

2021

Employability in Academe for Athletic Trainers with the Doctor of Athletic Training Degree

Bonnie L. Van Lunen
Old Dominion University, bvanlune@odu.edu

Stephanie H. Clines

Tyler Reems

Lindsey E. Eberman

Dorice A. Hankemeier

See next page for additional authors

Follow this and additional works at: https://digitalcommons.odu.edu/pt_pubs



Part of the [Higher Education Administration Commons](#), [Nursing Commons](#), [Rehabilitation and Therapy Commons](#), and the [Sports Sciences Commons](#)

Original Publication Citation

Van Lunen, B. L., Clines, S. H., Reems, T., Eberman, L. E., Hankemeier, D. A., & Welch Bacon, C. E. (2021). Employability in academe for athletic trainers with the doctor of athletic training degree. *Journal of Athletic Training*, 56(3), 220-226. <https://doi.org/10.4085/1062-6050-0253.20>

This Article is brought to you for free and open access by the Rehabilitation Sciences at ODU Digital Commons. It has been accepted for inclusion in Rehabilitation Sciences Faculty Publications by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.

Authors

Bonnie L. Van Lunen, Stephanie H. Clines, Tyler Reems, Lindsey E. Eberman, Dorice A. Hankemeier, and Cailee E. Welch

Employability in Academe for Athletic Trainers With the Doctor of Athletic Training Degree

Bonnie L. Van Lunen, PhD, ATC*; Stephanie H. Clines, PhD, ATC†; Tyler Reems, MSAT, ATC‡; Lindsey E. Eberman, PhD, LAT, ATC§; Dorice A. Hankemeier, PhD, ATC||; Cailee E. Welch Bacon, PhD, ATC¶

*Old Dominion University, Norfolk, VA; †Sacred Heart University, Fairfield, CT; ‡Ergonomic Consultants of Indiana, Carmel; §Indiana State University, Terre Haute; ||Ball State University, Muncie, IN; ¶Department of Interdisciplinary Health Sciences, School of Osteopathic Medicine in Arizona, Mesa

Context: The doctor of athletic training (DAT) degree has recently been introduced into academe. Limited literature exists regarding how individuals with this degree can become part of an athletic training faculty.

Objective: To identify department chairs' perceptions of the DAT degree and determine whether they viewed the degree as viable when hiring new faculty within a postbaccalaureate professional athletic training program.

Design: Cross-sectional study.

Setting: Online survey instrument.

Patients or Other Participants: A total of 376 department chairs who had oversight of Commission on Accreditation of Athletic Training Education athletic training programs were invited to participate. Of these, 190 individuals (50.5%) accessed the survey, and 151 of the 190 department chairs (79.5%) completed all parts of the survey.

Main Outcome Measure(s): A web-based survey instrument consisted of several demographic questions and 4-point Likert-scale items related to perceptions of the DAT degree. Independent variables were degree qualifications, advanced degree requirements, institutional control, student enrollment, current faculty with a clinical doctorate, and institutional degree-

granting classification. The dependent variables were the department chairs' responses to the survey items.

Results: More than 80% of department chairs were moderately or extremely familiar with the concept of an advanced practice doctoral degree, and 64% believed it would be extremely to moderately beneficial to hire someone with this degree in the athletic training program. Furthermore, 67% of department chairs were very likely or likely to hire someone with a DAT degree and expected they would do so in the next 5 years. Characteristics associated with higher perception scores were lower institutional student enrollment, having more current faculty with an advanced practice doctoral degree, and a lower institutional degree-granting classification.

Conclusions: Department chairs recognized the DAT degree as a viable degree qualification for teaching in professional athletic training programs. Future researchers should examine the need for athletic trainers with the DAT degree in clinical practice settings.

Key Words: health care professionals, advanced practice doctorate, postprofessional education

Key Points

- Department chairs reported that it would be beneficial to hire an individual with a doctor of athletic training (DAT) degree in an athletic training program, and they were also likely to hire a degree holder within the next 5 years.
- Most department chairs were familiar with the changes in athletic training education requirements, considered an individual with the DAT as able to teach at the master's level, and would require an individual with an advanced degree above the specified degree for teaching purposes.
- The DAT degree is a viable degree qualification to teach in a professional athletic training program and can align with several different faculty line appointments.

Athletic training education has undergone considerable evolution over the past several years. Recent changes in athletic training education include the 2015 decision of the Athletic Training Strategic Alliance¹ that all professional programs be at the postbaccalaureate level by 2022, thereby eliminating the traditional bachelor's degree as a pathway for entry into professional practice. The transition to a postbaccalaureate degree has also created a shift in the chronology for athletic training students seeking to advance their education after credentialing. Under the current infrastructure, students who obtained a professional

bachelor's degree in athletic training have the option of pursuing athletic training advanced practice and leadership skills via a postprofessional master's degree program in athletic training. However, with these changes to athletic training education, the doctor of athletic training (DAT) degree could perhaps serve as an option for athletic trainers (ATs) seeking to further their education in the field. The *DAT degree* is defined as

[A] post-professional advanced practice doctoral degree. A primary purpose of attaining a post-professional

advanced practice doctoral degree is to become a clinical scholar with advanced knowledge and skills needed for the delivery of patient care at the highest levels.^{2(p3)}

Although not explicitly stated in the definition, as clinical scholars with advanced knowledge and skills, these individuals would have the requisite knowledge to serve as both clinical and classroom educators, and a desire to use the degree in these employment opportunities has been shown.⁵ The DAT programs vary in program curricular content, delivery mode, and area of focus while including advanced practice skills, leadership development, or both.^{4,5} Several potential reasons for ATs to pursue this educational opportunity include the shortage of clinically prepared leaders, the shortage of terminally prepared ATs able to teach within postbaccalaureate degree programs, and the need to produce individuals who can initiate and engage ATs at higher levels of clinical reasoning.

The DAT degree was not intended to replace the need for the academic doctorate (eg, doctor of philosophy [PhD], doctor of education [EdD]), yet it provides a viable option for those seeking to increase knowledge, skills, and abilities in athletic training, which can be maximized in leadership, clinical, and teaching positions. The Higher Learning Commission guidelines⁶ state that instructors should possess an academic degree relevant to what they are teaching and at least 1 level above the level at which they teach. In the most recent Commission on Accreditation of Athletic Training Education (CAATE) Analytics Report,⁷ 37.7% (n = 137) of program directors and 52.1% (n = 189) of clinical education coordinators served in their role with only master's degrees; therefore, the transition to the postbaccalaureate professional athletic training degree will continue to increase the need for doctoral-educated individuals who can serve as teachers, advisers, and research mentors in these new programs.

In a preliminary study, various stakeholders' perceptions were assessed regarding the DAT degree.⁸ Faculty administrators (ie, college or university department chairs, deans, provosts, presidents) who were asked to consider the viability of this degree for their programmatic and institutional needs were somewhat or very familiar with the degree. Additionally, they commented that DAT degree holders were thought to be best aligned with nontenure-track positions, while also having the qualifications to teach because of their ability to bridge theory and application. In addition, the faculty administrators indicated that DAT degree holders had increased clinical expertise, would enhance overall faculty research productivity, and were a viable alternative to hiring a terminal academic degree holder, depending on the needs of the institution.⁸

Although faculty administrators with different institutional roles have previously been surveyed on their perceptions of the DAT degree, it is unclear how specific administrators such as department chairs, who have intimate knowledge of the needs of athletic training programs, perceive the degree. Department chairs are often responsible for the recruitment and retention of faculty; therefore, they have a vested interest in aligning faculty with appropriate faculty lines associated with credentials and degrees. As the DAT degree has endured and more programs have emerged, it is pertinent to explore the need for this degree as a postprofessional option by understand-

Table 1. Select Institutional Demographics

Variable	No. (%)
Institution type	
Private	72 (48)
Public	77 (51)
Did not report	2 (2)
Total student enrollment	
<5000	61 (40)
>5000	90 (60)
Carnegie classification	
Baccalaureate	28 (18)
Master's	81 (54)
Doctoral	38 (25)
Did not report	4 (3)
Type of athletic training program	
Undergraduate	129 (78)
Graduate	24 (14)
Both	13 (8)
Advanced degree required to teach?	
Yes	134 (81)
No	24 (14)
Did not report	8 (5)

ing the roles and responsibilities associated with faculty lines for which this degree may be suited. Therefore, the purpose of this study was to identify department chairs' perceptions of the DAT degree and determine whether they viewed the DAT degree as a viable degree when hiring new faculty for different faculty lines within a postbaccalaureate professional athletic training program based on institutional criteria. Department chairs were the targeted audience, as they are often responsible for the hiring of faculty within an institution and should have direct knowledge of athletic training programmatic needs.

METHODS

Participants

We contacted the CAATE to identify department chairs at institutions where accredited professional athletic training programs were housed. A total of 376 department chairs were identified and contacted via email to complete a survey regarding their perceptions of the DAT degree. The survey was accessed by 190 individuals (access rate = 50.5%), and 151 of those completed all parts of the survey (completion rate = 79.5% of those who accessed the survey). Institutional demographic information is provided in Table 1. Participation in the survey implied informed consent, and the study was approved by the exempt review committee at the university.

Survey Instrument

A web-based survey was developed and hosted in Qualtrics (Qualtrics, LLC, Provo, UT). The survey consisted of 3 sections focused on (1) institutional demographics (institutional type, student enrollment, Carnegie classification, faculty and departmental program information); (2) information related to types of faculty lines in the department (lecturer or instructor, clinical faculty, tenure-track faculty, research faculty), degree

qualifications for the faculty lines, and roles and responsibilities (teaching, service, scholarship, advising) associated with each faculty line; and (3) terminal clinical degree specific questions (5 items; Table 2). Some survey items included follow-up questions determined by the response to the initial question, which therefore altered the length of the survey for each participant. Definitions related to associated terminology were provided within the opening page of the survey, which included references to a clinical doctorate. We defined a *professional clinical doctorate* as a practice-focused degree obtained in preparation to enter a given profession. Examples of clinical doctorate degrees included the doctor of physical therapy degree, the doctor of audiology degree, and the doctor of pharmacy degree. A *postprofessional clinical doctorate* or *advanced practice terminal degree* was defined as a practice-based degree designed for professionals who are currently certified or licensed that aims to enhance professional expertise or specialization within the field. An example of a postprofessional clinical doctorate degree is the doctor of nursing practice (DNP) degree. We defined the *DAT degree* as an advanced practice postprofessional degree focused on advancing knowledge, skills, and clinical abilities that serves to enhance professional expertise beyond the entry-level competencies of ATs. The survey contained a mix of close-ended questions and Likert-scale items.

The survey instrument was developed by 3 athletic training education researchers (B.L.V.L., S.H.C., T.R.) who had direct experience with postprofessional and professional education programs. Three administrators (non-authors) associated with athletic training programs were also consulted. These 3 administrators all served as division or department leaders and were currently in positions that oversaw athletic training programs at the professional or postprofessional level. The first draft of the survey was developed from the consultation and submitted to the 3 administrators for feedback. Feedback on the clarity of the questions and associated language was provided. The survey was revised and distributed to experts in athletic training education (3) who provided qualitative feedback regarding the clarity and relevance of each item related to the content by determining if the question was sufficient or needed attention, with suggestions for improvement noted. Minor modifications were made, and the revised survey was then pilot tested by experts in athletic training survey research (5) who had experience in research content and design, and minor modifications were made. Reliability of the instrument was not assessed.

Procedures

An email containing information about the survey was sent to department chairs (376) at institutions housing CAATE-accredited professional athletic training programs in spring 2016. The email supplied (1) the purpose and importance of the research study, (2) a request for participation, (3) the estimated time to complete the survey (15 minutes), (4) the hyperlink to the survey Web page, and (5) the contact information for the researcher. Department chairs were instructed to answer survey questions to the best of their abilities. If an athletic training program was not transitioning from the professional baccalaureate level to the postbaccalaureate level, the survey automatically

Table 2. Likert-Scale Survey Questions and Response Choices Specific to the Terminal Clinical Degree^a

Question	Response Choice (Value)
1. How likely would it be that you would hire someone with a terminal clinical degree?	Very likely (1) Likely (2) Unlikely (3) Very unlikely (4)
2. How likely would it be that you would hire someone with a terminal clinical degree in the next 5 years?	Very likely (1) Likely (2) Unlikely (3) Very unlikely (4)
3. How beneficial would it be for you to hire someone with a terminal clinical degree within the athletic training program?	Extremely beneficial (1) Beneficial (2) Somewhat beneficial (3) Not beneficial (4)
4. How familiar are you with the changing educational requirements for athletic training education?	Very familiar (1) Familiar (2) Somewhat familiar (3) Not familiar (4)
5. How familiar are you with the concept of clinical doctoral degrees?	Very familiar (1) Familiar (2) Somewhat familiar (3) Not familiar (4)

^a Items are presented in their original format.

concluded when a *no* answer was submitted to this question. We sent a follow-up email reminder, which contained the same information as the initial email, 1 to 4 weeks later.

Data Analysis

Survey data were automatically sent to the university's database-collection system, and responses were generated in statistical software (SPSS version 21.0; IBM Corp, Armonk NY). We calculated means, standard deviations (SDs), and frequencies for the descriptive variables. Several independent variables were assessed: institutional control (public, private), institutional student enrollment (<5000, >5000), institutional degree-granting classification (doctoral, master, baccalaureate), current faculty with a clinical doctorate (yes, no), advanced degree requirement for teaching (yes, no). The dependent variables were the department chairs' responses to the 5 Likert-scale items. When the independent variable consisted of 2 groups, we used Mann-Whitney *U* tests to examine between-groups differences with the significance level set at $P \leq .05$. When the independent variable consisted of 3 groups, we conducted Kruskal Wallis *H* tests to detect differences. A post hoc Mann-Whitney *U* test with a Bonferroni adjustment was used to correct for type 1 errors. The significance level was set at $P \leq .05$ for each Kruskal-Wallis *H* test; taking into consideration the Bonferroni adjustment for 3 comparison groups, we set the significance level for each post hoc Mann-Whitney *U* test at $P \leq .017$.

RESULTS

Institutional Control

Seventy-seven department chairs were employed at a public institution, while 72 were employed at a private institution. No differences existed between groups regarding the likelihood of hiring a person with a terminal clinical degree ($P = .39$), benefits of hiring a person with a terminal

clinical degree ($P = .90$), familiarity with the changing athletic training education requirements ($P = .17$), or familiarity with the concept of clinical doctoral degrees ($P = .64$) items.

Institutional Student Enrollment

Of the 151 department chairs who completed the survey, 61 were employed at an institution with a student enrollment of <5000 and 90 at an institutional with a student enrollment of >5000 . No differences were present between groups regarding the benefits of hiring an individual with a terminal clinical degree ($P = .22$), familiarity with the changing athletic training education requirements ($P = .28$), or familiarity with the concept of clinical doctoral degrees ($P = .95$). However, department chairs employed at an institution with a student enrollment of <5000 were more likely (3.23 ± 0.77) than those at an institution with a student enrollment of >5000 (2.94 ± 0.87 ; $P = .043$) to hire an individual who possessed a terminal clinical degree for any program within their unit.

Institutional Degree-Granting Classification

Twenty-eight department chairs were employed at an institution with bachelor's degree-granting classification, while 81 were at a master's degree-granting institution, and 38 were at a doctoral degree-granting institution; data for 4 participants were missing for this demographic item. The perceived benefits of hiring a person with a terminal clinical degree differed ($P = .002$). Post hoc analyses revealed that department chairs employed at a bachelor's degree-granting institution perceived greater benefits of hiring someone with a terminal clinical degree (3.54 ± 0.79) than those at a master's (2.96 ± 0.84 ; $P = .001$) or doctoral degree-granting institution (2.82 ± 1.06 ; $P = .004$). Familiarity with the changing athletic training education requirements item also differed ($P = .02$). Compared with department chairs at bachelor's degree-granting institutions (3.43 ± 0.63), those employed at master's degree-granting institutions were more familiar with the changing educational requirements for athletic training education (3.73 ± 0.52 ; $P = .009$). No differences were demonstrated in the likelihood of hiring an individual with a terminal clinical degree ($P = .68$) or familiarity with the concept of clinical doctoral degrees ($P = .17$).

Current Faculty with a Clinical Doctorate

Thirty-five (23.3%) department chairs were currently employed faculty members with a clinical doctoral degree in their area, whereas 111 (73.5%) department chairs were not. Five department chairs were unsure if any of their faculty members possessed a clinical doctoral degree. As expected, department chairs with current faculty who possessed a terminal clinical doctoral degree were more familiar with the concept of a terminal clinical doctoral degree (3.66 ± 0.64 ; $P = .015$) than those without faculty who had a terminal clinical doctoral degree (3.36 ± 1.06). No differences were noted between groups regarding the likelihood of hiring a person with a terminal clinical degree ($P = .11$), benefits of hiring a person with a terminal clinical

degree ($P = .39$), or familiarity with the changing athletic training education requirements ($P = .93$).

Advanced Degree Requirement

A total of 129 department chairs (85.4%) indicated that their institution required an advanced degree in a given discipline to teach within their program, while 21 department chairs (13.9%) stated their institution had no such requirements. No differences existed between groups regarding the likelihood of hiring someone with a terminal clinical degree ($P = .53$), benefits of hiring someone with a terminal clinical degree ($P = .25$), familiarity with the changing athletic training education requirements ($P = .12$), or familiarity with the concept of clinical doctoral degrees ($P = .21$).

Perceptions of the DAT Degree

Overall, 48.8% ($n = 74$) of department chairs were extremely familiar with the concept of clinical doctoral degrees, 31.9% ($n = 48$) were moderately familiar, and 10.2% ($n = 15$) were only somewhat familiar. Furthermore, 60.8% ($n = 92$) of department chairs were extremely familiar with the changing educational requirements for athletic training education, and 25.3% ($n = 38$) were moderately familiar. Department chairs stated that it would be extremely (33.7%, $n = 51$) or moderately (30.7%, $n = 46$) beneficial for their unit to hire an individual with a terminal clinical degree within the athletic training program. An additional 21.1% ($n = 32$) of department chairs indicated it would only be somewhat beneficial, and 5.4% ($n = 8$) described it as not beneficial at all. When asked how likely they would be to hire someone who possessed a terminal clinical degree for any program within their unit, 31.3% ($n = 47$) of department chairs said very likely and 36.1% ($n = 54$) said likely. Conversely, 19.9% ($n = 30$) of department chairs were unlikely to hire someone who possessed a terminal clinical degree for any program within their unit, and 3.0% ($n = 4$) would not do so. Finally, department chairs indicated they would be very likely (27.7%; $n = 42$) or likely (41.6%; $n = 63$) to hire someone with a terminal clinical degree for any program in their unit within the next 5 years.

Degree Qualifications and Roles and Responsibilities of Faculty Lines

Teaching was identified as the primary role expected of an individual hired within a lecturer, clinical faculty, or tenure-track line, whereas scholarship was the primary role for research faculty lines (Table 3). The doctor of philosophy (PhD) degree was the option chosen most often for all faculty lines; however, respondents stated that the DAT degree was viable for hiring an individual into lecturer or instructor (52.7%, $n = 69$), clinical faculty (53.6%, $n = 37$), research faculty (25%, $n = 8$), and tenure-track (45.3%, $n = 63$) lines in their institutions if available (Table 4).

DISCUSSION

The purpose of our study was to examine the current perceptions of department chairs who were associated with professional athletic training programs regarding the

Table 3. Breakdown of Roles Within Institutional Faculty Lines

Faculty Line	Role	Frequency (%)
Lecturer or instructor (n = 131)	Advising	89 (67.9)
	Teaching	127 (96.9)
	Scholarship	29 (22.1)
	Service-community	90 (68.7)
Clinical faculty (n = 69)	Service-clinical	41 (31.3)
	Advising	44 (63.8)
	Teaching	66 (95.6)
	Scholarship	21 (30.4)
Research faculty (n = 32)	Service-community	47 (68.1)
	Service-clinical	41 (59.4)
	Advising	15 (46.9)
	Teaching	20 (62.5)
Tenure-track faculty (n = 139)	Scholarship	29 (90.6)
	Service-community	22 (68.8)
	Service-clinical	4 (12.5)
	Advising	117 (84.8)
	Teaching	134 (96.4)
	Scholarship	130 (93.5)
	Service-community	131 (94.2)
	Service-clinical	34 (24.5)

viability of employing a person with the DAT degree in their program. We were interested in assessing whether the DAT would be a degree that academic institutions would consider for different faculty lines within their programs. Most department chairs were familiar with the changes in athletic training education requirements, considered the DAT a degree they would recognize as qualifying an individual to teach at the master's level, and would require a person with an advanced degree above the specified degree for teaching purposes. The type of institution did not affect their perceptions; however, as the Carnegie classification increased, the perceived benefits of hiring an individual with the DAT degree decreased. The DAT degree was also an accepted degree for lines as a lecturer, clinical faculty, or tenure-track faculty and less desired for the research faculty lines.

The development of advanced practice in athletic training is not a new concept, as the postprofessional athletic training degree has existed since 1972, when the first program was accredited.⁹ The postprofessional athletic training degree evolved over time in that it first served as a route for taking the credentialing examination and is now aligned with advanced knowledge, skills, and abilities beyond the professional level. Individuals who attended these programs did so to advance their entry-level knowledge, increase their professional development, and align their careers for a life-long commitment to the discipline.¹⁰ With the evolution of the professional degree to the postbaccalaureate level, there will be a gap in the ability to advance clinical practice knowledge and other aspects of advanced leadership skills. Therefore, a pathway for athletic trainers to pursue formal educational growth, ie, the DAT degree, is essential. Individuals pursuing a DAT degree were committed to learning and believed that the degree would bring them professional development and advancement.³

The nursing profession has examined this type of advanced terminal degree for the past several years. The DNP degree was developed to prepare nurses with the competencies needed to improve health care systems through administrative leadership and advanced practice

Table 4. Accepted Degree Qualifications for Institutional Faculty Lines

Faculty Line	Degree	Frequency (%)
Lecturer or instructor (n = 131)	PhD	108 (82.4)
	EdD	94 (71.8)
	DSc or ScD	54 (41.2)
	DAT	69 (52.7)
Clinical faculty (n = 69)	Other	33 (25.2)
	PhD	47 (68.1)
	EdD	43 (62.3)
	DSc or ScD	29 (42.0)
Research faculty (n = 32)	DAT	37 (53.6)
	Other	25 (36.2)
	PhD	30 (93.8)
	EdD	24 (75)
Tenure-track faculty (n = 139)	DSc or ScD	11 (34.4)
	DAT	8 (25)
	Other	1 (3)
	PhD	133 (95.7)
	EdD	107 (77)
	DSc or ScD	61 (43.9)
	DAT	63 (45.3)
	Other	5 (4)

Abbreviations: DAT, doctor of athletic training; DSc or ScD, doctor of science; EdD, doctor of education; PhD, doctor of philosophy.

roles.¹¹ In 2004, the American Association of Colleges of Nursing¹² adopted a resolution that the DNP degree would become the educational requirement for entry into advanced practice registered nursing by 2015. The position statement outlined the need for administrative and advanced practice leaders with stronger preparation in systems-based practice improvement and translational research. Other disciplines (eg, medicine, pharmacy, physical therapy, nursing) have found it difficult to develop leadership, translational science, and systems improvement competencies while a student is acquiring the didactic and experiential learning required for entry-level clinical practice.¹¹ Although educational programs are calling on DNP-trained individuals for instruction, pedagogical training has not been part of the typical degree program, which may have negative implications for socializing into that role. Those with DNP degrees believe they are ready to function in a faculty role,¹³ yet experts^{14,15} have recommended that these individuals seek additional preparation in the science of pedagogy either through their curriculum or through onboarding by the hiring institution. This component may also be applicable for those completing DAT degree programs, as the foci of the programs do not necessarily align with the outcomes.^{4,5}

As a terminal degree in athletic training, the DAT degree could mitigate the future athletic training faculty shortage and close the practice-education gap. The number of faculty in athletic training with terminal degrees is limited, as baccalaureate programs have relied on graduate assistants and clinical faculty to assist with teaching needs.¹⁶ Approximately one-third of professional athletic training program directors had a master's degree,⁷ and many individuals in the other faculty lines who teach within professional programs also possess the master's degree. The DAT would be a route to prepare these individuals for the rigors and demands of a faculty role beyond that of an instructor. Most of the department chairs surveyed indicated that a degree above the master's level would be

needed to teach in postbaccalaureate programs; therefore, program administrators will need to examine how to meet these demands.

It is important to consider that the clinical DAT degree is not intended to inflate the postprofessional master's degree but to elevate postprofessional education in the profession. Although human capital theory suggests that the expansion of higher education provides practitioners with advanced practice skills to use in their jobs,^{17–19} educational credentialism suggests that educational attainment is more important than the actual acquisition and application of new skills.²⁰ All of higher education faces these concerns as clinical doctorates continue to proliferate. An author²¹ suggested that the advanced practice or postprofessional doctorate, as differentiated from the master's level, was more effective in developing advanced skills and demonstrating economic benefit to students.

The DAT degree may also be a route to bridge the practice-education and practice-research gaps. As professional standards for athletic training programs continue to evolve, the importance of clinical practice activities for those who teach in the academic program may need to be considered. Physical therapy program standards require that core faculty have doctoral preparation, an ongoing scholarly agenda, and contemporary expertise beyond that obtained in an entry-level program.²² Those holding the clinical doctorate as the highest terminal degree in physical therapy tend to be of junior rank and spend 10% of their time in clinical practice; more than half are clinical specialists in a defined area.²³ Although the purpose of the DAT degree includes becoming a clinical scholar with the advanced knowledge and skills needed to deliver patient care at the highest levels,² it will be necessary to prepare these individuals with pedagogy if they are to align with positions in academe. Our results indicate that individuals with a DAT will be able to teach in most athletic training programs and in different faculty lines, which will all soon be at the postbaccalaureate level. The ability to bring clinical practice experiences into the classroom is another component that the DAT degree may address, as several current programs include clinical content, and these individuals could remain clinically active while in academe, benefitting the educational training of students. This may be a valuable component for athletic training programs to consider. Additionally, individuals with a DAT may be poised to understand the role of research in clinical practice as they complete their programming related to clinical and patient outcomes, electronic medical records, and assessment of interventions in clinical practice. We divided faculty lines into 4 common categories used at several institutions, but these lines may not have been all inclusive. Lecturers are traditionally individuals whose main function is course instruction, whereas clinical faculty lines often include clinical supervision, practice, or management along with instruction. Some clinical faculty lines, depending on the type of institution, also require scholarship. Tenure-track lines are typically associated with some teaching and some scholarship as defined by the institution, and research lines predominantly encompass positions that are solely aligned with research activities. Our department chairs completed the survey in the context of their host institution; therefore, their responses were associated with how their host institution defined them.

Limitations and Future Research

Our results reflect the perceptions of department chairs associated with professional athletic training programs and are not transferrable to other academic administrators at an institution. Our research focused on the viability of the DAT degree within academe, but little is known about the need for the degree in clinical practice settings. We must understand more about why individuals pursue the DAT degree and the benefits they perceive this type of degree will provide them, as well as employers' perspectives on how this degree will benefit their health care system and the patients they serve. Information from graduates of DAT programs would be helpful in guiding further development of programming and alignment with suitable positions. Lastly, additional information with respect to degree programs in which the clinical terminal degree is more widely accepted should be explored.

CONCLUSIONS

The surveyed department chairs were aware of the educational changes in athletic training and believed that the DAT degree was a viable degree for many types of faculty lines at their institutions. Due to the changes within athletic training educational programs, we must identify instructional solutions that will meet the needs of students and the institution. The DAT degree-prepared individual has a varied background based on current programming models and therefore could be the bridge for athletic training programs as they seek to develop clinical ATs who can examine patient care topics. This type of doctoral education does not necessarily prepare individuals for academe responsibilities of teaching, advising, and scholarship; therefore, programs may need to consider embedding preparation for the academy in or as a supplement to their programming.

REFERENCES

1. Strategic alliance degree statement. Athletic Training Strategic Alliance Web site. <http://atstrategicalliance.org/statements/strategic-alliance-degree-statement>. Accessed March 14, 2020.
2. Athletic training glossary. Commission on Accreditation of Athletic Training Education Web site. <https://caate.net/wp-content/uploads/2019/06/IAT-Glossary-v.3-Final-.pdf>. Accessed April 25, 2020.
3. Mulder ER, Welch Bacon CE, Edler JR, et al. Motivators, anticipated challenges, and supportive factors for athletic trainers pursuing the Doctor of Athletic Training degree. *Athl Train Educ J*. 2018;13(2):148–157. doi:10.4085/1302148
4. Hamson-Utley J, Ave J, Weiss L. Athletic training education pathways: the doctorate in athletic training. *NATA News*. February 2019:28–29.
5. Van Lunen B. The future of athletic training and the role of DAT/residency programs in building clinical expertise. Paper presented at: Virginia Athletic Trainers' Association Student Symposium; January 4, 2020; Winchester, VA.
6. Determining qualified faculty through HLC's criteria for accreditation and assumed practices: guidelines for institutions and peer reviewers. Higher Learning Commission Web site. http://download.hlcommission.org/FacultyGuidelines_2016_OPB.pdf. Accessed March 7, 2020.
7. 2017–2018 CAATE analytic report. Commission on Accreditation of Athletic Training Education Web site. https://caate.net/wp-content/uploads/2019/07/2017-2018-Analytics-Report_VF.pdf. Accessed March 8, 2020.

8. Huxel Bliven KC, Potteiger K, Baker RT, Pitney WA. Part II: examining stakeholder perceptions of the postprofessional clinical doctoral degree in athletic training. *Athl Train Educ J*. 2018;13(3):205–218. doi:10.4085/1303205
9. Delforge GD, Behnke RS. The history and evolution of athletic training education in the United States. *J Athl Train*. 1999;34(1):53–61.
10. Mazerolle SM, Dodge TM. National Athletic Trainers' Association-accredited postprofessional athletic training education: attractors and career intentions. *J Athl Train*. 2012;47(4):467–476. doi:10.4085/1062-6050-47.4.11
11. Cronenwett L, Dracup K, Grey M, McCauley L, Meleis A, Salmon M. The Doctor of Nursing Practice: a national workforce perspective. *Nurs Outlook*. 2011;59(11):9–17. doi:10.1016/j.outlook.2010.11.003
12. AACN Position Statement on the Practice Doctorate in Nursing. American Association of Colleges of Nursing Web site. <https://www.aacnnursing.org/Portals/42/News/Position-Statements/DNP.pdf>. Published 2004. Accessed January 7, 2021.
13. Udalis KA, Mancuso JM. Perceptions of the role of the Doctor of Nursing Practice-prepared nurse: clarity or confusion. *J Prof Nurs*. 2015;31(4):274–283. doi:10.1016/j.profnurs.2015.01.004
14. AACN's vision for academic nursing. American Association of Colleges of Nursing Web site. <https://www.aacnnursing.org/Portals/42/News/White-Papers/Vision-Academic-Nursing.pdf>. Published 2019. Accessed April 20, 2020.
15. Agger CA, Oermann MH, Lynn MR. Hiring and incorporating Doctor of Nursing Practice-prepared nurse faculty into academic nursing programs. *J Nurs Educ*. 2014;53(8):439–446. doi:10.3928/01484834-20140724-03
16. Cavallario JM, Van Lunen BL. Preparation of the professional athletic trainer: a descriptive study of undergraduate and graduate degree programs. *J Athl Train*. 2015;50(7):760–766. doi:10.4085/1062-6050-50.1.13
17. Boud D, Tennant M. Putting doctoral education to work: challenges to academic practice. *Higher Educ Res Develop*. 2006;25(3):293–306. doi:10.1080/07294360600793093
18. Servage L. Alternative and professional doctoral programs: what is driving the demand? *Stud Higher Educ*. 2009;34(7):765–779. doi:10.1080/03075070902818761
19. Walters D. The relationship between postsecondary education and skill: comparing credentialism with human capital theory. *Can J Higher Educ*. 2004;34(2):97–124.
20. Brown DK. The social sources of educational credentialism: status cultures, labor markets, and organizations. *Sociol Educ*. 2001;74:19–34.
21. Zusman A. *Degrees of Change: How New Kinds of Professional Doctorates Are Changing Higher Education Institutions*. Berkeley, CA: Center for Studies in Higher Education. 2013;1–20.
22. Standards and required elements for accreditation of physical therapist education programs. Commission on Accreditation of Physical Therapy Education Web site. https://capteonline.org/uploadedFiles/CAPTEorg/About_CAPTE/Resources/Accreditation_Handbook/CAPTE_PTStandardsEvidence.pdf. Accessed April 24, 2020.
23. Hinman MR, Brown T. Changing profile of the physical therapy professoriate—are we meeting CAPTE's expectations? *J Phys Ther Educ*. 2017;31(4):95–104. doi:10.1097/JTE.0000000000000015

Address correspondence to Bonnie L. Van Lunen, PhD, ATC, Old Dominion University, Room 2114, Health Sciences Building, Norfolk, VA 23529. Address email to bvanlune@odu.edu.