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# Examining Initial Perceptions of Transition to Clinical Practice from the Perspective of Professional Master's Students

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**Context:** Newly credentialed athletic trainers are expected to be independent practitioners capable of making their own clinical decisions. Transition to practice can be stressful and present challenges for graduates who are not accustomed to practicing independently.

**Objective:** Explore the perceptions of professional master's students as they prepare to experience role transition from students to autonomous clinical practitioners.

Design: Qualitative study.

Setting: Nine higher education institutions.

**Patients or Other Participants:** Fourteen athletic training students (7 male, 7 female, age =  $25.6 \pm 3.7$  years) participated.

**Main Outcome Measure(s):** Participants completed a semistructured interview over the phone which focused on the perception of preparedness to enter clinical practice. All transcribed interviews were analyzed using a general inductive approach. Multiple-analyst triangulation and peer review were used to ensure trustworthiness.

**Results:** We found themes for facilitators and challenges to transition to autonomous clinical practice. Students felt prepared for independent practice due to (1) *mentoring networks* they had developed, (2) *exposure to the breadth of clinical practice*, and (3) *autonomy* allotted during clinical education. Potential challenges included (1) *apprehension with decision making* and (2) a *lack of confidence*.

**Conclusions:** Our findings suggest graduates from professional master's programs, although ready for clinical practice, may require more time and exposure to autonomous practice to build confidence. Professional master's program administrators should work to provide clinical education experiences that expose students to a wide variety of clinical situations (patients, settings, preceptors) with appropriate professional role models while providing decision making autonomy within accreditation standards.

Key Words: Autonomy, clinical education, mentor

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#### **KEY POINTS**

- Although graduates of professional master's programs feel prepared to enter professional practice, they may need time to develop confidence.
- Developing a mentor network is critical during the transition to practice for graduates of professional master's programs.
- Clinical education experiences should offer variety and preceptors who can guide skill development through appropriate autonomy.

#### INTRODUCTION

Newly credentialed athletic trainers are expected to be independent practitioners capable of making their own clinical decisions. This transition can be stressful and present challenges for graduates who are not accustomed to practicing independently. Clinical education requires direct supervision, which provides a safety net for independent decision making by students, thus limiting skill development and increasing stress as they transition to practice. Other factors may influence readiness to transition to independent practice such as clinical diversity, mentorship received, and patient interactions,<sup>2–5</sup> but our understanding is limited. Researchers and employers have questioned the preparation of recent athletic training graduates regarding their ability to transition into clinical practice.<sup>6,7</sup> In fact, the concerns have escalated since the decision has been made to transition the professional degree to the graduate level as many stakeholders fear the same issues regarding competence and decision making will exist.8

Currently, initial postgraduate experiences are often graduate assistantships or internships. These postgraduate experiences are attractive to new graduates, as these positions offer continued mentoring<sup>2,9,10</sup> and engage new athletic trainers in a role that prepares them for future employment.<sup>11</sup> Although many factors influence postgraduate employment decisions for athletic trainers,<sup>2,11,12</sup> these reasons are rooted in a desire to find support for clinical decisions while developing self-confidence as an autonomous clinician.

There is concern that the removal of the current graduate assistant model will impede transition to practice for some, as there will be a potential loss of support regarding mentoring to transitioning athletic trainers. Proponents for the removal speculate that the clinical immersion in combination with an educational experience that is solely focused on preparing athletic trainers may produce comparable outcomes as the graduate assistant model and facilitate the transition to practice experience for professional program graduates.<sup>8,13</sup> It remains unknown how the move of professional education to the master's level will affect factors known to influence transition to practice (eg, support networks, mentorship, and the opportunity to engage in independent practice during

clinical education experiences). 9,10 Therefore, the purpose of our study was to explore the perceptions of professional master's students as they experience role transition from students to autonomous clinical practitioners.

#### **METHODS**

#### Research Design

We used a general inductive approach to our study to really understand the perceptions of professional master's students before and as they experience transition to practice. Our exploratory study is one of the first looking at the professional master's student, thus using a paradigm that uses a more global approach to data collection allows for capturing the major perceptions and experiences of these students.

#### **Participants**

Fourteen athletic training students (7 male, 7 female, age =  $25.6 \pm 3.7$  years) from 9 different institutions that sponsor accredited professional master's athletic training programs participated in our study. Institutions represented 7 of the 10 National Athletic Trainers' Association districts, and 4 had doctoral universities: high research activity designations, 5 were categorized as doctoral universities: very high research activity, 4 were master's colleges and universities: larger programs, and 1 had master's colleges and universities: medium programs Carnegie classification. Data saturation, which we achieved after 14 completed interviews, drove recruitment efforts. We sent a recruitment e-mail to program directors of all accredited professional master's programs nationwide and asked them to forward it to the students in the last semester of the program. At the time of the interview, participants were in the last month of their respective professional master's program or had graduated within the 3 previous weeks. Twelve had passed the Board of Certification exam at the time of the interview, while 2 participants were scheduled to take the exam for the first time during a later exam window.

#### **Data Collection Procedures**

Phone interviews were conducted following a semistructured, yet in-depth format. We followed the parameters established by an inductive study.  $^{14}$  The process required the interviewer to engage the participants through a series of questions, while allowing the freedom for discourse that may be unplanned or unintentional to fully capture their experiences. We created our interview guide (Table) to reflect an integration of current literature in athletic training  $^{9,10,15-17}$  and nursing  $^{18-23}$  regarding the needs of newly credentialed practitioners and transition to practice. A peer completed a content review of the interview guide followed by a small pilot study (N = 3) to confirm comprehensiveness, clarity, and to gain rigor with our procedures  $^{24}$  prior to data collection. The pilot yielded no

#### Table. Interview Guide

- Do you feel adequately prepared to transition into clinical practice after passing your BOC exam? Please explain.
  - a. Can you explain to me your thoughts about the transition?
- Did you discuss transition to practice while you were completing your professional preparation? If so, please explain how.
- 3. What are your expectations as you transition from student to autonomous practitioner?
- 4. Do you believe you have a clear sense of your future job roles and responsibilities?
- 5. Do you know what type of position you hope to get after graduation?
  - a. If yes, what factors influenced your decision to seek employment in this setting?
  - b. If no, what factors will influence your decision?
- Describe what concerns you most about your athletic training practice.
- 7. What challenges do you foresee facing regarding your development as an independent practicing athletic trainer?
- 8. What strategies do you think you will use to help navigate those challenges you foresee?
- 9. How do you think you will find support for clinical decisions?
- 10. Do you have a mentor? Someone you consider to be a person to reach out to, seek advice or guidance from?
  - a. If yes, can you discuss how this relationship developed? Is your mentor an athletic trainer? Did the relationship develop formally or informally? What impact do you expect this relationship to have on your transition into independent practice as an athletic trainer?
    - i. How do you communicate with your mentor? How frequently does this happen?
  - b. If not, can you discuss why you do not believe you have someone who can provide mentorship in your professional development?
    - i. Would a mentor be helpful to you as you prepare for transition to independent clinical practice, if one was available?
    - ii. What would you look for in a mentor?

Abbreviation: BOC, Board of Certification.

changes to the content of the interview guide, but the order of questions was altered to improve the flow and exchange between the interviewer and interviewee. We interviewed our participants at their convenience during their last semester prior to graduation or within 3 weeks of graduating for approximately 30 minutes. We had all interviews transcribed verbatim by a professional transcription company to facilitate data analysis and reduce researcher bias.

# **Data Analysis**

Data analysis was completed following the principles of a general inductive approach,<sup>25</sup> as it allowed a holistic approach to understanding role transition. The analyses included the following steps: (1) *data evaluation*, whereby data was labeled line by line to identify its primary meaning. The raw data

deemed to match the research questions was the primary focus of the coding. (2) Defining and labeling units of meaning occurred next, and the data were reduced to reflect only those items that relate to the research aims. Consolidation of the raw data transpired at this time. (3) After identifying patterns that begin to emerge within the transcripts, grouping common units of data into categories was completed. (4) Defining and collapsing categories into final themes served to answer our questions raised at the outset of the study. (5) Finally, findings were compared by 2 researchers, to ensure credibility and accuracy of the coding.

Credibility was established by several mechanisms including memoing (field notes during interviews), peer review, and researcher triangulation. 14,26 During each interview session, the interviewer completed memoing to capture the key points shared by the participant. We used this information to support data analysis during the initial coding process, as it alerted us to key statements or experiences shared by the participant.<sup>27</sup> A peer review occurred before data collection (instrument review) and then also occurred upon completion of data analysis. As discussed previously, the peer reviewed the interview guide for content comprehensiveness and clarity as part of the piloting process. In addition, the peer was provided the presentation of the results and 2 coded transcripts. We asked the peer to verify the coding structure and presentation of the results. We selected the peer based upon content expertise in transition to practice for athletic trainers and qualitative research design. The peer has published studies in the area of transition to practice and the socialization framework, but was independent to the data collection process and initial analyses. T.G.B. and S.M.S. independently completed the analysis process as outlined above and shared their findings prior to finalizing the presentation of the results. The researchers have been trained in the analyses described previously and discussed and agreed upon the stepwise method before engaging in the coding process.

#### **RESULTS**

While analyzing the data to determine perceptions of newly credentialed athletic trainers as they enter autonomous clinical practice, we found themes for facilitators and challenges to transition. Students felt prepared for independent practice due to (1) mentoring networks they had developed, (2) exposure to the breadth of clinical practice, and the (3) autonomy allotted during clinical education. Participants noted preceptors, peers, and faculty as primary mentors they planned to contact for guidance during transition. Experiencing multiple patient cases and appropriate levels of autonomy during clinical education fostered readiness for transition. Potential challenges included (1) apprehension with decision making and (2) a lack of confidence. Participants noted that making decisions while in stressful moments did cause them some anxiety and that building confidence would be something, they would need to work on due to being responsible for autonomous clinical decisions after transitioning.

#### **Mentoring Networks**

Our participants consistently mentioned the fact that their transition to practice would be facilitated by mentors they had gained during their preparation. One participant summed up the importance of mentors in the development of her clinical practice:

There is such a good push for mentorship that I do want to take advantage of it because it is such a small world and because those people have helped me to develop not only my clinical practice, but also have given me answers when I don't have them. I really do value that a lot. I think that—I have probably, I would say, 5 or 6 people that I can very readily call that have been in the field for multiple years that I would contact in some way, either generally, just to keep in touch and to just have general relations with and to hear about their experiences and any kind of insight that they have, but also to call promptly if I have an emergent situation that I don't know the answer to.

Similarly, one participant explained how her mentors would assist her transition to practice, noting that she would ask for advice. She responded to a question regarding if her mentor would help in her transition by stating:

I think definitely. I will lean on both my mentors and the people in my class when my athletic director is being really difficult over an issue. I can ask, "What do you think I should do?"

Indeed, our participants felt that "mentoring is one of the most powerful things you can do and have." A final student getting ready to transition noted the importance of mentorship based on the experiences of friends who struggled with the transition due to being "isolated" without a mentor. She said:

When I think about the transition, I definitely feel like I want to surround myself with people who will mentor me and be able to assist my transition. I have some friends who are—have already graduated and become athletic trainers. They have expressed feeling isolated or unsupported. I think, when I look at that transition, my top priority is going to be finding other athletic trainers who can support me in my transition.

This last quote illustrates the perceived importance of mentors in the transition process, while other participants appreciated the value of mentors during the educational process to date and knew they would be necessary moving forward into clinical practice.

#### **Exposure to the Breadth of Clinical Practice**

The variety and robustness of clinical education provided our participants with feelings of comfort while considering the transition to clinical practice. The robustness of the clinical education experience was detailed as exposure to the breadth of athletic training responsibilities and knowledge needed in clinical practice, rather than a specific set of skills. One student preparing for transition explained how a variety of experiences allowed him to appreciate the "gatekeeper" role of athletic trainers in the greater health care system. He stated:

Over my clinical experiences, I have gotten a wide variety of setting exposure. I spent the summer at [institution name] working a more military athlete population. I've been at 2, I guess at 3 DI [Division I] universities. I've been at an NAIA [National Association of Intercollegiate Athletics] college, at a small high school, and a large high school and had different experiences along the way with more outreach activities to inner city public schools or covering NCAA [National

Collegiate Athletic Association] tournaments. I think what these have taught me is maybe your daily responsibilities are different, but your role as an athletic trainer, as a provider of health care, and as a gatekeeper to the health system, the role stays very much the same, no matter what setting you're in.

Another student agreed and had similar clinical education experiences. He stated the importance of a diverse set of clinical experiences to help prepare for what day-to-day life will be like as a practicing athletic trainer. The student who attributed his breadth of experiences as a positive part of role transition mentioned past experiences in totality, which included exposure prior to his acceptance into his current program, as well as his current educational curriculum. He explained:

I would say just the wide variety of experience[s] that I've been fortunate to have not only in my undergrad, working with a bunch of different sports, but also here at [institution name], I was able to work in the clinic, a high school, and then also with the sports teams here. Just having a whole different variety of experiences, I feel like, prepares me for whatever's coming my way next year.

A final participant noted the importance of previous experience as she had worked for several years in a physical therapy clinic and had massage therapy experiences. These experiences combined with the clinical experiences she received made her feel prepared to transition. She stated:

The way that our program is structured, honestly, it's very heavily focused on putting us in diverse clinical environments, if we so choose to seek them out. I've gotten to practice with 2 different Division I universities and in a private clinical setting in the 2 years that I've been here, as well as our research clinic. Having that diversity—also, I'm not really a traditional student. I've got a long clinical background being in physical therapy, also just working as a massage therapist and aid and chiropractic assistant and all these kind of things.

The last quote explains the importance of program administrators seeking out clinical experiences that are diverse to provide students with a breadth of experiences upon graduation.

# Autonomy

Our students enjoyed appropriate autonomy during their clinical experiences that helped them appreciate what working as an athletic trainer would be like once they graduated. One participant had a great experience with a postsurgical case where she was able to take the case from start to finish. She explained:

That's where I was learning best in our clinical [education experiences]. As a second year now, I'm with baseball. He [my preceptor] pretty much gave us free rein under his eye, obviously. We had a guy here who had a knee scope. He was just like "I'll check in with you guys and make sure you're making the right decisions, but I want all the decisions for him returning to play to be you, from rehab to initial postsurgery stuff." That's where I found I learned best, so that's what I know I'm going to need as I transition from job to job.

Simply put, autonomy allowed students to appreciate what life is like as a professional. Another respondent stated:

The program just really put us in clinical environments. It put me in clinical environments where I was able to learn, but also be given autonomy to experience what it's like to be a clinician.

A final student noted his development and "growth" by being allowed to make decisions under appropriate levels of supervision. She explained:

Obviously, as a student, still under supervision, but being given the responsibility to basically take charge from beginning to end on athlete care under that supervision, that's where I've seen the most growth. I do feel ready... I do feel like I have all the tools to go forward and to have the opportunity to succeed.

Our participants felt prepared for clinical practice due to the autonomy they were able to experience during their clinical education experiences.

# Apprehension with Decision Making

Our participants, although they had the experience and felt prepared for clinical practice, were apprehensive to be the primary decision maker. For many, it was more about the conditions that were rare, or they had not seen yet during their clinical education experience. For example, one participant shared:

Medical issues or maybe injuries that aren't well talked about or aren't very common, having those come up, and then I'm unsure about what the protocol is or what the procedure is and how to handle those and things like that, things that I either haven't learned or that aren't in my wheelhouse yet, that I'm like I have no idea. I've never heard of this. I've never seen this kind of thing. I think things like that would be not an issue, but definitely cause me to think and reflect, like. "Wow, okay, I need to study more or do more research."

Another was also concerned about the unknown, when it pertained to making decisions when no one else is around:

I guess it's just the unknown. When I get out, like I said before, to just make that first decision, walk into an athletic training room and unlock the door, and it's all me. There's nobody else in there. There [are] no students running around, trying to help. I make all the decisions. It makes me a little nervous because, again, there's people—I kind of rely on people, students that I've worked with and preceptors to guide me. It'll be—I don't know. I guess I'm just a little nervous to not have that backing. It's not like I'm nervous I'm going to make the wrong decision; it's just I'm nervous that nobody's going to be there to watch me.

A final response came from another young professional preparing to transition. She discussed not wanting to "miss the big one" when treating patients. She explained:

I would say one of the biggest things that I've become aware of, especially towards the end of the program—I really don't want to, obviously, miss a diagnosis. That's a big one for me, as far as people are relying on you to make decisions, not necessarily for them, but give them the best advice. There can be a lot of pressure. I think you're not going to do everything perfect, but you also don't want to miss the big one. That's kind of concerning, I guess, in a way.

Although our participants felt prepared to enter clinical practice, they did have feelings of apprehension regarding future clinical decision making.

#### **Lack of Confidence**

A lack of confidence was noted by our participants which did lead to feelings of anxiousness regarding the transition to practice. When asked what challenges she anticipated facing regarding her development as an independent practicing athletic trainer, one participant explained her feelings regarding confidence:

For me, I would say confidence, mostly. I think that will be the biggest personal challenge for me. I think the clinical reasoning aspect and the growth there will be fine because I'm already in that mindset, but I think for me, it will be—yeah, it will ultimately be that confidence and trusting my knowledge, trusting my decisions, trusting my evaluations to make the best decision that I can.

Another student discussed his need for improving his level of confidence and his need to not second guess himself. He explained:

I think a big one would be trusting myself, trusting what I've learned. Sometimes I lack confidence because I don't have certain experience in an area or things like that. Knowing I know what I know about myself—sometimes I don't give myself enough credit. My friends or family are like, "Dude, you know this. You're good at this because we've seen you do it..." Yeah, confidence in what I've learned and my ability, instead of second-guessing myself. Is this right? Am I doing this right?

A final response came from another student getting ready to transition. Her lack of confidence was concerning when she reflected on the fact that she would be required to interact with coaches and knew she would need to carry herself in a way that made others feel she "knew what she was doing." She explained:

I think the biggest thing for me coming out as a student to a full-time staff member is the whole confidence issue. Dealing with coaches, you need to be confident. Dealing with athletes, you need to be confident. Coming into situations that might be the first time for me, I need to sort of be confident enough that athletes or coaches don't know that this is the first time that I'm dealing with this. Just having that confidence, I think, is something that is going to be huge next year.

Although our participants felt prepared for the transition to autonomous clinical practice, they also believed they would need to improve their confidence to be successful moving into their first job.

#### **DISCUSSION**

# Facilitators to the Perception of Role Transition

Role transition is facilitated by having mentors, regardless of the employment setting, that can provide support through feedback and knowledge of the setting's expectations and policies. <sup>28</sup> Our participants recognized the need to seek out support from mentors, as it would augment their growth and confidence. Mentoring has been shown to facilitate an effective role entry as it reduces the stress associated with

the unknown as well as provides feedback as to decision making and knowledge related to policies and procedures. 9,29 The finding that mentorship was identified as imperative in the transition process is not new, but the recognition of its importance to transition prior to the transition itself is new. This early recognition illustrates forward thinking on the part of newly credentialed athletic trainers and may alleviate some of the uncertainty and stress that can accompany the first few months of transition. Specifically, newly credentialed athletic trainers know where they can find support to handle any situation that may arise.

The opportunity to perform the roles and responsibilities of an athletic trainer with autonomy prior to certification was identified as a facilitator for role entry. The socialization process pre-entry and postentry into the field is founded on experience, autonomy, and diversity and provides a realistic impression of the field and the expectations of the role.30-34 Our participants attributed their readiness to enter a full-time role as credentialed athletic trainers to the opportunities to perform those roles, with autonomy as well as through diversity within their clinical education. Although the need to have autonomy and diversity during the professional socialization process has been found previously, 4,5 the uniqueness lies in our finding that diversity during clinical experiences allowed for an appreciation of the overarching expectations and responsibilities of athletic trainers. Thus, diversity is still warranted, as well as the chance to be autonomous in clinical practice prior to entering the profession as credentialed athletic trainers. Therefore, program administrators should carefully select and train preceptors while placing students with preceptors who will complement their skillset and push them towards autonomy. Immersive clinical education may offer opportunities to gain exposure to the practice of athletic training, but also the chance to assume the roles of athletic trainers holistically. Our participants did not reference immersion as a supportive mechanism for transition to practice; however, we believe our findings align with the need to implement clinical immersive experiences. The idea behind immersive experiences is to support transition to practice by giving students the chance to see the totality of the role of athletic trainers while they gain confidence and reduce apprehension.<sup>17</sup> An immersive experience may allow students more chances to practice their decision making and increase their confidence. The 2020 Standards for Professional Master's Programs will require immersive experiences beginning July 1, 2020,<sup>35</sup> which may improve transition to practice.

# **Challenges During Role Transition**

During the first year of autonomous clinical practice, newly credentialed athletic trainers report challenges when transitioning into their role, a finding that is not uncommon among new nursing practitioners. <sup>22,36–38</sup> The stress and challenges experienced are often due to gaining confidence in decision making, as well as learning the policies and procedures that can be employment setting specific. <sup>28</sup> Employers expect that newly credentialed athletic trainers entering the field will be autonomous, licensed, and competent<sup>9</sup>; this expectation inherently creates stress for new athletic trainers.

Our results compliment previous literature examining transition to practice and the socialization process during initial role entry. <sup>28,39</sup> The fear of the unknown or lack of experience with certain conditions or situations was shared as a challenge that

can create stress for our participants. Our finding is comparable to the work of Thrasher et al,9 in which newly credentialed graduate assistant athletic trainers had trepidations surrounding something they may have little to no experience with beforehand (ie, emergency situations). Developing confidence is also a part of the initial transition process, and the challenges faced by our participants are consistent with other findings where the early stages of the transition are more difficult, as self-efficacy, efficiency, and confidence need to be gained.9 However, as these experiences continue to occur, confidence is gained as positive patient outcomes occur due to their clinical decisions as they engage in the role of practitioners. Parallels can be drawn from other professions in regard to transition to practice, as many new nurses and novice physicians experience transition shock, which includes a period of uncertainty and increased stress. 40,41

#### **Limitations and Future Directions**

It is important to note that generalizability is a common limitation to qualitative studies. We collected data for our study from 14 participants, and although we reached data saturation with a broad demographic, our findings may not generalize to all young professionals embarking on transition to autonomous practice. Transition is a process, and perceptions will change throughout the process. Our results represent a snapshot in time prior to full transition and may not represent what participants will feel once autonomous practice is started. Future studies should use a longitudinal approach to understand how perceptions change over time during the transition process. Finally, our participants noted the breadth of clinical education as a key to the perception of transition. However, we did not probe for detail to determine what clinical education provided allowed them to feel ready for transition. Future studies should more closely examine this finding to determine what components of clinical education specifically provide students with feelings of preparedness to transition to autonomous clinical practice.

# **CONCLUSIONS**

Our findings suggest graduates from professional master's programs, although ready for clinical practice, may need support networks in place to assist in decision making and confidence building. Professional master's program administrators should work to provide clinical education experiences that expose students to a wide variety of clinical situations (patients, settings, preceptors). Students should be provided with appropriate professional role models to provide decision making autonomy within accreditation standards during clinical education. Employers of newly credentialed athletic trainers should find ways to support them (ie, mentorship) and recognize the fact that new clinicians will have some feelings of trepidation when faced with challenging decisions and will need time and experience to improve confidence.

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