programs, and their overarching purpose or identified outcomes. A variety of DAT programs differ based on their educational tracks and foci. Programs continue to proliferate, and efforts have been made to inform the athletic training profession about the purpose, admissions expectations, and programmatic outcomes in the NATA news.³¹ As an early mechanism to communicate the available programs, this has been somewhat effective; however, a centralized database where potential learners could identify programs and their goals would be ideal.

Some clinicians perceived that the possession of a higher degree, such as the DAT, would correlate with a higher salary based on other doctoral education trends, but employers are concerned that the clinical doctorate may be difficult to compensate.^{3,7} Other stakeholders expressed a desire to hire candidates with a DAT degree because they are perceived to have the ability to enhance patient care; however, it remains unidentified how the DAT will influence the employability or salary earning potential of ATs.^{7,8} Continued attention should be paid to postprofessional pathways and larger data sets should be sought to characterize the outcome trends for DAT-degree holders.

Limitations and Future Directions

Although we were able to achieve saturation for data collection, participants for this study were based on a nonrandomized convenience sample of academic employers who met the inclusion criteria. Their familiarity and knowledge of the DAT degree as well as experiences with ATs who possess the DAT credential may have influenced their perceptions of the degree based on their interactions. Because the DAT is a new postprofessional pathway to achieve advanced education within the athletic training education continuum, the knowledge, understanding, and acceptance of the degree lacks wholeness and accuracy.

Further research is needed to determine whether the identified perceptions of the DAT degree and DAT-credentialed ATs are shared beyond the scope of academic employers. Many participants in the study discussed the value of advanced clinical practice; understanding clinical employers' perceptions would be beneficial to confirm the findings of the current study. In addition, it is imperative to clarify that the intention of the DAT degree as a postprofessional pathway is fundamentally different from professional education. Specifically, the purpose of postprofessional education is to expand the depth and breadth of knowledge of an already credentialed provider, and the areas in which that expansion occurs may be student driven or program driven. As postprofessional pathways continue to evolve and the athletic training profession progresses, DAT programs should continue to collectively develop advanced practice leaders while also accounting for consumer preferences in the marketplace.

CONCLUSIONS

The current study examined academic employers' impressions regarding the qualifications of ATs with the DAT degree. Participants demonstrated positive associations with the DAT, but the current perceptions of academic employers only give a baseline understanding of the impact of the degree in totality. A common trend that leads to many misconceptions of the DAT is the lack of understanding of the degree itself, and the specific role of the DAT degree program remains unclear to many. These outcomes call for professional advocacy through the Strategic Alliance to promote, advocate, and educate ATs on the benefits of the DAT in development of advanced practice leaders in athletic training. Moreover, there is a need for more in-depth perceptions of the DAT degree, specifically from alumni who possess the DAT credential who can speak to how the degree has affected their professional development and career pathway.

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