

# Faculty and Preceptor Perceptions of Their Respective Roles in Athletic Training Student Development

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**Context:** Health care professions use a unique learning pattern in which education occurs both didactically and clinically. Previous research has focused on preceptor selection and training, but there has been limited emphasis on the perceived roles of didactic and clinical educators. Identifying potential discrepancies in perceived roles in student development may help improve athletic training student education through a shared understanding of role delineation.

**Objective:** To understand the perceived roles of faculty and preceptors in athletic training student development.

**Design:** Consensual qualitative research.

**Setting:** Videoconference focus group interviews.

**Patients or Other Participants:** Eight faculty, 7 preceptors, and 7 dual-role faculty/preceptors representing professional athletic training programs participated in this study. Data saturation guided the number of focus groups conducted.

**Data Collection and Analysis:** Semistructured focus group interviews were conducted and transcribed verbatim. Four researchers used a consensus process to analyze data, identify emergent themes, and create a codebook independently. We created a consensual codebook using identified themes and subgroups. Trustworthiness was established with the use of multiple researchers and an external auditor.

**Results:** Three themes emerged from the data: (1) contributors to role achievement, (2) challenges to role achievement, and (3) perceived improvements. Factors contributing to role achievement included positive relationships, effective communication, role development, student development, and socialization. Challenges to role achievement included preparation for the role, student commitment, role strain, ineffective communication, authenticity of learning, and preceptor willingness. Suggestions for perceived improvements included concept integration and application, programmatic leadership, and culture.

**Conclusions:** Some participants identified ineffective communication as a challenge to role development. Others noted effective communication as a contributor to role development. Limited formal training exists for faculty and preceptors relative to their respective roles in student development, and many draw from their own past experiences to better fulfill those roles.

**Key Words:** clinical education, communication, role delineation

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# Faculty and Preceptor Perceptions of Their Respective Roles in Athletic Training Student Development

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## KEY POINTS

- Role development for both faculty and preceptors was highly influenced by communication between the program administrators and the preceptor.
- Faculty and preceptors both acknowledge that they received limited formal training in how to direct student development, and both groups felt that they relied on past experiences to help them achieve their roles.
- Preceptors and faculty both perceived that increased concept integration across didactic and clinical instruction would improve role fulfillment in student development.

## INTRODUCTION

Like other health care professions' education programs, professional athletic training education programs use a learning approach in which students learn through a combination of traditional classroom instruction and hands-on clinical practice opportunities.<sup>1,2</sup> Faculty in such education programs assume the responsibility of providing and building upon foundational and theoretical knowledge, ensuring primary skill acquisition, and assessing appropriate skill level necessary for the practice of athletic training. Preceptors are responsible for guiding the translation of classroom-taught content to clinical-practice application and students' supervision throughout their clinical experiences.<sup>2,3</sup> Preceptors of most health profession education students are often the ostiaries for feedback on clinical performance, in the forms of both feedback to the student and feedback to the program about the student.<sup>4</sup> To promote student development, preceptors are expected to integrate classroom content and theory into student clinical experiences.<sup>3,4</sup>

The shared responsibilities of faculty and preceptors in student development emphasize the importance of collaboration and communication between the 2 groups. Insufficient communication has been noted previously in both athletic training and nursing education, and the lack of communication has contributed to collaborative impediments.<sup>5-7</sup> Athletic training students have identified interactions with both faculty and preceptors as a contributing frustration to their experiences as a student, with neither preceptors nor program faculty considering the other's expectations and requirements when placing requirements onto the student.<sup>8</sup>

Literature in athletic training clinical education has often focused on preceptor selection and training. Preceptors have previously disclosed that they lack a complete understanding of expectations of them before accepting the role of preceptor.<sup>3</sup> Preceptors have previously noted concern with a lack of communication from the program, specifically about what preceptors can expect from students and how to evaluate students.<sup>3,5,7</sup> Such preceptors have identified that communication between preceptors and program faculty needs to be improved.<sup>3,5,7</sup> Preceptors would like more education and

workshops focused on expectations, evaluation, and programmatic objectives as they prepare for their role in supervising and educating students clinically.<sup>3,4,6,7</sup>

Both faculty and preceptors fulfill distinctive roles in the education of future health care professionals. However, discrepancies in the perception of each other's roles can negatively impact athletic training students' educational experience and development. Identification of perceived roles and responsibilities and barriers to role fulfillment has the potential to result in the development of improved collaborative role performance for both faculty and preceptors. Therefore, this study aimed to create focus group dialogues among faculty and preceptors to explore their perceived roles in athletic training student development.

## METHODS

### Design

This study used a multiple-category focus group design with a consensual qualitative research (CQR) analysis. The multiple-category focus group design allows for focus group research that involves different categories of participants.<sup>9</sup> The CQR approach for analysis incorporates grounded theory,<sup>10</sup> phenomenology,<sup>11</sup> and a comprehensive process analysis.<sup>12</sup> By using this approach, we were able to provoke discussion on the respective roles of faculty and preceptors from athletic training programs on athletic training student development. We chose the CQR approach for this investigation to minimize bias through triangulation and peer debriefing. Trustworthiness was established through the presence of at least 2 of the same 3 researchers (J.M.C. [postprofessional and professional athletic training program faculty member], H.M.B.W. [postprofessional graduate student and clinician in the secondary school setting], and E.L.N. [postprofessional graduate student and clinician in the secondary school setting]) for each focus group discussion,<sup>9</sup> the methodologic review of all participant cases to obtain a thorough and accurate depiction of the results, a multiphase analysis conducted by 4 researchers (J.M.C., G.W.C., H.B.M.W., and E.L.N.), and the use of an external reviewer (C.E.W.B.).<sup>13</sup> The study design was reviewed and approved by the Old Dominion University College of Health Sciences Human Subjects Review Committee.

### Participants

Approximately 500 faculty and preceptors associated with Commission on the Accreditation of Athletic Training Education (CAATE)-accredited professional athletic training programs were emailed a demographic questionnaire link (Qualtrics) and asked to complete the questionnaire if they were interested in participating in a focus group discussion about their role in athletic training student development. The demographic questionnaire, which included identifying their

**Table 1. Participant Pseudonyms and Demographics**

Pseudonym	Role	Age	Gender	Years of Experience	Self-Rated Relationship Between the Program Faculty and the Program's Preceptors
Jorah	Faculty	38	Male	8	Good
Jaime	Faculty	30	Male	2	Good
Robert	Faculty	32	Male	8	Good
Catelyn	Faculty	34	Female	3	Good
Eddard	Faculty	49	Male	22	Very good
Cersei	Faculty	52	Female	1	Very good
Daenerys	Faculty	42	Female	12	Good
Sansa	Faculty	46	Female	5	Very good
Arya	Faculty	31	Female	2	Very good
Olenna	Faculty	34	Female	3	Good
Bran	Dual role	30	Male	3	Very good
Sandor	Dual role	45	Male	3	Good
Tyrion	Dual role	48	Male	23	Good
Melisandre	Dual role	27	Female	1	Very good
Shae	Dual role	47	Female	20	Good
Gilly	Dual role	47	Female	17	Neutral
Brienne	Dual role	28	Female	3	Very good
Missandei	Preceptor	37	Female	14	Good
Ellaria	Preceptor	31	Female	7	Good
Ygritte	Preceptor	26	Female	3	Neutral
Margaery	Preceptor	25	Female	1	Very good
Daario	Preceptor	29	Male	1	Very good
Tommen	Preceptor	37	Male	1	Very good

primary role (ie, faculty, preceptor, or dual role), was completed by 192 interested participants, whom the research team members then contacted to identify scheduling availability for focus group meetings. Snowball sampling was also used to recruit an adequate number of preceptors to participate. For this study, faculty needed to serve as core faculty for a CAATE-accredited professional athletic training program, and preceptors were required to be supervising an athletic training student from a CAATE-accredited professional athletic training program in a clinical setting during the 2018–2019 academic year. Those who served as both core faculty and preceptors for the same athletic training program at the time of the study were considered dual role.

Voluntary participation in the demographic questionnaire served as consent to participate in the study's focus group portion. Each participant category was exclusively represented in 2 groups, creating 6 focus groups in total (2 faculty, 2 preceptor, and 2 dual role). Each focus group included 3 to 6 participants, and data saturation guided the number of focus groups conducted. Demographic information for focus group participants appears in Table 1. The faculty focus groups consisted of 6 women and 4 men (38.9 ± 8.0 years of age, 6.6 ± 6.4 years of experience), the preceptor focus groups consisted of 4 women and 2 men (30.8 ± 5.2 years of age, 4.5 ± 5.5 years of experience), and the dual-role focus groups consisted of 4 women and 3 men (38.9 ± 9.9 years of age, 10.0 ± 9.5 years of experience). In addition to identifying their primary role, the questionnaire asked each participant to select their gender, indicate years of experience in their current position, and rate the relationship between their athletic training program's faculty and preceptors (*very poor*, *poor*, *neutral*, *good*, or *very good*).

### Instrumentation

Consistent with the CQR approach, the research team developed an open-ended, semistructured interview protocol to explore participants' perceptions of both faculty and preceptor roles in student development.<sup>13</sup> The semistructured format allowed for consistent data collection across groups while permitting opportunities for clarifying and follow-up questions. Faculty and preceptor groups answered 7 questions respective to their roles in student development, and dual-role participants were asked an eighth question requesting them to compare the 2 roles they fulfilled. The complete semistructured interview guides for all focus group types are presented in Table 2. Three members of the research team (J.M.C., H.B.M.W., and E.L.N.) developed interview questions, which C.E.W.B. subsequently reviewed for clarity and content. Minor, primarily grammatical, revisions were made to ensure focus group questions would yield results specific to the study's purpose. No pilot testing on the interview script was deemed necessary after external review.

### Data Collection

Focus groups were conducted via WebEx (Cisco Webex) between September 2018 and December 2018 and were recorded with participant consent. Data saturation guided the number of focus groups conducted. The research team determined the achievement of data saturation after 2 faculty, 1 preceptor, and 2 dual-role focus groups. However, the researchers felt it was essential to conduct an equal number of focus groups for each group type, so 1 additional preceptor focus group was conducted. Interview recordings were transcribed verbatim by a third-party transcription service

**Table 2. Semistructured Interview Guides**

Focus group questions: educators/faculty only

1. What do you perceive your role to be regarding athletic training student development?
  - a. Discuss training, if any, that has allowed you to be effective in this role.
2. What are the most challenging aspects of your role in athletic training student development?
3. What do you perceive the role of preceptors to be regarding athletic training student development?
4. What types of information do you communicate to the preceptors affiliated with your athletic training program?
5. What types of information do the preceptors affiliated with your athletic training program communicate to you?
  - a. Please describe any gaps in the current communication process with preceptors affiliated with your athletic training program that might impact student development.
6. Describe your relationship with the preceptors affiliated with the athletic training program.
7. Please discuss your perceptions of educating students didactically versus educating students clinically.
  - a. If different, do you have any suggested solutions to eliminate those differences?

Focus group questions: preceptor only

1. What do you perceive your role to be regarding athletic training student development?
  - a. Discuss training, if any, that has allowed you to be effective in this role.
2. What are the most challenging aspects of your role in athletic training student development?
3. What do you perceive the role of educators/faculty to be regarding athletic training student development?
4. What types of information do you communicate to the educators/faculty affiliated with your athletic training program?
5. What types of information do the educators/faculty affiliated with your athletic training program communicate to you?
  - a. Please describe any gaps in the current communication process with educators/faculty affiliated with your athletic training program that might impact student development.
6. Describe your relationship with the educators/faculty affiliated with the athletic training program.
7. Please discuss your perceptions of educating students didactically versus educating students clinically.
  - a. If different, do you have any suggested solutions to eliminate those differences?

Focus group questions: dual-role preceptor/educator group

1. What do you perceive your role to be relative to athletic training student development?
  - a. Describe any differences in the roles assumed when teaching didactically versus clinically.
  - b. Discuss training, if any, that has allowed you to be effective in this role.
2. What are the most challenging aspects of your role in athletic training student development?
3. What do you perceive the role of those serving solely as educators/faculty to be regarding athletic training student development?
4. What do you perceive the role of those serving solely as preceptors to be regarding athletic training student development?
5. What types of information does the program communicate to the educators/faculty versus preceptors?
6. Please describe any gaps in the current communication process with educators/faculty and preceptors affiliated with your athletic training program that might impact student development.
7. Describe the relationship between educators/faculty and preceptors affiliated with the athletic training program.
8. Please discuss your perceptions of educating students didactically versus educating students clinically.
  - a. If different, do you have any suggested solutions to eliminate those differences?

using Olympus AS-2400 transcription kit software (Olympus Inc), and the research team assigned pseudonyms for all participants.

### Data Analysis

Two members of the research team (H.B.M.W. and E.L.N.) initially analyzed interview transcripts through open coding to identify initial themes and subthemes to reach a consensus on a preliminary codebook. Once the preliminary codebook had been established, the 2 research team members performed axial and thematic coding on all transcripts to develop an established codebook. Next, those 2 research team members and an additional researcher (H.B.M.W., E.L.N., and G.W.C.) performed axial and thematic coding on all transcripts independently. They then met to finalize the main themes and categories. Finally, the 4-member research team (H.B.M.W., E.L.N., G.W.C., and J.M.C.) independently coded all transcripts using the finalized codebook. This team then met to review and reach a consensus on all codes within all transcripts. Once this was completed, trustworthiness was further established by using an external auditor (C.E.W.B.),

who reviewed the final codebook and all coded data, along with 3 uncoded transcripts (1 from each type of participant group role), to confirm the final codebook and coded data. As a component of CQR, and outlined by Hill et al,<sup>13</sup> categorical occurrence was quantified. Categories were described as *general* if mentioned by more than 20 participants, *typical* if mentioned by 11 to 20 participants, or *variant* if mentioned by 10 or fewer participants. We used the Consolidated Criteria for Reporting Qualitative Research<sup>14</sup> to guide the comprehensive reporting of our findings. Table 3 provides the frequency of category appearance and Figure 1 represents the methods study flowchart.

### RESULTS

Three main themes and 14 categories emerged from the focus group discussions. The main themes were (1) contributors to role achievement, (2) challenges to role development, and (3) perceived improvements. Figure 2 shows the conceptual framework resulting from the data analysis. Participants are identified with both their pseudonym and their role through-

**Table 3. Theme and Category Frequencies**

Theme	Category	Frequency of Code Use	No. of Participant Cases	Category Description
Contributions to role achievement	Positive relationship	29	18	Typical
	Effective communication	51	21	General
	Role development	46	18	Typical
	Student development	55	20	Typical
	Socialization	15	12	Typical
Challenges to role development	Preparation for role	16	12	Typical
	Student commitment	28	13	Typical
	Role strain	24	13	Typical
	Ineffective communication	22	15	Typical
	Authenticity of learning	32	15	Typical
	Preceptor willingness	12	9	Variant
Perceived improvements	Concept integration and application	30	17	Typical
	Programmatic leadership	10	8	Variant
	Culture	14	10	Variant

out the remainder of the results to contextualize similarities and differences in responses based on role.

**Contributors to Role Achievement**

Participants commonly identified concepts that contributed to successfully achieving their perceived role in student develop-

ment throughout the interview process. Five categories emerged from the discussion: positive relationship, effective communication, role development, student development, and socialization.

**Positive Relationship.** As participants described the relationship between the academic program faculty and the

**Figure 1. Study procedures flowchart.**

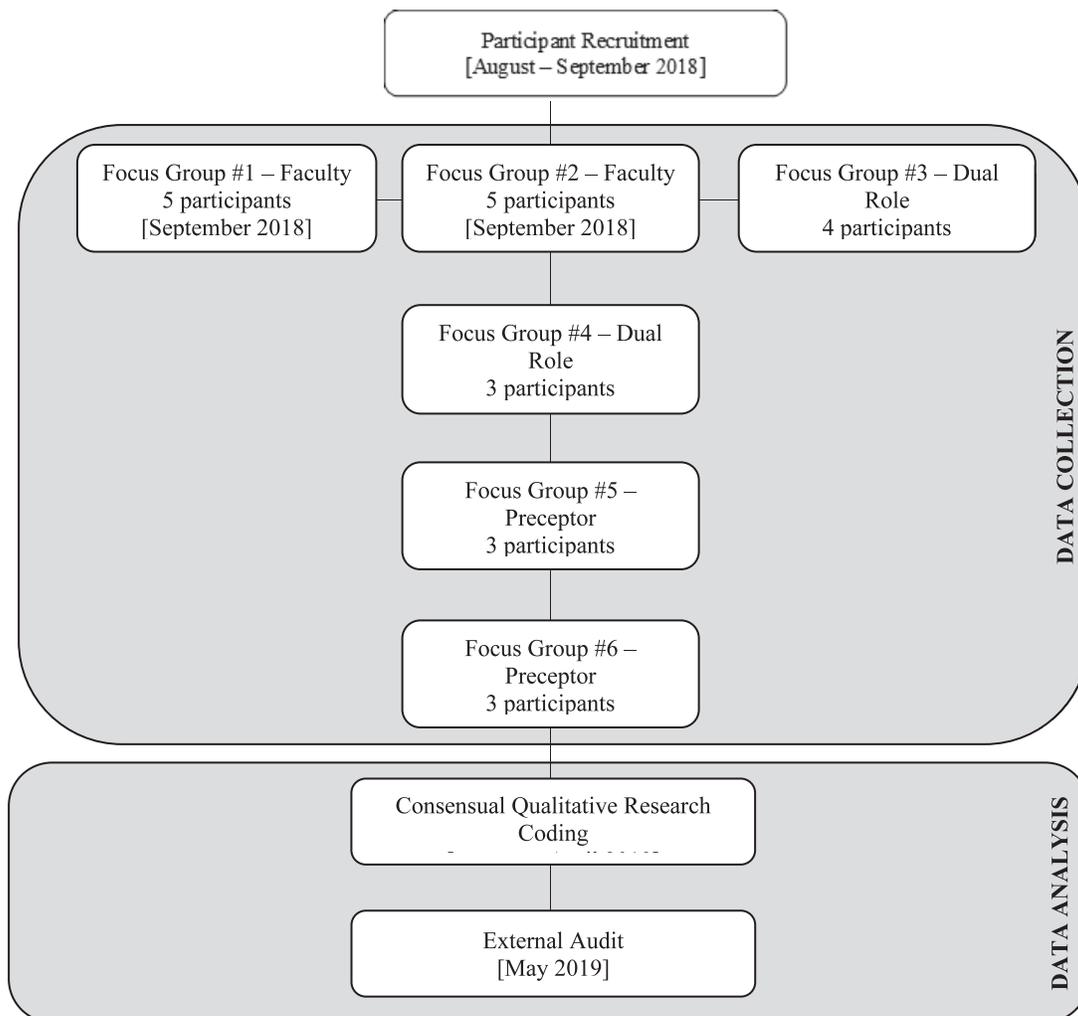
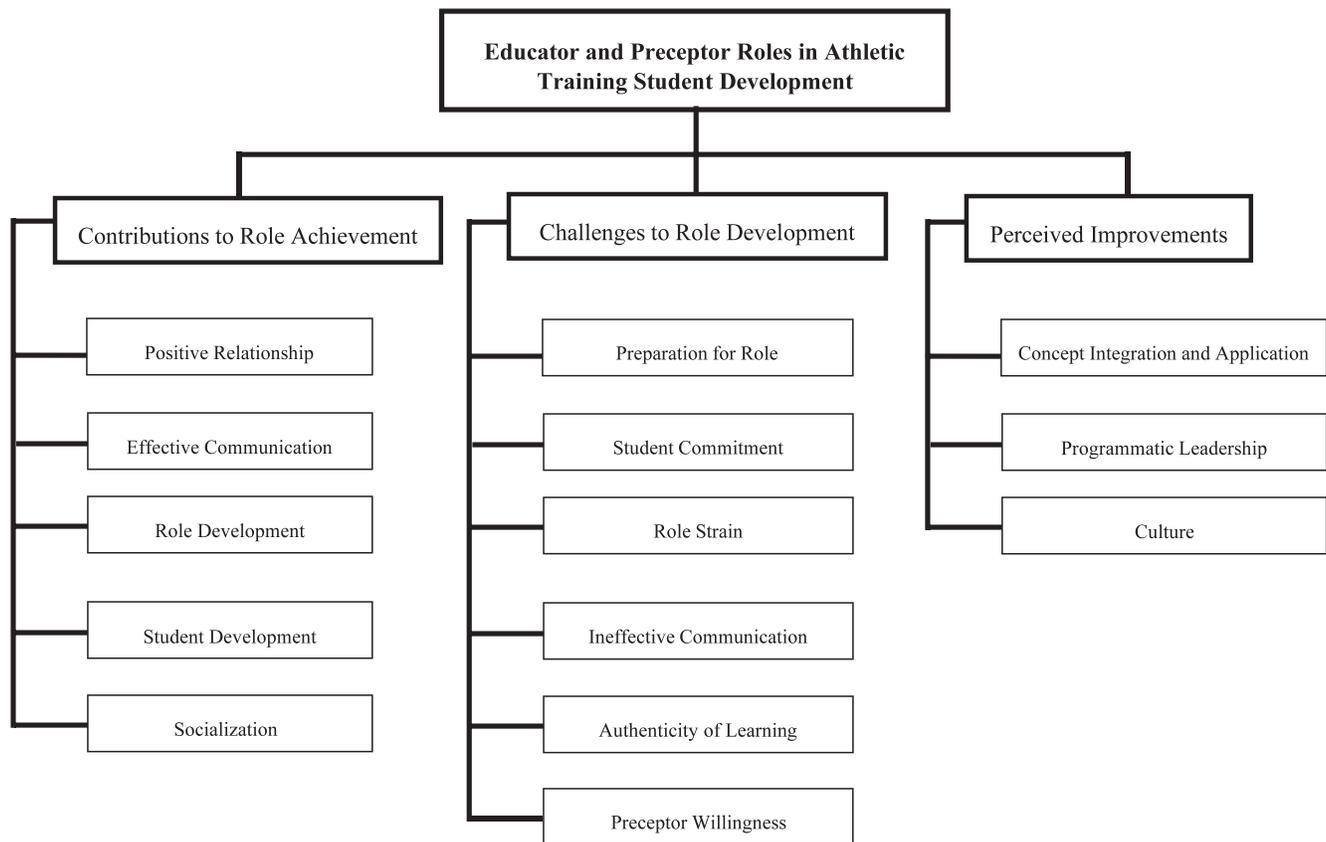


Figure 2. Conceptual framework.



program’s affiliated preceptors, the existence of positive relationships typically facilitated role achievement in pursuit of student development. Friendships, collaboration, and teamwork characterized positive relationships. Eddard (faculty) shared,

*I would describe our [relationship] as collaborative, trusting, and very positive. That is not by accident. That has taken 20 years of development to get to that point where I feel like I can call up one of our [preceptors] in one of our facilities and have a candid conversation that is received in the right way. It is not adversarial.*

Tommen (preceptor) stated, “I am good friends with the clinical coordinator, so I know if I ever have questions or have an issue that I can reach out to her quickly and easily.” Melisandre (dual role) said, “Our professors love inviting us into the classroom as preceptors so our students can see us in a different role, then we can also teach more of the clinical skills when they want us to.”

**Effective Communication.** A majority (21/23, 91.3%) of participants described effective communication strategies that they used to ensure the achievement of their respective roles. In some cases, this included changes they had made to overcome previously ineffective communication that may have impacted student development. Tyrion (faculty) described,

*...we really tried to be present more in the last couple of years, and I do believe it’s made a huge difference and so visiting [preceptors] once a week, twice a week, twice a month, depending on location, is important to us and I think it*

*really has helped our relationship with the preceptors and their interaction with the students.*

Shae (dual role) shared how her program maintained communication regardless of geographic locations,

*I think communication is key. It is such a vital part of that. I think with our off-campus preceptors, the interactions tend to be very good. We are also very spread out, and they are far away, and we don’t see them frequently, but with the end of the year, we get everyone together, and those end-of-the-year meetings tend to be collaborative. So, it is nice. We talk about what is working and what is not working. So, I think that relationship is pretty good as well.*

Interestingly, effective communication did not always signify more frequent communication. For example, Ygritte (preceptor) stated,

*We touch base with [faculty] if not once or twice a semester. Depending on the site, we have more [communication] than other sites. So, we typically have a pretty open relationship as far as communication goes.*

**Role Development.** Our participants typically described the process that led to their successful pursuit and achievement of their role as it related to student development. Our faculty participants shared that they had little to no formal training with regard to their role in student development but intriguingly did not perceive this to be a challenge. Catelyn (faculty) shared the strategies she used to develop her abilities in her faculty role, which included drawing from her own experiences in developing when she was a student:

*I have very little formal training in terms of student development, so it has been a lot of how I was mentored as a master's student and a doctoral student, my experiences being able to work with undergraduate students during that graduate time too and then my mentorship as a faculty member now.*

Melisandre (dual role) explained resources that are provided from the athletic training program to preceptors that aided her in role development:

*Our clinical coordinator also tries to do something educational. We practiced rectal temperature this year with one of the manikins. Last year we had a communications professor come in and talk about how to address difficult conversations and communication techniques, and I think that it's helpful [as] we go through different situations.*

**Student Development.** Participants' successful personal role achievement was typically explained in terms of the participants' role in student development. Participants described the achievement of their respective roles based on examples of how they had seen or would like to see student development occur because of their actions. Tommen (preceptor) shared,

*My expectation is that the faculty and the staff were going to give [students] all the knowledge that they need to be successful in clinical settings. and then as a preceptor, it is our job to put that knowledge into functional use.*

Brienne (dual role) explained how she perceives the role of those serving as both educators and preceptors:

*I see our role as the integral connection piece between classroom learning and clinical practice. I like to throw [students] in the fire in a safe environment, so that when they are on their own, they have the confidence that they have the ability to do their jobs well. I'm okay if they are scared when they are with me because I am not going to let them hurt someone, but when they are out on their own, they have to know that they know what to do.*

**Socialization.** Participants typically expressed that socialization was essential for successful role achievement. Daenerys (faculty) shared,

*...it goes back to education, but I think sometimes it goes back to the stuff that is not in the textbook that we teach. How do you deal with a difficult parent? How do you communicate with a coach that is having problems? What if there is a legal issue? How do you manage to juggle schedules with 10 sports, all having games on Friday nights? I think from that aspect, while I want them to be able to reiterate and a lot of the students practice the actual knowledge and skills, we really have to put a lot on our preceptors to help our students learn how to be an athletic trainer from a real-life situation and to really try to do the things that we can't do in the classroom.*

Missandei (preceptor) felt similarly, "Give [students] a pretty relevant and real experience so that they know when they get into the profession and they are out around that they can have real expectations." Ellaria (preceptor) also felt that it was her duty to expose students to the athletic training profession:

*My role is to make sure that the students get an idea of what the real life is of an athletic trainer, especially at the college setting where I am, and experience develops autonomy while they are with me in order to prepare them to go out on their own.*

## Challenges to Role Achievement

Participants described challenging aspects associated with their role in student development, and many of the challenges they described surrounded their own personal role development and how that subsequently impacted student development. Six categories emerged: (1) preparation for role, (2) student commitment, (3) role strain, (4) ineffective communication, (5) authenticity of learning, and (6) preceptor willingness.

**Preparation for Role.** In contrast with the participants who felt that past experiences aided in their personal role development, participants typically expressed a perception of being underprepared for their role in student development. Preceptors noted a lack of formal training for their role as clinical educators, highlighting that they may not have received training specific to education and pedagogy. Tommen (preceptor) shared,

*I never got any real training, I guess. We do preceptor training, but there is not a whole lot. It is kind of more these are the things you need to do to approve hours and this is the paperwork you have to do and things like that. It is not really instruction on how to be a good preceptor, to be honest.*

This sentiment was similarly expressed by Arya (faculty), as she described the difficulty with helping to prepare preceptors as educators,

*...it is difficult to make sure that you are conveying those responsibilities that you are providing [students] with various opportunities to enhance their skill set in making sure that [preceptors] are taking their roles as preceptors seriously and being able to be supportive and balance their role as a clinician first of all, but then as a clinical educator.*

**Student Commitment.** The students themselves were also mentioned as a typical challenge for participants in achieving their preconceived roles. Ellaria (preceptor) discussed challenges with students who may be using a degree in athletic training as a stepping stone to another medical profession, "trying to keep [students] motivated and learning and engaged even though this isn't the route they saw themselves in careerwise." Participants discussed challenges regarding student personality and maturity, student evaluation, and students' differing levels in the program. Eddard (faculty) expressed some of these frustrations:

*... maybe some students have reached their peak a little early. I think for some students it is a maturity and openness thing. I think maybe some of that has to do with the kinds of roles they are in, in different years.*

Arya (faculty) also expressed difficulty with keeping students motivated:

*The fact that I really want to provide opportunities for the students and making them understand that they need to be just as active as the faculty or the preceptors in their overall development, so they have to ensure that commitment, and*

hopefully, they understand that we are committed to their development, but they have to meet us halfway or even further than halfway in order to make sure they are hitting the milestones and understanding the contents for their future clinical practice.

**Role Strain.** Our participants typically expressed role strain as a challenge in being effective in their roles, with a focus on student development at times conflicting with their primary roles as either educators or clinicians. Brienne (dual role) shared,

*... in terms of just time in the day, there is only so much time. So, to be educating myself both for classroom teaching and precepting can be daunting at times to make time for all of those different skills and interactions or trying to keep up to date for myself.*

Olenna (faculty) went on to share the challenge of portraying a good balance to students:

*A lot of things you can't learn out of a textbook and trying to balance that with service and research and keeping your teaching up and not [taking] your job home. Definitely, work-life balance is a struggle, and trying to show that I have it and show my kids that it's possible is very difficult because I really try to preach it to them that "you can be an athletic trainer and have a family, you can be an athletic trainer and be a female. You're not, hey I'm going to do high school for 3 years and then have a family." That's not what it has to be. But it is tough to display that sometimes.*

Ygritte (preceptor) shared that balancing students' involvement in conflicts at her workplace was a challenge she had:

*...not letting my frustrations become their frustrations. So, toeing the line between exposing them to the difficult situations with administrators and having difficult conversations and also keeping them out of the mix.*

**Ineffective Communication.** Participants typically expressed that ineffective communication was a challenge to role achievement. Shae (dual role) shared some examples of the lack of communication to preceptors in her program:

*In fact, most of our preceptors are not given any of the program information policy stuff other than being given a copy of the student handbook, so they know what policies the students are required to follow, but if a student is struggling, the preceptor may or may not know that. If the student was not successful in a particular class, the preceptor may or may not know that.*

Missandei (preceptor) identified that preceptors are at times responsible for the lack of communication that occurs:

*I think a lot of the gaps in the communication are not coming from the program; they are coming from preceptors, so we get weekly communications from them, but unless we reach out to them, they don't have to hear from us, and I think adding things to a preceptor's plate isn't necessarily something everyone wants to do and it does become a time-constraint thing.*

**Authenticity of Learning.** Participants typically identified differences in students' education in the classroom and the

clinic as a challenge to the achievement of their respective roles as they pursued student development. Faculty were commonly concerned with preceptors not reinforcing didactic knowledge given to students, and preceptors felt that faculty might not understand their job's actualities.

Sansa (faculty) expressed this concern:

*...it's not for the preceptor to say, "Oh, you will never need that statistical relevance of a test, or you will never need that physiology stuff." It is concerning to me. That preceptor doesn't possess that knowledge, and so then they can't use it. I don't want the preceptor's experience and skill to limit the student.*

Some participants expressed conflict between the faculty and preceptors, lacking understanding and appreciation for each other's roles. Bran (dual role) explained this conflict,

*We've all seen a different institution to where it's almost academics versus athletics, and you put students in the bad spot, and they say, "This professor said this in the classroom, but this preceptor says this in the clinical setting...what do I do?" and if you're an 18-, 20-year-old kid, essentially that's a tough spot to put them in.*

**Preceptor Willingness.** Participants variably stated that preceptor willingness was challenging for them in achieving student development. Margaery (preceptor) felt that she did not adequately engage in preceptor training, and therefore was not prepared for her role as a preceptor. She said, "So, I guess I didn't pay attention to that [information] when I started." Tyrion (dual role) reported that preceptor willingness for communication was also low: "We started 5 or 6 years ago trying to do a weekly email from a couple of sentences to several paragraphs, and it was pretty obvious and clear that preceptors weren't reading it."

### Perceived Improvements

While participants discussed challenges that they faced in achieving their roles in student development, many of them also offered potential solutions to their challenges, or the challenges others described, that would benefit student development and address differences in didactic and clinical education. Three categories emerged within the theme: concept integration and application, programmatic leadership, and culture.

**Concept Integration and Application.** Many of our participants (17/23, 73.9%) expressed that encouraging concept integration and application both clinically and didactically could improve student development and overcome some of the emerging challenges. Faculty stated they were particularly looking forward to integrating classes in the future, specifically with the transition to the professional master's degree. Jorah (faculty) expressed this with the development of their new curriculum:

*We are in the process of transitioning our program to a professional master's, and one of the overarching themes of the new curriculum is that it is not as siloed. So, something that I think the idea behind that is that students will be able to see similarities between how they learn in the classroom compared to how they're going to learn at the clinical site.*

Ygritte (preceptor) expressed, as did other participants, that scenario-based learning could be beneficial to student development. She said,

*I think that classroom experiences should be geared a little bit more clinically, so these are the exams for the ankle, knee, shoulder, and they should be more structured. I think that I am a little biased towards standardized patients and simulations and things that give these students opportunities to develop and make mistakes in an emergency situation before they actually happen, and I think that is a good way to kind of bridge that gap, but also respecting the fact that those differences exist for a reason.*

**Programmatic Leadership.** Our participants variably referenced improved programmatic leadership as perceived improvements. This improvement was commonly described as the programmatic leaders attempting to build relationships and encouraging personal role development and teamwork.

Gilly (dual role) pointed out,

*As a preceptor, it is super important to have that support of the program. . . . You are not going to teach that [preceptor] in that clinical site in which you have a student how to be a better athletic trainer, but you just want to support them in any way that you can to ensure that your student is getting a rich experience.*

In addition to supporting preceptors, Sandor (dual role) felt that it was essential to be involved in both didactic and clinical education. He reported, “Whereas the [faculty] being able to be effective not only in the classroom but also still maintaining relevance in the clinical setting, I think it’s essential.” Shae (dual role) echoed this perspective of having dual-role faculty members when she said,

*I wish more programs would use those [dual] roles even though it is extremely demanding, I think it is better for the students and not to say that someone who is only teaching can’t offer great things, they absolutely can, but so much of what we do is involved with placing our hands on a patient so to speak. It is hands-on.*

**Culture.** Participants variably perceived a culture fostering better communication as an ideal improvement that would impact student development and aid in the elimination of differences in didactic and clinical education. The participants identified that both educators and preceptors had a responsibility to improve the culture of the program. Faculty felt it was their responsibility to improve communication by giving preceptors more information regarding students and student development. Sansa (faculty) said,

*I agree that I think preceptors really want to have that real usable knowledge and information, and I think they also want to hear that they are probably not alone in struggling with some of the student issues that they come with. If it’s about a student arriving on time or a student is on their phone or certain things that might happen. They want to hear that other preceptors are having the same issues, and here are some solutions for them.*

Ygritte (preceptor) expressed a want for more formal communication with the program:

*. . . it would be nice if we could try rearranging the evaluation for each semester and sit down with each program to see where all the [students] are and what their concerns are and what our concerns are. It would be difficult to sit down, other than the occasional email conversation or something like that, but it would really be nice.*

Jaime (faculty) emphasized the tone that is taken when communicating with preceptors should be a priority. He said, “As far as providing feedback, we do want it to be positive, constructive. Not so much critical, but also to be done fairly privately, I would say.”

## DISCUSSION

Faculty and preceptors commonly viewed personal role development as a contributor to role achievement in student development. Role development rarely occurred formally but instead was described as a process that required each person to seek out opportunities to develop within their respective role. Faculty frequently drew upon their own experiences as a student and implemented aspects of the faculty role that had previously been beneficial to them. Faculty also sought out mentorship, continuing education, and socialization opportunities to support their personal growth within the role. This desire for mentorship is consistent with athletic training literature, which has previously found that educators use mentorship and professional development opportunities to help fulfill the educator role.<sup>15</sup> One of the suggested improvements from our participants was improving upon programmatic leadership to encourage role development and teamwork for both faculty and preceptors. Program administrators should seek out professional development in the content areas of leadership and collaboration and use such strategies across faculty and preceptors to support their role development.

Preceptors followed suit in role development in that they often described a lack of formal training for the role but found that experiences and professional development aided in role achievement. The evidence suggests that preceptors glean programmatic insight from formal training provided by the program. However, the true understanding of and necessary skills for the preceptor’s role are more commonly achieved through informal processes and experience.<sup>15,16</sup> Pharmacy preceptors have explicitly identified that interactive workshops and mentorship programs with experienced colleagues would benefit their role development as novice preceptors.<sup>17</sup> The results of our study consistently support that experience and informal development provide a sense of greater role achievement than formal training in those roles, and this was true for both faculty and preceptors. As the CAATE standards require only planned and ongoing communication between the program and preceptors,<sup>1</sup> program administrators should consider an individualized approach to communications, seek out each preceptor’s expectations, and implement less formal communication and mentorship strategies. Specifically, program administrators could create mentorship pairs, matching more seasoned preceptors with newer preceptors to aid in role acquisition for the less experienced of the two. This strategy could be further enhanced by a core faculty liaison assignment to assist in communication between the program and the preceptor mentorship pair.

Communication between the program faculty and preceptors was identified as both a contributor to role achievement and a challenge to role achievement by the participants in our study, with effective communication leading to positive relationships between program faculty and preceptors. Previous research regarding communication with preceptors has documented the importance of communication and cooperation between educators and preceptors in athletic training student development.<sup>2,5,8,18</sup> However, there is a persistent lack of communication between these professionals.<sup>2,5,7,8</sup> Communication that preceptors described as effective was more often informal communication that occurred during site visits and informal email or phone call conversations. Previous research has also suggested newsletters as a useful mode of communication.<sup>19</sup> However, our findings contradict this recommendation, as our participants stated that preceptors did not have time to regularly read such items.

Preceptors further identified that having the opportunity to guest lecture or teach in the program also increased both communication and positive relationships. Our participants suggested that if faculty were to be more clinically active, this might improve role understanding. A similar recommendation has been made in athletic training literature, suggesting that to bridge gaps between faculty and preceptors, faculty should spend some time in clinical settings and preceptors should spend some time in didactic classroom settings.<sup>18</sup> However, one of the challenges identified by our participants was role strain, described as having difficulty finding a balance between the roles they fill. It seems likely that if both faculty and preceptors were asked to spend more time in each other's roles, it might improve communication and role understanding but would likely increase the occurrence of role strain in both groups.<sup>20</sup>

One of the challenges that faculty and preceptors alike identified in successfully achieving their desired role in student development was the need to more purposefully integrate didactic content into clinical practice and make didactic teaching more clinically relevant. Medical education has been tackling this issue by using tools that link classroom and clinical experiences such as patient cases, video training, and flowcharts.<sup>21</sup> The integration of knowledge through multimodal teaching methods, application of essential knowledge skills, and specific focus on attitudes in the clinic are how nursing aims to better transition didactic knowledge into clinical application.<sup>22</sup> Ultimately, faculty should focus on intentional inclusion of simulations or standardized patients and case-based scenarios whenever feasible to bring a more realistic tone to the classroom, and preceptor input may facilitate this content for educators who have not engaged in recent clinical practice. Preceptors should seek information on didactic content from both students and faculty to encourage students' implementation and practice during clinical experiences. Program administrators should consider how knowledge-translation models<sup>23</sup> might serve as a tool to bridge didactic knowledge into clinical application.

When explicitly asked about challenges associated with their role in student development, faculty and preceptors expressed that the students themselves were one of their biggest challenges. They stated that student motivation, differing personalities, and maturity levels posed a significant challenge to their role in student development. Research has shown that

students exhibit increased motivation when educators set high expectations and use multidimensional approaches to education (eg, active learning, problem-based learning, case-based learning) are implemented.<sup>24</sup> They also have more motivation when they can connect with other students, when educators create interactive learning experiences, and when mentorship is incorporated into the learning experience.<sup>24</sup> This may point to a need to further examine students' role in their own development and preceptors' role in holding students accountable for meeting high expectations. Also, clinical competency and patient feedback are linked to student motivation in nursing.<sup>25</sup> With similar clinical experience guidelines, athletic training preceptors should be aware of the impact that feedback and confirmation of competency have on their students' motivation. Faculty could further foster student motivation by incorporating more interactive learning opportunities, group discussions, and case-based learning, such as grand rounds, within the classroom.

## LIMITATIONS AND FUTURE RESEARCH

During the focus groups, we assumed that participants were truthful in their answers to the interview questions and did not allow the presence of peers on the call influence their responses to questions, but the study's self-reported nature could be a limitation. None of the participants categorized the program faculty and preceptors' relationship as poor or very poor, so the positive bias in our studied populations likely decreased the number of challenges presented within focus group discussions. Participants were asked about how aspects of their role contributed to student development, and student development was not operationally defined so as to allow participants to share their lived experiences and interpretation of the term. However, this may have impacted the findings, as participants may have viewed student development differently. Lastly, recruiting preceptors to participate in a 1-hour focus group proved challenging and resulted in a more inexperienced group of preceptors ultimately participating, which may have influenced the findings. Future research should focus on a larger sample of the populations of interest and consider focusing on role development and communication. These 2 categories seemed to represent contradictory findings between groups within our study.

## CONCLUSIONS

Our study's findings highlight how intertwined program faculty and preceptors are at achieving student development and mutually assured role achievement. Personal role fulfillment as educators or clinicians clearly influenced perceptions of roles in student development, indicating an inextricable link in personal role development and student development. When communication was effective, program relationships were viewed more positively, and student development and preceptor and faculty role development were positively influenced. When communication was ineffective, role achievement was negatively impacted, and the authenticity of learning and student motivation was questioned. Faculty should aim to establish individual expectations for communication, student development, and preceptor development. Preceptors should identify which communication mechanisms are effective for them and make their role development needs clear to program administrators. Program administrators should implement individualized preceptor

development programs to support preceptors in meeting their needs better and improving areas of weakness in their preceptorship.

## REFERENCES

1. Implementation and guide to the CAATE 2020 professional standards. Commission on Accreditation of Athletic Training Education. Accessed August 11, 2021. [https://caate.net/wp-content/uploads/2021/01/Pursuing-Maintaining-and-Guide-to-2020-Standards-FInal\\_approved-Dec-2020.pdf](https://caate.net/wp-content/uploads/2021/01/Pursuing-Maintaining-and-Guide-to-2020-Standards-FInal_approved-Dec-2020.pdf)
2. Laurent T, Weidner TG. Clinical instructors' and student athletic trainers' perceptions of helpful clinical instructor characteristics. *J Athl Train*. 2001;36(1):58–61.
3. Hankemeier DA, Kirby JL, Walker SE, Thrasher AB. Athletic training preceptors' perceived learning needs regarding preceptor development. *Athl Train Educ J*. 2017;12(1):39–45. doi:10.4085/120139
4. Budgen C, Gamroth L. An overview of practice education models. *Nurse Educ Today*. 2008;28(3):273–283. doi:10.1016/j.nedt.2007.05.005
5. Phan K, McCarty CW, Mutchler JM, Van Lunen B. Clinical preceptors' perspective on clinical education in post-professional athletic training education programs. *Athl Train Educ J*. 2012;7(3):103–114. doi:10.4085/0703103
6. Wotton K, Gonda J. Clinician and student evaluation of a collaborative clinical teaching model. *Nurse Educ Pract*. 2004;4(2):120–127. doi:10.1016/S1471-5953(03)00033-7
7. Nottingham S. Preceptors' perceptions of the preparation and qualifications for the preceptor role. *Athl Train Educ J*. 2015;10(4):302–314. doi:10.4085/1004302
8. Bowman TG, Dodge TM. Frustrations among graduates of athletic training education programs. *J Athl Train*. 2013;48(1):79–86. doi:10.4085/1062-6050-48.1.01
9. Krueger RA, Casey MA. *Focus Groups: A Practical Guide for Applied Research*. 4th ed. Sage Publications; 2008.
10. Corbin J, Strauss A. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 3rd ed. Sage Publications; 2008.
11. Giorgi A, Giorgi B, Morley J. The descriptive phenomenological psychological method. In: Willig C, Stainton-Rogers W, eds. *The SAGE Handbook of Qualitative Research in Psychology*. 2nd ed. Sage Publications; 2017:176–192.
12. Elliott R. Comprehensive process analysis: understanding the change process in significant therapy events. In: Packer WJ, Addison RB, eds. *Entering the Circle: Hermeneutic Investigation in Psychology*. State University of New York Press; 1989:165–184.
13. Hill CE, Knox S, Thompson BJ, Williams EN, Hess SA, Ladany N. Consensual qualitative research: an update. *J Couns Psychol*. 2005;52(2):196–205. doi:10.1037/0022-0167.52.2.196
14. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349–357. doi:10.1093/intqhc/mzm042
15. Mazerolle SM, Barrett JL, Nottingham S. Examining the factors that facilitate athletic training faculty socialization into higher education. *Athl Train Educ J*. 2016;11(4):208–218. doi:10.4085/1104208
16. Mazerolle SM, Bowman TC, Dodge TM. The professional socialization of the athletic trainer serving as preceptor. *J Athl Train*. 2014;49(1):75–82. doi:10.4085/1062-6050-48.6.16
17. Truong C, Wyllie A, Bailie T, Austin Z. A needs assessment study of hospital pharmacy residency preceptors. *Can J Hosp Pharm*. 2012;65(3):202–208. doi:10.4212/cjhp.v65i3.1143
18. Gage MJ, Williams R, Knight KL. Bridging the gap between academic and clinical athletic trainers. *Int J Athl Ther Train*. 2012;17(1):2–7. doi:10.1123/ijatt.17.1.2
19. Nottingham S. Strategies for facilitating ongoing communication between clinical education coordinators and preceptors. *Int J Athl Ther Train*. 2016;21(3):12–18. doi:10.1123/ijatt.2015-0075
20. Hannah CM. *Perceptions of Role Strain in Dually Appointed Certified Athletic Trainers*. Dissertation. University of Hartford; 2013.
21. Peters S, Clarebout G, Diemers A, et al. Enhancing the connection between the classroom and the clinical workplace: a systematic review. *Perspect Med Educ*. 2017;6(3):148–157. doi:10.1007/s40037-017-0338-0
22. Jamshidi L. The challenges of clinical teaching in nursing skills and lifelong learning from the standpoint of nursing students and educators. *Procedia Soc Behav Sci*. 2012;46:3335–3338. doi:10.1016/j.sbspro.2012.06.062
23. Welch Bacon CE, Pike Lacy AM, Lam KC. Knowledge translation in athletic training: considerations for bridging the knowledge-to-practice gap. *J Athl Train*. Accepted manuscript. Published online January 6, 2021. doi:10.4085/0470-20
24. Sedden ML, Clark KR. Motivating students in the 21st century. *Radiol Technol*. 2016;87(6):609–616.
25. Nasrin H, Soroor P, Soodabeh J. Nursing challenges in motivating nursing students through clinical education: a grounded theory study. *Nurs Res Pract*. 2012;2012:161359. doi:10.1155/2012/161359