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ORIGINAL RESEARCH

Motivators, Anticipated Challenges, and Supportive Factors for Athletic Trainers Pursuing the Doctor of Athletic Training Degree

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Context: The doctor of athletic training degree (DAT) is a new concept in athletic training. Athletic trainers (ATs) currently pursue the degree, but little is known about why they choose the DAT.

Objective: To explore ATs' motivations to pursue the DAT degree.

Design: Qualitative study.

Setting: Individual telephone interviews.

Patients or Other Participants: Twelve first-semester DAT students (6 males, 6 females; age = 32.2 ± 5.2 years; athletic training experience = 9.1 ± 5.7 years) participated.

Main Outcome Measure(s): Each individual telephone interview was transcribed verbatim and all identifying information was redacted. Two members of the research team used a phenomenological approach to complete data analysis. Constant comparison was used throughout data analysis to ensure consistency among individuals. A third investigator served as an external consultant to verify themes and accuracy of coding. Her review also confirmed discontinuation of interviews upon reaching data saturation. Trustworthiness of the data was established using multiple-analyst triangulation and peer review.

Results: Four themes emerged affecting DAT student motivations for pursuing the degree: (1) personal motivators, (2) program-specific motivators, (3) initial perceived challenges, and (4) supportive factors. Participants indicated that intrinsic pursuit of lifelong learning, professional advancement, future employment opportunities, improved value within their workplace, and mentors' influence impacted them to pursue a DAT. Participants were motivated to develop professionally and advance knowledge and skills while also selecting programs based on program and faculty reputation and engagement in professional advocacy. While time commitment, work-life balance, cost, and online learning expectations were anticipated challenges, participants perceived that family, employers, peers, organization, and time management were supportive factors that would help them be successful.

Conclusions: Students are pursing the DAT degree because of both intrinsic and extrinsic motivators. Individual program characteristics also influence the pursuit of the DAT. Students do anticipate challenges but surround themselves with supportive factors to help them be successful.

Key Words: Postprofessional education, clinical doctorate, qualitative research

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KEY POINTS

- Athletic trainers are pursuing a doctor of athletic training degree because of a commitment to learning and a belief that the degree would bring them professional advancement and development.
- Athletic trainers think the doctor of athletic training degree brings value to the profession and adds to their own perceptions of self-worth.
- Cost and work-life balance causes apprehension, but supportive factors help to mitigate these challenges in the first semester.

INTRODUCTION

Even decades ago, it was believed that the athletic training profession would gain further support only by strengthening the quality, reputation, and educational requirements of its credential.[1] Continual deliberations about education are essential for the future progression of athletic training. Moreover, evolution and revision of the educational requirements and competencies to prepare athletic trainers (ATs) to appropriately treat patients and align with the educational background of other health care professions are necessary. For athletic training, this has meant a degree level change. Among other health care professions, more than 70% require postbaccalaureate education for entry into medical practice.[2] In May of 2015, the athletic training profession also made a transition whereby the Strategic Alliance affirmed that all professional programs would deliver professional-level education at the level of a master's degree by 2022.[3] With this degree elevation at the professional level, athletic training education must inherently consider the subsequent organic shift at the postprofessional level.[3]

Doctoral education in health care is present in several forms; one of these includes the traditional doctor of philosophy (PhD) degree.[4] The PhD degree involves education grounded in academic and research interests with the student organizing this knowledge into a formal doctoral dissertation.[4] More recently, health care education established another type of doctoral education in the form of a clinical or practice-based doctorate. A professional-level clinical doctorate prepares future clinicians, in their respective disciplines, to practice that discipline autonomously.[5] Several health care professions have adopted and continue to adopt the doctoral degree as their required entry-to-practice degree, such as the doctor of physical therapy, occupational therapy doctorate, and doctor of pharmacy.

In contrast to a doctoral degree at the professional level, other health care professions have implemented postprofessional education through a clinical doctorate degree. At the postprofessional level, the goal of a clinical doctorate is to provide an already licensed and practicing clinician with further specialization or expertise.[6] The most prominent example of a postprofessional clinical doctorate is the doctor of nursing practice (DNP) degree. The degree was developed in the late 1990s, and then DNP programs became more abundant after the American Association of Colleges of Nursing declared educational reform necessary in 2004.[7,8] The American Association of Colleges of Nursing strongly recommended that advanced practice nurses obtain education at the doctoral level instead of the master's level.[7,8] The number of DNP-accredited programs in 2006 was 20, and by 2016, the number of accredited programs had substantially increased to 289.[9] The main goals for developing the DNP degree include nurse preparation for increasingly complex clinical situations, recording and interpreting patient outcomes, experience in quality improvement, enhanced leadership skills in care delivery, and service as a practice faculty member.[10,11] These outcomes address the need to connect entry-level professionals to advanced practice clinicians through the DNP degree.

The athletic training profession faces a similar challenge with transition of the professional athletic training degree to the master's level. As a result, there is an immediate need to educate ATs with expert knowledge and a skill set appropriate for success in today's dynamic health care environment. Although continuing education and postprofessional residency programs are part of the solution in closing the gap between newly certified ATs and advanced practice clinicians,[12,13] terminal degrees in the form of doctoral education may be necessary to create a consistent flow of knowledge among professionals.

To appropriately understand and establish progression from entry to practice knowledge to clinical expertise in athletic training, it is important to consider the educational framework embraced by the Strategic Alliance.[12] The framework provides context to improve quality of patient care through several modes grounded in educational and clinical research. One of these objectives is to establish advanced practice leadership particularly through the recently identified doctor of athletic training (DAT) degree.[13] The DAT degree, defined by the National Athletic Trainers' Association (NATA) Post Professional Education Committee, is additional advanced coursework and applied research for a credentialed AT closely related to the clinical practice of athletic training.[13] The DAT degree outcomes include advanced clinical scholarship combined with improved knowledge and skills necessary for patient-centered care.[13] Despite increased optimism regarding the degree outcomes, little is known about the market for the degree, from both the potential employer and consumer perspective. Therefore, the purpose of this study was to explore ATs' motivations to pursue the DAT degree. The guiding concepts of this investigation were to understand motivators to inform ATs interested in obtaining the DAT degree, to provide recommendations to current programs for

Table 1. Participant Demographics

Pseudonym	Gender[a]	Age	Athletic Training Experience, y	Current Setting	C, NC, or S
Addis	F	32	8	Secondary school	C
Benton	M	37	13	College/university	S
Donald	M	35	13	College/university	S
Jake	M	32	8	Other	NC
James	M	36	14	College/university	S
Lois	F	24	1	Secondary school	C
Marie	F	33	11	College/university	NC
Peter	M	32	11	College	NC
Richard	M	26	3	Industrial	C
Rhonda	F	25	2	Clinic/hospital	S
Sarah	F	32	5	Military	C
Zoe	F	42	20	College/university	NC

Abbreviations: C, clinical; F, female; M, male; NC, nonclinical; S, split.

[a] Participants were given the following options: male, female, intersex, transgender, transsexual, female-to-male, male-to-female, androgynous, prefer not to say, and other.

recruitment efforts, and to inform the profession about the consumers' perspective in pursuing a DAT degree.

METHODS

Using a qualitative research approach, we created a semistructured interview protocol to investigate motives for DAT students in pursuing their degree. We created the research instrument through peer revision including content experts for both qualitative research and postprofessional athletic training education. Before performing any interviews, we obtained university institutional review board approval. After receiving participant informed consent, we recorded each of the interviews to maintain accuracy in data transcription. We used a phenomenological approach in our data analysis to identify common views and experiences of participants in their motives to pursue the DAT degree, as well as identify strategies to overcome initial perceived barriers.

Participants

Students enrolled in 3 of the 4 current DAT programs as of 2016 participated. The principal investigator (E.R.M) recruited participants from the 4 current DAT programs, and 1 program chose not to participate. Twelve first-semester DAT students (6 males, 6 females; age = 32.2 ± 5.2 years; years of experience = 9.1 ± 5.7) voluntarily participated in the study, with 2 universities having 5 participants each and the third university having 2 participants. Table 1 provides detailed participant demographic information. An additional student showed interest in participating, but later declined based on unassociated personal commitments. Potential participants who were beyond the first semester of their respective DAT program were excluded due to the possibility that students may develop or change their initial motives in pursuing the DAT degree without realizing it. Therefore, including potential participants beyond this point could create participant bias during data collection.

Instrumentation

We established a semistructured interview protocol (Table 2) of questions addressing DAT student academic, clinical, and research areas of interest. The interview protocol also included questions regarding professional goals as well as concerns and strategies in balancing school, employment, and personal commitments. The principal and senior investigators initially established an interview protocol and subsequently provided the tool to the research team, as well as qualitative research and content experts for peer revisions and validation. After instrument revisions, the principal investigator (E.R.M.) performed 1 pilot interview with a DAT student enrolled beyond the first semester, thus not fitting the study inclusion criteria. We did not make any additional changes to the study instrument after the pilot interview. Due to the semistructured nature of the interview protocol, the principal investigator asked additional probing questions to clarify participant answers when necessary.

Procedures

We contacted the program administrator from each DAT program by e-mail explaining the study's purpose, participant involvement, and potential benefits and risks and providing a link for interested participants to visit. We asked program administrators to forward this e-mail to their DAT students fitting the inclusion criteria. By forwarding the recruitment e-mail to all students fitting the inclusion criteria, program directors or equivalent faculty were unaware of any of their students choosing to participate. After giving written informed consent, the participants provided demographic information, a phone number, e-mail address, and pseudonym. Upon receiving this information, we e-mailed each first-semester DAT student to schedule a phone interview. Each participant then confirmed his or her enrollment status, and we answered any participant questions before arranging the phone interview. Upon calling the participant, the principal investigator reviewed the study purpose and associated consent and withdrawal information. Each interview lasted approximately 15 to 25 minutes, and participant interviews were recorded via speaker phone in a private room to ensure response validity in transcription. Data collection began in June of 2016 and continued until the research team confirmed data saturation after 12 interviews.

Table 2. Interview Protocol

1. How did you first learn about your DAT program? Were you aware of the other 3 respective programs when applying?
2. What personal and/or professional factors guided you in differentiating between the DAT programs and/or other postprofessional athletic training programs when you were applying? Of those, which factor(s) was most influential?
   a. How were professional mentors influential in selecting a DAT program?
3. What DAT program areas of focus are you most interested in completing (eg, clinical outcomes, advanced practice clinical skills, administrative skills, leadership skills)?
4. What areas of athletic training are you looking to develop through DAT enrollment and coursework?
   a. What athletic training content areas are you hoping to improve on while enrolled in the DAT program?
   b. What clinical skills are you hoping to improve on while enrolled in the DAT program?
5. What goals, if any, do you have for research involvement while enrolled in a DAT program?
6. What goals, if any, do you have to promote and/or advocate for athletic training in the health care field?
7. Are you looking to transition to another athletic training professional setting in the future? If yes, where and why?
8. What do you anticipate being the biggest challenge(s) of completing an online/hybrid program?
9. Please discuss ways, if any, your employer is supportive of your pursuing a DAT degree.
10. What challenges balancing education, employment, and personal life do you feel you might experience over the course of your DAT program?
11. What strategies do you plan to use in overcoming potential challenges with enrolling in the DAT?
    a. What strategies and/or individual resources do you have available to support you in continuing your education?
    b. How confident are you these strategies and resources will work? Please explain.
12. Are there any additional things you think might be important about your motivation to enroll in a DAT program that you think I should know?

Abbreviation: DAT, doctor of athletic training.

Data Analysis

The principal investigator transcribed each interview verbatim and redacted all participant information including student, faculty, or university names. After completing data transcription, 2 members of the research team (E.R.M., L.E.E.) used a phenomenological approach as described by Moustakas[14] to complete data analysis. Furthermore, constant comparison was used throughout data analysis to ensure consistency among individuals.[15] To begin, 3 of the transcripts were individually coded to identify themes and categories; we discussed and compared the individually coded transcripts to reach a consensus of commonalities and differences for the data. Next, we coded the rest of the transcripts, placed all data into each appropriate theme, and created a final codebook that was representative of the data. A third investigator (J.R.E) served as an external consultant to verify themes and accuracy of coding. Her review also confirmed discontinuation of interviews upon reaching data saturation.[15,16]

Trustworthiness of the data was established using multiple-analyst triangulation and peer review. Two members of the research team independently coded all transcripts, and emergent themes and categories were discussed collaboratively to minimize the potential of individual researcher bias. The third researcher was not only to ensure data saturation but also to confirm the findings that emerged during data analysis.

RESULTS

We identified 4 main themes affecting DAT student motivations for pursuing the degree (Figure): (1) personal motivators, (2) program-specific motivators, (3) initial perceived challenges, and (4) supportive factors. The participants indicated they had both personal motivators and program-specific motivators that influenced their decisions to enroll. Participants also described several perceived and anticipated challenges and as a result, they identified various supportive factors they felt would help them persevere through the duration of their program.

Personal Motivators

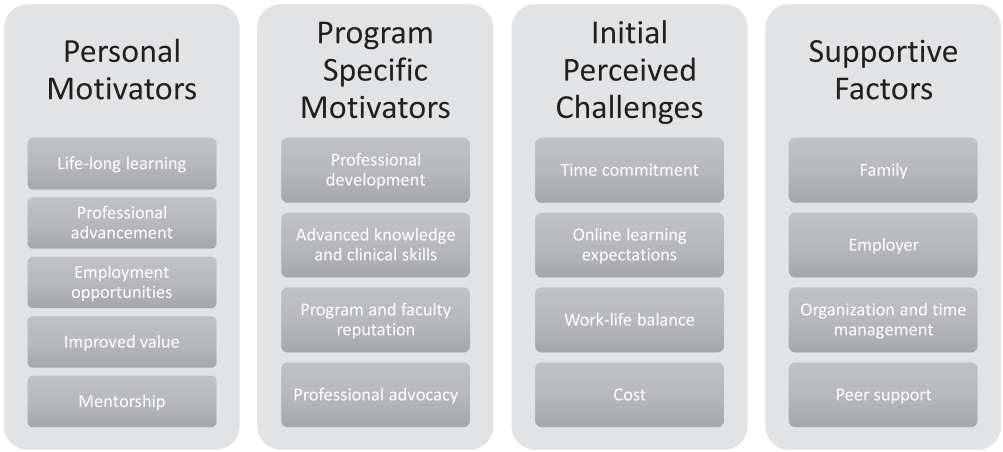
Participants' personal motivators for pursuing enrollment included recognition of career benefits such as career advancement and professional status upon program completion. Several participants described aspirations to pursue a doctoral degree because of a deep desire for lifelong learning. In multiple interviews, participants provided reasoning to pursue a clinical doctorate degree versus a traditional academic doctorate degree. Sarah stated the following:

> *I think a big factor in my motivation to pursue the DAT as opposed to a PhD was all of the skills I would learn in the program would be directly applicable to the population I am working with currently. I have nothing against pursuing a PhD, but I love the fact that I am able to do two things currently with learning new skills and being able to apply them to patients right way.*

Not only did this reasoning assist participants in their goal of being lifelong learners, they also hoped it would be valuable in maintaining status in their current appointments or in seeking professional advancement to new academic appointments. With the athletic training professional degree transition to the master's level, multiple participants currently serving as program faculty directly discussed with their program and department administrators if the DAT degree would satisfy their position requirements once the professional degree transition reached fruition. Peter explained his situation:

> *When I started to weigh options, I definitely talked to my program director and department chair. The department chair did not have any issues as far as promotion with regards to rank as well as moving into the program director position. It meant a lot to confirm those things.*

Figure. Emergent themes and categories.



Other participants looked at the completion of the degree as an avenue to reach other employment opportunities outside of the traditional athletic training setting either in a formal academic appointment or in other positions requiring advanced knowledge and clinical skills. Teaching faculty positions were the most commonly mentioned setting. Rhonda talked about her experience specifically:

> *I definitely like being on the field and doing those things but being able to educate is where my heart is at. Where I am working right now, I am able to do that. I am hoping I can stay here and potentially be adjunct faculty to one of the local universities.*

In addition, James discussed his eventual desire to move into the academic setting as well as the benefits of not being the lone AT in a small collegiate setting:

> *At some point I would like to transition to more of an academic setting. I love teaching the kids and know some of the professors at this university that have full academic appointments. I know they take work home often but a lot of times it would be nice to know that I had a weekend off.*

Another personal factor noted by participants was the potential for the degree to help increase the perceived value of the athletic training profession compared to other health care disciplines. Not only would elevation of the professional degree potentially influence this value change, but participants hoped the DAT degree would allow for education in advanced clinical practice. Many participants understood that the degree was new; however, they displayed optimism for the future, hoping it would further improve personal and professional identity of ATs as clinicians in health care. Donald explained:

> *It really is more about me wanting to do better for the profession and having highly trained clinicians in athletic training to represent the profession and deliver the best kind of patient care that we can. I think eventually we will see more DAT-trained individuals than not and I hope that means something.*

Several of the participants sought out mentorship about pursuing the degree or their respective program. Interestingly, while some participants noted they received support, some were told the DAT degree may not have legitimacy in higher education as opposed to an academic doctorate. Participants considered these opinions but ultimately made their own decision with enrollment. Benton provided his experience:

> *My mentors were harping on me to choose a different style of program, a different school. One of my professional mentors is a faculty member at [university], and she gave me a personal phone call saying you better pick a doctoral program. She did not say that I had to take her program but her call said you have to make a choice and you have to move forward if this is what you want to continue to do. Selecting [DAT program] was outside the norm of what my mentors thought that I would do.*

Beyond personal factors motivating them to choose the DAT degree, participants also considered various programmatic factors that would satisfy their individual needs and commitment to learning.

Program-Specific Motivators

Program-specific motivators also emerged as a main theme. Participants believed they would receive a comprehensive educational experience because of professional development, program-specific curriculum, and research involvement. Participants described their ability to improve in various areas of knowledge and skill development including outcome measures, leadership, and administration. Richard described his interest in utilizing clinical outcomes in comparison to other metrics used in his work setting. Aside from competency in clinical outcomes, participants explained the importance of growing from a leadership and administrative standpoint. For example, Peter described communication as an important area to grow based on leadership responsibilities in his current position:

> *I think definitely leadership skills for myself. One of the biggest parts of that is the administrative duties that I do have in my current role. I do interact with a lot of different students, facilities, and with a lot of people on campus in our medical school, nursing school, and in the school of health professions.*

Sarah offered similar thoughts, touching on ATs communicating as educators even if it is not in a formal faculty role:

> *I think that is one area athletic trainers and practicing clinicians need to be a lot better in. We learn a lot of clinical skills that are very applicable skills and this is one of the areas*

we kind of lose, not focus, but we need to be better with communication especially in the nontraditional settings. The ability to be personable, informative, and being able to communicate what athletic trainers can and can't do.

Participants also expressed that they wanted to grow in the areas of evidence-based practice, application of literature and clinical outcomes to clinical practice, rehabilitation, return to play, manual therapy, complementary and integrative medicine, and patient-centered care. All of these content areas were important to participants not only as practicing clinicians but also as faculty educators for training current students and graduates entering the field. Richard described how the use of clinical outcomes introduced in coursework could enhance not only patient care but also quality improvement through cost and resource efficiency for an organization:

I really hope I can start to develop my clinical site. Talking about clinical outcomes, how can we compare those to metrics we currently take? I really hope to improve the type of health care we are providing to patients in this setting. Also try to pair that with . . . we have had a lot of success with X, Y, and Z and if we do this we save the organization this much more money. That will not only help in the care of our patients but it will also help our growth in showing the worth for the athletic trainer in this setting.

Participants also described how the programs would require them to be active in faculty-guided research. Specific areas of research included concussion education, emergency management training, perceptions of ATs, clinical outcomes for cost savings, and how mental health relates to burnout in ATs. For participants not having a specific area interest, they were open to learning and participating in a faculty-guided experience where they received support to succeed.

Furthermore, participants mentioned reputation of the university, athletic training education, and faculty as motivation to pursue their respective DAT program. Participants noted their perception of how they would fit into their respective program as important. They hoped to have a supportive environment where they expected to fit in with faculty and other students. Sarah discussed this: "One of the most influential factors was that I got to talk to students who were already in the program or were familiar with the program."

Professional advocacy and involvement attracted participants to their respective institutions. They selected programs that included faculty members involved in the athletic training profession at the local, district, and national levels. Participants explained the reputation of faculty members as a motivating factor because involvement in advocating for the profession was an area they wanted to continue to engage with in the future. James explained how a faculty member's work in creating a NATA Position Statement was motivating for him. Aside from local efforts, participants wanted to be active in future legislation in their specific state or in national organizations. Lois talked about her individual motivations in this area:

Well, I live in California so we are the only state to have no regulation whatsoever. I have in the past participated in Capital Hill Day as well as now that I am certified I can hopefully take a bigger role in that.

Individuals who stated they had not been a part of professional involvement in the past were also hoping to begin this involvement in the future.

Initial Perceived Challenges

Although the convenience of completing an online degree was considered a benefit, it also posed challenges. First, participants were aware of the time commitment involved with completing an online degree concurrently with practicing clinically or performing as an educator. Even though some knew the program would require a large amount of time, potentially the time needed was more than they initially anticipated. Benton explained this more specifically:

Right now, there is only so many hours in the day and you are asked to complete a vast amount of coursework with reading and learning technology you are not familiar with. So a project that was intended to only take a short period of time really takes much more time.

Many participants had expectations regarding online learning. They felt that becoming accustomed to online learning techniques would take time and potentially make assignments time-consuming initially. Participants also mentioned requirements to meet with classmates and faculty via video conference calling at certain points in the day. This helped participants in addressing initial concerns about not interacting with classmates or faculty. Donald explained his perspective:

The way the program is set up it is actually very easy to interact with people online. I was tentatively worried about not having a lot of interaction but after going through the first few weeks I can see there is a ton of interactions with my classmates and professors as well.

Furthermore, participants explained that the online learning environment tested their ability to stay engaged in the coursework. They explained that the ability to stay focused would be the responsibility of the individual. Rhonda talked about her experience with this initially:

I think the motivation to get on the computer and get engaged is a challenge. I was one of those students who everyone used to make fun of because I was the first one to post on the discussion board, first one to turn in my work, and now it is more difficult to get into it and be engaged.

A portion of the participants also stated they had not been in school for several years and that returning to formalized education would be difficult. They considered this factor when deciding if they had enough motivation to enroll in their respective program. Strongly related to their motivation to complete DAT coursework was the participants' perceived ability to manage their time and balance their other commitments. Every participant mentioned balancing responsibilities as a challenge to success. Donald talked about his experiences specifically:

Well, I am already feeling it in this first semester. It is just managing time and obviously you are spending more time doing something else and unfortunately other places have to suffer. Obviously, I am not trying to do that to critical areas such as relationships with my wife, patients, and colleagues.

The final challenge detailed by participants was geography, specifically, how time zone differences affected assignment

submission and the additional cost of travel if the program required a face-to-face component. This motivated some participants to stay closer to their current position to defray travel costs and time away. James talked about this as part of his decision initially: "I wanted to stay in the [blank] part of the country and did not want to have to travel the other direction."

These expenses are additional costs to the student in excess of tuition. Paying tuition was also an obvious financial concern for many participants.

Supportive Factors

To combat the initial challenges of enrollment in their respective DAT programs, participants identified various supportive factors including an understanding family, assistance from their employer, personal skills involving organization and time management, and peer support from classmates. Family encouragement specifically from a significant other was an important factor in the initial decision to begin the program as well as to persist in the first semester. Participants' partners were willing to take care of children or provide stress relief from course requirements. Significant others would also be willing to act as a mock patient. Sarah described her husband's support throughout her first semester enrollment, stating:

> *My husband is great at keeping me on track and making sure we do things that are fun or spend time together with our dog. On Sunday afternoon, I try to keep a couple hours on the side designated as family time.*

In addition, participants identified formal assistance from their employer. They stated that their employer was helpful in tuition support, in financial support for travel and housing expenses, and in providing flexible scheduling and workloads. Some employers provided reimbursement for a portion of the tuition. James stated the following when asked if his employer was supportive of his pursuing further education:

> *Yes, my employer is very supportive of it. Unfortunately, not supportive enough to provide full tuition assistance. But for example, we have a week-long (campus) requirement to attend and I have already talked to them about attending. They assured me it was not going to be a problem and were totally fine with it. I think as long as it was supporting what I was doing at the college it would not be a problem.*

Employers also provided scheduling and class load flexibility by allowing participants to have a smaller teaching load and take additional time off for on-campus days, and offered travel expenses and lodging accommodations.

Additional mechanisms of support for participants included personal skills involving organization and time management to increase their productivity and focus. Participants described using calendars to block off time in their schedule designating the time for specific tasks where they would be unavailable to students and patients. Benton also mentioned utilizing similar methods at home when explaining the following:

> *The first strategy is going to be more of blocking my time to specifically get tasks done. Like this afternoon and tomorrow I have already blocked off 8 hours to accomplish homework that I put on my family's calendar. The other thing I am realizing is classes closely relate and what I am noticing is that I should have 1 hour for each class per day to work is going to be beneficial.*

Furthermore, participants hoped to eliminate distractions by closing e-mail and putting away or silencing other electronic devices, specifically ones giving immediate notifications. Finally, participants were confident classmates in the program would be a source of support by being able connect on assignments and relate to the challenges within the coursework.

DISCUSSION

To date, no evidence exists with regard to understanding ATs' perceptions and motivators to pursue the DAT degree. Findings from this study highlight professional and personal advancement as a prominent motivator in the overall development of a DAT student's short- and long-term goals. Moreover, program-specific factors were extremely influential in participants pursuing the degree and a particular program. Specific challenges and anticipated supportive factors are consistent for nontraditional students across professional disciplines to succeed and obtain a doctoral degree.

Personal and Program-Specific Motivators

Professional advancement was evident in participant responses as they felt pursuing the degree would give them the opportunity to solve problems using quality improvement in a dynamic health care environment. This is similar to findings from a study about ATs transitioning from novice to expert practice via postprofessional athletic training education.[17] The authors emphasized increased professional competence as essential to properly address complex patient situations.[17] The participants in this study emphasized the need for their degree to help them demonstrate their professional competence to patients through outcome measurements. Doctoral education in other health care professions supports this idea also, as 65% of occupational therapists felt the postprofessional clinical doctorate in occupational therapy would lead to increased professional competence.[18] Research in advanced practice nursing suggested that nurses need to be able to work with complex patients across a variety of settings in a holistic and patient-centered approach.[19] Consistently, participants in our study emphasized the need to develop their knowledge and clinical skills, but also engage in continued learning over the course of their career. Through health care providers gaining increased competence through clinical doctoral education, they are also engaged in the quality improvement process that can lead to organizational advancement.[20]

Many participants explained interest in moving outside of traditional athletic training settings for various reasons. In general, health care professionals perceive advancement differently depending on their long-term career goals; however, examples include transitioning into either a management or an academic role. This is no different for ATs, as some have goals of positions as faculty or management. Others desire to be clinicians for their entire career. A study[21] of chief nursing officers' perceptions resulted in greater than 50% of DNP graduates utilizing knowledge to influence nursing operations, business operations, nursing retention, patient care, implementation of nursing research, and health policy. Other studies[18,22–24] across health care professions

commonly presented clinical doctorate graduates with aspirations for career advancement in leadership or education faculty positions. The viability of individuals obtaining a clinical doctorate degree in management or education roles remains to be seen, as there are no current studies in this area. However, 64% of department chairs perceived it would be moderately to extremely beneficial to hire someone with a clinical doctorate within an athletic training program, and 67% indicated they were likely or very likely to hire someone with a DAT degree.[25] Participants in our study indicated a desire to work academically, and it does appear that there is an avenue for them to do so, if they choose.

We also found that participants were strongly interested in future academic appointments or promotion. Whether or not the DAT degree will prepare individuals for faculty positions continues to be a topic of discussion. Other health care disciplines including nursing continue to deliberate on whether the clinical doctorate is sufficient as opposed to other doctorates (PhD, EdD, etc) for serving as faculty. In 2007, a study investigated nursing academia perceptions of the clinical doctorate and divided each participant (n = 44) into 1 of 3 groups based on their opinions of the clinical doctorate as appropriate education for serving as professional faculty.[5] *Enthusiastic*, *ambivalent*, and *skeptical* were the 3 groups the authors used to identify the viewpoints of academia, with the largest group (n = 33) being enthusiastic about the DNP degree as a legitimate alternative to the PhD degree.[5] In contrast, skeptics regarding this educational preparation viewed the clinical professional doctorate as employing "watered-down standards" to prepare future faculty.[5] An important alternative viewpoint to this resistance in nursing explained that neither research-based PhD education nor clinically based DNP education would fully prepare professionals for faculty roles.[26] Individuals motivated to serve as valued educational faculty regardless of degree preparation need to dedicate themselves to learning and implementing effective teaching methods. Furthermore, PhD-trained individuals are necessary to construct the theoretical framework of education programs, but DNP graduates are essential for translation of bench research into clinical practice.[26] Concurrently, DNP-trained graduates are also able to instruct doctoral students and rectify the current faculty shortage.[26] Academic and clinically educated doctoral graduates should coexist in academia to offer comprehensive avenues of education with problem-based learning.[7,8]

Several participants desired additional respect as clinicians in health care and they believed the DAT degree would be an opportunity to gain this. Nurses pursuing doctoral education felt that they received more respect, and that other individuals took nurses more seriously when learning about their educational background.[24] Similarly, approximately 50% of physical therapists believe their doctoral education improves credibility with and respect not only from other physical therapists, but also among other health care professions including physicians.[22] Respect and collaboration among health care professionals are extremely important in avoiding professional isolation.[26] Personal confidence, empowerment, and achievement are noticeable for professionals pursuing education at the doctoral level.[7,24] Individuals apply these characteristics to increase self-esteem in their employment and personal lives.[7] After enrolling in a clinical doctorate program, a nurse talked about her enjoyment in telling others about her education because she liked that it challenged people's typical assumptions of a nurse and gave her a new identity.[24] Participants thought that acquiring the DAT degree would improve their clinical practice and others' perceptions of their value in health care.

In selecting their program, participants prioritized a supportive learning environment leading to a successful, meaningful experience. They also selected a program they felt could coincide with their current employment, which hopefully would lead to a comprehensive experience relevant to their career goals. Not only would participants have to balance enrollment and employment, but they also considered their personal lives, which frequently involved family. When considering personal life and family along with returning to formal education after several years of absence,[27,28] doctoral students take on the role of a nontraditional student. Nontraditional students are the fastest-growing enrollment classification in US higher education.[29] These individuals pursue alternative delivery methods such as online learning to gain affordable, practical, relevant, and accessible education, despite unique circumstances, to obtain career advancement.[30,31] In our study, participants fulfilled this nontraditional student role as they knew they could not change their family lives by moving across the country to further their education. DAT degree programs in our study provide this opportunity for meaningful postprofessional education to ATs who are looking to transform their careers without a major life change.

In some ways online learning can be more convenient for balancing employment and family responsibilities, but it requires self-regulation and discipline to work independently.[29] Mature learners are likely better suited to do this; however, participants in our study still mentioned the frequent challenge to stay focused and disciplined between the demands of work, school, and personal life. Good study habits are difficult especially for students needing to fulfill their family life. Fifty-seven percent of nontraditional students are married, and 53% of nontraditional students have children; among these, 29% are single female parents.[28] If nontraditional students attempt to complete coursework at home, they are often interrupted by family members, especially children, even when using a separate closed room to reduce distractions.[32] These distractions may require studying away from home and family, which makes an understanding significant other necessary.[32] Several participants mentioned how their significant others were supportive in helping to create uninterrupted study time and scheduled family activities to facilitate a more balanced environment.

Initial Challenges and Supportive Factors

Time commitment posed a significant difficulty for participants pursuing their degree. Actual class workload in the initial few weeks of the semester was more demanding than the study participants initially expected. There are often discrepancies in predicted versus actual purpose for pursuing doctoral education and workload among students and their instructors.[33] Because of the inclusion criteria of our study, we are unable to determine if this difference in perceived workload between participants and instructors continued throughout the program. Another reason participant time commitments were increased, at least initially, was related to

the potential barriers in online learning. Associated with online learning were students' abilities to engage with the coursework both individually and as a group. This is another challenge that depends on the program, course structure, and instruction techniques. Online programs and their students obviously do not have the advantage of regular class meetings to answer questions.[34] As a result, students have to take responsibility in going back to the literature or textbook before asking questions of others.[34] Performing this independently involves self-regulation. Subsequent skills of self-regulation include goal setting, self-monitoring, effort expenditure, risk evaluation, persistence, and most importantly help-seeking behavior.[35] Many of the participants in our study returned to full-time enrollment as well as it was their first experience in an online learning environment. Subsequently, participants demonstrated many of these self-regulation behaviors such as allotting time for completion of assignments and classes, eliminating distractions, time management, goal setting, and perseverance regarding challenges with concepts or technology.

Nontraditional students in online learning programs are most successful when they perform help-seeking behaviors whether with faculty, peers, or family. This was a common plan for several of the participants in this study. Nontraditional students often look for support from faculty in the form of advisement and understanding in difficult situations when students are not able to meet deadlines.[27–29,36] The majority of nontraditional students are not looking for special treatment; however, they hope to be treated as adults with lives outside of higher education.[29] Based on the inclusion criteria and timing of our study, we were not able to measure whether participants performed health-seeking behaviors similar to those reported in the literature.

Participants also developed social support is through peers, friends, and family. This is essential for overcoming learning barriers and psychological stress, thus leading to student success.[27,28] Through success, doctoral students are more likely to develop hopefulness.[27] They understand they will be challenged to experience likely setbacks throughout their education, but they know that through maintaining their hopefulness they can persevere to attain their degree.[27]

Future Considerations and Implications

By more clearly understanding the motivations for ATs in pursuing the DAT degree, we can provide considerations for future prospective student recruitment using the NATA Postprofessional Education Committee's definition of a postprofessional doctoral degree program.[13] In general, prospective students are seeking the DAT degree with aspirations that it will improve their clinical practice through research, advance them toward career goals, and help them gain further respect individually and as part of the athletic training profession. Programs should consider these motivations in explaining how advanced coursework, applied research, and program areas of distinction will help students achieve their respective goals. In addition, program recruitment should also clarify the type of instruction delivery and learning environments they hope to replicate. Being cognizant of program demands that aim to transition credentialed ATs into clinical scholars and advanced practice leaders is essential for prospective students. After gaining this information, individuals interested in enrolling in a DAT program can make their own educated decision on whether enrollment will fulfill their needs.

LIMITATIONS AND FUTURE RESEARCH

A limitation of this study is DAT programs are currently functioning in preliminary stages and still require additional time and experience to develop curriculum content and delivery that are advantageous to student learning and achievement of career goals. Concurrently, new programs will continue to proliferate across the country in the future. As a result, further research is necessary to understand motivations for students pursuing all programs. Another limitation of this study was the volume of DAT programs ($n = 3$) and participants ($n = 12$) investigated. It is possible the participants in this study did not provide data entirely representative of all current DAT students. Furthermore, motivations for ATs enrolling in these studies likely change upon program matriculation. Research is necessary to understand how these motivations transform as students move through the program. Identifying career outcomes and perceptions of DAT graduates after they graduate is important in future research as well. Tracking the average annual income of DAT graduates would also be beneficial in tracking the success of the degree. Finally, determining employer perceptions of the DAT degree is essential. This research will provide additional perspective on the overall impact of the DAT degree in preparing professionals as leaders in athletic training and the health care field.

CONCLUSIONS

This study established 4 main themes; 2 of these identified motivators, and the others addressed perceived challenges and supportive factors to pursuing the DAT. Through our participant sample, we identified that DAT students in their first semester longed for continued learning and believed that the degree would bring professional advancement and development. They believed the degree would demonstrate added value of the profession, both internally regarding their own self-worth and externally by the way others perceive the profession. They sought out programs that had a strong reputation and faculty who were involved and active in the profession. They also feared online learning, even though it brought a level of convenience they were looking for as nontraditional students. They also worried about cost and balancing work, life, and family, but they indicated that support from family, employers, and peers would help mitigate these challenges. This study provides a basis of understanding regarding ATs' motivations to pursue the DAT degree; further research is needed to recognize how these motivations change throughout program matriculation. Finally, as more students graduate from DAT programs, we need to learn about how their degrees impact their role in the workplace, both from their perspective and from that of employers.

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