# Effective Characteristics of Formal Mentoring Relationships: The National Athletic Trainers' Association Foundation Research Mentor Program

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**Context:** Mentoring is a beneficial mechanism to support junior faculty members as they navigate job expectations, institutional nuances, and the professional landscape during the first few years as a faculty member. Whereas effective characteristics of informal mentoring relationships are generally understood, less is known about factors that contribute to formal mentoring relationships.

**Objective:** Gain mentor and mentee perceptions of effective mentoring in a formal setting.

**Design:** Qualitative phenomenology.

**Setting:** Higher education institutions.

**Patients or Other Participants:** Six mentees (4 women and 2 men with $3 \pm 4$ years in their current faculty position) and 4 mentors (2 women and 2 men with an average of $10 \pm 3$ years in their current faculty position) participating in the 2015 National Athletic Trainers' Association Foundation mentor-program cohort.

**Main Outcome Measure(s):** Participants completed one telephone interview before starting the mentor program and one interview upon program completion 11 months later. Participants also completed 3 structured online journals at 3-month increments throughout their participation in the program. Two researchers independently analyzed the interview and journal data using a phenomenological approach. To improve trustworthiness, we used peer review and pilot testing of the interview guides, member-checks, and multiple-analyst triangulation.

**Results:** Participants described effective mentoring relationships as those that facilitated collaboration and demonstrated humanistic qualities. Participants who collaborated on scholarly activities during their mentoring experience perceived this to be a highly valuable aspect of the experience that increased the potential for a long-lasting relationship. Whereas the mentoring focused on professional development, humanistic attributes such as approachability and personal connections further enriched participants' mentoring experiences.

**Conclusions:** Participants in formal mentoring experiences describe effective mentoring characteristics similarly to those who have participated in informal mentoring and should be encouraged to exhibit them. Additionally, coordinators of formal mentoring programs should provide participants with resources and guidance to facilitate their experiences.

**Key Words**: Professional development, socialization, structured mentoring, higher education

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## INTRODUCTION

Mentoring is a valuable mechanism to support athletic training faculty members in any stage of their career.[1,2] In fact, mentoring is viewed as bidirectional and mutually beneficial for both the mentor and mentee.[3,4] Experienced faculty members provide guidance for junior faculty members as they navigate job expectations, scholarly endeavors, and promotion and tenure requirements.[1,2] In addition to professional development, mentees experience personal development and increased confidence from mentoring.[5,6] Mentoring has emerged as an important aspect of professional development and the socialization process within athletic training and includes athletic trainers in a variety of roles (ie, preceptors, faculty, clinical practice).[1–4,7–9] Participants in mentoring relationships describe active engagement, communication, and similar interests as helping make their mentoring experiences productive and enjoyable.[4,7] Novice faculty members who experience mentoring also describe higher career satisfaction and an improved transition to higher education.[2,5,6]

The purpose of mentoring in higher education is generally understood but is typically focused on informal mentoring relationships.[2,7,10] Informal mentoring relationships often develop when a more experienced individual seeks out a less experienced protégé to provide advice and act as a role model.[9,11] Informal mentoring often grows organically and emerges due to shared interests and commonalities, including personal and professional goals. Mentees, or less experienced individuals, may also seek out mentors for support and guidance.[1,4,8] In contrast, formal mentoring is guided by an organization that establishes a program and process for mentoring.[10] Formal mentoring relationships are usually short term (1 year), and mentors and mentees are purposefully paired by the organization rather than organically matched.[10] Generally, informal mentoring is thought to be more valuable than formal mentoring relationships,[12] and participants are more satisfied with informal mentoring compared with formal mentoring relationships.[10] However, the benefits of mentoring have been noted for faculty members, and many have sought to facilitate these valuable components by initiating mentoring relationships through more formal mechanisms.[10,13] Studies in academic medicine[5,14] and physical therapy[6] found that mentees faced challenges identifying potential mentors, and formal mentoring could help pair more experienced and less experienced individuals. Formal mentoring can also serve as a mechanism to facilitate long-lasting mentoring relationships that become less formal over time.[12]

Recent studies[1,2,7] have increased our understanding of the value of mentoring for athletic training faculty members. However, less is known about formal mentoring and whether effective mentoring characteristics are similar for formal and informal relationships. We do know that there are some data to suggest new faculty in athletic training should seek mentors who are external to their institutions, as a means to gain support in navigating their research agendas.[1,2] The National Athletic Trainers' Association (NATA) Research and Education Foundation formal mentoring program has been in existence for 4 years, but little is known about what facilitates effective mentoring in this program. The mission of the NATA Foundation's program is to support new faculty as they seek to grow their research initiatives and navigate grant applications and publications. The program appears to be successful on the surface, but little is known about the experiences of those who participate. Therefore, the purpose of our study was to examine effective mentoring from within a formal mentoring program for athletic training faculty members. Our study was guided by this research question: What do participants of formal mentoring programs perceive as effective mentoring characteristics?

## METHODS

### Design

We used a phenomenological, qualitative design to guide our research study. The phenomenological design allowed us to examine the topic of formal mentoring from the perspectives of those who have participated in formal mentoring experiences.[15] We also examined formal mentoring experiences longitudinally over the course of 1 year to understand participants' experiences throughout the entire experience. This study was a part of a larger investigation examining the 2015 NATA Foundation research mentor cohort.[16]

### Participants and Setting

Our purpose was to examine effective mentoring from the perspectives of those who have experienced formal mentoring in athletic training higher education. Therefore, we targeted participants of the NATA Foundation mentor program, a formal mentoring program that pairs more experienced athletic training faculty members with less experienced members.[17] The program was established in 2012 with the intent to provide research guidance to novice faculty members. At the time of this study, interested mentees applied for the program and were paired with experienced faculty with similar research interests. After agreeing to participate, mentors and mentees were introduced at a luncheon at the NATA Clinical Symposia and AT Expo and were provided basic guidelines and recommendations for facilitating the mentoring relationship (Table 1). After this initial pairing and instruction, participants were then left to shape their mentoring relationship however they wished over the course of 1 year.

We purposefully sampled[15] the incoming 2015 cohort of the NATA Foundation mentor program so we could include active participants from a formal mentoring program whom we could follow throughout the length of the program. The mentor program had specific inclusion criteria for participants to be eligible for the program; therefore, inclusion criteria for our study were identical to those guidelines.[17] Inclusion

**Table 1. Guidelines Provided to Participants of the 2015 National Athletic Trainers' Association Foundation Research Mentor Program[a,b]**

Mentor Requirements/Expectations
1. Commitment to mentee through communication and collaboration.
2. Keep an open mind.
3. Provide mentee with knowledge and information on aspect that can help them grow professionally.
    a. Help establish a research plan that includes time frame, realistic projects and goals, and information on grant agencies/opportunities.
4. Actively listen to your mentee.
5. Discuss expectations with mentee.
    a. Your expectations of the relationship and mentor experience.
    b. Their expectations of the relationship and mentor experience.
6. Establish specific goals with mentee that can be realistic, measurable, and attainable.
7. Maintain consistency with communication with mentee, as established in initial meeting.
8. Make time to review the mentor relationship.

Mentee Requirements/Expectations
1. Commit to mentor experience by asking questions and reaching out to mentor.
    a. Demonstrate initiative and professionalism.
2. Share and review your professional goals and aspirations.
    a. Include a research plan and ideas.
3. Discuss expectations with mentor.
    a. Your expectations of the relationship and mentor experience.
    b. Their expectations of the relationship and mentor experience.
4. Establish specific goals with mentee that can be realistic, measurable, and attainable.
5. Maintain consistency with communication with mentor, as established in initial meeting.
6. Make time for the mentoring process.
7. Make time to review mentor relationship.

[a] This information was provided to the 2015 cohort at the initial mentor program luncheon meeting at the NATA Clinical Symposia and AT Expo in St Louis, Missouri, on June 24, 2015.

[b] Current information provided to mentor program participants can be found at http://natafoundation.org/request-funding/faculty-mentor-program-overview/.

criteria for mentees included completion of doctoral education, working in a faculty position with research responsibilities, academic rank of assistant professor, first authorship on a research publication, current NATA member, and certified athletic trainer. Inclusion criteria for mentors were the same as the mentees but with an academic rank higher than assistant professor. The NATA Foundation provided contact information for the 2015 cohort of 6 mentors and 6 mentees. Ten individuals (6 mentees, 4 mentors) agreed to participate, including 4 men and 6 women. Mentees averaged $3 \pm 4$ years in their current faculty position, and mentors had an average of $10 \pm 3$ years of experience as a faculty member. Detailed participant demographics are in Table 2.

### Instrumentation

We developed four interview guides and a set of journal prompts to gain participants' perspectives over the course of 1 year. We developed 2 initial interview guides, 1 for mentors and 1 for mentees, to obtain information regarding their current positions, experiences with mentoring, and expectations of the program (Table 3). The journal prompts were

**Table 2. Participant Demographics**

| Mentee | Sex | Academic Rank | Current Position, y | Carnegie Level of Employment Position |
|---|---|---|---|---|
| Mentees | | | | |
| Reggie | M | Assistant professor | 3 | Master's colleges and universities: small programs |
| Arnold | M | Assistant professor | 1 | Doctoral universities: higher research activity |
| Danica | F | Assistant professor | 1 | Doctoral universities: higher research activity |
| Rachel | F | Assistant professor | 1 | Doctoral universities: higher research activity |
| Adrienne | F | Assistant professor | 12 | Baccalaureate colleges: diverse fields |
| Amanda | F | Assistant professor | 1 | Doctoral universities: highest research activity |
| Mentors | | | | |
| Emily | F | Associate professor | 6 | Doctoral universities: highest research activity |
| Daniel | M | Associate professor | 11 | Master's colleges and universities: medium programs |
| Greg | M | Full professor | 12 | Doctoral universities: higher research activity |
| Erica | F | Full professor | 11 | Special focus 4-y: medical schools and centers |

Abbreviations: F, female; M, male.

**Table 3. Initial Interview Guides**

Initial interview—mentees
1. Can you summarize your doctoral training program?
   a. Degree type, coursework, dissertation topic? doctoral advisor? assistantship?
   b. How many years out of your doctoral program are you?
2. Can you describe your current faculty position?
   a. Research expectations, teaching load, tenure-track process?
3. How many years have you been in this position?
4. Can you describe your level of comfort/confidence with fulfilling job expectations?
   a. Describe your level of preparedness for your current position?
   b. Specific to your promotion/tenure reappointment?
5. How did you learn about the National Athletic Trainers' Association Foundation research mentor program?
6. What were initial attractors to becoming a part of the research mentor program?
7. What are your goals and expectations of being part of this program?
   a. What do you hope to gain from your participation?
   b. Has this changed now that you know who your mentor is?
8. Do you currently have a mentor? If so, please describe that person.
   a. How did that mentoring relationship develop?
   b. Is this mentor your doctoral advisor? Someone at current location?
     i. If doctoral mentor—how do you envision this relationship continuing? (if recently graduated) or how has this relationship continued? (if >1 y graduated)

Initial interview—mentors
1. Can you describe your current faculty position?
   a. Research expectations, teaching load, tenure process
2. How many years have you been in this position?
3. Did you know about the National Athletic Trainers' Association Foundation research mentor program prior to being asked?
4. What attracted you to becoming a part of this program once you had been asked?
5. What qualities do you believe are necessary to be an effective/good mentor?
6. What expectations do you have of your mentee?
7. Can you describe your previous or current experience with mentoring?
   a. How have those relationships developed?
   b. Please describe your previous and/or current mentees (general number and description).
8. What are your goals and expectations of being part of this program?
   a. What do you hope to gain from your participation?
   b. Has this changed now that you know who your mentee is?
9. Have you had any formal training in mentoring? If so, describe.
10. Do you feel prepared to mentor a promising faculty member? Explain.
11. Can you describe your level of comfort/confidence with starting mentoring role?

developed as a set of questions for participants to respond to online (Qualtrics, Provo, UT) and related to their perceptions of the mentoring relationship (Table 4). Last, we developed 2 final interview guides to obtain participants' reflections on the entire mentoring experience (Table 5). We developed the instruments specifically for this study to capture participants' experiences with mentoring throughout program participation, rather than 1 point in time. Aligned with the phenomenological design, questions were semistructured to obtain specific information yet allow for individual experiences with formal mentoring to be captured.[15] Following the development of questions, interview guides were peer-reviewed by 3 investigators with qualitative research expertise for content and structure. Comments were reviewed, digested, and incorporated into the interview guide, which was then piloted with 2 individuals who met the inclusion criteria (1 mentee, 1 mentor). Pilot interviews were not included in the final analysis. Minor changes to question order and wording were completed before finalizing for data collection.

## Data Collection Procedures

Institutional review board approval was obtained before recruitment began in May 2015. The timeline of the research

**Table 4. Journal Prompts**

1. Can you describe your overall level of satisfaction with your mentoring relationship at this stage?
2. What characteristics do you value in your mentor/mentee?
3. Can you summarize your interactions with your mentor/mentee since you began the program?
4. How frequently and in what way do you interact?
5. Can you discuss what is going well and what areas may need to be improved?
6. Can you describe where you are in the process of meeting your goals of the mentor relationship?
7. What (if any) roadblocks have you faced in achieving your goals and how have you/do you plan to overcome them?

**Table 5. Final Interview Guides**

Final interview – mentees
1. Reflect upon your experiences participating in the mentor program this year.
2. Summarize your interactions with your mentor over the year.
   a. Quantity and quality of interactions?
3. Do you believe your mentor had an impact on your professional development? Describe.
4. Do you believe your mentor had an impact on your transition into higher education?
   a. Can you describe your response?
5. Did you face challenges working with your mentor? If so, please describe.
   a. How did you handle them?
6. Were your expectations for this program met? Why or why not?
7. Looking back, if you could change anything about your mentoring relationship what would it be and why?
8. Do you believe your mentoring relationship will continue after this year?
   a. Why or why not?
   b. If this relationship isn't continuing, can you explain why?
   c. Do you plan to pursue other mentor(s)?
9. Can you reflect on the initial guidelines given and the ongoing support the foundation provided?
   a. Did these adequately support the development of your mentor relationship?
10. Do you believe the National Athletic Trainers' Association Foundation was involved enough to help you successfully develop your mentoring relationship?
    a. Why or why not?
11. What is your level of satisfaction with this program?
12. Would you recommend this program to colleagues? Why or why not?
13. Do you see yourself becoming a mentor in the future?
    a. In general?
    b. Specific to this research mentor program?
14. Did your participation in the mentor program influence your teaching? Describe.
    a. your research and scholarship? Describe.
    b. your ability to perform administrative tasks? Describe.
    c. your service to the profession? Describe.

Final interview—mentors
1. Reflect upon your experiences participating in the mentor program this year.
2. Summarize your interactions with your mentee over the year.
   a. Quantity and quality of interactions?
3. Did you learn anything from the experience of participating in this program? If so, what?
4. What strategies have you utilized to navigate your relationship with your mentor?
5. Do you believe that your interactions with your mentee helped them succeed in his/her current role?
   a. Did this extend beyond the research aspect of their job?
6. Did you face any challenges working with your mentee?
   a. How did you overcome them?
7. Looking back, if you could change anything about your mentoring relationship what would it be and why?
8. Do you believe your mentoring relationship will continue after this year?
   a. Why or why not?
   b. If this relationship isn't continuing, can you explain why?
9. Can you reflect on the initial guidelines given and the ongoing support the foundation provided?
   a. Did these adequately support the development of your mentor relationship?
10. Do you believe the National Athletic Trainers' Association Foundation was involved enough to help you successfully develop your mentoring relationship?
    a. Why or why not?
11. What is your level of satisfaction with this program?
12. Would you recommend this program to colleagues? Why or why not?
13. Do you see yourself continuing to be a mentor in the future?
    a. In general?
    b. Specific to this research mentor program?
14. Do you envision applying your experiences here to your other mentees/doctoral students (if applicable)?

study and mentor-program participation are detailed in Figure 1. We emphasized that participation in the research study was independent of participation in the mentor program and was completely voluntary. Participants completed the initial telephone interview before attending the introductory program luncheon at the NATA clinical symposium. The mentoring relationships proceeded independently of the research study. Participants completed online journals using Qualtrics at 3-month increments. They received an email notification and reminder each month the journal was requested (September, December, March). Last, participants completed a final interview as the yearlong mentor program

**Figure 1.** Timeline of research study and mentor program participation. Abbreviation: NATA, National Athletic Trainers' Association.
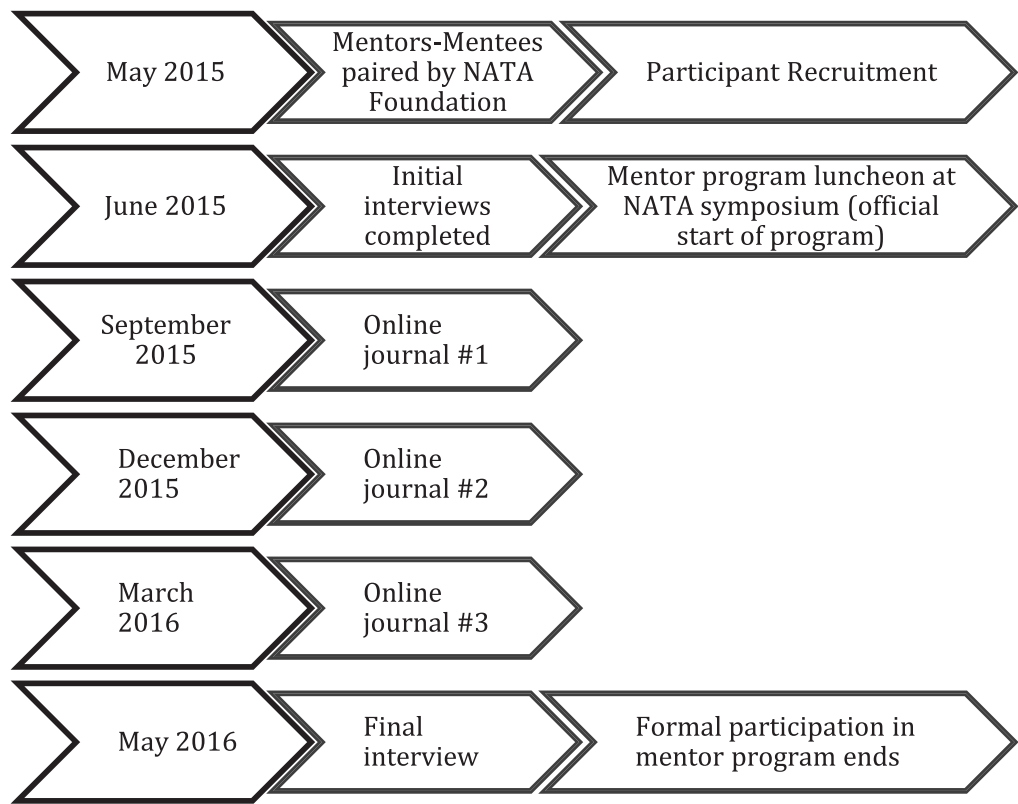


was finishing. Interviews were transcribed verbatim and participants were asked to member-check their final interview for accuracy and the opportunity to provide final reflections on their participation.[15] All participants completed every interview and journal, and 3 participants completed the member-checking process.

## Data Analysis and Trustworthiness

After all data were collected and member-checking responses were received, we initiated data analysis. Two investigators (S.L.N., S.M.M.) independently analyzed data using a phenomenological approach.[15] We initially analyzed data by participant, reading through each participant's initial interview, journals, and final interview, to gain appreciation for perspectives of the mentoring program from start to finish. As we completed a global read of each participant's data, we noted general thoughts and began to identify significant statements.[15] We followed this by independently reexamining the supporting data to group key findings into themes. After independently developing themes from supporting data, the researchers compared their individual findings and reached a final consensus regarding their presentation. A third investigator (J.L.B.) then peer-reviewed the findings for accuracy and clarity. We also made several efforts to establish trustworthiness and credibility during the data collection and analysis process, including (1) triangulating mentors' and mentees' perspectives[18]; (2) collecting longitudinal data over the course of 1 year to allow participants several opportunities to share their ongoing experiences with the mentoring process; (3) using peer reviewers when developing the instruments and in the data analysis process to minimize bias[18]; (4) using multiple data analysts to improve credibility[18]; and (5)

providing participants the opportunity to review their final interview transcript to give final clarifications and information in the form of member-checking.

## RESULTS

Our analysis revealed 2 themes with supporting categories regarding effective formal mentoring relationships (Figure 2). Collaboration facilitated communication, expectations, and investment in the mentoring relationship. Second, demonstrating humanistic qualities, such as approachability and making personal connections, enhanced professional mentoring relationships.

### Collaboration

For our participants, collaboration, specifically on a research endeavor, facilitated communication and enabled goal creation and completion. Collaborating on a research initiative focused mentoring relationships and promoted regular communication. The collaboration theme included three supporting categories: expectations, communication, and investment.

Our participants mentioned that collaboration transformed the mentoring relationship into a mutually beneficial experience. When collaborating on research-related activities, mentors described the experience as more reciprocal than hierarchical. Greg, a mentor, described in his first interview that he hoped to collaborate with his mentee:

*I hope that we can collaborate on a lot of projects because we have very similar interests and I think some of the data that I collect complements some of the stuff she is doing and*
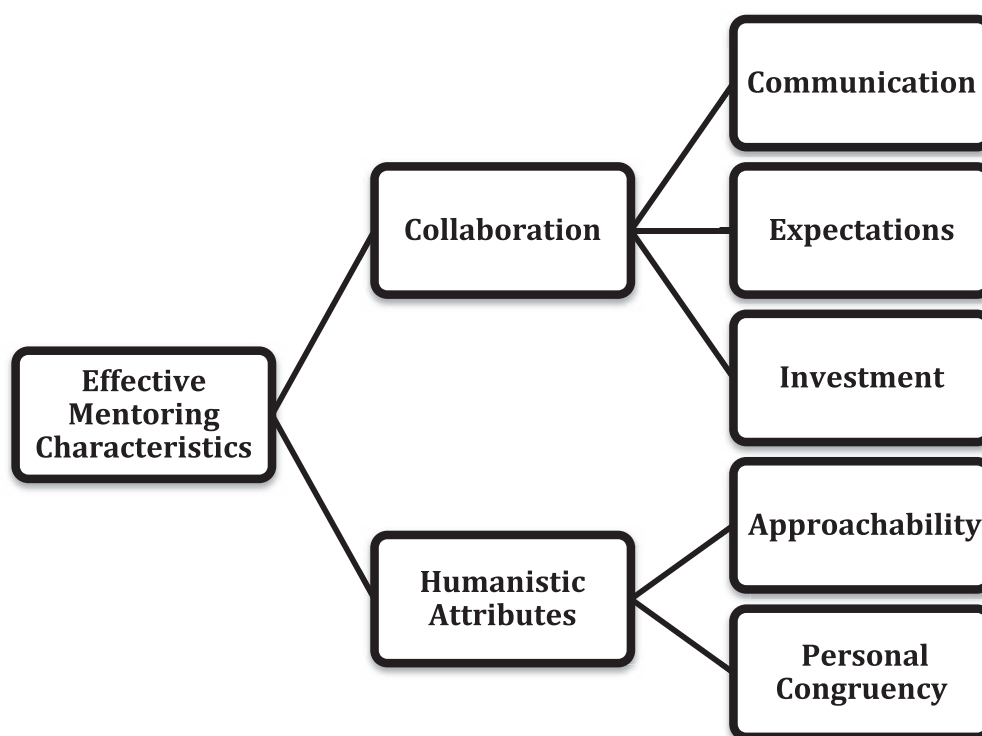
hopefully we can get involved in some projects together and coauthor some studies and maybe do some grant work together as well.

Danica, a mentee, stated:

I would say we have moved to 'colleagues' instead of a defined 'mentor-mentee' relationship. We are currently finishing a paper together. Since working on the paper we correspond more frequently (once a week) but prior to that we would email about once a month (December journal).

Daniel, a mentor, described in his final interview:

I think it's probably going to grow into something that's less mentoring and more like collaborative. That's kind of how I see it right now to be honest with you. I don't really see myself as her mentor. I see myself as her colleague who is working on projects with her and stuff like that.

Collaboration also contributed to participants' perceptions that the mentoring relationship would continue into the future. In Rachel's (a mentee) final interview, she said,

...We submitted a grant together, a couple of publications. Some that have been accepted, some in review, and then we have talked about a couple projects that hopefully we'll be able to do the IRBs [institutional review boards] to collect on next year.

Similarly, Amanda, another mentee, commented in her final interview:

...We have at least two other manuscripts that we're working on together, so that's going to lead into next year. I might continue to teach this class with her at least for the next few years, you know, I definitely think [our relationship will continue].

**Expectations.** Expectations and goals for each individual in a mentoring relationship should be set early in mentor-mentee interactions. These initial conversations set the direction for the yearlong relationship. Arnold, a mentee, described in his first journal that he thought the relationship was going well due to their goal setting. He stated:

We have been transparent with our expectations and developed a clear agenda and goals. We have developed specific goals for the academic year and are in the process of scheduling a meeting to create a plan to achieve these goals (September journal).

Mentors also spoke of the importance of goal setting, such as Erica, who mentioned this in her first interview: "You have to understand the person, what their goals are, so that you can help, give advice to get them to what their goals are." This goal setting early on appeared to work for Erica [mentor] and her mentee, as they stayed on track as of September: "We are on target with meeting goals at this point in time." Goal setting was the platform for the relationship, as it allowed the pair to set benchmarks and expectations to ensure success.

While discussing the need for clear goals and expectations, participants also mentioned the negative impact on the mentoring process when goal setting does not happen at the beginning of the relationship. In fact, when goals were not set early or if they were limited in nature, the relationship often floundered. Adrienne noted the value of clear expectations halfway through her mentoring relationship: "I believe more of a formal plan or list of expectations between the mentor and mentees would be helpful along with the expected timeframe of communication" (December journal). Adrienne further reflected on the importance of setting expectations during her final interview:

*I guess it just wasn't what I had expected. I think if I would do it in the future—if I would be a mentor in the future, I would maybe sit down with the mentee and say, what are your expectations? Let's outline something—a goal that you have for this year and let's make sure that we achieve those.*

Reggie, a mentee, also struggled with lack of direction in his relationship, noting this in his first and second journals: "Not knowing expectations of both sides makes it difficult to have expectations and therefore, difficult to gauge satisfaction." He further elaborated:

*Improvement would be that the process is relatively rudderless. Now that the grant was submitted and rejected, I don't know what to do next. I guess we should have set up very specific goals for the yearlong relationship.*

## Communication

For our participants, frequent communication was central to an effective mentoring relationship, and collaboration promoted regular communication. The format and frequency of communication varied between pairs, but scheduling regular interactions facilitated a productive relationship. Arnold, a mentee, noted early on in his September journal that it "has been easy to schedule meetings and speak with my mentor." He echoed this sentiment in December, stating,

*I feel we have an open line of communication. I would not hesitate to contact them with any questions I may have. I do feel we should start to communicate more and begin executing some of the goals we initially set forth.*

Amanda noted in her September journal that she and her mentor used a combination of structured and informal communication:

*We have a monthly standing phone meeting to talk about current and future goals, how things are going at work, etc. Otherwise she has been available via email any time or if we need to chat via phone in between our standing meeting she has been very willing to do so.*

Danica, another mentee, described her mentor's communication: "I have been very satisfied with the mentoring relationship thus far. We have talked on the phone twice and e-mailed numerous times. . . . I greatly appreciate his promptness in response time" (September journal).

Like mentees, mentors also described the importance of communication in a mentoring relationship. In Greg's (mentor) first interview, he described one of the characteristics of an effective mentor as communication: "you have to be a good communicator, you have to be a good listener." Erica made a nearly identical statement in her first interview: "I think you probably have to have good communication. You are supposed to be a good listener." In her final interview, Erica attributed to communication the perceived success of her mentoring relationship: "I feel like I had a good experience because I was in communication with my mentee."

Although most participants appeared to be satisfied with their communication, a few participants noted that lack of communication negatively affected the mentoring experience. The dissatisfaction was due to a lack of communication often preceded by failing to discuss the best way to communicate as a pair. Adrienne, a mentee, commented in her final interview that an early lack of communication continued throughout the yearlong mentoring relationship: "I felt like it was just kind of thrown together and then I was expected to do the connecting. And I didn't feel like there was a lot of communication throughout the whole year." Greg, a mentor, noted a desire for more communication early on in his September journal: "I would like to meet more frequently. Nothing intense, just updates on what she is working on and what her short-term goals are for the next time we meet. We haven't really done much together at this point."

## Investment

Our data revealed that mentoring-program participants should be engaged in the relationship to make it work. This includes reaching out to their mentor/mentee and taking time to participate. Both mentors and mentees described that engagement on both sides of the mentoring relationship promotes positive, productive interactions. Daniel, a mentor, described in his first interview that his mentee's initiative was an important expectation: "I want the communication from the junior faculty member, to learn about what their challenges are and how they can be better supported. So I think my hope is that it will be a two-way street where we will both get something out of it." Amanda, a mentee, described in her final interview: "I'm very satisfied, but that's because I think I have a really good relationship with my mentor, and she was interested in developing this relationship with me." Erica, a mentor, communicated early on in her first interview that her mentee would be engaged in the relationship: "I expect my mentee is probably going to be very on the ball and more of an initiator so that's probably a good fit for us." This continued to be a positive attribute of their relationship, with her later stating how she valued her mentee's initiative: "She is proactive, motivated, interested, and goal-oriented" (September), and "I think I have a very good mentee and that she's very driven" (final interview).

A few mentees noted that they could improve their time spent toward the mentoring relationship. Arnold reflected in his final interview: "It's definitely something that I probably didn't take full advantage of. . . . When just the brunt of the semester really started taking place I more or less probably could have reached out more than I did and used the program more." Rachel commented in her December journal: "My mentor is great! I need to do a better job communicating and using him. I have been caught up in my own tasks and have not been great about communicating with him and using him as a resource." Adrienne, a mentee who was generally dissatisfied with her mentoring experience, simply stated: "I have gotten out of it what I have put into it," acknowledging her lack of engagement in the mentoring experience.

Although mentors and mentees agreed on the importance of investing in the mentoring relationship, their opinions differed on who should drive the experience. Some mentors believed mentees should largely initiate the relationship and let the mentor know what is needed of them. Greg (mentor) voiced frustrations with the lack of his mentee reaching out to him:

*I routinely contact her, but rarely receive any response. There is relatively no mentoring at this point. . . . I have tried to make myself easily accessible and keep an open line of*

*communication but my mentee is not taking much initiative* (December journal).

Some mentees perceived that they were driving the relationship and desired more engagement from their mentors. Danica, a mentee, described in her March journal: "I feel strongly that I am leading the relationship which makes me feel like I am pestering him at times." Likewise, Adrienne, a mentee, wanted her mentor to go beyond simply responding to her communication: "My mentor responds when I email her, however there is a lack of reaching out on the mentor's part" (March journal). Although participants' specific views on who should lead the mentoring relationship varied, consensus was that willingness and engagement are important to a successful relationship. One participant's lack of engagement may lead to an imbalance, perceived lack of interest, and a gradual decline in productivity of the relationship, suggesting that a balanced level of engagement and initiative may lead to a more positive relationship.

### Humanistic Qualities

Our data revealed that participants valued different humanistic qualities in their mentor/mentee, which helped foster an enjoyable and productive mentoring experience. These humanistic qualities are divided into two categories: approachability and personal congruency.

### Approachability

Both mentors and mentees valued approachability in their counterpart. Approachability, honesty, and friendliness helped facilitate enjoyable interactions. In each journal, participants were asked to describe what characteristics they value in their mentor/mentee. Common responses from mentees included "Experience, approachability" (Reggie, September) and "willingness to talk and listen, personal interest in me, enthusiasm, provides feedback" (Amanda, September). Arnold described: "I value that they are easy to speak with and easily approachable. They bring a different and unbiased perspective to our conversations" (December). Similarly, Rachel responded: "His thoughtfulness is the trait that I value most. When there are things that he thinks would be of interest to me—he forwards them. He identifies areas for things that we could do together and has made himself very accessible" (September).

Mentors valued the same personality traits in their mentees, describing: "Easy to talk with. Very receptive to feedback and discussion" (Emily, December), and "She's super friendly, super nice. So we get along really well" (Daniel, final interview). Greg described: "I really like my mentee's attitude. She is very energetic and receptive to new ideas" (September) and "[She is] very intelligent and pleasant to work with" (March). Mentors communicated the value of personal attributes throughout the mentoring process. In his first interview, Daniel commented "I think approachability is also pretty high on the list, so if the mentee doesn't feel like he or she can approach me that communication is likely not going to happen. So I would say that approachability would be pretty high and then helpfulness." For Emily, her final interview comments summed up her appreciation of her interactions with her mentee: "I think we as two people seemed to mesh well together in terms of just personalities and when we did talk, you know, I felt like it was easy to sort of share ideas, and discuss. And I think we've established certain levels of trust on both ends." Mentors' and mentees' comments suggest that approachability and personal attributes contribute to participants' satisfaction with professional mentoring relationships.

### Personal Congruency

In addition to personal attributes of mentors and mentees, participants described that their mentoring relationships were deepened by discussions about personal life and family. When asked about characteristics he values in his mentee, Daniel stated in his March journal: "we also have a lot in common (similar age, young families, etc)." Daniel later stated in his final interview: "Every time we talk we always, you know, kind of small talk like oh how are your kids, you know. Those types of things, so we, we usually have that good thing." Mentees also described that that they connected personally with their mentors. Danica stated: "On a personal level, he has daughters just as I do. We've been able to connect on that" (final interview). Similarly, Amanda said: "Most of the time we talk about goals and future plans but we also talk about more personal things" (March journal).

Beyond discussing their personal lives, mentors and mentees also shared challenges and provided guidance with work-life balance. In her final interview, Emily described:

> I think we did talk a little bit about the struggles of balancing work, life. He's got little kids and so do I, and the demands of how do you maintain a research career while teaching and wanting to spend a lot of time with students and still paying attention to your home life. So we did talk briefly talk about that periodically over time, which I think is always helpful to share experiences and hear both sides that people have similar struggles.

Although discussing their personal lives with their mentoring counterpart was beneficial for participants, personal time commitments and obligations also became a barrier to spending time toward the mentoring relationship. Several mentees described family events that affected their ability to engage in the mentoring experience. Reggie commented, "I have not been able to work much towards goals with a new baby" (March journal); and Adrienne stated, "with being on maternity leave, it is difficult for me to get things done" (September journal). Rachel experienced a death in her family and described: "Because of this and the time I took away from work, I have been playing catch up and just trying to stay ahead in my work and have not been reaching out to my mentor and fostering our relationship." She followed up with her appreciation for her mentor during this time:

> However, [my mentor] has reached out to me several times, sent flowers following her death, and sent information about professional opportunities. It has made me feel connected and motivated to continue progressing and growing as a professional.

From a mentor's perspective, Emily acknowledged the need for personal time: "He values his family time—he just welcomed a child so I have not heard much from him recently." Our participants' comments suggest they enjoyed the personal connections they made with their counterparts, enriching their professional mentoring experiences.

### DISCUSSION

Previous research[1,2,7] identified mentoring as a valuable resource for athletic training faculty members. Mentors

support junior faculty in their scholarly activities, role balancing, and navigating institutional politics and expectations.[1,2,13] Participants who engage in mentoring relationships describe communication, approachability, and willingness to participate in mentoring as effective characteristics for both mentors and mentees.[4,7] Our findings from the participants in the formal mentoring program are similar to previous research on informal mentoring, supporting clear expectations, regular communication, and investment in the mentoring relationship as promoting a successful and satisfying mentoring experience. Although the development of mentoring relationships can be different (informal-organic versus formal-planned), they fundamentally need to include similar attributes, as described previously.[10] Additionally, our participants described collaboration facilitated their mentoring interactions, leading to more regular communication and goal achievement. These professional mentoring experiences were enhanced by personal connections and humanistic qualities demonstrated by mentors and mentees.

## Collaboration

One of our key findings was that mentoring relationships were more successful when pairs collaborated on a research study or other scholarly activities. For our participants, collaboration focused the relationship, facilitated completion of their goals, and promoted regular communication. Most mentees stated that one of the primary interests of participating in the mentor program was collaborating with a more senior faculty member. Sands[19] describes this type of mentorship as the "intellectual guide," where a mentor primarily serves to support the mentee's career goals. Likewise, career development is described as the primary objective of mentoring in higher education.[6,10,20] Academic medicine faculty members with mentors produce more research and have more scholarly activity than those without mentors.[5,13] Collaboration between our participants also contributed to the mutually beneficial nature of their mentoring relationships. Like Hansford et al,[21] mentors in our study described that collaborating with their mentees reinvigorated their careers and contributed to the personal fulfillment. On the basis of our findings and previous studies,[5,13,19,21] it appears that collaboration is an important contributor to successful mentoring in higher education.

When compared with formal mentoring, one of the perceived benefits of informal mentoring is the length of the relationship.[12,22] Kram[22] described informal mentoring relationships as typically lasting several years, whereas formal mentoring is usually shorter in time, perhaps limiting the beneficial aspects of the relationship. Our findings seem to slightly disagree with the premise that formalized relationships are short lived, given that we had several participants who indicated an interest and commitment to continued mentoring beyond the formal program. Kram[22] also describes mentoring relationships as having a 6–12 month initiation process because it takes time for the mentor and mentee to establish their relationship and begin the productive phase. Perhaps the participants in our study developed a foundation for collaboration and mentorship more quickly, thus giving the relationships greater potential for longevity, and explaining the discrepancy found between our study and Kram's.[22] The NATA Foundation faculty mentor program is an 11-month commitment and that

also could provide the platform for a faster "initiation process" as compared with Kram.[22]

Participants in our study who collaborated believed their mentoring relationships were likely to continue into the future beyond the structured formal mentoring program compared with those who did not collaborate. Perhaps for the participants who did not plan to continue their mentoring relationship, the 1-year length of the mentor program was not long enough for them to fully initiate their mentoring experience. Although our mentor program participants' relationships were relatively brief compared with informal mentoring,[22] it appears several participants were still able to form the beneficial collaborative component of mentoring, leading to long-lasting relationships. Future participants in formal mentoring programs, such as the NATA Foundation's mentor program, should establish collaborative projects early on, which will potentially contribute to the success of their relationship.

## Expectations

Our participants described having clear expectations and goals as an important component of their mentoring relationships. Our findings were aligned with existing research on mentoring, which states that clear expectations followed by regular communication improve satisfaction with formal faculty mentoring.[5,11,14] Inzer and Crawford[10] also found that participants in mentoring programs need to identify a clear focus area for the relationship and should agree upon attainable goals. Additionally, setting expectations and goals can be facilitated by the organizers of formal mentor programs to help build these relationships.[10,23] Some of our participants described their mentoring relationship as lacking clear goals and expectations, which created challenges and unfocused interactions. Similarly, Hansford and colleagues'[21] review of formal mentoring in education summarized that unrealistic expectations were also a contributor to negative experiences. Participants in formal mentoring programs should be encouraged to communicate early on regarding their individual goals and expectations of the relationship. Additionally, mentor program facilitators may consider providing general expectations or goal-setting examples to participants to use as a guide when establishing their relationship.

**Communication.** Similar to setting clear expectations and goals early in the relationship, frequent communication facilitated effective mentoring for our participants. Barrett et al[7] also found that athletic training faculty members who have participated in formal or informal mentoring relationships value regular communication with their mentor or mentee. Although existing research has found open and regular communication to be important in formal mentoring,[5,10,12,14] the frequency of this communication is rarely detailed. Participants in a formal pharmacy-faculty mentoring program participated in monthly meetings with their mentors, and they described this as a positive program attribute.[23] Ragins et al[12] found that mentees participating in formal mentoring programs that established regular points of communication were more satisfied than those who did not have a set timetable. Whereas our pairs identified a variety of communication approaches that differed in formality and frequency, participants who communicated more regularly, usually every few weeks, were generally more satisfied than those who only spoke every few months. Additionally, participants described

increased communication frequency when collaborating on a specific project with their partner. Although there are no specific recommendations for frequency or type of communication used in formal mentoring programs, evidence suggests that frequent, mutually agreeable communication may help facilitate an effective mentoring experience.[5,10,12,23] Therefore, participants in mentoring programs should establish a communication strategy with their counterpart early in the relationship and strive to interact as planned.

**Investment.** Both mentors and mentees in our study described that willingness to participate and invest their time in the mentoring relationship contributed to a positive experience. Barrett et al[7] and Nottingham et al[1] found that active engagement in mentoring is important for athletic training faculty and preceptors. Several authors[10,20,24] describe mentoring as a reciprocal relationship grounded in commitment, where both parties share a joint responsibility for learning. Willingness to participate in mentoring leads to higher satisfaction with the mentoring experience,[12] whereas lack of engagement can be detrimental.[10,21]

Our participants desired that their counterpart demonstrate initiative and active engagement in the mentoring relationship. In some relationships, the commitment demonstrated was adequate, but others preferred their mentor or mentee put in more effort. Sometimes one participant felt there was an imbalance in who was driving the relationship, leading to dissatisfaction and lack of productivity. Inzer and Crawford[10] and Straus et al[14] note that protégés should not expect mentors to guide the relationship and that the mentee should identify areas of support they need from their mentor. Likewise, pharmacy-faculty mentors wanted mentees to take more responsibility in the mentoring relationship.[13] Mentors should also consider the workload required to mentor and ensure they can commit the time required.[23]

Successful mentoring relationships require both parties to participate and actively engage. Perhaps this is why informal mentoring, where both parties voluntarily participate, is often preferred to formal mentoring.[11] Formal mentoring, however, can also be voluntary for participants.[14] At the time of this study, mentees applied to the NATA Foundation mentor program and mentors were invited but not required to participate, suggesting that both parties were ready to invest in the relationship. Inzer and Crawford[10] suggest that as long as participants are engaged in the relationship, both formal or informal partnerships can be successful. Therefore, potential mentees and mentors should invest in the relationships forged.[10,11,21,23]

## Humanistic Attributes

In addition to career-related support, mentors and mentees in our study also valued personal attributes, such as approachability and interpersonal characteristics, similar to humanistic aspects shared by other researchers.[8,9,13] Our participants appreciated the personal connections made with their counterpart, such as having families and similar interests, which was similar to previous research on mentoring for preceptors where Nottingham et al[4] and Pitney et al[9] found that preceptors valued interpersonal characteristics including trust, approachability, and open-mindedness. Several authors[11,19,20,24] have also described that developing friendships and sharing life experiences is important

to and interrelated with professional mentoring. Furthermore, participants in pharmacy-faculty mentoring programs described sharing challenges and strategies for overcoming them related to work-life balance as valuable.[13,20] Our participants echoed this sentiment. The mutual trust and personal bonds established between mentors and mentees provided personal and emotional support.[10,21,25] These findings suggest that mentors and mentees should be encouraged to connect on a personal, and not just professional, level. Formal faculty mentoring program coordinators may also consider these personal characteristics when pairing potential mentors and mentees.

## Recommendations

### Recommendations for Mentors and Mentees.

1. Establish firm goals and timelines to provide structure to the experience. Formal goals and timelines can stimulate success and achievement.

2. Agree upon when and how communication will occur and who is responsible for initiating communication and driving the relationship.

3. Set goals that reflect the pair's professional interests and strengths, which can help establish a platform for continued success.

4. Commit to a mentor program only if you have the time and energy to invest in developing the relationship and achieving the goals set.

5. Invest in the relationship on personal and professional levels. Developing a common bond and a personal connection can enhance the professional relationship and promote commitment to the mentoring experience.

### Recommendations for Formal Mentoring Program Organizers.

1. Educate pairs on the importance of goal setting, communication, and investment in the relationship.

2. Remember the human factor. Pair individuals with similar backgrounds and, if possible, life stage. Common interests can facilitate effective relationships.

3. Provide the pair background information on the program's mission and the tools to succeed (ie, "mentor checklist").

4. Consider checking in with participants throughout the program with reminders to regularly communicate and monitor progress toward goals.

## Limitations and Future Research

Our research provided formal mentoring program participants' perspectives of effective mentoring characteristics. Although our findings included experiences from both mentors and mentees, we did not analyze data by matched mentor-mentee

pairs, potentially limiting our understanding of their unique mentoring relationships. Future research should consider examining mentoring from a paired case study approach to capture the in-depth experiences of mentoring over time. Although our data were collected over the course of 1 year, our findings suggest that several of the mentoring relationships may continue for several years. Future studies should examine mentoring over a longer time period to gain further understanding of the dynamics over time.

At the time of this study, the NATA Foundation mentor program was focused primarily on research development for young investigators; therefore, participants of the mentor program likely prioritized scholarly productivity in their mentoring relationship. Additionally, first authorship on a publication was a prerequisite for participating in the program, emphasizing that these participants entered the program with a research background. Future studies should examine the role of formal mentoring for faculty who may not emphasize research productivity. All of our participants completed a Doctor of Philosophy degree for their doctoral education; therefore, results may not translate to those with different types of doctoral training. Although most of the mentor program cohort participated in our study (10 of 12), we recognize this is a small sample that may not be generalizable to a larger population. Last, success and satisfaction with effective mentoring relationships were based solely on participants' perceptions and no other outcome measures. Measurement of specific outcomes such as research publications, grants received, or objective measures of satisfaction may provide a more comprehensive understanding of what contributes to successful mentoring relationships.

## CONCLUSIONS

Formal mentoring relationships are fostered when participants communicate regularly, set clear expectations, and invest time in the experience. Faculty mentoring relationships that include collaboration on scholarly activities promote these effective characteristics and foster long-lasting relationships. Formal mentoring programs should encourage participants to communicate and collaborate early and often throughout the mentoring experience to promote a mutually satisfactory and successful relationship. Additionally, formal mentoring program organizers should consider providing guidelines and resources for regular communication and goal setting. Last, whereas professional mentoring relationships are often focused on career development, they appear to be strengthened when mentors and mentees develop personal bonds. Therefore, mentor program participants should be encouraged to share both personal and professional experiences during their time spent together.

## REFERENCES

1. Nottingham SL, Mazerolle SM, Barrett JL. Roles of mentoring for novice athletic training faculty members. *Athl Train Educ J.* 2017;12(4):234–243.
2. Mazerolle SM, Barrett JL, Nottingham SL. Examining the factors that facilitate faculty socialization into higher education. *Athl Train Educ J.* 2016;11(4):208–218.
3. Bowman TG, Mazerolle SM, Dodge TM. Mentoring and personal relationships are perceived benefits of serving as an athletic training preceptor. *Athl Train Educ J.* 2013;8(3):35–40.
4. Nottingham SL, Mazerolle SM, Barrett JL, Eason CM. Examining the role mentorship plays in the development of athletic training preceptors. *Athl Train Educ J.* 2016;11(3):127–137.
5. Sambunjak D, Straus SE, Marusic A. Mentoring in academic medicine: a systematic review. *JAMA.* 2006;296(9):1103–1115.
6. Pinto Zipp G, Maher C, Falzarano M. An observational study exploring academic mentorship in physical therapy. *J Allied Health.* 2015;44(2):96–100.
7. Barrett JL, Mazerolle SM, Nottingham SL. Attributes of effective mentoring relationships for novice faculty members: perspectives of mentor and mentee. *Athl Train Educ J.* 2017; 52(4):368–376.
8. Mazerolle SM, Eason CM, Barrett JL, Nottingham SL. Athletic training students' perceptions of mentorship in clinical education *Athl Train Educ J.* 2016;11(2):72–81.
9. Pitney WA, Ehlers G, Walker SE. A descriptive study of athletic training students' perceptions of effective mentoring roles. *Internet J Allied Health Sci Pract.* 2006;4(2):1–7.
10. Inzer LD, Crawford CB. A review of formal and informal mentoring: processes, problems, and design. *J Leadership Educ.* 2005;4(1):31–50.
11. Kram KE. *Mentoring at Work: Developmental Relationships in Organizational Life.* Glenview, IL: Scott Foresman; 1985.
12. Ragins BR, Cotton JL, Miller JS. The effects of type of mentor, quality of relationships, and program design on work and career attitudes. *Acad Manage J.* 2000;43(6):1177–1194.
13. Jackevicius CA, Le J, Nazer L, Hess K, Wang J, Law AV. A formal mentorship program for faculty development. *Am J Pharm Educ.* 2014;78(5):1–7.
14. Straus SE, Chatur F, Taylor M. Issues in the mentor-mentee relationship in academic medicine: a qualitative study. *Acad Med.* 2009;84(1):135–139.
15. Creswell JW. *Qualitative Inquiry & Research Design: Choosing Among Five Approaches.* 3rd ed. Thousand Oaks, CA: SAGE Publications; 2013.
16. Mazerolle SM, Nottingham SL, Barrett JL. Formal mentoring in athletic training higher education: perspectives from participants of the NATA Foundation mentor program. *Athl Train Educ J.* In press.
17. NATA Foundation faculty mentor program. National Athletic Trainers' Association Research and Education Foundation Web site. http://natafoundation.org/portfolio/research/. Accessed February 2, 2017.
18. Shenton AK. Strategies for ensuring trustworthiness in qualitative research projects. *Educ Inf.* 2004;22:63–74.
19. Sands RG, Parson LA, Duane J. Faculty mentoring faculty in a public university. *J High Educ.* 1991;62(2):174–193.
20. Fuller K, Maniscalco-Feichtl M, Droege M. The role of the mentor in retaining junior pharmacy faculty members. *Am J Pharm Educ.* 2008;72(2):1–5.
21. Hansford B, Ehrich L, Tennent L. Formal mentoring programs in education and other professions: a review of the literature. *Educ Adm Q.* 2004;40(4):518–540.
22. Kram KE. Phases of the mentor relationship. *Acad Manag J.* 1983;26(4):608–625.
23. Zeind CS, Zdanowicz M, MacDonald K, Parkhurst C, King C, Wizwet P. Developing a sustainable faculty mentoring program. *Am J Pharm Educ.* 2005;69(5):1–13.
24. Zellers D, Howard V, Barcic M. Faculty mentoring programs: reenvisioning rather than reinventing the wheel. *Rev Educ Res.* 2008;78(3):552–588.
25. Cohen N. *The Manager's Pocket Guide to Effective Mentoring.* Amherst, MA: HRD Press; 1999.