

# The Relationships of Age and Years of Experience to Professional Development for Athletic Trainers Employed in the Collegiate Setting

Christianne M. Eason, PhD, ATC\*; Jessica L. Barrett, PhD, ATC†; Stephanie H. Clines, PhD, ATC‡  
\*Department of Kinesiology, University of Connecticut, Storrs; †Exercise Science and Sport Studies, Springfield College, MA; ‡College of Health Professions, Sacred Heart University, Fairfield, CT.

**Context:** Professional identity is a process in which individuals forms a self-concept in the context of their profession, and includes an ability to articulate a professional philosophy. Professional identity relates to many aspects of a profession, including practices, ethics, and the requirements for success. Professional development is a component of professional identity and represents the growth of professionals as they acquire skills and confidence in autonomous practice. Currently, little is known in regard to the role age and years of experience play in the professional development of athletic trainers (ATs).

**Objective:** To determine the relationships of age and years of experience to professional development.

**Design:** Cross-sectional online survey.

**Setting:** Collegiate athletic training clinical setting.

**Patients or Other Participants:** Four hundred twenty-three (193 men, 230 women) ATs.

**Intervention(s):** Data were collected via a Web-based survey instrument consisting of demographic and Likert-scale questions relating to professional development.

**Main Outcome Measure(s):** Likert responses were summed, and demographic information was analyzed for frequency and distribution. Pearson correlations were run to evaluate the relationships between variables and linear regression was used to determine if age or years of experience could predict professional development scores.

**Results:** A positive relationship exists between professional development scores and both age and years of experience. Both age ( $R^2 = 0.066$ ) and years of experience ( $R^2 = 0.075$ ) were statistically significant predictors of variance in overall professional development scores.

**Conclusions:** Although age and years of experiences were both positively correlated with, and predicted variance in, overall professional development scores, the predicted variance of both variables was relatively small. Although we can say that both age and years of experience are prognostic in the professional development of collegiate ATs, their impact is statistically minimal.

**Key Words:** Transition to practice, clinical autonomy, professional identity

*Dr Eason is currently Vice President of Sport Safety at the Korey Stringer Institute. Please address correspondence to Christianne M. Eason, PhD, ATC, Department of Kinesiology, University of Connecticut, 2095 Hillside Road U-1110, Storrs, CT 06269, christianne.eason@uconn.edu.*

## Full Citation:

Eason CM, Barrett JL, Clines SH. The relationship between age and years of experience to professional development for athletic trainers employed in the collegiate setting. *Athl Train Educ J*. 2020;15(3):194–200.

# The Relationships of Age and Years of Experience to Professional Development for Athletic Trainers Employed in the Collegiate Setting

Christianne M. Eason, PhD, ATC; Jessica L. Barrett, PhD, ATC; Stephanie H. Clines, PhD, ATC

## KEY POINTS

- Professional development is a key component of professional identity and can represent a clinician's confidence in their own autonomous skills.
- Age and years of experience do appear to impact professional development, though they explain a small proportion of variance in professional development scores.
- Athletic Training educators should continue to explore ways to enhance professional development.

## INTRODUCTION

Professional development is a process in which an individual discovers their purpose in relation to his or her identity as a professional<sup>1</sup> and denotes the professional growth of that individual as the individual gains skills and confidence in autonomous practice. Professional development will evolve throughout an individual's education and professional career. For athletic trainers (ATs), the exposure to professional development begins upon enrollment in a program accredited by the Commission on Accreditation of Athletic Training Education (CAATE). In the 2020 Standards for Accreditation of Professional Athletic Training Programs, graduates must be prepared to create professional development plans according to personal and professional goals (Standard 67).<sup>2</sup> Evidence for the importance of professional development in the education of ATs can be found in the definition of *supervision*, provided by the CAATE as "occurring along a developmental continuum that allows a student to move from interdependence to independence. . ."<sup>2(p21)</sup> Further, not only accredited programs but also preceptors are responsible for the professional development of students, as stated in Standard 40.<sup>2</sup> The inclusion of professional development for preceptors in the 2020 Standards may help preceptors refine their own skills to grow more autonomous and discover their professional identities as ATs, as well as teach them how to help transition students from interdependent to independent clinical practice.

Within the athletic training profession, a decision has been made to shift the professional preparation degree from a bachelor's to a master's degree. Student maturity has been identified as a potential advantage of the degree transition. However, limited time for students to engage in developmental activities and autonomous practice has been identified as a disadvantage.<sup>3</sup> The length of educational preparation has been shown to influence the professional development and identity of nurses.<sup>4</sup> The degree transition within athletic training may mean shorter athletic training educational preparation for new graduates and less time in clinical education experiences, as the content of professional master's programs will be taught over 2 years as opposed to 3 or 4, which is typical of bachelor's programs. Degree transition also likely means an older graduate entering the workforce. Previous research has shown that age is one possible

constraining factor to successful job performance and feelings of inauthenticity.<sup>5</sup> Age can be a source of division and hierarchy and can also be a factor of substantial conflict.<sup>6</sup> Professional women have explained that they feel a youthful appearance is often interpreted as being "novice" or "inauthentic," or creates situations in which they are mistakenly thought to be students.<sup>5</sup> These professional degree changes inevitably lead to questions regarding the best educational practices for the professional development of ATs. Although changes in the 2020 Standards for Accreditation of Professional Athletic Training Programs explicitly address the professional development of students and preceptors, we are not aware of any research that has explored if these changes are effective.<sup>2</sup>

Currently, there is little research on the topic of professional development in the athletic training profession, including the impact a professional degree change could have on the professional development of ATs. The concept of professional development has been studied extensively in other health care professions. Novice professionals in counseling move from a dependence on experts to a reliance on their own training and experiences as they develop.<sup>7-9</sup> For example, in the early stages of professional development, individuals often rely on external sources of guidance, such as a professor, a mentor, or textbooks, compared with advanced individuals, who incorporate more of their own personal attributes into their professional identity and development.<sup>8</sup> The challenges of professional development have been well documented and include a critical need for positive mentors, exaggerated self-expectations, acute performance anxiety, and permeable or unyielding emotional boundaries.<sup>9</sup> Many of these challenges originate from unclear standards in the educational program.<sup>9</sup> Additionally, some newly credentialed professionals struggle with unrealistic expectations of what it means to be a professional based on idealistic views of their profession.<sup>10</sup> It is reasonable to assume that individuals with higher levels of professional development are more self-confident and experience less professional insecurity, though we are not aware of any empirical evidence to support this notion.

A recent study<sup>11</sup> validated the Professional Identity and Values Scale<sup>1</sup> among an AT population. Three stages of professional development were established for athletic training professionals: stage 1, professional insecurity; stage 2, importance of mentors; and stage 3, self-confidence. These professional development stages emphasized professional insecurities during early development, the importance of mentors in the intermediate phases, and self-awareness and confidence during the later stages of professional development.<sup>11</sup> The groupings revealed that ATs were not comfortable in their new professional roles during the earliest stages of professional development. Factors specifically impacting when or how an AT moves from one stage of professional development to another were not explored.

Given the reliance of entry-level clinicians on external sources such as mentors, athletic training attrition may have an impact on professional development. National Athletic Trainers' Association (NATA) membership data show that the majority (51%) of ATs who maintain membership are between the ages of 18 and 29, with numbers steadily declining over the age of 30.<sup>12</sup> Additionally, Kahanov and Eberman<sup>13</sup> highlighted a trend showing that women depart the profession entirely around the age of 28 and men change clinical settings, from collegiate to secondary schools, at approximately 40 years old. Given these attrition data, it may be natural to assume that there are a limited number of ATs available who are in advanced stages of professional development to serve as mentors for entry-level ATs. However, we do not know if age or years of experience play any part in professional development and subsequently professional identity.

There are many factors that may influence the growth of an individual's professional identity, and each of these components has the ability to impact overall professional development. However, because of limited research on this topic, it is unknown what factors may correlate with professional development. The purpose of our study was to determine if there is any relationship between age or years of experience and professional development. We selected age and years of experience because of employment data highlighting the departure of ATs from the profession and emphasizing the number of young professionals who remain, as well as the degree shift in athletic training that will likely result in older individuals entering the profession. Specifically, we hypothesized that age and years of experience would be positive predictors of professional development.

## METHODS

### Study Design

This study was a cross-sectional online survey (Qualtrics, Provo, UT) developed to examine the relationships between age and years of experience and professional development among ATs in the college practice setting. Approval was awarded by the Committee for Protection of Human Subjects before data collection.

### Participants

Four hundred twenty-three (193 men, 46%; 230 women, 54%) ATs currently employed in the collegiate setting participated in our study. The inclusion criterion was full-time employment in the collegiate clinical setting at any of the following levels: National Collegiate Athletic Association Division I, II, or III; National Association of Intercollegiate Athletics; or community college. Graduate assistants, part-time employees, and individuals in a full-time academic appointment were excluded from participation.

### Procedures

The NATA membership services generated a random sample of 3000 e-mail addresses for members who self-identified employment in the collegiate setting. Of the 3000 surveys, 2942 were valid (invalid e-mail addresses were identified as e-mails returned to researcher). An invitation e-mail was sent to potential participants containing the hyperlink to the survey.

The survey was open for a total of 30 days, and 2 reminder e-mails were sent to all participants, 2 and 3 weeks after the initial request for participation. Researchers e-mailed participants directly so that personal e-mails would not be linked to responses to help ensure confidentiality. Settings were established in Qualtrics that limited responses to one survey entry per Internet protocol address in order to avoid duplicate responses. At the end of the 30-day collection period, all surveys were reviewed to examine completeness, duplications, and inclusion criteria. At the close of the data collection period, 618 survey responses were recorded. A total of 195 responses were removed because of incomplete responses, resulting in 423 completed surveys (14% response rate).

### Instrumentation

The survey instrument consisted of a demographic section and the Professional Identity and Values Scale.<sup>11</sup> The demographic section gathered information regarding participant age, sex, race/ethnicity, years of experience, contract length, hours worked, and marital and family status. These demographic data were collected to ensure a representative sample was obtained.

The Professional Identity and Values scale was originally developed as a measure of counselor professional identity development.<sup>1</sup> In 2018, the Professional Identity and Values scales was validated among an athletic training population.<sup>11</sup> The Cronbach  $\alpha$  for this modified scale was reported to be 0.80, and this is the version that was used for this study. The Professional Development subscale can be broken into 3 factors identifying 3 stages of professional development. Scoring and description of the scale can be found in the Figure.

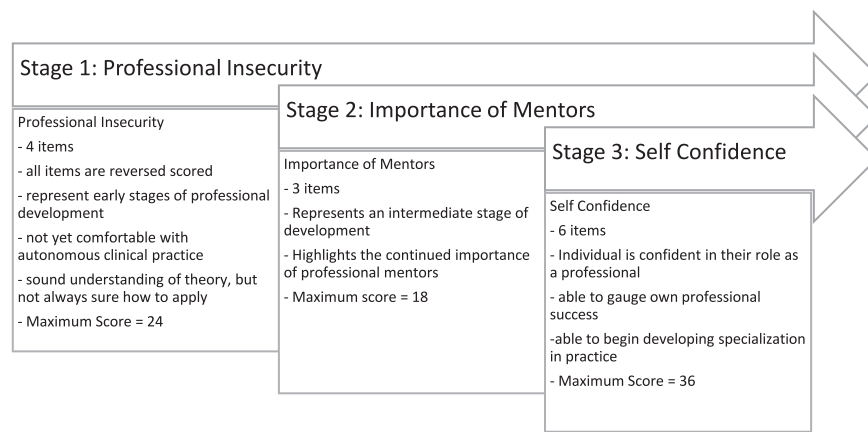
### Data Analysis

The independent variables derived from the survey responses were age and years of experience. The dependent variables were total professional development score, professional development stage 1 score, professional development stage 2 score, and professional development stage 3 score. We set the a priori level at  $P > .05$ . Data were downloaded from the Qualtrics Web site into an Excel spreadsheet, which was then converted to an SPSS (version 22.0; IBM Corporation, Armonk, NY) worksheet. The data were cleaned (responses were listwise deleted if a participant did not complete at least 75% of the survey questions) before analysis. Likert responses for the Professional Development Scale were summed to provide a total professional development score for each participant, as well as a score for each of the 3 professional development stages. Pearson correlations were conducted to evaluate the relationships between age, years of experience, and all professional development scores. Professional development scores that showed a significant correlation with age or years of experience were included in a linear regression. All descriptive and significance testing was completed using SPSS.

## RESULTS

The Professional Development Scale had a Cronbach  $\alpha$  of  $r = 0.77$ , indicating acceptable internal consistency. The average respondent age was  $38 \pm 10$  (23–68). Participants were certified by the Board of Certification for  $14 \pm 10$  years

**Figure. Description and Scoring of the Professional Development Scale.**



(range, 1–46 years) and employed by their current institution for  $8 \pm 8$  years (range, <1–37 years). All NATA districts were represented, with districts 2 ( $n = 63$ , 14.9%), 4 ( $n = 89$ , 21.4%), and 9 ( $n = 48$ , 11.3%) having the largest representation. Additional demographic data can be found in Table 1, and participant professional development scores can be found in Table 2.

### Pearson Correlation

Correlation data revealed a moderate positive relationship between age and professional development stage 1 ( $r = 0.323$ ,  $P = .000$ ) and low positive relationships between age and both professional development stage 3 ( $r = 0.280$ ,  $P = .000$ ) and overall professional development score ( $r = 0.257$ ,  $P = .000$ ). A low negative relationship was also discovered between age and professional development stage 2 ( $r = -0.186$ ,  $P = .001$ ). Correlation data also revealed a moderate positive relationship between years of experience and professional development stage 1 ( $r = 0.342$ ,  $P = .000$ ) and low positive relationships between years of experience and both profes-

sional development stage 3 ( $r = 0.296$ ,  $P = .000$ ) and overall professional development Score ( $r = 0.275$ ,  $P = .000$ ). A low negative relationship was also discovered between years of experience and professional development stage 2 ( $r = -0.189$ ,  $P = .000$ ). Table 3 highlights the correlations between age, years of experience, and professional development scores.

### Predictors of Professional Development

Based on the correlations, several linear regression models were run to predict professional development scores from age and years of experience.

**Age as a Predictor.** Age significantly predicted professional development stage 1 scores,  $b = 0.107$ ,  $t_{339} = 6.281$ ,  $P < .001$  and also explained a significant proportion of variance in professional development stage 1 scores,  $R^2 = 0.104$ ,  $F_{1,339} = 39.454$ ,  $P < .001$ . Age significantly predicted professional development stage 2 scores,  $b = -.406$ ,  $t_{339} = -3.483$ ,  $P = .001$ , and also explained a significant proportion of variance in professional development stage 2 scores,  $R^2 = 0.035$ ,  $F_{1,339} = 12.133$ ,  $P = .001$ . Age significantly predicted professional development stage 3 scores,  $b = 0.122$ ,  $t_{339} = 5.371$ ,  $P < .001$ , and also explained a significant proportion of variance in professional development stage 1 scores,  $R^2 = 0.078$ ,  $F_{1,339} = 28.848$ ,  $P < .001$ . Age significantly predicted total professional development scores,  $b = 0.183$ ,  $t_{339} = 4.902$ ,  $P < .001$ , and also explained a significant proportion of variance in total professional development scores,  $R^2 = 0.066$ ,  $F_{1,339} = 24.029$ ,  $P < .001$ .

**Years of Experience as a Predictor.** Years of experience significantly predicted professional development stage 1 scores,  $b = 0.124$ ,  $t_{379} = 7.085$ ,  $P < .001$ , and also explained a significant proportion of variance in professional development stage 1 scores,  $R^2 = 0.117$ ,  $F_{1,379} = 50.201$ ,  $P < .001$ . Years of experience significantly predicted professional development stage 2 scores,  $b = -.051$ ,  $t_{379} = -3.738$ ,  $P < .001$ , and also explained a significant proportion of variance in professional development stage 2 scores,  $R^2 = 0.036$ ,  $F_{1,379} = 13.972$ ,  $P < .001$ . Years of experience significantly predicted professional development stage 3 scores,  $b = 0.137$ ,  $t_{379} = 6.030$ ,  $P < .001$ , and also explained a significant proportion of variance in professional development stage 3 scores,  $R^2 = 0.088$ ,  $F_{1,379} = 36.360$ ,  $P < .001$ . Years of experience significantly predicted total professional development scores,  $b = 0.210$ ,  $t_{379} = 5.554$ ,  $P < .001$ , and also explained a

**Table 1. Demographic Data for Respondents (N = 423)**

Demographic Information	No.	%
Highest degree earned <sup>a</sup>		
Bachelor's	35	8.3
Master's	365	86.3
Doctorate	21	5.0
Contract length, mo		
9	27	6.4
10	88	20.8
11	20	63.4
12	268	4.7
Relationship status <sup>a</sup>		
Married	210	49.8
Single	187	44.3
Divorced	16	3.8
Separated	1	0.2
Other	8	1.9
Family status <sup>a</sup>		
No children	266	63.2
Children	155	36.8

<sup>a</sup> Missing responses (<2).

**Table 2. Average Participant Professional Development Scores<sup>a</sup>**

Professional Development Score	No. of Responses	Scale Range	Mean $\pm$ SD	Minimum	Maximum
Total	389	13–78	59.8 $\pm$ 7.1	24	77
Stage 1	398	4–24	20.1 $\pm$ 3.4	5	24
Stage 2	393	3–18	11.4 $\pm$ 2.5	4	18
Stage 3	398	6–36	28.2 $\pm$ 4.3	6	36

<sup>a</sup> Higher scores indicate higher levels of professional development.

significant proportion of variance in total professional development scores,  $R^2 = 0.075$ ,  $F_{1,379} = 30.842$ ,  $P < .001$ .

## DISCUSSION

The purpose of this study was to examine the relationships of age and years of experience to the professional development of collegiate ATs. Our results revealed that age and years of experience were both individually significant predictors of overall professional development scores and scores at each stage of professional development, meaning older individuals or those individuals with more years of experience exhibited more professional development. Although age and years of experience were able to statistically predict professional development scores, they accounted for very little of the variance in scores. The variance in values indicates that these are only small factors in professional development and that other factors should be considered and explored in regard to professional development.

These findings are consistent with previous literature exploring similar concepts in other health care professions. For example, the link between years of experience and professional identity has been explored among physical therapists.<sup>14</sup> Master physical therapists, identified by a nomination process of their peers, demonstrated greater confidence in decision-making than novice physical therapists, characterized as recent graduates who had worked less than 1 year. This increase in confidence was attributed to years of experience and multiple exposures to a variety of patient conditions and encounters.<sup>14</sup> Additionally, positive relationships between age and professional socialization<sup>15</sup> and age and professional self-concept have been identified within the field of nursing.<sup>16</sup> Although these constructs are closely related to professional development, we are not aware of any studies that specifically examine the relationships of age and years of experience to professional development.

**Table 3. Correlations**

	Years of Experience	PD Stage 1	PD Stage 2	PD Stage 3	Total PD Score	Age
Years of experience						
Correlation	1	0.342 <sup>a</sup>	−0.189 <sup>a</sup>	0.296 <sup>a</sup>	0.275 <sup>a</sup>	0.955 <sup>a</sup>
Significance (2-tailed)		.000	.000	.000	.000	.000
No. of responses	380	380	380	380	380	341
PD stage 1						
Correlation	0.342 <sup>a</sup>	1	0.239 <sup>a</sup>	0.646 <sup>a</sup>	0.780 <sup>a</sup>	0.323 <sup>a</sup>
Significance (2-tailed)	.000		.000	.000	.000	.000
No. of responses	380	380	380	380	380	341
PD stage 2						
Correlation	−0.189 <sup>a</sup>	−0.239 <sup>a</sup>	1	−0.015	0.232 <sup>a</sup>	−0.186 <sup>a</sup>
Significance (2-tailed)	.000	.000		.776	.000	.001
No. of responses	380	380	380	380	380	341
PD stage 3						
Correlation	0.296 <sup>a</sup>	0.646 <sup>a</sup>	−0.015	1	0.906 <sup>a</sup>	0.280 <sup>a</sup>
Significance (2-tailed)	.000	.000	.776		.000	.000
No. of responses	380	380	380	380	380	341
Total PD score						
Correlation	0.275 <sup>a</sup>	0.780 <sup>a</sup>	0.232 <sup>a</sup>	0.906 <sup>a</sup>	1	0.257 <sup>a</sup>
Significance (2-tailed)	.000	.000	.000	.000		.000
No. of responses	380	380	380	380	380	341
Age						
Correlation	0.955 <sup>a</sup>	0.323 <sup>a</sup>	−0.186 <sup>a</sup>	0.280 <sup>a</sup>	0.257 <sup>a</sup>	1
Significance (2-tailed)	.000	.000	.001	.000	.000	
No. of responses	380	380	380	380	380	341

Abbreviation: PD, professional development.

<sup>a</sup> Correlation is significant at the 0.01 level (2-tailed).

Within our study, age and years of experience independently explained the highest percentage of variance in relation to professional development stage 1 scores. This stage of professional development highlights professional insecurities. These results indicate that age and years of experience play a role in the development of professional insecurities, as individuals in stage 1 of development are not yet confident in their role as an AT and are still trying to develop their own professional approaches. Findings related to athletic training transition to practice consistently emphasize feelings of stress and professional insecurity during the transition from student to autonomous practitioner.<sup>17–19</sup> Given the understanding of the difficulties associated with transition to practice, it is not surprising that age and years of experience explain the highest level of variance in the professional insecurity stage of professional development within our study. Knowing that professional development shifts from professional insecurities to a reliance on mentors, athletic training educators should consider adding formal mentor programs to their educational programs to help students transition to practice.

A frequent source of mentorship for the athletic training student is the clinical preceptor. Mazerolle and Dodge<sup>18</sup> found that preceptors who were enthusiastic about the profession and were themselves committed to athletic training bolstered students' view of the profession. Additionally, preceptors who model professional behaviors and positive attitudes contribute to the development of those traits in students,<sup>20</sup> highlighting the link between mentors and the development of a student's professional identity. Athletic training clinical education provides opportunities for students to develop self-confidence through patient care, as these clinical experiences enable students to develop an increased awareness about the profession through encounters with patients and experienced clinicians. The forthcoming implementation of the 2020 Standards for Accreditation of Professional Athletic Training Programs explicitly<sup>2</sup> places emphasis on the need for athletic training clinicians who serve as preceptors to demonstrate planned professional development through the establishment and maintenance of areas of clinical expertise. This addition reiterates the preceptor's role as an educator, rather than a clinical supervisor. As a result, it is essential for preceptors to recognize the impact they can have on the professional development practices and attitudes of their students during this highly influential time in a student's education. Preceptors are encouraged to critically reflect on their personal growth through the stages of professional development and model appropriate professional behaviors and continuing education practices, as their actions may significantly shape how future ATs approach their own clinical advancement. It may also be important to consider the professional development stages of preceptors. As our results indicate, age was a contributing factor to professional development, so it is possible younger preceptors may not be at a point in their own development to serve as a strong professional mentor.

Young professionals rely on mentors in the development of professional identity and professional insecurity.<sup>18,19</sup> Specifically, newly credentialed ATs in graduate assistantship positions often rely heavily on mentorship during their initial transition to practice.<sup>19,21</sup> Though these ATs are certified professionals, they still require support and ongoing encouragement from mentors. Uniquely, however, graduate assistant

ATs often rely on the previous mentors they had as students<sup>19</sup> or peer mentoring from fellow graduate assistants rather than establishing new mentorship opportunities with the seasoned clinicians in their new organizations.<sup>21</sup> A goal of effective mentoring is to establish a lifelong relationship with a mentee,<sup>22</sup> which is positively demonstrated by the gravitation of students to previous mentor relationships. However, it may also benefit this group of newly credentialed ATs to have guidance from an experienced clinician within their new work environment to help bridge the gap during this critical developmental period. Athletic training departments are encouraged to facilitate more formalized mentorship programs or implement a mentoring specific component to the onboarding process for their novice ATs to better assist these young professionals, enhance their confidence, and develop their professional identities during their initial experience of autonomous clinical practice.

Although there is limited research on professional development among an AT population, the concept has been studied in other medical and health care fields. Athletic training programs seeking to meet the 2020 Standards for Accreditation of Professional Athletic Training Programs can create initiatives that align with the findings of other allied health professions. Among nurses, it has been reported that education, learning experiences, culture, and individual characteristics all play a role in professional development.<sup>23</sup> Patient interaction<sup>23</sup> and clinical placements<sup>24</sup> have also been shown to impact the professional identity and development of nursing students. Clinical placement experiences provided a sense of professional understanding to nursing students, as supervisors and mentors at the clinical placement site served as important models in shaping professional identity.<sup>24</sup> Athletic training education programs should strive to develop their preceptors to serve as mentors and positive role models while ensuring students are exposed to diverse clinical placements and a plethora of patient interactions.

In medical education, the formation of professional identity requires reflection over time and self-awareness as students and young professionals experience conflicts, new situations, and patient encounters.<sup>25</sup> Peers, family, and patient encounters also have been shown to establish the professional identity of medical students.<sup>25</sup> Athletic training educators have long been encouraged to engage students in guided reflective journaling about their clinical education experiences to reflect on their patient interactions as a means to bolster critical thinking and highlight the student's development.<sup>26</sup> Continuation of the practice of reflective journaling into the young professional's career should also be encouraged, as it may serve as a means to demonstrate professional growth as an autonomous developing clinician.

In this study, we examined only the impact the individual factors of age and years of experience had on the professional development of ATs. Given the existing body of literature in other fields, our findings are consistent and highlight that individual characteristics do impact professional development. However, given the relatively small level of variance in professional development that age and years of experience accounted for, it is reasonable to assume that other factors are contributing to the professional development of ATs, and this warrants further investigation.

## LIMITATIONS AND FUTURE DIRECTIONS

The results of this study may not be generalizable to all ATs because we ascertained data only from those employed in the collegiate clinical setting. The job demands, number of staff, and the demands of the patient population in other settings may affect the impact of age and years of experience on professional development. Therefore, it would be important to examine other AT populations to further expand the understanding of this relationship. Additionally, age and years of experience, although statistically significant, accounted for only a small percentage of the variance in professional development scores. It is therefore essential to continue exploring the impact other factors may have on professional development. These factors should include gender, clinical settings, educational route, number of staff, orientation processes, and availability of mentoring programs.

## CONCLUSIONS

Age and years of experience have been shown to play a statistically small role in the professional development of ATs employed in the collegiate setting. This information is important to consider in regard to a shift in the educational requirements of developing athletic training students and the impact on transition to practice. Athletic training educators should continue looking for ways to enhance professional development, including the possible inclusion of formal mentor programs, reflective journaling, and continued preceptor development. Future research should continue to explore professional development within the athletic training profession.

## REFERENCES

1. Healey AC. *Female Perspectives of Professional Identity and Success in the Counseling Field* [dissertation]. Norfolk, VA: Old Dominion University; 2009.
2. Commission on Accreditation of Athletic Training Education. 2020 standards for accreditation of professional athletic training programs. <https://caate.net/wp-content/uploads/2019/08/2020-Standards-Final-7-15-2019.pdf>. Updated 2019. Accessed July 2, 2020.
3. Mazerolle SM, Bowman TG, Pitney WA. Multistakeholder perspectives on the transition to a graduate-level athletic training educational model. *J Athl Train*. 2015;50(9):964–976.
4. Rush KL, Adamack M, Gordon J, Lilly M, Janke R. Best practices of formal new graduate nurse transition programs: an integrative review. *Int J Nurs Stud*. 2013;50(3):345–356.
5. Archer L. Younger academics' constructions of "authenticity," "success" and professional identity. *Stud High Educ*. 2008;33(4):385–403.
6. Bourdieu P. *Homo Academicus*. Cambridge, United Kingdom: Polity Press; 2001.
7. Brott PE, Myers JE. Development of professional school counselor identity: a grounded theory. *Prof Sch Couns*. 1999;2(5):339–358.
8. Gibson DM, Dollarhide CT, Moss JM. Professional identity development: a grounded theory of transformational tasks of new counselors. *Couns Educ Superv*. 2010;50(1):21–38.
9. Skovholt TM, Rønnestad MH. Struggles of the novice counselor and therapist. *J Career Dev*. 2003;30(1):45–58.
10. Moss JM, Gibson DM, Dollarhide CT. Professional identity development: a grounded theory of transformational tasks of counselors. *J Couns Dev*. 2014;92(1):3–12.
11. Eason CM, Mazerolle SM, Denegar CR, Burton LJ, McGarry J. Validation of the Professional Identity and Values Scale among an athletic trainer population. *J Athl Train*. 2018;53(1):72–79.
12. National Athletic Trainers' Association. 2013 in review: it's never been a better time to be an NATA member. *NATA News*. December 2013;(16):17.
13. Kahanov L, Eberman LE. Age, sex, and setting factors and labor force in athletic training. *J Athl Train*. 2011;46(4):424–430.
14. Jensen GM, Shepard KF, Gwyer J, Hack LM. Attribute dimensions that distinguish master and novice physical therapy clinicians in orthopedic settings. *Phys Ther*. 1992;72(10):30–41.
15. Du Toit D. A sociological analysis of the extent and influence of professional socialization on the development of a nursing identity among nursing students at two universities in Brisbane, Australia. *J Adv Nurs*. 1995;21(1):164–171.
16. Kelly S, Courts N. The professional self-concept of new graduate nurses. *Nurse Educ Pract*. 2007;7(5):332–337.
17. Mazerolle SM, Whitney M, Eason C. Examining the experiences of athletic trainers as they transition into their first full-time position. *J Sports Med Allied Health Sci*. 2017;2(3):2.
18. Mazerolle SM, Dodge TM. Role of clinical education experiences on athletic training students' development of professional commitment. *Athl Train Educ J*. 2015;10(2):138–145.
19. Mazerolle SM, Walker SE, Kirby JL. Support received during the transition to practice for the secondary school graduate-assistant athletic trainer. *J Athl Train*. 2016;51(10):780–788.
20. Aronson PA, Bowman TG, Mazerolle SM. Evaluating perceptions of culminating clinical education experiences of senior athletic training students. *Athl Train Educ J*. 2015;10(3):219–226.
21. Mazerolle SM, Clines S, Eason CM, Pitney WA. Perceptions of support networks during the graduate assistant athletic trainer experience. *J Athl Train*. 2015;50(12):1256–1266.
22. 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.
23. Parandeh A, Khaghanizade M, Mohammadi E, Mokhtari-Nouri J. Factors influencing development of professional values among nursing students and instructors: a systematic review. *Glob J Health Sci*. 2014;7(2):284–293.
24. Maranon AA, Isla-Pera MP. Theory and practice in the construction of professional identity in nursing students: a qualitative study. *Nurs Educ Today*. 2015;35(7):859–863.
25. Sharpless J, Baldwin N, Cook R, et al. The becoming: students' reflections on the process of professional identity formation in medical education. *Acad Med*. 2015;90(6):713–717.
26. Walker SE. Journal writing as a teaching technique to promote reflection. *J Athl Train*. 2006;41(2):216–221.