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## Preparedness of Doctor of Athletic Training (DAT) Credentialed Athletic Trainers to Take Roles in Academia

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## Preparedness of Doctor of Athletic Training (DAT) Credentialed Athletic Trainers to Take Roles in Academia

### Abstract

#### ABSTRACT

**Purpose:** The athletic training education landscape is shifting, which has opened new avenues for postprofessional education. Previous literature has investigated stakeholder perceptions and attitudes towards hiring a DAT degree holder in academia. Yet, there is no research investigating the experiences of DAT degree holders in academic roles. The purpose of this study was to explore the preparation and experiences of DAT degree holders related to their roles in academia. **Methods:** We used a consensual qualitative research design to explore the lived experiences of DAT degree holders in academia through semi-structured web-based interviews. Twelve DAT degree holders with at least one-year post-graduation that have been in their current academic role for at least 6 months (5 male, 7 female) were interviewed. Participants engaged in semi-structured interviews that were audio-recorded and transcribed verbatim. We used a constant comparative analysis and multi-analyst triangulation to create a consensus codebook including domains and categories identified from the transcripts. Credibility and trustworthiness were established through member checking, multiple researcher triangulation, and auditing. **Results:** Three domains emerged from the experiences of DAT degree holders in their preparation within their program and their transition into education: 1) Common program preparation 2) Program variability and 3) Integration. Participants indicated they were commonly prepared in the areas of *advanced clinical practice skills, clinically meaningful research, the value of service, and academic culture*. However, there was variability in preparation regarding *instructional design and program administration*. Finally, participants spoke to receiving *system acceptance* through the perceived *benefits of hybrid faculty* as well as their increased *translational teaching skills*. **Conclusions:** DAT degree holders are prepared to assume academic roles based on the preparation received in their DAT program, despite not being formally prepared for teaching. Doctor of Athletic Training (DAT) degree holders are accepted by academia due to the perceived benefit of hybrid faculty and their ability to bridge the gap between didactic and clinical learning in professional athletic training programs

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### ABSTRACT

**Purpose:** The athletic training education landscape is shifting, which has opened new avenues for postprofessional education. Previous literature has investigated stakeholder perceptions and attitudes towards hiring a DAT degree holder in academia. Yet, there is no research investigating the experiences of DAT degree holders in academic roles. The purpose of this study was to explore the preparation and experiences of DAT degree holders related to their roles in academia. **Methods:** We used a consensual qualitative research design to explore the lived experiences of DAT degree holders in academia through semi-structured web-based interviews. Twelve DAT degree holders with at least one-year post-graduation that have been in their current academic role for at least 6 months (5 male, 7 female) were interviewed. Participants engaged in semi-structured interviews that were audio-recorded and transcribed verbatim. We used a constant comparative analysis and multi-analyst triangulation to create a consensus codebook including domains and categories identified from the transcripts. Credibility and trustworthiness were established through member checking, multiple researcher triangulation, and auditing. **Results:** Three domains emerged from the experiences of DAT degree holders in their preparation within their program and their transition into education: 1) Common program preparation 2) Program variability and 3) Integration. Participants indicated they were commonly prepared in the areas of *advanced clinical practice skills*, *clinically meaningful research*, *the value of service*, and *academic culture*. However, there was variability in preparation regarding *instructional design* and *program administration*. Finally, participants spoke to receiving *system acceptance* through the perceived *benefits of hybrid faculty* as well as their increased *translational teaching* skills. **Conclusions:** DAT degree holders are prepared to assume academic roles based on the preparation received in their DAT program, despite not being formally prepared for teaching. Doctor of Athletic Training (DAT) degree holders are accepted by academia due to the perceived benefit of hybrid faculty and their ability to bridge the gap between didactic and clinical learning in professional athletic training programs

**Keywords:** postprofessional education, doctoral degree, higher education

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## INTRODUCTION

Athletic training education has undergone a major shift since the decision of the Athletic Training Strategic Alliance in 2015 to move the entry-level degree to the master's level.<sup>1</sup> Due to the change in degree requirements, the direction for postprofessional education must also adapt to develop advanced practitioners. A large majority of athletic trainers (81.8%) reported they see formal education beyond the professional level as a major component to advance clinical practice.<sup>2</sup> With the changing landscape in postprofessional education specifically, the advanced practice, clinical Doctorate in Athletic Training (DAT) degree offers a new route for athletic trainers wishing to pursue postprofessional athletic training education.<sup>3-6</sup>

Professional healthcare educators need to be well versed in several areas, including, but not limited to knowledge in the area being taught, knowledge about evidenced-based practice, pedagogical skills, leadership, research, and clinical skills.<sup>7,8</sup> From the perspective of the National Athletic Trainers' Association, the DAT degree proposes to develop its graduates in several of these areas since the graduates would be doctoral-trained in the field of athletic training, thus displaying enhanced knowledge of the field, as well as further preparing them in evidence-based practice and its implementation into clinical practice.<sup>9</sup> The skills of DAT program graduates differ from those prepared in academic doctoral programs, where DAT graduates should have more training in clinical application of research, and traditional academic doctorate graduates have more extensive training in the curation of research.<sup>2,4,10</sup> Having doctoral-trained faculty from both degrees creates a well-rounded program faculty since, together, they encompass the skills needed to teach future athletic trainers, didactically and through clinical education.<sup>4</sup> Having a well-rounded faculty with different educational backgrounds and experiences could allow for the development of effective and diverse clinicians. However, the role of a DAT degree holder serving as a faculty member is not well established.

The notion of terminal clinical degree holders teaching in their respective programs is not new. In peer health professions education programs, there are a variety of clinical doctoral degree holders serving as faculty members such as Doctors of Medicine (MD), Doctors of Physical Therapy (DPT), Doctors of Dental Sciences (DDS), or Doctors of Medicine in Dentistry (DMD).<sup>11-13</sup> Previous researchers suggest administrators and stakeholders share a similar sentiment and view DAT degree holders as suited for either non-tenure track positions or clinical education coordinators, considering their experience connecting theory and clinical application.<sup>4,5</sup> The findings from this research further demonstrate the importance of having a blended faculty since having a clinically focused faculty member can bridge theory and application, while other trained faculty may be better trained in scholarship and on the cutting edge of new knowledge in the practice of athletic training.<sup>4</sup>

Although research has been conducted on the views that university and athletic training program administrators have about DAT degree holders being employed in academia, no research has explored the experiences of DAT degree holders currently working in academia. While the previous research has provided necessary insight into the beliefs of stakeholders,<sup>4,10,14</sup> it is important to understand how DAT degree holders are prepared and are experiencing academia. Therefore, the purpose of this study was to explore the lived experiences of the DAT degree holders in academia.

## METHODS

### Design

This study aimed to explore the lived experiences of DAT degree holders in academic roles and their preparation from their respective program for their academic role. The consensual qualitative research (CQR) design was selected to analyze the data as it allows for a deeper understanding of the data from reaching a consensus within the team and constant and repetitive analysis of the data.<sup>15</sup> This research study was deemed exempt by the Institutional Review Board of Indiana University.

### Participants

Inclusion criteria consisted of (1) graduated from a DAT program, (2) currently employed in an academic role, and (3) have been in their current academic role for at least a year post graduation from the DAT program. The exclusion criteria were not holding a DAT and/or not being in their academic role for at least one year. Twelve participants volunteered and their demographic characteristics can be found in Table 1.

**Table 1.** Participant Demographics

Pseudonym	Age	Years of Experience as an Athletic Trainer (years)	Carnegie Classification of Current Institution	Served as Educator Prior to DAT
Mary	32	9	M3- master's small programs	Yes
David	31	8	Doctoral/professional universities	No
Emma	28	6	Doctoral/professional universities	No
Henry	36	15	Research 1- doctoral	Yes
Regina	47	25	Doctoral/professional universities	Yes
Leroy	39	17	M3- master's small programs	Yes
Zelena	46	24	M3- master's small programs	Yes
Robin	28	7	Doctoral/professional universities	No
Belle	32	11	M3- master's small programs	No
Ruby	29	7	Doctoral/professional universities	Yes
Snow	37	15	Baccalaureate colleges: diverse fields	No
Gold	50	24	M3- master's small programs	Yes

### Interview Protocols

Two semi-structured interview protocols were created for this study, one for DAT degree holders that obtained their DAT before transitioning to their role, and one for DAT degree holders that were in their educator role before obtaining their DAT. Those who obtained their DAT first were targeted as potential participants to explore what challenges they faced transitioning to an academic role and if and/or how the preparation from the DAT program helped them to be successful in the transition and with their duties. Those who obtained their DAT after having been in an educator role were targeted as potential participants to explore how, if at all, the preparation from the DAT program has impacted their established teaching styles and philosophies. These individuals were targeted also to see if and/or how they feel the preparation from the DAT program could have helped them in their transition to being an educator. The two interview scripts were used to present questions in a manner that is consistent with each of the participants educational experiences, whether they had accepted an academic role prior to or after obtaining the DAT degree; however, the constructs and content of the interview scripts remained consistent with one another. Due to the semi-structured nature of the interview protocol, probing questions were asked, when warranted, to further explore the participant's experience of either previously holding an educator role before obtaining their DAT degree, or transitioning to an educator role after obtaining their DAT degree. Following development of the interview protocols, one member of the team who was not involved with initial development reviewed the protocols for face and content validity. Prior to data collection, 2 practice interviews were recorded and reviewed by the research team to approximate the length of the interview and to ensure the appropriateness of the questions. Data from the practice interviews were not included in analysis or associated with the study as authors. Both protocols included 7 questions (Table 2).

**Table 2.** Interview Scripts**DAT Before Transition to Role**

1. Tell me about your learning experiences in your DAT program.
  - a. Was there specific curricula in your DAT preparation that was dedicated to developing yourself as an educator?
    - i. If so, can you please share some of these experiences?
    - ii. If no specific class- What curricula do you think would have been helpful in developing as an educator?
2. In what ways, if any, has your learning in your DAT preparation influenced your approach to teaching?
3. Tell me about the scholarship opportunities that were presented to you in your DAT program.
4. In your current role, what if any, scholarship responsibilities do you have?
  - a. If some –
    - i. What challenges and/or successes, if any, have you encountered relative to these responsibilities?
    - ii. In what ways, if any, did the DAT prepare you for these responsibilities?
  - b. If mentoring student research-
    - i. What challenges and/or successes, if any, have you encountered relative to these responsibilities?
    - ii. In what ways, if any, did the DAT prepare you for these responsibilities?
    - iii. If scholarship opportunity was present in DAT program- In what ways, if any, have your experiences with scholarship as a DAT student impacted your approach to mentoring student research?
  - c. Regardless of yes or no – Was that part of your decision-making process to accept this position?
5. What has been your experience, as you transitioned into being an educator, after your DAT program?
  - a. What, if any, obstacles arose in your transition to becoming an educator?
  - b. What, if any, successes have you had in your transition to becoming an educator?
  - c. In what ways, if any, did preparation from the DAT helped during the transition.
6. What is the culture around faculty with advanced clinical doctoral degrees within your program or department?
  - a. In what ways, if any, has that supported your transition?
  - b. In what ways, if any, has that hindered your transition?
7. Please describe how the preparation you received in the DAT, in general, has impacted the accomplishments you have had in your role as an educator.

**DAT After Transition to Role**

1. Tell me about your learning experiences in your DAT program.
  - a. Was there specific curricula in your DAT preparation that was dedicated to developing yourself as an educator?
    - i. If so, can you please share some of these experiences?
    - ii. If no specific class- What curricula do you think would have been helpful in developing as an educator?
2. In what ways, if any, has your learning in your DAT preparation influenced your approach to teaching?
3. Tell me about the scholarship opportunities that were presented to you in your DAT program.
4. In your current role, what if any, scholarship responsibilities do you have?
  - a. If some –
    - i. What challenges and/or successes, if any, have you encountered relative to these responsibilities?
    - ii. In what ways, if any, did the DAT build upon your previous preparation for these responsibilities?
  - b. If mentoring student research-
    - i. What challenges and/or successes, if any, have you encountered relative to these responsibilities?
    - ii. In what ways, if any, did the DAT build upon your previous preparation for these responsibilities?

- 
- iii. If scholarship opportunity is presented in DAT program- In what ways, if any, have your experiences with scholarship as a DAT student impacted your approach to mentoring student research?
          - c. Regardless of yes or no – Was that part of your decision-making process to accept this position?
  5. What was your experience as you transitioned into being an educator?
    - a. What, if any, obstacles arose in your transition to becoming an educator?
    - b. What, if any, successes did you have in your transition to becoming an educator?
    - c. In what ways, if any, do you believe the preparation you received from the DAT could have helped during the transition.
  6. What is the culture around faculty with advanced clinical doctoral degrees within your program or department?
    - a. In what ways, if an, has that supported your transition?
    - b. In what ways, if any, has that hindered your transition?
  7. Please describe how the preparation you received in the DAT, in general, has impacted the accomplishments you have had in your role as an educator:
- 

### Procedures

Names and emails for the program directors of DAT programs that have matriculated students were compiled into a list from publicly available websites. The DAT program directors (N=7) were sent an email by the primary investigator (AAA). In one case, a Director of Clinical Education served as a proxy for the program director to eliminate any dual role conflict. The initial email contained a description of the study, the anticipated time requirements, recruitment email for DAT program graduates, and the contact information of the research team. The program directors were asked to forward the attached recruitment email and link to the participant screening tool (Qualtrics, Provo UT) to their graduates. To maximize reach of potential participants, social media recruitment was also used. We used the Standards for Reporting Qualitative Research to guide the design and reporting of this project.<sup>16</sup>

Potential participants completed the screening tool to verify they met the inclusion criteria. Demographic data including age, length of certification, length of being a DAT degree holder, their current position title, and their institution's Carnegie classification were also collected. If they met the criteria and consented to participate, they provided their contact information to schedule an interview. Interviews were completed through videoconferencing software (Zoom®, San Jose, CA), and audio recorded for transcript by artificial intelligence software. The interview was then conducted using the appropriate interview script. The audio recordings were transcribed and de-identified for analysis. As a form of member-checking, participants were sent their de-identified transcript to check for accuracy and clarity. Each respondent was provided with a pseudonym to maintain participant confidentiality. The sequence of our procedures can be found in Figure 1.

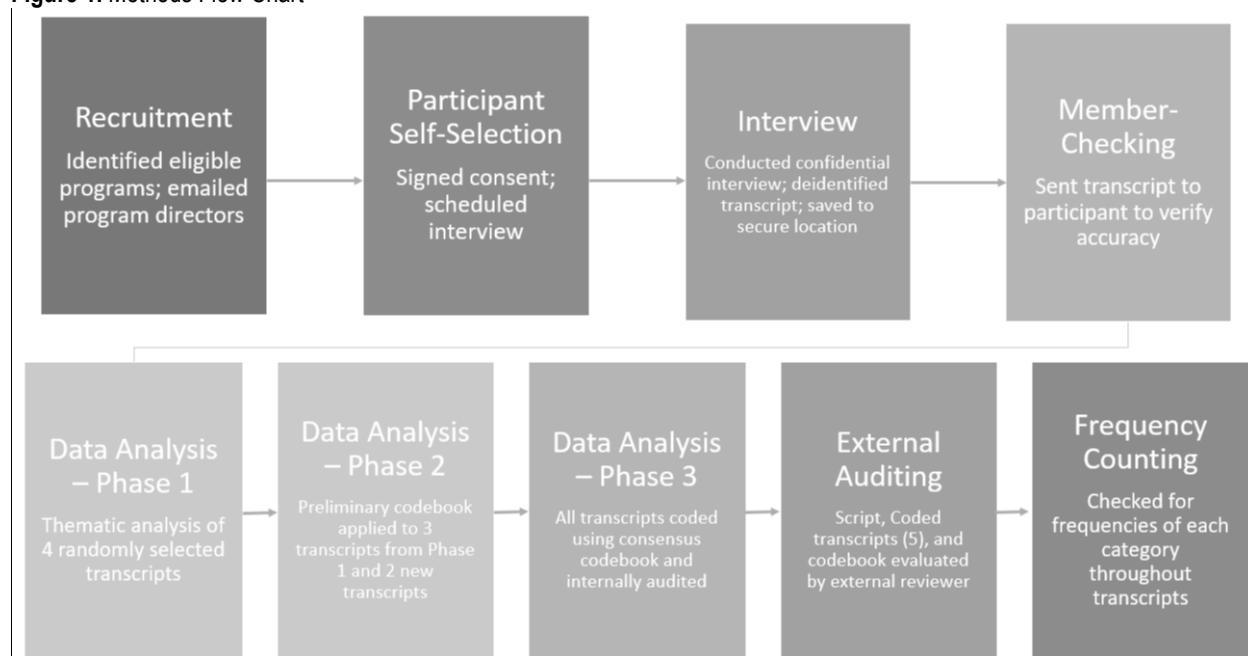
### Data Coding and Analysis

A Consensual Qualitative Research (CQR) approach from Hill, et al<sup>15</sup> was used to analyze the data from this study. The process involved each member of the data analysis team grouping the data into domains independently, then coming together to create a consensus on the interviews. The analysis consisted of 5 stages: (1) forming initial domains, (2) determining core ideas from each domain, (3) cross-analysis of interviews through the creation of categories, (4) providing interview scripts, the consensus codebook, and the coded transcripts to an external auditor, and (5) establishing the frequency of the data. The data analysis team (AAA, BBB, DDD) began analysis with each member reviewing the same four transcripts independently and determining the domains from the transcripts. The team then met to come to a consensus on the domains within the transcripts. Domains that resulted from the first consensus created the initial codebook. The team then applied this codebook to three of the original transcripts and two new transcripts, followed by another meeting to come to a consensus on the codebook, leading to the creation of the consensus codebook. The consensus codebook was then applied to the rest of the transcripts independently by the data analysis team and then the coded transcripts were exchanged between members for multi-analyst triangulation. After all data analysis had been performed, the consensus codebook, interview scripts, and coded transcripts were given to an external auditor to determine if the codebook accurately represents the data. Since all members of the research team have direct affiliations with DAT programs, the risk for potential bias was mitigated through multi-analyst triangulation and external review.<sup>15,17</sup> Perceived biases were discussed during each phase of the consensus process and the external auditor confirmed the findings were representative of the participants' collective voice. Frequency of the categories was reported, with the "general" frequency applying to a category present in all interviews, the "typical" frequency applying to categories appearing in more than half of the interviews but not all of them, and "variant" frequency if the category was present in half or less than half of the interviews.<sup>17</sup>

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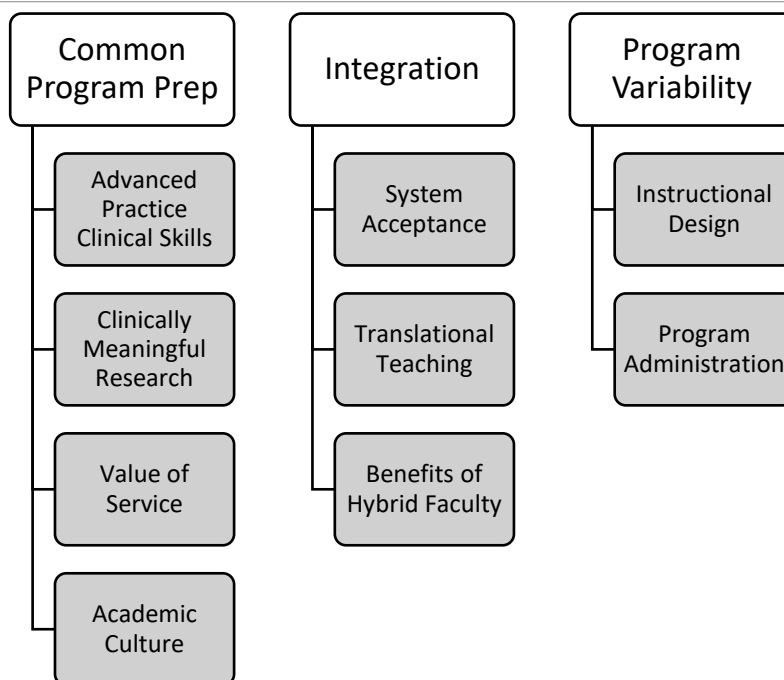
Figure 1. Methods Flow Chart



### RESULTS

Three domains emerged during the data analysis process (Figure 2): *common program preparation*, *program variability*, and *integration*. These domains were further broken down into several categories, and participant quotes representative of the categories have been included for each category. Frequencies of participants for each category are presented in Table 3.



**Figure 2.** Domains and Categories**Table 3.** Frequencies for Categories

Domain and Category	Counts	Description
Common program preparation		
Advanced practice clinical skills	12/12	General
Practice-based research	11/12	Typical
Value of service	10/12	Typical
Academic culture	11/12	Typical
Program variability		
Instructional design	12/12	General
Program administration	6/12	Variant
Integration		
System acceptance	12/12	General
Translational teaching	12/12	General
Benefits of hybrid faculty	8/12	Typical

### Common Program Preparation

*Common program preparation* refers to the types of preparation that participants generally and typically reported receiving in their DAT program. Participants' responses regarding their preparation were grouped into 4 categories: *advanced practice clinical skills*, *practice-based research*, *the value of service*, and *academic culture*. Supporting quotes for the *common program preparation* domain can be found in Table 4. Participants generally talked about receiving preparation in developing advanced practice clinical skills in several areas of clinical practice. Both clinicians that have been practicing for several years (some with 20+ years) and newer clinicians reported their clinical skills being enhanced in some capacity through their preparation in the DAT program. Specifically, an increase in the understanding of outcome measures and patient-centered care was echoed by participants as well, while the DAT program offered them opportunities to better connect these components.

Conducting research through a clinician's own clinical practice helped produce clinically relevant data gathered at the point-of-care. Participants typically felt that their DAT program helped to strengthen the importance of practice-based research. Participants also spoke about how their skills and confidence in performing this research have been enhanced. Not only did the participants speak to how their preparation from the DAT program has impacted their own research, but participants also spoke to how the preparation has impacted their ability to promote and mentor student research.

Service can take numerous forms, such as giving back to their institution or giving back to the profession at local, state, district, or national levels. Participants typically noted that the importance and the value of service were emphasized in their DAT preparation. There are many differences in working cultures that individuals may encounter when transitioning to academia. Participants typically spoke of how they were prepared for some aspects of academic culture, such as developing relationships with fellow faculty and students. However, many participants also expressed that they felt as though they were not prepared to handle the scholarly culture expectations at research-intensive institutions.

### Program Variability

*Program variability* speaks to the differences that are present between the various DAT programs across the country, primarily with the presence of formal curricula dedicated to developing one as an educator. Data were categorized as *instructional design* and *program administration* from the participant responses. Supporting quotes for the *program variability* domain can be found in Table 5. Instructional design refers to the inclusion of specific curricula in the DAT program that was dedicated to developing skills such as assignment creation and providing feedback. In contrast, not everyone had a class dedicated to developing their skills as an educator. Participants spoke to their lack of education on educational design and implementation, whereby describing where they were not prepared when they first took their educator role. The *program administration* category refers to the presence of curricula within the DAT program that taught them how to build a professional program around the CAATE standards and the core competencies. This category was found to be variant among the responses, but half of the participants still voiced that they were prepared in this manner.

**Table 4.** Supporting Quotes for the Common Program Preparation Domain and Categories

Category	Supporting Quote
Advanced practice clinical skills	<p><i>The DAT program that I was in really helped emphasize some of the new standards and core competencies in evidence-based medicine, patient-centered care, and healthcare informatics. It allowed advanced understanding from a clinical perspective.... – Leroy</i></p> <p><i>I'd say the opportunity to pull together the important pieces of administering patient-rated outcome measures and the patient voice in providing evidence-based practice. - Regina</i></p> <p><i>...implementing the patient-reported outcome measures and clinician reported outcome measures, giving me an option to measure what I'm doing well and where I need to improve my service was helpful. Clinical skills, per se, again I'm 22/23 years in this [profession]. I can't say that my skills made this incredible change, but I was able to apply research and the aspects of the clinical standards and the best practice we have available right now, pertaining to things such as ACL prevention programs, pre and post SLAP lesions or hip arthroscopy procedures. Knowing what my doctors did made me do rehab better. - Zelena</i></p>
Practice based research	<p><i>I think the main ways my professional scholarship was strengthened was by recognizing the value of clinical research and instead of doing research in the broad scope of a scientist or researcher by developing a large study, we can all perform our own individual studies in the clinics for the betterment of patient care. – Snow</i></p> <p><i>At my current institution, there is an expectation to facilitate research. A lot of the research requirements [at my institution] are akin to the development of the evidence-based manuscripts or publishable CAT papers that we did in the DAT, and I would say that I feel very, very well prepared to meet those requirements of the current institution. – Robin</i></p> <p><i>I felt like I was really prepared to help my students find meaningful research. I ask them "Is this something that a real clinician, a true athletic trainer could use? – David</i></p>

Category	Supporting Quote
Value of service	<p><i>I guess re-emphasizing the importance of [service]. I think that's the other thing that was clear and I don't think this was in a class; it was more the modeling of our mentors and faculty, [seeing] that they were involved. – Gold</i></p> <p><i>I have been more connected than I ever even imagined I could be because of the DAT so I feel that the DAT exceptionally prepared me for service to the profession. - Robin</i></p>
Academic culture	<p><i>So, I think that the DAT has helped to prepare me, again partially, on being able to effectively evaluate somebody, provide effective feedback, and work as a team to help find the best solution... I think that I did have good success just being able to kind of build the relationships with the students and kind of see how everybody operates differently. – Emma</i></p> <p><i>I doubt my ability to succeed in those [high research load] environments in a large part because of that lack of passion. I enjoy research, especially the research lines that I hold. I do find a lot of passion in those research lines, but I very, very much enjoy being in the classroom, educating students, volunteering within the profession of athletic training, and moving the profession forward. So, to summarize, I do think that these moderate-level research requirement institutions that I have sought out are a good fit for me, because they allow me to still be productive and engaged and research, but not take me away from my passion for service and teaching. - Robin</i></p>

**Table 5.** Supporting Quotes for the Program Variability Domain and Categories

Category	Supporting Quotes
Instructional design	<p><i>I would say a large chunk of it did [prepare them for duties related to teaching] at least with content delivery, especially with some of the new platforms that are used in education that I had no idea about. I'm actually constantly going back to all of my DAT material... I'm constantly referencing and going back and looking at what platform did we use for this video or whatever, so it definitely opened my eyes on how to educate the hybrid classes and then just incorporating more up to date platforms to deliver content and educational information. – Belle</i></p> <p><i>There was a specific course in the DAT program that I was a part of that was an athletic training educator course...it really helped prepare making assignment descriptions, making rubrics, and delivering effective feedback. The whole course was prepared to help develop athletic trainers as educators. - Emma</i></p> <p><i>There was not [any curricula dedicated to developing educator skills] ... I stepped into this [current program] program having very little knowledge about this position, such as writing exam questions. - Regina</i></p>
Program administration	<p><i>There were parts of the program that, if we want[ed] to go in education that we could utilize. So, I think that it just helped me understand the difference between the past standards and helping even understand the 2012 standards because they were different than when I was in school for my professional program. – David</i></p> <p><i>There were some assignments on setting up a curriculum to account for certain competencies. I think we talked about some accreditation things, how to develop outcomes, and how to measure some of the outcomes that are needed to verify that you're covering this stuff [the competencies] and that you're teaching effectively. - Gold</i></p>

## Integration

*Integration* refers to the experiences the DAT degree holder had becoming a part of academia. Responses from participants were grouped into the following three categories: *system acceptance*, *translational teaching*, and *benefits of hybrid faculty*. Table 6 contains the supporting quotes for the *integration* domain. To truly be successful in a certain field or work environment, that environment needs to be accepting. Participants generally spoke to having system-level acceptance through being able to meet their goals or having their work and degree recognized. Other participants discussed how their institution was open to accepting the DAT as a terminal degree, as well as the institution being open to changes that they proposed.

Being able to take content and techniques presented in a class and translate that into the clinical field in athletic training was paramount. Participants generally spoke on their translational teaching skills being improved through their DAT program preparation. Participants spoke to having found new modes of delivery through their DAT program preparation, discussing how their DAT program prepared them to teach online classes, particularly to facilitate clinical education. Participants felt that their clinical skills complemented the scholarship and educational expertise held by their fellow faculty members with academic doctorates. Eight participants described how the benefits of a hybrid faculty extend beyond teaching, as the different types of faculties can continue to complement each other in different aspects of academia such as sharing scholarship requirements at their institution.

**Table 6.** Supporting Quotes for the Integration Domain and Categories

Category	Supporting Quote
System acceptance	<p><i>I think that my institution is 100% supportive of it [the DAT]. I will actually be going up for full clinical Professor next year, so I know I could get promoted, I know I can move up within the ranks, if you will, so they [the institution] are 100% supportive. – Henry</i></p> <p><i>All three of my colleagues did our DATs at the same time, two different programs for the three of us. I think everything was met with pretty open arms. When we suggested improvements, there wasn't a lot between faculty who didn't have a DAT versus those that did, and at the time and a majority of our faculty were [DAT degree holders]. Since we've had additional faculty go on and get an EdD, and an additional faculty working on their PhD right now so ... I think other faculty saw that some of us were trying to improve, get better, and get that advanced degree and that I think sparked some interest in others, so I think that was good. I wouldn't say that we really faced any challenges as we are supported by our institution, we were supported by all of our administration. - Leroy</i></p>
Translational teaching	<p><i>It gave me a new window into how to engage students in a number of different ways, besides just 'here's a PowerPoint, here's a lecture'. It showed me a lot more ways of connecting with students and it motivated me to continue to search for new ways to motivate students or to reach students. I use a lot of the stuff that we used in the DAT and then I found other stuff that I've just kind of continued to evolve with, new modalities of reaching students...definitely online, but also in face-to-face interactions as well. – Gold</i></p> <p><i>Due to my experiences and with the DAT, I teach all of our practical courses within our Master of Athletic Training program. Those are online so, it's five courses over two years that our students participate in as they are matriculating through the MAT. Since we have a mix of integrated and immersive experiences, in order for accessibility and to continue that course work, they do it [clinical class] all, online. I had a lot of experience taking online classes, so that became my role, leading that online education portion of our program. - Ruby</i></p>
Benefits of hybrid faculty	<p><i>Having the clinical doctorate also brings a strength to our program, as we have a mix of faculty from EdDs to PhDs to clinical doctorates, and so here, the university mission of whole student development is strengthened by a combination of faculty. One strength that I'm able to bring with a DAT is clinical experience. Students really seem to gravitate towards educators or faculty members that have that real-world experience and stories, along with the lessons that they are providing. - Snow</i></p>

Category	Supporting Quote
	<i>We [the faculty] actually do it [scholarship] as a department and not individually, so that was helpful. If they [the institution] would have required it to be individual publications every year, I don't know if I would be able to succeed in this position without doing it with other people. I'm not confident enough at this time. - Mary</i>

## DISCUSSION

The direction for athletic training education, especially postprofessional education, is shifting with the change in professional degree requirements to the master's level, and the DAT degree offers a new path for those wishing to pursue postprofessional athletic training education.<sup>1,3-6</sup> Healthcare educators need to be skilled in multiple areas, which the DAT degree proposes to do; specifically, to develop its graduates in possessing enhanced knowledge of the field, or evidence-based practice and its implementation into clinical practice.<sup>2,7-9</sup> Previous research focused on stakeholder views regarding DAT degree holders being employed in academia, with no research on the lived experiences of these DAT degree holders.<sup>4,5,10,14</sup> This study identified the DAT degree holders' perceptions of how the DAT program prepares its graduates for academia, in addition to reporting lived experiences of DAT degree holders in academia. Our results indicate that participants believe they were prepared in several areas and have been able to integrate themselves into the academic system; however, there is also variability in the preparation provided by the different DAT programs, which may influence the perceived readiness to take these roles.

### Common Program Preparation

We identified that DAT programs were preparing their graduates with advanced practice clinical skills, enhanced knowledge of practice-based research, value of service to the profession/institution, and various aspects of academic culture such as cultivating professional relationships. Previous research has identified that gaining advanced clinical practice skills was a motivator for individuals to pursue the DAT degree,<sup>18</sup> as well as institution stakeholders and practicing athletic trainers alike feeling that athletic trainers graduating from a DAT program would have strong skills in advanced clinical practice.<sup>2,4,5,9,10,14</sup> This sentiment was echoed by the participants in our study, as they generally reported their advanced practice clinical skills improving through their preparation in their respective DAT programs. Additionally, DAT programs prepared their graduates similarly to graduates of postprofessional doctor degrees from other healthcare fields. The doctor of nursing practice is typically reserved for nurses already practicing that want to seek additional advanced practice skills such as patient outcomes, increasing opportunities for employment, and improving the graduate's translational research abilities.<sup>6</sup> Graduates of postprofessional doctor of occupational therapy programs are also prepared to critically appraise literature, integrate evidence into their practice, and become advocates and leaders for their profession.<sup>19</sup> Both of these examples demonstrate consistency across postprofessional healthcare professions education programs and current DAT programs.

Our participants typically had an increased understanding of the research process, particularly practice-based research, which concurs with previous research on DAT degree holders' perception on their preparation in practice-based research.<sup>20</sup> Additionally, participants indicated they felt they would not do well with substantial and independent scholarship requirements of research-intensive institutions. These sentiments from participants aligns with the previous research as well, as athletic training program directors and institution administrators felt that DAT degree holders would be best suited for a lecturer, clinical faculty, or tenure-track faculty, but not as suited for a research-line faculty.<sup>4,5,10,14,21</sup>

Current research suggests that DAT degree holders would not be prepared for the culture surrounding scholarship requirements and tenure/promotion guidelines, as well as some suggestions that there may be a conflict between DAT degree holders in academic roles and PhD degree holders within the same program.<sup>4</sup> Yet, there were some stakeholders and program directors that felt the DAT degree holder could contribute to the productivity of scholarship at their institutions, as well as meet the scholarship requirements; however, in this previous research, the Carnegie classification of the participants' institutions were not reported,<sup>4,5,21</sup> so we cannot say that this aligned with the types of institutions at which our participants felt they could be successful with scholarship. A majority participants spoke about not being prepared to handle the time requirements that scholarship requires at research-intensive institutions. However, the participants also described how they were not necessarily wanting to be prepared for research-intensive positions, stating that they liked the low to moderate scholarship loads at their current institutions.

Participants typically described having an increased value of service, primarily with state, district, and national level organizations. Although not explicitly stated in previous research, program directors listed service within the duties necessary for the faculty positions that they felt DAT degree holders could fit in within their institution.<sup>5</sup> Additionally, our findings suggest that there is a minimal conflict between faculty holding different degrees, as participants typically have good relationships within their department, as well as having increased skills at partnering with other faculty, specifically for scholarship. Individuals seeking the DAT degree

should capitalize on these relationships to help bolster their scholarship skills to produce robust research, at the volume and sophistication required by their employer.

### **Program Variability**

We identified DAT programs have variability in their preparation of their graduates in terms of instructional design and administration of education programs. Previously, stakeholders felt that DAT degree holders would be prepared to teach in some capacity in athletic training programs.<sup>4,10,14,21</sup> This is reflected in how participants typically described preparation in assignment development or curricular design to improve themselves related to educating others. However, half of participants expressed having no dedicated curricula to develop them as educators. The difference in program curricula can allow prospective DAT students to search for the program that will provide them with the most appropriate curricula based on their professional goals. Since it has been reported that some individuals pursue the DAT degree as means of being able to obtain an academic position, those individuals that are seeking the DAT degree to teach should examine these differences in the DAT programs and select one with more of a focus on developing oneself as an educator.<sup>18</sup> Specifically related to program administration and accreditation, only half of our participants noted preparation in the administration of athletic training programs. Though this is a variation in the different DAT programs currently being offered, those seeking DAT degrees may need more focused professional development in program administration.

### **Integration**

Acceptance into the system, the ability to translationally teach, and the perceived benefits of having a hybrid faculty were all found to influence the integration into academia. Previous literature has suggested that there is uncertainty among stakeholders about the DAT degree being accepted by academic systems as a suitable terminal degree for faculty positions.<sup>4</sup> Our findings were different, as we found that there generally was system acceptance of the DAT degree and DAT degree holders. Additionally, the development of a hybrid faculty (faculty consisting of varying degree types) was typically seen as a benefit for students, which contradicts previous research in which stakeholders felt there would be conflict between the different degree holders.<sup>4</sup>

Similar acceptance has been found in other healthcare professions, with medical doctor and doctor of dental sciences programs employing clinical doctorate degree holders as educators in their programs, demonstrating the universities' and profession's acceptance of the degree.<sup>12,13</sup> Looking at healthcare fields closely related to athletic training, doctor of physical therapy and doctor of occupational therapies also accept the clinical doctorate as a terminal degree for teaching, as both fields also have clinical doctorate degree holders teaching in their program alongside academic doctorate degree holders.<sup>22</sup> A literature review on individuals with the doctor of nursing practice serving as teachers found deans and nursing program directors accepted the doctor of nursing practice as a suitable degree for academia.<sup>23</sup> These clinical degree holders typically teach clinical skills and evidence based practice principals due to their increased training in these areas.<sup>22</sup> Researchers identified stakeholders at institutions of higher learning felt that DAT degree holders would be able to bring real-world clinical applications and doctoral-level clinical thinking to the classroom, enabling them to teach clinical concepts better and, thus, enhance student satisfaction.<sup>4,10,14</sup> We found similar results in our study, as the participants discussed numerous successes in translating clinical skills to a classroom environment, in addition to simply feeling that they were well prepared to take the clinical concepts they learned and enhanced in their respective DAT programs and translating it into teachable content for their students. Again, this finding is supported in other healthcare fields, with physical therapy, occupational therapy, and nursing programs having clinical doctorate degree holders teach since they can translate theories and concepts from literature into practice.<sup>22,23</sup>

### **Limitations and Future Considerations**

While there are several DAT programs across the country and multiple DAT degree holders in these roles, we recruited a limited number of participants. As the profession continues to grow and evolve with the switch to professional preparation at the master's level, we may see more DAT programs, and as an extension, more DAT degree holders taking these roles in the future. Therefore, future research could replicate this study once more of these programs and/or DAT degree holders are in academic roles to see if the results shift. While we attempted to recruit graduates from all available DAT programs, the voluntary nature of participation for this study limited us from conducting interviews with at least one graduate from each DAT program. However, unlike quantitative research that emphasizes representativeness of the sample to the general population, the focus of qualitative research is on collecting rich sources of data. The profession would also benefit from measuring outcomes relative to the educational effectiveness of any degree holder in academia. Since self-perception of effectiveness is often higher than the actual effectiveness, examining objective measures relative to instructional and overall effectiveness could help to reinforce the benefits of having hybrid faculty in healthcare profession degree programs.

## CONCLUSION

DAT degree holders interviewed in this study in academic roles perceived that their DAT program prepared them through coursework that allowed focused preparation in their field with advanced clinical practice skills or clinically meaningful research. The DAT degree holders interviewed in this study stated that there was some variability in their preparation, as some felt that they were not specifically prepared for teaching/learning or program administration. DAT degree holders in academic settings felt accepted by the academic system due largely to the perceived benefits of hybrid faculty within their department. Institutions and athletic training program directors should use this information when considering the hiring of new faculty. These results should also be used by prospective DAT students when considering their motivators to pursue the DAT, especially if it is related to pursuing a position in academia.

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