

# Perceptions from Athletic Training Students Involved in an Intentional Peer-Assisted Learning Pedagogy

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**Context:** Peer-assisted learning (PAL) has been shown to benefit students across educational levels. Current research has investigated perceptions of PAL, postgraduate impact, as well as prevalence. This study investigated athletic training students' perceptions of an intentional PAL pedagogy on both the peer-student and peer-tutor. In this study, the peer-tutors had training prior to implementation.

**Objective:** To explore athletic training students' perceptions of an intentional PAL pedagogy.

**Design:** Qualitative study using a phenomenological approach.

**Setting:** Focus group interviews with professional undergraduate athletic training students.

**Patients or Other Participants:** Eleven athletic training students from 1 accredited athletic training program volunteered for this study. Five students (4 females, 1 male) serving as peer-tutors and 6 (5 females, 1 male) peer-students participated in focus group interviews in spring term 2015. The peer-tutors completed training prior to tutoring the peer-students.

**Main Outcome Measure(s):** Focus group interviews were conducted with a structured interview protocol. The peer-student and peer-tutor groups were asked separate questions. Interview data were analyzed inductively to uncover dominant themes, first by organizing the data, then summarizing into codes, and finally interpreting. Credibility was secured through member checking, triangulation, and investigator triangulation.

**Results:** Themes indicated that both peer-students and peer-tutors perceived that, through PAL, they collaborated, built relationships, gained confidence, were exposed to varied techniques, and the PAL pedagogy served as a way to review and practice, which changed their clinical educational experiences. Peer-tutors developed skills in leadership and teaching through their PAL experience.

**Conclusions:** Evidence demonstrated that PAL created a learning environment in the student's clinical educational experiences that involved collaboration, relationships, confidence building, and more time for review and practice.

**Key Words:** Athletic training pedagogy, education, peer mentoring, peer modeling

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# Perceptions from Athletic Training Students Involved in an Intentional Peer-Assisted Learning Pedagogy

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## INTRODUCTION

Peer-assisted learning (PAL) is a pedagogical practice that was developed from Bandura's social learning theory that combines purposive cognitive psychology and behavioristic reinforcement.<sup>1</sup> Peer-assisted learning has been defined as students from similar social groupings, who are not professional teachers, helping each other to learn and, by so doing, learning themselves.<sup>2</sup> Henning et al<sup>3</sup> defined PAL in athletic training as a process of gaining knowledge, understanding, or skill in athletic-training-related tasks among students who are at either different or equivalent academic or experiential levels through instruction or experience.

Peer-assisted learning has been used in educational settings including nursing, dentistry, occupational therapy, physical therapy, and other allied health care settings.<sup>3</sup> Research shows numerous benefits of PAL, which include increased confidence in performing skills, decreased anxiety or stress when working with peers rather than clinical instructors, increased self-esteem, increased communication skills, improved test scores and course performance, increased critical thinking, enhanced learning of the material, social and psychological support, professional development, and improved organizational skills.<sup>3-14</sup>

Peer-assisted learning has been researched in athletic training, investigating prevalence, perceptions of PAL, and effectiveness.<sup>3,8,10,12,15-19</sup> Four studies have investigated planned PAL in athletic training.<sup>10,12,15,16</sup> However, none of these studies included formal instruction of the peer-tutors regarding teaching strategies. As was found through several studies,<sup>6,7,11,13,20-22</sup> planned PAL does require some instruction for the peer-tutors. Weyrich et al<sup>13</sup> developed training sessions for their peer-tutors, and they concluded that sufficient tutor training and preparation is crucial for the success of peer teaching models. Ross and Cameron<sup>22</sup> implemented PAL in which peer-tutors were mentored and supervised. They found that, through a planned PAL curriculum, the peer-tutors had significantly greater learning, integrated better on the ward, and had less anxiety concerning on-ward work as a medical doctor. As has been demonstrated through the research in other allied health fields,<sup>6,7,11,13,20-22</sup> when PAL is intentionally planned and implemented with PAL training sessions, both the tutor and peer may see benefits from this pedagogy.

An intentionally planned PAL curriculum with training and oversight by clinical instructors and faculty can benefit the peer-tutors and peer-students. The objective of this study was to explore peer-student and peer-tutor perceptions of an intentional PAL pedagogy that included education and training of the peer-tutors.

## METHODS

A qualitative research design was chosen for this study since the aim was to further understand, through the students, their

perspective on an intentional PAL pedagogy. For the purpose of this study, an intentional PAL pedagogy was defined as one that requires students to serve as either a peer-student (a student being taught by a higher academic level peer) or a peer-tutor (a student who is using PAL to teach, instruct, or demonstrate a learned skill to a peer-student at a lower academic level) through their educational exchange. Focus group interviews with professional athletic training students allowed participants to express meaning about their PAL experience. All participants were notified that their responses would remain confidential. The interview protocol and consent form were reviewed and approved by the institutional review board. All participants signed a consent form prior to focus group interviews.

## Participants

Athletic training student's enrolled in an athletic training program at 1 northwest area accredited program were eligible to participate. All eligible participants had served in roles of a peer-tutor or peer-student. A peer-tutor was either a second- or third-year student, while a peer-student was a first-year student in the athletic training program. Eleven students volunteered for the study. Five students (4 female, 1 male) served as peer-tutors during the PAL experience, while 6 students (5 female, 1 male) served as peer-students (Table 1).

## Intervention

In the fall of 2014, a 50-minute training sessions was provided for peer-tutors prior to PAL implementation. The aim of the training session was to provide an understanding of PAL pedagogy and included discussion on learning styles, teaching methods, and additional skills to facilitate peer-tutor sessions. These training sessions were conducted by the principal researcher, who has conducted research in PAL and has also implemented PAL pedagogy at previously employed institutions. The peer-students were also provided a 50-minute training session which detailed the PAL process and how they will work with peer-tutors on competencies in their clinical educational experiences. At the peer-student training, students were given PAL workbooks, which included psychomotor tasks that were to be signed off by a peer-tutor prior to formal evaluation by a preceptor. None of the peer-students or peer-tutors had previous experience with PAL in their athletic training education prior to implementation in fall 2014.

## Data Collection

Data was collected through focus group interviews with semistructured questions in April 2015. Semistructured questions allowed for individual responses and gave opportunity to ask more probing or follow-up questions if further clarification was necessary.<sup>23</sup> These interviews were recorded using Sound Recorder (Version 6.1, Microsoft Windows, Redmond, WA) on the investigator's password-secured laptop.

**Table 1. Study Participants**

Participant	Sex	Peer-Involvement
1	Female	Peer-student
2	Female	Peer-student
3	Female	Peer-student
4	Female	Peer-student
5	Female	Peer-student
6	Male	Peer-student
7	Male	Peer-tutor
8	Female	Peer-tutor
9	Female	Peer-tutor
10	Female	Peer-tutor
11	Female	Peer-tutor

The interview protocol was based on the research of Henning et al<sup>3</sup> and the investigator's experience with PAL. The questions were designed to discover the peer-tutors' and peer-students' perceptions of the intentional PAL experience (Tables 2 and 3). Interview questions were open ended to allow the investigator to elaborate on responses and ask follow-up questions as necessary.

Recorded interviews were replayed for transcription of the focus group interviews, and information was stored on a password-protected personal laptop. All participants received via e-mail a transcript of the interview for final review and to make sure their experiences with PAL had been correctly captured. No participants provided any further feedback from the transcript review.

The transcript notes were analyzed to discover patterns, ideas, explanations, and a deeper understanding of PAL's influence on the athletic training students. The principal researcher analyzed the data through organizing, summarizing into

**Table 2. Semistructured Focus Group Interview Questions: Peer-Student**

1	Describe your experience with PAL?
2	What was your initial reaction to PAL?
3	Is learning from your peers effective or ineffective? i. What makes learning from your peers effective or ineffective?
4	Did you gain anything from your experience with PAL?
5	What are the benefits of PAL for the student serving in the role of the peer-student?
6	What are the skills/characteristics/abilities of a good PAL tutor?
7	How did PAL occur in your clinical educational experiences?
8	Has the PAL experience changed the clinical educational setting?
9	Has learning changed in the clinical educational setting with PAL?
10	What would you change regarding the current implementation of PAL in your clinical educational experiences?
11	In what ways has working with peers helped you gain professional behaviors, skills, and knowledge?

Abbreviation: PAL, peer-assisted learning.

**Table 3. Semistructured Focus Group Interview Questions: Peer-Tutor**

1	Describe your experience with PAL?
2	What was your initial reaction to PAL?
3	Is teaching your peers effective or ineffective? i. What makes teaching peers effective or ineffective?
4	Did you gain anything from your experience with PAL?
5	What are the benefits of PAL for the student serving in the role of the peer-tutor?
6	What are the skills/characteristics/abilities of a good PAL tutor?
7	How did PAL occur in your clinical educational experiences?
8	Has the PAL experience changed the clinical educational setting?
9	Has learning changed in the clinical educational setting with PAL?
10	What would you change regarding the current implementation of PAL in your clinical educational experiences?
11	Was the training you received prior to implementation of PAL adequate? i. In what ways? ii. Could the training improve?
12	In what ways has working with peers helped you gain professional behaviors, skills, and knowledge?

Abbreviation: PAL, peer-assisted learning.

codes, and then finally interpreting the data. Organizing the data was first done through personally transcribing the interviews. The analysis of the transcripts followed an inductive process. This process began through reading, and rereading the transcripts to organize the data followed by separating the transcripts into workable units, leading to open coding, taking the data, and segmenting them into categories of information.<sup>23</sup> Data then was sorted according to topics, themes, and issues important to the study. Small segments were built into larger and broader themes from which to make comparisons across participants' responses. A master list of themes immersed in which relationships among categories were created to develop conclusions.

The final step of data analysis was interpreting the findings inductively, synthesizing the information, and drawing inferences.<sup>23</sup> From the themes, data were interpreted to develop tables, and information was layered to present comparisons. A colleague, with experience in education and qualitative research (EdD credential), was included to review and verify the data analysis. This process included asking the colleague to look at the transcript notes and determine themes to verify any similarities. From this visual table and categories, a "rich description" was developed regarding how a purposefully planned PAL pedagogy impacted athletic training students.

### Data Credibility

Data credibility, to ensure consistency and authenticity, was employed through triangulation, member checking, and investigator triangulation. Triangulation included using both transcripts and interview notes. During each focus group interview, the principal researcher took notes. The interview and transcript notes were analyzed to identify categories.



Member checking involved asking the participants to review transcript notes to confirm findings.<sup>23</sup> At the conclusion of transcribing the interviews, all research participants received via e-mail a copy of the interview transcripts for review, clarification, and suggestions. This allowed participants to confirm, correct, or elaborate to ensure accuracy of participant comments. Investigator triangulation involved asking a colleague to review transcript notes to interpret the data.<sup>23</sup> This colleague had conducted studies in qualitative research and had no connection to the program interviewed. Through triangulation, member checking, and investigator triangulation, credibility and validity improved.

## RESULTS

From the data of this study emerged 5 common themes from all participants: collaboration, building relationships, confidence, being exposed to varied techniques, and changed clinical educational experiences. A common theme from peer-tutors was skills learned through PAL: leadership and teaching.

### Collaboration

Participants stated that, through their PAL experience, they worked with fellow peers and collaborated on common goals of gaining knowledge and skills in athletic training. Eight of the 11 participants stated that, at times when working through a task, the students would not know an answer to a question, and therefore, they would work together and collaborate to find the solution. Peer-tutor participant 11 stated that, at times, they would find conflicting answers, which in turn created questions “where everyone would come together and figure it out.” When the peer-student group was asked any skills or behaviors they gained from their PAL experience, 4 of the 6 participants stated collaboration was key. With the implementation of PAL, peer-student participant 6 stated that “now with PAL, you are forced to do it [competencies], and they know you have to do it, so you learn something every time you go to clinical educational experiences.”

Peer-tutors also saw the PAL experience as a collaborative approach to clinical education. Peer-tutor participant 10 stated that students often asked hard questions that required the peer-tutor to look things up. The underclassmen “would ask me why, and I would say, ‘Let’s research this together because I honestly don’t know.’” Implementing PAL into the clinical education curriculum created an experience where students had to ask questions and collaborate with each other. Students felt that PAL created a positive collaborative environment amongst the peers.

### Building Relationships

Eight of the 11 participants stated that, through their PAL experience, they built relationships. As students were required to complete tasks with fellow peers, the participants stated that going to that fellow peer established a relationship. Through participating in a PAL pedagogy, the students had more opportunity to talk to other students and develop friendships.

Peer-student participant 4 stated that

*... it helps you build a relationship with the upperclassmen. You really don't have very many classes with them. So having*

*to go up to them and do this [PAL] with them is a great way to help build a relationship with them.*

Peer-tutor participant 11 stated that PAL “got them talking to us more too. If they didn’t have to do those check-offs, they probably would not have talked to us as much as they did. [PAL was] good at establishing a relationship.” Peer-tutor participant 7 stated that PAL “forced them to ask for our help because they wouldn’t have done it on their own, usually.”

Peer-tutor participant 10 commented on the relational skills gained through the PAL experience:

*I think it goes along with communication but relational skills. I feel like that is really important in any setting to be able to be relatable and build relationships with the people you are working with, your peers, everybody.*

Through the PAL experience, students built relationships with fellow peers. It was stated that, without PAL, peer relationships and interactions may not have occurred. While the students were required to communicate and complete peer sign-offs, it proved to be a valuable tool in the students’ clinical educational experiences.

### Confidence

As students interacted with their peers and began to master competencies, they felt PAL allowed for practice and built their confidence. All participants agreed that working with a peer created less anxiety and diminished fear of asking a preceptor. As the students worked together on skills in athletic training, they became more confident in themselves.

Peer-tutor participant 7 stated that

*... it was easier for them [peer-student] to come to us and not as nervewracking to do it in front of a fellow peer in the athletic training program versus a preceptor, and then build on that confidence when you actually do it [competency sign-off] in front of an ATC [certified athletic trainer].*

Peer-tutor participant 8 stated that her educational experience would have been different if PAL had been implemented earlier in her education:

*I kind of wish that, when I was a sophomore or junior, there would have been someone to help me kind of look at it. Instead of me having to going to the head [athletic trainer] and be like I have got to review this right now. So I think it would have been a little more of a confidence builder for me if someone had been there to kind of facilitate some of that learning.*

Peer-students felt confidence in their skills was built first when working with a fellow peer. Peer-student participant 3 stated that PAL “adds in confidence because you can look stupid in front of your peers, and if you go to the preceptor, you don’t have to look stupid. You’ve done it before. You’ve honed your skills.” Peer-student participant 4 stated that PAL

*... gives us more confidence too because we’re not just signing it off once and forgetting about it. We are practicing it multiple times before we get it signed off. It gives us more confidence in what we are doing.*

As students are required to collaborate and communicate with each other in PAL, they are building confidence in athletic training skills. Students' confidence was established in both the peer-student and peer-tutor through PAL. As the peer-student works with an upperclassman, they are less anxious in performing skills before evaluation by a preceptor. Peer-tutors also build their confidence as they may be asked to demonstrate skills and in turn teach the peer-student. Peer-tutor participant 7 stated that PAL resulted in repetition of skills and built confidence:

*I think like a lot of things, the more times you spend doing. . . like taping. . . or going over situations, the more you feel confident. . . even as an upperclassman, you can't do something too many times in the undergraduate realm of things.*

All of the participants agreed that PAL assisted in building their confidence.

### Varied Techniques

As students collaborated on skills and techniques in athletic training, students stated that, through PAL, they saw varied techniques and skills in athletic training. Peer-students stated they learned 1 method or skill through the classroom but were shown varied techniques through their clinical educational experiences especially through PAL. All participants stated that their PAL experience was positive and led to a deeper understanding of content. Peer-student participant 4 gave an example of ankle taping and how they had learned varied taping techniques:

*I think an example would be taping an ankle because you have some seniors or even juniors that have been to a high school or wherever and have seen their preceptor do it differently, and maybe they like that way differently, or they like that way better, or it is just another example of taping an ankle.*

Peer-student participant 1 stated the PAL "allows you to see different ways that somebody might do a skill or to help you better understand how a skill is supposed to be performed." Peer-student participant 3 clarified further to state that different was not "better or worse, but just a different way of doing something, or a different method." Overall the peer-students emphasized they liked seeing varied ways to perform skills and felt that it helped them in their own skill development. Peer-student participant 2 felt that, through the PAL experience, it got her to think outside of just completing the task. She gave an example that, at times she felt like a "robot" just completing tasks. The PAL experience with the peer-tutor allowed for the opportunity to see that there can be different ways to complete psychomotor tasks and required her to not just be a robot. Through the PAL experience, the peer-students learned that there were different methods to complete tasks other than how their preceptor or instructor had shown, which in turn supplemented their clinical educational experiences. Peer-tutors also stated they gained from the varied experiences. Peer-tutor participant 10 stated, as they worked together in PAL, they learned from each other:

*One person might be more book smart about a certain thing because they had already taken that class and had a personal*

*experience, and so together, you are both benefiting from it, and you are getting a different perspective from each student.*

Peer-tutor participant 7 stated that, as an upperclassman, "[W]e have recent experiences we can draw from and help give to the sophomores, little ticks and tacks that help us get through different situations."

### Changed Clinical Educational Experiences

All students stated that their clinical educational experiences changed when PAL was introduced into the curriculum. Through PAL, their clinical educational experiences now provided more practice and review of skills in athletic training, which in turn led to more concrete learning. The peer-students stated that PAL led to a more organized system for competency sign-offs as well as more hands-on practice of athletic training skills. Peer-student participant 2 stated that PAL led to competency tracking that

*. . . was organized, and through listening and learning through to other students and us talking about it and practicing before we went and did it [sign-off with a preceptor]. . . it was overall helpful getting the competencies done, and we learned more I feel.*

Peer-student participant 3 stated that PAL "forced us to do things over again. . . so we can practice our skills and be proficient before we get them signed off."

All of the peer-tutors felt that, through PAL, they were able to review and practice athletic training skills. Peer-tutor participant 8 stated that

*. . . [PAL] gave us a really good review too. Some of that stuff we learned sophomore year. . . is like we should know this. Really thinking about what I am looking for, what am I listening for when they say or go through their proficiency, it is good for us.*

Peer-tutor participant 9 also commented that PAL "just helps you review maybe because you don't think about all the little things that they are going over, when they come and do it [PAL], helps you to review whatever they are working on." Participant 9 also stated that, if there was down time in clinical education, PAL created more practice: "It helps [us] to do stuff outside of class time, and get better at it. . . during free time, we would practice it [competencies] but this [PAL] makes them practice it more than just in class."

Students stated that, through the PAL experience, their clinical educational experiences transitioned to more practice and review from the previous years. As they practiced and reviewed, the students felt their learning was more concrete than just learning in the formal classroom.

### Peer-Tutors: Leadership and Teaching Skills

A common theme that emerged from the peer-tutors was that they gained valuable skills in leadership and teaching through PAL. Peer-tutor participant 10 stated that PAL did place her into a leadership position:

*Leadership was an expectation and just kind of realizing that I am a junior now and they are in the position I was last year*

*and thinking about how I looked at those upperclassmen and just knowing that they have more knowledge than me, realizing that you are at that point where you can lead them, help them, push them along and be that person that can push them and now serve in that upperclassman role. . . that knows this [skills].*

Peer-tutor participant 8 stated that

*. . . I think when looking to the future too. Some of us may be in a teaching position. . . even just teaching other students when we are their [certified], but calling on some of those skills necessary in PAL to be able to communicate better. How can I ask the right questions? How can I encourage them [peer-students] to look up something? To the future thinking of some skills we might need in our profession.*

All peer-tutors stated that, through their PAL experience, they gained skills in teaching and leadership. As demonstrated from this study, students are able to step into a teaching role with little formal education or background in teaching methodology. Peer-tutors stated that success in PAL lies in effective communication and confidence between peer-student and peer-tutor. It was noted by peer-tutor participants that a good peer-tutor is one who challenges the peer-students, does not dumb down the questions, asks good clarifying questions, and is professional. Peer-tutor participant 11 stated that, as a good teacher, one needs to know when one should

*. . . look stuff up. You realize where your deficits are. It's good having them [peer-students] asking you questions and trying to figure out what I know and what I don't know and then learn from that too.*

## DISCUSSION

Both peer-students and peer-tutors stated they benefited from their PAL experience through their athletic training clinical experiences. Themes that emerged from the focus group included collaboration, building relationships, confidence, being exposed to varied techniques, changed clinical educational experiences, and a common theme from peer-tutors was leadership and teaching.

Peer-assisted learning requires a collaborative effort by both the peer-student and peer-tutor. It has been stated that athletic training students prefer clinical educational experiences that are collaborative in nature.<sup>3</sup> Prior to PAL implementation in fall 2014, the athletic training students of this 1 accredited program stated they were not often collaborating with fellow peers. As demonstrated in this study, PAL can be a way to increase collaboration in clinical educational experiences.

This study found that both peer-students and peer-tutors built relationships in their clinical educational experiences with PAL, which is supported in the PAL research.<sup>10,24</sup> Vaidya<sup>24</sup> found that students improved socialization skills and developed positive relationships through peer coaching. Mackey et al<sup>10</sup> found through their study that participants developed stronger relationships with peers.

Athletic trainers must be confident in their skills as they transition from completely supervised to independent health

care practitioners. Evidence demonstrates PAL improves students' confidence in areas of athletic training, education, nursing, and medicine.<sup>3,5,9,10,12,14,17,24,25</sup> Vaidya<sup>24</sup> reported a greater sense of self-confidence about students' knowledge content and emotional and intellectual development as a result of being in the helper role with peer teaching. In athletic training research, Mackey et al,<sup>10</sup> Henning,<sup>3</sup> Bates,<sup>16</sup> and Weidner and Popp<sup>12</sup> found that athletic training students believed PAL contributed to their confidence. Nursing research<sup>25-27</sup> found that, when nursing students were in the role of a peer mentor, self-confidence improved. It appears that, as students collaborate in clinical education experiences, they practice skills through PAL which in turn improves confidence.

As stated previously, PAL involves students gaining knowledge, understanding, or skill from students that are at different academic experience levels.<sup>3</sup> The participants in this study were introduced to PAL for the first time in fall 2014. Prior to that time, students were not required to demonstrate any skills to a fellow peer. As a result of implementing PAL in fall 2014, the participants' experiences were more collaborative where students were actively involved in their clinical education. Previous research has supported these findings that the PAL experience reinforces previously learned information and techniques and allows for problem solving.<sup>14,28</sup>

Half of the participants in this study stated they were exposed and gained insight on varied techniques in athletic training. While students did not verify whether these techniques were based on evidence-based practice, the implementation of PAL led to sharing of successful practices through collaboration, which supports and assists new and beginning athletic training students. This finding has been supported in other research.<sup>24,29-32</sup> Through PAL, peer-tutors and peer-students work together to problem-solve and are less reliant on their preceptor. Peer-assisted learning teaches students to be comfortable approaching fellow peers and coworkers to discuss cases, which could carry over to clinical practice postgraduation. With PAL, students begin to see the importance of collaboration and hearing about varied techniques, rather than feeling that, if they ask for help, it may be a sign of inadequacy.

As demonstrated in this study, PAL can assist in developing skills in leadership and teaching. The peer-tutors stated they gained valuable teaching and leadership skills through the PAL curriculum. Several studies have demonstrated that PAL can help allied health care students learn to teach.<sup>5,11,14,22,33,34</sup> Escovitz<sup>14</sup> used senior-level medical students as clinical skills teaching assistants to underclassmen and found that the students became better teachers through serving as teaching assistants. Other studies<sup>11,33,34</sup> have also demonstrated that peer-tutors gain valuable skills and experience in teaching.

Peer-tutors in our study stated they learned valuable leadership skills through the PAL curriculum. As they tutored and mentored underclassmen, they felt they were seen as role models and leaders; the peer-students now looked up to them. This finding is supported in a study<sup>26</sup> in nursing that senior nursing students in a peer-to-peer mentoring program developed leadership skills.



Peer-assisted learning can occur both intentionally and incidentally. This study, however, focused on an intentionally and tutor-trained PAL curriculum. While previous research does demonstrate numerous benefits of incidental or planned PAL, a planned curriculum with training of the peer-tutors<sup>11,22</sup> has demonstrated that both peer-tutors and peer-students felt more confident with a PAL curriculum that is intentional and planned.

Nikendei et al<sup>11</sup> implemented a trained peer-tutor PAL curriculum in which the tutors were supervised on a weekly basis by an experienced medical tutor. The peer-tutors were also given a financial allowance. Authors concluded that the peer-tutors benefited from increased basic clinical skills as well as enhancement of personal teaching skills. When their program was evaluated by a controlled study prior to implementation, the authors found the PAL group to have significantly greater learning, integrate better on the ward, and have less anxiety concerning on-ward work as a medical doctor. Another study<sup>21</sup> supports the previous work that demonstrated peer-tutor training is a critical part for successful PAL programs. The authors also stressed close monitoring by experienced faculty and staff and continuous availability of preceptor. While research<sup>3–14</sup> has demonstrated many benefits to a PAL curriculum, research<sup>6,7,11,13,20–22</sup> has also demonstrated the importance of mentoring and training the peer-tutor.

## Limitations

A limitation of the study is the small sample size. A small sample size for this qualitative study was due to a convenient sample of students who participated in this intentional PAL pedagogy. One must be careful not to generalize statements toward the entire population based on 1 qualitative study. Future research should involve investigating PAL through larger samples sizes in qualitative methods as well as quantitative analysis.

## CONCLUSION

This study explored students' perceptions of an intentional PAL curriculum. This pedagogy was new to the students. While there were some areas of concerns and room for improvement, overall, athletic training students of 1 athletic training program felt that PAL positively impacted students and changed their clinical educational experiences. Students felt that PAL is an effective way to collaborate and build relationships with fellow students, gain confidence, and be exposed to varied techniques. The peer-tutors gained valuable skills in leadership and teaching through PAL.

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