

# Retention Initiatives Used by Professional Bachelor's Athletic Training Program Directors

Thomas G. Bowman, PhD, ATC\*; Stephanie M. Mazerolle, PhD, ATC†; Thomas M. Dodge, PhD, ATC, CSCS‡

\*Department of Athletic Training, Lynchburg College, VA; †Department of Kinesiology, University of Connecticut, Storrs; ‡Department of Exercise Science and Sport Studies, Springfield College, MA

**Context:** Retaining athletic training students has been identified as problematic by approximately half of athletic training program (ATP) directors. It is unknown what ATP directors do to improve athletic training student retention.

**Objective:** To identify initiatives that ATP directors use to improve the retention rates of athletic training students in their programs.

**Design:** Qualitative study.

**Setting:** Undergraduate ATPs.

**Patients or Other Participants:** We asked directors of ATPs across the nation to complete an Internet questionnaire. We obtained responses from 171 out of 343 ATP directors (51.6%). In addition, we completed follow-up interviews with 16 randomly selected ATP directors.

**Main Outcome Measure(s):** During the online questionnaire, we asked ATP directors to describe any specific initiatives they or their ATP used that were aimed at retaining athletic training students and ideally what they would like to do to improve athletic training student retention at their institution. During the follow-up telephone interviews, we asked participants to further describe their retention strategies and other techniques not already mentioned in their questionnaire responses to gain further insight. We used a general inductive approach to analyze the data and performed multiple-analyst triangulation, member checks, and a peer review to ensure the trustworthiness of the analysis and results.

**Results:** During data analysis, we identified 3 themes that highlight the ATP directors' initiatives to retain athletic training students. Directors discussed fostering a *family atmosphere*, *strategic planning*, and having *resources* available to support students as ways to improve retention.

**Conclusions:** Athletic training program directors are encouraged to integrate students into their programs early through informal and formal participation opportunities, evaluate student potential prior to formal admissions, plausibly through an interview process, and educate students on scholarship opportunities to help offset tuition and fees associated with program completion.

**Key Words:** Persistence, departure, attrition

*Dr Bowman is currently an Associate Professor in the Department of Athletic Training at Lynchburg College. Please address all correspondence to Thomas G. Bowman, PhD, ATC, Department of Athletic Training, Lynchburg College, 1501 Lakeside Drive, Lynchburg, VA 24501. bowman.t@lynchburg.edu.*

## Full Citation:

Bowman TG, Mazerolle SM, Dodge TM. Retention initiatives used by professional bachelor's athletic training program directors. *Athl Train Educ J*. 2016;11(1):18–26.

# Retention Initiatives Used by Professional Bachelor's Athletic Training Program Directors

Thomas G. Bowman, PhD, ATC; Stephanie M. Mazerolle, PhD, ATC; Thomas M. Dodge, PhD, ATC, CSCS

## INTRODUCTION

Articles about athletic training student retention rates and strategies have gained a foothold in the literature.<sup>1-4</sup> One reason for the increase in attention may be that retaining athletic training students has become increasingly important due to competition from the growing number of athletic training programs (ATPs) across the country.<sup>5</sup> The retention rate of athletic training students at institutions sponsoring undergraduate ATPs has recently been found to be 81%.<sup>2</sup> This high rate may be due to a combination of a rich history of producing qualified graduates, which shapes the reputation and financial strength of the ATP,<sup>6</sup> as well as stable leadership.<sup>2</sup> Other factors which have been linked to increased athletic training student retention include socialization time for prospective students, providing students with individual attention, and recruiting students who can handle the rigor of the ATP.<sup>2</sup> Approximately half of ATP directors have acknowledged retaining athletic training students as a current problem facing athletic training education.<sup>3</sup> Several reasons have been identified for why ATP directors believe athletic training student retention is a problem, including a lack of information regarding the ATP and the profession, as well as the rigor of completing an ATP.<sup>3</sup>

An ATP with a strong reputation and consistent leadership will learn how to market its strengths, leading to incoming students who are better informed about athletic training.<sup>2</sup> Stable leadership will also allow curricular challenges, such as course sequencing and clinical education specifics, to be recognized and addressed expeditiously.<sup>2</sup> While consistent direction is important, formal professional socialization may be the keystone that helps students gain an understanding of their future role and identity as an athletic training professional.<sup>7</sup> Providing this early link to their future is critical for prospective students who may not have a robust understanding of either the ATP or the profession itself upon entering college.<sup>5</sup> Furthermore, socialization has been linked to persistence,<sup>8</sup> as the process often encourages student integration, which is paramount for developing passion and professional commitment, both steadfast retention factors. Athletic training program directors have identified using both formal and informal structures to help socialize athletic training students, including orientation sessions, introductory classes, social outings, and peer groups.<sup>9</sup> Academic and social integrations have long been linked to persistence in higher education<sup>10</sup> and are often obtained when athletic training students are provided experiences that are meaningful, authentic, dynamic, and hands on.<sup>1,7,11,12</sup> The aforementioned processes often help integrate athletic training students into their ATP, helping them acclimate and adjust to the demands placed on them.

Recruiting prospective students who can handle the ATP rigor is important, since the demands of degree completion can lead to student stress<sup>13,14</sup> and negatively affect learning and alter persistence decisions. Also, recruiting students with formida-

ble academic backgrounds can help foster a stimulating environment to help keep student motivation high, while getting to know students individually can help improve social integration into the ATP and the institution due to the perception of an encouraging environment.<sup>10,15,16</sup>

While there is a lack of research on retention initiatives used specifically by ATP directors, there is an abundance of information examining nursing program student retention. Since there are similarities between nursing programs and ATPs, the most common practices identified by nursing programs to improve student retention might prove beneficial to athletic training students, faculty, and administrators. The nursing literature has suggested that improving public knowledge of the nursing profession,<sup>17</sup> providing students with peer study sessions,<sup>18,19</sup> socializing students early on in their educational career,<sup>19,20</sup> and providing students with a mentoring program<sup>19-21</sup> can improve retention rates. Further, retention initiatives data suggest that persistence likely occurs when a student has access to services that promote meaningful learning opportunities,<sup>22</sup> which in general education refers to tutoring programs, writing centers, etc. It remains unknown if ATPs use any of these initiatives or others to help reduce student attrition.

Program administrators are concerned with retaining quality students to meet the growing demand for athletic trainers in the workforce; as such, they are likely implementing specific initiatives within their ATPs to encourage persistence. It is possible that some of the initiatives used by ATPs are similar to those effectively used by other health care educational programs, such as nursing. However, despite recognition of retention as an issue, it remains unknown what ATP directors do to improve student persistence. Therefore, the purpose of this research was to identify initiatives that ATP directors use to improve the retention rates of athletic training students in their programs.

## METHODS

We used qualitative methods to understand what initiatives ATP directors use to improve athletic training student retention rates. We collected data through 2 separate processes for the current study. First, we sent an online survey<sup>2</sup> to all undergraduate ATP directors to obtain an initial impression of retention methods used. To gain a more robust appreciation for the retention initiatives used, we completed follow-up telephone interviews with randomly selected participants. The combination of the 2 data sources provided triangulation and a clearer depiction of the results.

## Participants

The present data was collected using 2 separate strategies: an Internet survey sent to all participants and follow-up telephone interviews conducted with a smaller, random group of participants generated from the initial pool of respondents.

**Table. Frequencies for Institutional Information of Athletic Training Program Survey Respondents and Interview Participants**

Variable	Survey Respondents, No. (%)	Interview Participants, No. (%)
Carnegie classification		
Research	52 (29.4)	4 (25)
Master's	84 (47.5)	6 (37.5)
Baccalaureate	41 (23.2)	6 (37.5)
Enrollment		
Up to 1000	11 (6.4)	NA
1000–3000	47 (26.6)	8 (50)
3000–5000	21 (11.9)	2 (12.5)
5000–10 000	24 (13.6)	3 (18.8)
10 000–20 000	37 (20.9)	3 (18.8)
20 000–30 000	23 (13.0)	NA
30 000 or greater	13 (7.3)	NA
Missing	1 (0.6)	NA
Institutional type		
Public	89 (50.3)	4 (25)
Private non-religious	19 (10.7)	3 (18.8)
Private religious	63 (35.6)	9 (56.3)
Private for profit	2 (1.1)	NA
Other	1 (0.6)	NA
Missing	3 (1.7)	NA
Athletic affiliation		
NCAA Division I	75 (42.4)	4 (35)
NCAA Division II	43 (24.3)	5 (31.3)
NCAA Division III	45 (25.4)	7 (43.8)
NAIA	14 (7.9)	NA

Abbreviations: NA, not available; NAIA, National Association of Intercollegiate Athletics; NCAA, National Collegiate Athletic Association.

We initially sent an Internet survey request to all 343 undergraduate ATP directors in the United States in the spring 2012 semester. A total of 171 ATP directors (51.6%) completed the Internet survey. A total of 83 ATP directors, upon completion of the Internet survey, stated they would agree to a follow-up telephone interview. From this subset, we randomly selected 16 ATP directors to complete the telephone interviews using a random number table. Data analysis was ongoing throughout the 1-on-1 interviews, and it was at 16 respondents that we achieved data saturation with no new themes emerging from the data. Demographic information for the directors who completed the online survey and for those who completed the telephone interviews is in the Table.

### Data Collection Procedures

Before we initiated data collection, the Institutional Review Board of the host institution approved our study. As stated previously, we collected data using 2 separate processes. We administered our online survey similar to methods suggested previously.<sup>23</sup> First, we sent a personalized e-mail to directors of all undergraduate ATPs in the United States informing them of the purpose of the study and asking for their participation. One week later, we sent another personalized e-

mail with a link to the online survey. We delivered the survey electronically using QuestionPro Survey Software (QuestionPro Inc, Seattle, WA). The first page of the survey was an Institutional Review Board approved consent form. Two weeks later, we sent a reminder e-mail to those who had not completed the survey, followed by another reminder e-mail an additional week later. Seven days after the last reminder e-mail, we personally called the remaining ATP directors to ask for their participation. After receiving no new responses for 2 days, we terminated data collection.

We contacted those randomly chosen for telephone interviews by e-mail to schedule a date and time for the conversation. We finalized the scheduled call after we received a signed consent form. The interviews followed a semistructured format, allowing for additional questions to be asked to ensure rich data, and lasted approximately 30–45 minutes. We tape recorded the conversations and transcribed them to facilitate data analysis.

### Data Analysis

We used a general inductive approach<sup>24</sup> to analyze the responses to the open-ended Internet survey questions and the telephone interview transcripts. Similar to grounded theory,<sup>25</sup> the main goal of the general inductive approach is to make sense out of large amounts of data by creating links between the data and the research objectives. The objective of the current study was to identify the initiatives ATP directors use to improve athletic training student retention. Therefore, we focused on the responses to 2 survey questions and 1 telephone interview question. The survey questions used asked the participants to describe any specific initiatives they or their ATP used that were aimed at retaining students and ideally what they would like to do to improve athletic training student retention at their institution. During the telephone interviews, we asked participants to describe retention strategies used by their ATP and used follow-up questions and prompts to achieve an appropriate level of detail in the answers. Analysis started by reading the transcripts several times. After getting a sense of the data, the researchers started applying codes to the data. Following several additional reads, we combined the codes into categories by grouping similar topics. We finished by condensing the categories into final themes by reducing overlap.

We used several techniques to ensure the trustworthiness of the data and results. First, the 2 primary authors participated in multiple-analyst triangulation. Through this procedure, the researchers analyzed the data independently and negotiated over the coding scheme and final themes. The 2 primary authors discussed the systematic steps of the analysis process prior to engaging in data analysis, thus ensuring consistency with the procedure but still maintaining the rigor of independent evaluation. In the current study, no content or nomenclature changes were necessary based on the conversations between the 2 authors upon completion of the analysis. Second, we performed member checks with 4 randomly selected ATP directors by providing them their transcript and the final themes of the data analysis. We asked them to verify the accuracy of their transcripts prior to beginning data analysis and the final themes generated from the multiple-analyst analysis. Finally, we had a peer review our coding structure and the presentation of the final results. The review

was completed by an individual who is an athletic training educator and scholar who has extensive graduate level training in qualitative methods and data analysis.

## RESULTS

During data analysis, we identified 3 themes, which explain the initiatives ATP directors use to retain athletic training students. Athletic training program directors discussed fostering a *family atmosphere*, *strategic planning*, and having *resources* available to support students as ways to improve student retention. A family atmosphere was fostered through significant interpersonal connections between the ATP stakeholders, the organization of social outings, early socialization opportunities for new recruits, providing peer mentoring programs, and by involving alumni. Our participants used strategic planning to alter their ATP and provide an environment more conducive to athletic training student success. The results noted several alterations, including changes to admissions criteria, the timing of formal admissions, and clinical and didactic education. Finally, the ATP directors we spoke to discussed the need for student financial assistance through scholarships or other means, funding for an adequate number of faculty and/or staff, and space for appropriate learning environments. The themes are defined and supported with participant quotes in the sections below.

## DISCUSSION

### Family Atmosphere

Many participants stated that they try to foster a family atmosphere by cultivating personal relationships between the various stakeholders within the ATP. For example, mentoring and positive interactions between ATP faculty and staff have been found to facilitate persistence to graduation.<sup>1,26</sup> Analysis revealed that our ATP directors value the creation of a family atmosphere as a means to retain their students. One ATP director summed this theme up by stating that 1 initiative used in her program to bolster retention is to have “significant interpersonal contact with students to know them as individuals and promote a ‘family’ atmosphere in the ATP.” A similar response came from a participant who stated, “We have a tradition of family style gatherings and enjoyment of each other as staff, and students with staff, and this seems to maintain a positive setting [for our students].”

The development of a family atmosphere in the workplace has been identified by work-life balance scholars as an important retention factor for male and female athletic trainers at the National Collegiate Athletic Association Division I setting, as it helps stimulate professional/organizational commitment and improve work-life balance.<sup>27,28</sup> Despite this literature being rooted in the Division I setting, applications can be drawn to our population primarily because differences are rarely found between the collegiate divisions regarding levels of satisfaction and intentions to stay.<sup>29</sup> Moreover, previous literature has suggested that athletic training students steer away from the profession because of a concern regarding time for parenting and nonwork obligations and interests.<sup>4</sup> However, if athletic training students are able to witness a family-friendly work environment and interact with preceptors who display organizational commitment because of

adequate work-life balance, persistence is more likely.<sup>30–32</sup> Organizational commitment is necessary and foundational for both workplace/employee and ATP/student retention. In addition to achieving and displaying a balanced lifestyle, preceptors have the responsibility to orient their students properly and make them feel welcome. We presume that, when ATPs invest in their students’ professional development and demonstrate support, the students feel valued, which in turn increases their commitment to their academic programs and translates into persistence. This supposition is supported by some of the accessible literature on student professional development and socialization.<sup>7,8,12</sup>

Students must be committed to their degree program in order to persist until graduation. Commitment can be stimulated by integration and realization of professional and personal goals.<sup>1,11,15</sup> Academic and social integration that is fostered through personal relationships with ATP personnel were discussed by a participant who stated that, in his program, he tries to “promote new students’ academic integration into the program by providing them with early experiences that allow them to interact with our students, faculty, and preceptors.” The importance of personal relationships, which includes positive interactions amongst ATP personnel and students, was identified by previous authors<sup>1</sup> as necessary for persistence to graduation. The findings of that particular study were from the student perspective, which is now supported by our ATP directors, as illustrated by this statement on how nurturing the relationships between faculty and students can help retention. The ATP director stated:

*We want to make sure we know each of our students, and they know each of us. So we think that also helps with retention once they’re formally in the program, so they feel comfortable coming and talking with us if they’ve got a question or a problem or think maybe their career goal has changed, and we’re not delaying that conversation.*

Fostering relationships among students, faculty, and preceptors appears to help students feel comfortable by getting to know each other on a personal level. The relationships established between ATP stakeholders help sustain a family atmosphere, particularly as a means to mentor students during their professional development and socialization into their future roles as athletic trainers. Our participants suggested that building relationships with faculty, staff, and peers helps improve athletic training student retention. Previous work also found that the small class sizes that typically occur in ATPs facilitate a close-knit community.<sup>1</sup> Similarly, previous work<sup>2</sup> has found that providing athletic training students with individual attention can potentially improve their retention rates by improving social integration into their institutions.<sup>10,15,16</sup>

Historically, mentorship has been the keystone for professionally socializing students into their future roles, as indicated by the number of empirical investigations citing mentorship as fundamental to integrating, socializing, and retaining students in their athletic training degree programs.<sup>1,4,9,26,33,34</sup> Our participants indicated that mentorship programs were another initiative used to inspire a family atmosphere. Several participants also discussed the need to promote positive encounters between students, something accomplished by forming a peer mentoring program. Our participants seemed to prefer more informal mentoring

arrangements, as found previously, as a socializing agent for both undergraduate<sup>9</sup> and professional master's<sup>34</sup> ATPs. A typical informal mentoring program is outlined by the following quote:

*We've tried very hard to get our upper-class students to be good mentors and peers, so that when students do observation hours, the first-year students, that our upper-class students are engaging them, talking about, "What did you learn in class today," helping them learn various tape jobs that they've learned or universal precaution techniques or whatever it is.*

Student facilitated mentoring has been found to help socialize novice athletic training students into the professional responsibilities and program expectations, as it provides opportunities for informal learning and the development of role understanding.<sup>13,14</sup> Once students understand and accept their role through the informal mentoring program, they often feel integrated and vested, a necessary aspect for retention.<sup>1,4</sup>

Recent evidence<sup>35</sup> suggests that program pride and tradition can support retention of athletic training students, as it fosters commitment to the ATP mostly due to the success and involvement of alumni. Some ATP directors mentioned the importance of alumni in creating a family environment and using them as an influence on current students. One participant stated:

*One of the things that we do is we have alumni and current students hold different events throughout the year. Essentially, they're trying to get the students into the fold and comfortable with other students in the program, alumni, and get them the opportunity to ask questions in a nonofficial way, where they don't feel like they're being evaluated.*

While strategic to several ATP directors' retention plans' mentoring programs, alumni involvement was more formalized than peer mentoring programs discussed by our participants.

Our participants found value in cultivating a family style atmosphere within the ATPs they direct. Many did so by holding various social activities and through informal peer mentoring. Faculty and peer support provided to students in ATPs stimulates retention, as it promotes professional enthusiasm and drive.<sup>12,36</sup> Based on our data, fostering relationships between ATP stakeholders also creates a collegial, family-centered environment associated with retention in athletic training.<sup>27</sup>

## Strategic Planning

Evidence suggests that college and university administrators who use a more selective, competitive admissions process are more likely to retain their students,<sup>37</sup> an initiative discussed by our participants. Directors of ATPs often spoke of proactive measures, such as admission standards or the use of a secondary admissions process, they had taken in order to improve student retention in their programs. The most common response under this theme referred to the ATP admissions standards and the use of a secondary admissions process to help socialize recruits before being formally admitted to the ATP. The finding was not surprising, as only 7.3% of the survey respondents and 18.8% of the telephone interview participants directly admit prospective students

from high school before completing any college coursework. Thus, the majority of our participants used a secondary admissions process to select students for ATP admission. One ATP director explained how sticking to their admissions standards has helped reduce attrition within the ATP she directs. She said:

*At this point, having statistics on the first-time passing rate of students who come in on probation, meaning that they are below the minimum criteria on several items that we require for application to the program, we have shifted our focus back to only accept the students who meet the minimum criteria.*

Additional participants noted similar practices. One stated:

*Student retention is not a problem. Through our competitive admissions process we are able to select those who have a desire to succeed and not select those who academically would not [succeed].*

Other participants would like to increase their admissions standards to help reduce attrition in their programs. One ATP director stated, "We are currently working on strengthening our admissions requirements. The students with the lowest [grade point averages] are the most likely to drop out of the program." Another agreed by saying, "We are in the process to make retention more challenging by increasing the [grade point average] for incoming freshman." Multiple additional ATP directors agreed that their capability to retain students would be enhanced by improving the admissions criteria of their ATPs. Perhaps some early attrition is necessary to reduce numbers to those who can handle the rigor of the program,<sup>38</sup> allowing athletic training faculty and preceptors to focus on students with the highest chances of success.

Other participants noted the use of a secondary admissions process to help socialize students to the profession and allow them time to make a decision on whether studying athletic training was right for them. One ATP director explained how pushing the secondary admissions process back a year to make it later helped improve retention. She explained by saying:

*One of the biggest things we've done to increase retention in our program is we've put off the athletic training application process so our students don't begin their professional phase until their junior year. They've had 2 years to not only figure out if athletic training is for them, and to understand everything that goes along with the major, but they've also had time to adjust to college life. So I think that was 1 of the biggest things we did to increase retention. Before, in the past, what we did is we had students complete observation hours in their freshman year and start the whole retention process in their sophomore year. What we found is we had a big dropout rate because I think students—it wasn't that they didn't love athletic training or didn't like the major. It was just that it was a little too much too soon trying to make a freshman a health care provider before they even found out where their college dorm was located or where their rooms were located. I think that's 1 of the biggest things we did.*

The above participant believed that moving the secondary admission process back a year allowed prospective students to become socialized, not only into the athletic training profession and the ATP, but also into the institution and life as college students.

Another participant explained that the ATP he directs used to admit students directly out of high school. He changed the process and found that including a socialization period while in college helped improve persistence. He said:

*We used to be a program that admitted freshman the day they walked in the door. What we discovered was, halfway through their freshman year, halfway through their sophomore year, the kid was in over his head and thought athletic training was personal training and things like that. Like I said, now we are very meticulous in how we do things with freshman in terms of their orientation and their applications, exposing them to athletic training. We have an introduction to athletic training class, which is kind of a general class for all students, but we highly encourage applicants to take that class, again, just so that they know what they're getting into; they've been exposed to it. The first day they walk into the athletic training clinic isn't the first day they're in the academic program and they go, "Oh, wow, I thought athletic training was strength and conditioning," or, "I thought athletic training was personal training. This isn't what I thought." We're very, like I said, kind of meticulous in how we orientate kids to our program, which I think then carries over once they're in [the ATP]. They're comfortable with what they're doing.*

The use of a secondary admissions process was popular among ATP directors, as approximately 93% select students into ATPs after some college coursework has been completed.<sup>2</sup> It has also been found that the timing of the secondary admissions process is a key factor when considering athletic training student persistence. Retention rates for athletic training students are higher when the secondary admissions process occurs later in a student's college career, potentially because it allows students more time to explore whether entering an ATP is the right choice for them.<sup>2</sup> Prospective students may also require time to develop a subjective warrant, which includes perceptions of the necessary knowledge, skills, and attitudes to perform work in a specific occupation<sup>39</sup> and is influenced by role models and other individuals, educational experiences, and social influences among others factors.<sup>40</sup>

Social integration, intellectual integration, commitment, and the clinical education experience are factors that have been found to alter the decision to apply to an ATP.<sup>38</sup> Perhaps focusing on the variables influencing application during the period preceding formal admission can help facilitate student socialization and result in students entering an ATP with an accurate depiction of the curriculum and the profession. Furthermore, a secondary admissions process may allow for more interactions between ATP faculty and instructors if introductory coursework or an observation period is included without overwhelming students. In comparison to a direct admission process, research suggests increasing the amount of mentoring received as well as improving academic integration to encourage the student to persist.<sup>4,15,41</sup>

We spoke with 1 ATP director who admits high school students directly into his ATP as first semester freshman. He thought the way his staff handles the selection process improved retention. He explained the process:

*We interview every student before they are accepted into the program. So I think we're the only place in the country that*

*does that. So we require high school students, as part of the selection process, to come on campus and interview, and that's a key part of our selection process. So we think that in itself cuts down on some attrition. So if a student were to come and interview here, and they had great [Scholastic Aptitude Test] scores and excellent grades, and then at the interview, they have no idea what athletic training is, and they have no interest in being an athletic training major, we won't accept them into the athletic training major.*

When a secondary admissions process is not used, ATP directors should work to ensure socialization has occurred before the student enters the ATP, as it is common for prospective students to have an incomplete understanding of the athletic training profession.<sup>5</sup> In the example above, the faculty and staff interview each high school applicant to ensure they have an accurate understanding of the curriculum and the profession. We speculate that many ATP directors do not directly admit students into their program because such an interview process may be cumbersome logistically. Scheduling prospective students who live far from campus could be a challenge; however, requiring an interview may help reduce the applicants to those who are serious and passionate about entering the athletic training profession. Enjoyment and passion for athletic training, as well as dedication to the profession, have been found previously as reasons athletic training students persist to graduation.<sup>42</sup> Moreover, as high school recruits may have incomplete perceptions and understanding of the role of the athletic trainer,<sup>5</sup> taking the extra time to interview potential candidates can help educate them on the rigors of the program and demands of the profession.

A final subtheme revolved around curricular modifications ATP directors made or wanted to make to improve student retention. Many of the revisions pertained to clinical education. One participant wanted to "create more and better opportunities for students to engage in meaningful clinical education to keep their interest level high." Another ATP director agreed, stating they wanted to "improve clinical experiences to demonstrate quality over quantity." Some ATP directors did mention changes to the didactic portion of the curriculum. One participant mentioned that "we [the faculty and staff] are changing to a 5-semester program so the information is spread out more." Interestingly, the opposite was being completed by another participant. In her program, the faculty and staff were "dropping the ATP program length by 1 semester." Unfortunately, these responses came from the online questionnaire portion of the data; therefore, additional information about the reasons for these changes remain unknown. However, program length was not identified as a predictor of athletic training student retention, although it is probably inversely related to the timing of the secondary admissions process<sup>2</sup> discussed above.

Providing students with engaging clinical education experiences can help improve retention rates<sup>1</sup> and help reduce athletic training student frustration.<sup>13</sup> In fact, previous research<sup>7</sup> found that clinical integration through meaningful learning experiences improved professional self-efficacy, which in turn facilitated retention, as the student was able to visualize their professional identity. We believe ATP directors should work to provide athletic training students with authentic experiences where they are able to practice

their skills while being supervised by a preceptor who is an appropriate professional mentor. Providing such experiences, particularly early on for athletic training students, will help students find their niche and feel integrated into the operations of the athletic training clinic, leading to improved persistence rates.<sup>1,4</sup> Clinical education sites should be continuously monitored and discontinued if athletic training students are not provided with opportunities to practice their skills with appropriate supervision.<sup>13</sup>

Finally, we had several participants state that they wanted to transition to a professional master's program to improve their retention rates. A typical answer to the question of, "What would you like to do to improve athletic training student retention at your institution," was, "Transition to a professional master's program." Similar to the subtheme regarding curricular revisions, additional data explaining this answer is unavailable because these responses came from the online questionnaire. However, the response is interesting as the discussion regarding transitioning the entry-level degree to the master's level continues to strengthen.<sup>43 a</sup> Previous research has found that the retention rate of professional bachelor's athletic training students is 81%,<sup>2</sup> while professional master's athletic training students retain at a rate of 89%.<sup>44</sup> However, at the time of data collection, these results were unknown, and ATP directors probably relied on anecdotal evidence to make the assertion that moving to a professional master's ATP would improve the retention rates of athletic training students.

## Resources

Student departure from a degree program or a college/university is caused predominantly by financial aid, cost, or affordability.<sup>45</sup> Our final theme, resources, explores the concept of financial compensation. The most popular response in this theme pertained to offering students scholarships. Recipients of merit scholarships are more likely to persist in their academic studies compared to those who receive other forms of financial aid,<sup>46</sup> which aligns with several of our participants' initiatives regarding retention. For example, 1 participant explained improving her program's athletic training student retention rate by providing scholarship opportunities. She said, "We have some scholarship monies for all students which increase as the student progresses within the program." One ATP director explained how scholarship funding can help improve athletic training student dedication to the profession. He stated:

*We are starting a scholarship for freshmen that will allow us to get them more involved from the beginning and give them a sense for the profession. It also allows us to give them competitive scholarship money to keep them out of other extracurricular activities that would interfere with their ability to commit all of their time to the program and not feel so overwhelmed.*

Additionally, multiple ATP directors stated that they would like to offer scholarship opportunities to improve athletic training student retention. Some of these respondents went into more detail; 1 in particular wished she could help students afford college. She explained:

*I wish tuition would be lower so the students could follow their dreams and stay in college. I wish the students did not have to work to pay tuition. Holding down a full-time job and completing the major is extremely difficult.*

Financial considerations heavily influence student retention, especially as current economic conditions continue to remain bleak. Athletic training students are not exempt from the financial strain of higher education, as ATP directors have identified financial difficulty as a common reason for athletic training student departure.<sup>42</sup> Often college students must hold part-time or work-study jobs to help offset the costs of tuition. Specific to athletic training students, the costs of clothing, insurance, and travel associated with clinical education are additional expenses to be considered. Several of the ATP directors discussed providing scholarships to cover specific expenses such as insurance, memberships, or certification examination fees. One stated that the faculty and staff "pay for the first-time attempt of the [board of certification] exam." Similarly, another stated that "scholarships reduce the costs to the student by providing memberships, uniforms, and liability insurance."

Unlike most college students, the rigor of the didactic education and the time associated with clinical education responsibilities makes it difficult for athletic training students to have time for a part-time job.<sup>47</sup> Previous research has found anxiety related to the costs associated with completing an ATP as a facilitator of student stress,<sup>14</sup> which can possibly influence the decision to persist, particularly due to concerns of financial compensation and time commitments related to the role of the athletic trainer.<sup>4</sup> Athletic training faculty need to be particularly aware of the demands placed on athletic training students related to the necessity of part-time employment to support their clinical education experiences.

Having access to appropriate resources facilitates strong learning experiences and is essential to degree program persistence,<sup>48,49</sup> and many of the ATP directors mentioned the need for financial support for adequate staffing and facilities as keys in their ATPs for retention. One participant summed this theme up by stating he wanted to "be given adequate and appropriate financial and personnel resources in which the ATP director has responsibility for and authority over." More specifically, ATP directors would like to "hire additional athletics staff," "hire additional faculty," and make "athletic training lab improvements with additional teaching tools" to improve persistence of students in their ATPs. Since role strain has been found to occur among athletic training preceptors,<sup>50,51</sup> hiring additional athletics staff might help reduce patient loads for preceptors and lower student to preceptor ratios. Additional faculty may also provide students with additional individual attention that may help improve retention rates.<sup>2</sup> Our participants noted that they tried to provide funding for the costs related to insurance, memberships, appropriate staffing, and learning facilities in order to retain athletic training students.

<sup>a</sup> At the time of acceptance, the fall 2015 decision had not been made. The Commission on Accreditation of Athletic Training Education mandated a change to master's level professional education by 2022.

## LIMITATIONS

Our qualitative analysis revealed 3 primary retention initiatives used by ATP directors. These findings mirror existing literature within higher education and athletic training; however, our sample was relatively small, and we did not have good institutional diversity in terms of size and type. Due to program autonomy, the initiatives discussed by our participants may not reflect those used by other ATP directors. We also had a large number of participants representing private institutions that tend to have higher tuition rates, which may be why providing funding was a theme. A future study should conduct a nationwide investigation on successful retention initiatives highlighting the effects upon athletic training student persistence in athletic training education. Our study also only examined retention initiatives from the ATP director's perspective and was not confirmed through observation or triangulation from other stakeholders' perspectives. Although we used reputable credibility strategies, confirming the final outcomes of our study could have been strengthened by including multiple perspectives, including but not limited to students, clinical preceptors, and other program faculty.

## CONCLUSIONS

Students enrolled in higher education persist because they are engaged in learning communities, have resources accessible which allow them to succeed, feel connected to their peer groups, and have opportunities to interact with program faculty. Athletic training students persist because they develop passion for the profession, passion that is developed through academic, social, and clinical integration. Our results illustrate that ATP directors use the creation of a family-like atmosphere, a secondary admissions process, and support services through scholarships and resources as means to retain their students. Faculty and peer support permeates the socialization and retention literature as being paramount to professional development and persistence, as it allows for the student to feel integrated. The secondary admissions process appears to offer a few benefits in regards to persistence, all previously identified retention factors, including allowing the ATP to better educate students on the roles and responsibilities of athletic trainers, evaluate the potential for success of students, and provide early integration and meaningful exposure to the profession. Finally, increasing opportunities for financial support was recognized as key to athletic training student retention. Financial concerns are universal for college students, but can be compounded for athletic training students due to the travel, liability insurance, and clothing demands of clinical education. Athletic training program directors are encouraged to integrate their students early through informal and formal opportunities, evaluate students' potential prior to formal admissions, plausibly through an interview process, and educate students on scholarship opportunities to help offset tuition and fees associated with the profession and program completion.

## Acknowledgments

We would like to thank Lynchburg College for partially funding this study through a summer research grant.

## REFERENCES

1. Bowman TG, Dodge TM. Factors of persistence among graduates of athletic training education programs. *J Athl Train*. 2011;46(6):665–671.
2. Bowman TG, Hertel J, Wathington HD. Programmatic factors associated with undergraduate athletic training student retention and attrition decisions. *Athl Train Educ J*. 2015;10(1):5–17.
3. Bowman TG, Hertel J, Mazerolle SM, Dodge TM, Wathington HD. Program directors' perceptions of undergraduate athletic training student retention. *J Athl Train*. 2015;50(2):178–184.
4. Dodge TM, Mitchell MF, Mensch JM. Student retention in athletic training education programs. *J Athl Train*. 2009;44(2):197–207.
5. Mensch J, Mitchell M. Choosing a career in athletic training: exploring the perceptions of potential recruits. *J Athl Train*. 2008;43(1):70–79.
6. Herzog VW. *The Effect of Student Satisfaction on Freshman Retention in Undergraduate Athletic Training Education Programs* [dissertation]. Huntington, WV: Marshall University; 2004.
7. Young A, Klossner J, Docherty CL, Dodge TM, Mensch JM. Clinical integration and how it affects student retention in undergraduate athletic training programs. *J Athl Train*. 2013;48(1):68–78.
8. Mazerolle SM, Dodge TM. Considerations for the use of the observation experience to aid in early socialization and retention of athletic training students. *Athl Train Educ J*. 2014;9(2):54–58.
9. Mazerolle SM, Bowman TG, Dodge TM. Athletic training student socialization part I: socializing students in undergraduate athletic training education programs. *Athl Train Educ J*. 2014;9(2):72–79.
10. Tinto V. *Leaving College: Rethinking the Causes and Cures of Student Attrition*. 2nd ed. Chicago, IL: The University of Chicago Press; 1993.
11. Klossner J. The role of legitimation in the professional socialization of second-year undergraduate athletic training students. *J Athl Train*. 2008;43(4):379–385.
12. Mazerolle SM, Dodge T. Role of clinical education experiences on athletic training students' development of professional commitment. *Athl Train Educ J*. 2015;10(2):138–145.
13. Bowman TG, Dodge TM. Frustrations among graduates of athletic training education programs. *J Athl Train*. 2013;48(1):79–86.
14. Stilger VG, Etzel EF, Lantz CD. Life-stress sources and symptoms of collegiate student athletic trainers over the course of an academic year. *J Athl Train*. 2001;36(4):401–407.
15. Tinto V. Dropout from higher education: a theoretical synthesis of recent research. *Rev of Educ Res*. 1975;45:89–125.
16. Tinto V. Classrooms as communities: exploring the educational character of student persistence. *J High Educ*. 1997;68:599–623.
17. Wells MI. An epidemiologic approach to addressing student attrition in nursing programs. *J Prof Nurs*. 2003;19(4):230–236.
18. Higgins B. Relationship between retention and peer tutoring for at-risk students. *J Nurs Educ*. 2004;43(7):319–321.
19. Lockie NM, Burke LJ. Partnership in Learning for Utmost Success (PLUS): evaluation of a retention program for at-risk nursing students. *J Nurs Educ*. 1999;38(4):188–192.
20. Candela LL, Kowalski S, Cyrkiel D, Warner D. Meeting the at-risk challenge: empowering nursing students through mentoring. *Int J Nurs Educ Scholarsh*. 2004;1:1–13.

21. Matteson-Kane M, Clarren DS. Recruiting students is one thing; keeping them is another. *Nurse Educ.* 2003;28(6):281–283.
22. Roberts J, Styron R. Student satisfaction and persistence: factors vital to student retention. *Res High Educ.* 2010;6:1–18.
23. Dillman DA. *Mail and Internet Surveys: The Tailored Designed Method.* 2nd ed. New York, NY: Wiley; 2000.
24. Thomas D. A general inductive approach for qualitative data analysis. *Amer J Eval.* 2006;27:237–246.
25. Strauss AL, Corbin JM. Grounded theory methodology. In: Denzin NK, Lincoln YS, eds. *Handbook of Qualitative Research.* Thousand Oaks, CA: SAGE Publications, Inc; 1994:273–285.
26. Mazerolle SM, Gavin KE, Pitney WA, Casa DJ, Burton LJ. Undergraduate athletic training students' influences on career decisions after graduation. *J Athl Train.* 2012;47(6):679–693.
27. Goodman A, Mensch JM, Jay M, French KE, Mitchell MF, Fritz SL. Retention and attrition factors for female certified athletic trainers in the National Collegiate Athletic Association Division I football bowl subdivision setting. *J Athl Train.* 2010;45(3):287–298.
28. Mazerolle SM, Goodman A, Pitney WA. Factors influencing the decisions of male athletic trainers to leave the NCAA Division-I practice setting. *Inter J Athl Ther Train.* 2013;18(6):7–12.
29. Terranova AB, Henning JM. National Collegiate Athletic Association Division and primary job title of athletic trainers and their job satisfaction or intention to leave athletic training. *J Athl Train.* 2011;46(3):312–318.
30. Mazerolle SM, Dawson A, Lazar R. Career intentions of pre-professional female athletic training students. *Inter J Athl Ther Train.* 2012;17(6):19–22.
31. Mazerolle SM, Gavin K. Female athletic training students' perceptions of motherhood and retention in athletic training. *J Athl Train.* 2013;48(5):678–684.
32. Mazerolle SM, Goodman A. Athletic trainers with children: finding balance in the collegiate practice setting. *Int J Athl Ther Today.* 2011;16(3):9–12.
33. Pitney WA, Ehlers GG. A grounded theory study of the mentoring process involved with undergraduate athletic training students. *J Athl Train.* 2004;39(4):344–351.
34. Mazerolle SM, Bowman TG, Dodge TM. Athletic training student socialization part II: socializing the professional master's athletic training student. *Athl Train Educ J.* 2014;9(2):80–86.
35. Mazerolle SM, Bowman TG, Dodge TM. Program director perspectives on athletic training student motivation to complete their professional athletic training degrees. *Athl Train Educ J.* 2013;8(3):58–65.
36. Dodge TM, Mazerolle SM. Preceptors influence on athletic training students' development of excitement and commitment to the field of athletic training. *Athl Train Educ J.* 2015;10(1):18–24.
37. DeBerard MS, Spielmans GI, Julka DC. Predictors of academic achievement and retention among college freshmen: a longitudinal study. *College Stud J.* 2004;38(1):66–80.
38. Herzog VW, Anderson D, Starkey C. Increasing freshman applications in the secondary admissions process. *Athl Train Educ J.* 2008;3(2):67–73.
39. Dewar AM, Lawson HA. The subject warrant and recruitment into physical education. *Quest.* 1984;36:15–25.
40. Lawson HA. Toward a model of teacher socialization in physical education: The subjective warrant, recruitment, and teacher education (Part I). *J Teach Phys Educ.* 1983;2(3):3–16.
41. Townsend B, Wilson K. The academic and social integration of persisting community college transfer students. *J Coll Stud Retention.* 2009;10(4):405–423.
42. Bowman TG, Hertel J, Mazerolle SM, Dodge TM, Wathington HD. Program directors' perceptions of professional bachelor's athletic training student decisions to persist and depart. *Athl Train Educ J.* 2016;11(1):45–53.
43. Pitney WA. Requiring professional athletic training programs at the post-baccalaureate level: considerations and concerns. *Athl Train Educ J.* 2012;7(1):4–10.
44. Bowman TG, Pitney WA, Mazerolle SM, Dodge TM. Description of professional master's athletic training programs. *Athl Train Educ J.* 2015;10(1):39–46.
45. Scannell J. The role of financial aid and retention: what the realities are and smart retention strategies. *U Bus Mag.* May 2011.
46. Schuh JH. Examining the effects of scholarships on retention in a fine arts college. *J Coll Stud Retention.* 1999;1(3):193–202.
47. Racchini J. Enhancing student retention. *Athl Ther Today.* 2005;10:48–50.
48. Pascarella ET, Terenzini PT. *How College Affects Students: Vol. 2. A Decade of Research.* San Francisco, CA: Jossey-Bass; 2005.
49. Adelman C. *Answers in the Toolbox: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment.* Document No. PLLI 1999-8021. Washington, DC: Department of Education, Office of Educational Research and Improvement; 1999.
50. Dodge TM, Mazerolle SM, Bowman TG. Challenges faced by preceptors serving in dual roles as health care providers and clinical educators. *Athl Train Educ J.* 2014;9(1):29–35.
51. Henning JM, Weidner TG. Role strain in collegiate athletic training approved clinical instructors. *J Athl Train.* 2008;43(3):275–283.