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An Exploration of Athletic Trainers' Perceptions of the Continuing Education Process

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ABSTRACT

Purpose: Many health care professionals, including athletic trainers, utilize continuing education to maintain their certification or licensure status. Little is known about the perceptions of athletic trainers toward this educational process. The purpose of this study was to explore the perceptions of athletic trainers toward the continuing education process. **Method:** Data were collected from 2 sources: field notes from 6 focus groups with 43 individuals, and 6 hours of transcribed audiotape recordings from focus groups. Trustworthiness was established through member checks and multiple analyst triangulations. **Results:** Continuing education is valued and it is believed to advance the profession of athletic training and maintain competence. Engagement in continuing education was generally based on individual learning interest and applicability of the content to their individual work setting. Lastly, athletic trainers feel they are ultimately accountable for honestly engaging in learning activities and reporting continuing education activity. **Conclusion:** Continuing education is valued by credential holders and is an integral part of what it means to be a professional. It can be effective as long as athletic trainers appropriately select continuing education programs and responsibly engage in learning. Knowledge that is applicable and pertains to individual work duties is perceived as more meaningful. The benefits of effective continuing education are the maintenance of competency, improved self-efficacy, and enhanced professional respect, all of which can have a positive impact on and advance the profession.

INTRODUCTION

Many health care professionals engage in continuing education that culminates in continuing education units (CEUs). These units are often the means by which professional certification or licensure is maintained. In addition, knowledge and skills are learned to deliver competent patient care. Current requirements for certified athletic trainers (ATCs) to maintain their Board of Certification (BOC) credential and entry-level competence call for the accumulation of 75 hours of CEUs every 3 years along with ongoing maintenance of CPR/AED for the Professional Rescuer or the equivalent.¹ In addition, states with licensure may have other requirements (e.g., 50 CEUs every 2 years) and/or accept the BOC continuing education terms.

There are several methods by which ATCs can obtain CEUs, such as online courses, home study programs, and journal quizzes. The norm, however, is attending seminars, symposia, lectures or workshops on various topics.² This common method of obtaining CEUs (e.g., symposia, conferences) has been challenged in other professions over the years as to whether this form of

continuing education results in better patient care. While other professions have investigated the perceptions of and effects of continuing education on professional practice, there is a paucity of research relative to ATCs' perceptions.

Very few studies exist that investigate participants' perceptions of continuing education in the athletic training context. One of the initial studies was a needs assessment for continuing education based on various employment settings (e.g., college/university, corporate/industrial, professional, and clinical).³ This investigation found that traditional continuing education topics were often presented at conferences (e.g., orthopedic evaluation, rehabilitation), but the participants felt that those topics were of little priority. Participants felt the need for more non-traditional topics such as legal issues, various documentation methods, and administrative skills. It was suggested that more non-traditional topics be offered at athletic training seminars and conferences. Also, participants felt more small groups or discussions need to be the delivery method of continuing education offerings for ATCs. The participants wanted fewer lectures and more "hands on" continuing professional education opportunities.

Another needs assessment explored the self-perceived continuing education needs of ATCs and factors that affect those needs.⁴ Similar results were found in that ATCs sought more "hands on" and multiple sessions with a common theme. Moreover, ATCs desired more practical applications to their own clinical practice and/or employment related needs. Recently, ATCs' knowledge and perception of professional preparation involving eating disorders among athletes was investigated.⁵ It was found that ATCs feel they do not obtain enough preparation or education for properly treating eating disorders in athletes. There is a need and interest for continuing education to enable ATCs to properly treat and counsel individuals with eating disorders. All of these previous studies involve the self-perceived needs regarding overall continuing education or of a specific topic. While engaging in continuing professional education is mandatory for ATCs, we are unaware of the perceptions and motivating factors that guide the continuing education process of athletic trainers. Bolton states that evaluation of attitudes and practice is also a component of evaluating continuing professional development.⁶ Therefore, the purpose of this study was to explore the perceptions of ATCs toward the continuing education process.

METHODS

Because the study was exploratory in nature, a qualitative method was utilized. Qualitative research seeks a depth of understanding related to individuals' experiences and perceptions. A total of 43 ATCs participated in 6 focus group interviews. Demographical data are presented in Table 1. Electronic invitation letters were sent out to all Board of Certification (BOC) ATCs in good standing with a published e-mail address in the National Athletic Trainers' Association (NATA) Districts 1, 2 and 4 (Northeast and Midwest United States). The email explained the purpose of the study, and provided the days, times, and locations (in a conference hotel) of the focus groups. All focus groups coincided with the respective District meetings. If an individual was interested in participating, they were instructed to email or call the designated investigator stating their interest and which focus group they could attend.

Table 1. District 1, 2, 4 Participants Age Ranges and Years of Experience

Age in Years	Years of Experience	Work Setting
18-25 = 1	1-5 = 7	College/University = 20
26-33 = 14	6-10 = 11	High School = 10
34-41 = 16	11-15 = 8	Out Reach = 9
42-47 = 5	16-20 = 5	Other = 3
48-55 = 5	21-25 = 5	Professional = 1
55+ = 2	26-30 = 6	
	31 and + = 1	

The Institutional Review Board at Ball State University approved this investigation prior to sending any invitation letters. A semi-structured interview guide was used to direct the questioning of focus group participants (see Table 2). Three separate focus group sessions were held at the 2004 District 1 & 2 (Eastern Athletic Trainers' Association [EATA]), and District 4 (Great Lakes Athletic Trainers' Association [GLATA]) meetings for a total of 6 focus group sessions. Each focus group session was approximately 45 minutes to an hour in length. All of the focus group sessions were taped using cassette tape recorders and the facilitators also took field notes.

Table 2. Semi-structured Focus Group Questions.

1.	Why do you think continuing education is used?
2.	What makes continuing education effective?
3.	Could you give an example as to how continuing education has affected your practice as a certified athletic trainer?
4.	What is your overall impression of continuing education? (optional question and could be used last based on time)
5.	Do the different modes of learning (facets of continuing education, national conference, district conference, state conference, local conferences, workshops, etc) affect your ability to utilize the information learned in your practice as a certified athletic trainer? (Could also ask in place - How do you select your CEU opportunities?)
6.	What is your perception of continuing education as it stands today? is working for you? Why/Why not?
7.	What would you change about the current state of continuing education?
8.	What is your opinion about the different methods that you are currently allowed to obtain continuing education (CPR re-certification, Category A, B, etc.)

The transcripts and interview field notes were analyzed inductively. This process involved manually unitizing the data onto the transcripts and field notes. The transcripts and field notes were read, and important concepts related to the perceptions of continuing education were identified. The concepts were then organized into themes using an emergent category designation and labels were given to the themes to capture their meaning.⁷

Trustworthiness was established by using member checks and multiple analyst triangulation. Member checks were completed by sharing the results with 4 participants. All participants felt that the findings were reasonable based on their reflections of the focus group sessions. Multiple analyst triangulation was used by having multiple researchers examine the data and negotiate the themes that emerged from the study.

RESULTS

Three primary themes emerged from the data: 1) maintaining competency and advancing standards, 2) participant accountability and responsibility, and 3) selection criteria. Each theme provided insight regarding the participant's beliefs, motivating factors, and perceptions of continuing professional education: The themes are presented here with supporting data. All names are pseudonyms.

Maintaining Competency and Advancing Professional Standards

Participants valued continuing education and believed it was important for maintaining professional competency and advancing the profession. With respect to professional competency, continuing education helps credential holders sustain entry-level knowledge. For example, one participant stated:

We [athletic trainers] kind of start getting into little niches whether you're always working at a high school...or you're always working at a college ... continuing education helps us maintain our skills over a broader range [of areas] so that we don't become too specific and we don't lose sight of all of the skills that we have as opposed to just working with a very particular patient.

Another participant explained that continuing education helps to ensure that athletic trainers maintain their ability to provide a broad scope of activities and "...make sure that we're the best generalists ...as well to be able to go from setting to setting because when we do volunteer work, we're ... supposed to be prepared [for it]." In addition to the perception that continuing education maintains competency, it was perceived that the process was a mechanism for maintaining high standards for the profession. For example, one participant stated:

I think that in order to maintain high standards within a profession itself we need to have the continuing education. There's so much change going on and if people do not keep up with that change, they can't expect other outside individuals to realize the importance and the profession of athletic training as being one that is of high standards.

Not only are practitioners keeping current with medical knowledge, but continuing education positively impacted some of the participant's confidence, or self-efficacy. By engaging, they felt validated and more confident in their care of patients. For instance, one participant stated:

By getting CEUs, I'm learning things and becoming aware. I make better judgments and my confidence level increases so that I feel more comfortable.

There appeared to be a perceptual relationship between maintaining competency and advancing the profession. Regular comments from other participants related to the ideas that continuing education helps to maintain current standards leading to credibility and respect by other health care providers. For example, one participant stated:

[continuing education] gives us the ability to communicate better with physicians and it gives us the ability to communicate with physical therapists because we're all basically starting to work from the same knowledge base and have the same information available so that it's easier to communicate.

Besides gaining respect from other practitioners, continuing education also assisted with building and gaining respect from patients. One participant commented how this occurs with a patient:

Especially at [our institution]...our athletes are very smart and they hear about a lot of new things, and if they come and ask you about a new technique or a new anything and you don't know what... they're talking about, you don't have the credibility – any credibility at that ... That's awfully bad.

Though this theme identifies a belief that the continuing education process can perhaps maintain competency and advance the standards of the profession, it was also apparent that it can only do so providing a credential holder engages in the processes in a responsible manner. The second emergent theme clarifies this concept.

Accountability and Responsibility

This theme echoed the participant's belief that the practitioner is ultimately responsible for learning and honestly engaging in and reporting continuing education activity. Referring to credential holder responsibility, one participant stated:

I feel that the CEU the way it's set up now for me it works ... [I] choose to make it work. I go to the meetings and I attend the meetings. I don't go meet my friends, go to lunch, go [do]... whatever. I go because I want to learn.

She continued:

I would hope that the bulk of the athletic trainers would take pride enough in themselves and in what they do that they would take advantage of the CEU opportunities given to them. But obviously I can't speak for everybody but I, for myself, it does work and I really choose to make it work.

Another participant supported this discussion when noting: *"I think it's only effective if the individual who is participating ... utilizes it correctly..."*

Ultimately, participants believed that whether or not continuing education is effective, it is related to their individual responsibility to engage in continuing education in a way that is meaningful to him/her. This is exemplified by one participant who explained:

I think what makes it (continuing education) most effective is the willingness on the part of the individual to really try and get something out of it. I know how they think – in the first couple of years, it was just about going to conferences and, oh, I've got to get my CEUs, I've got to get my CEUs and going to meetings and not really trying to seek out things like ... knowing where your weaknesses are and trying to bolster those up a little bit to meet your strengths. So now when I go, I try to go to a seminar or a lecture or a home-study course that is something very new or foreign or maybe even out of my comfort zone. So I'm really learning.

Another participant elaborated on the effectiveness of continuing education and alluded to the practitioner responsibility. He suggested that continuing education can be effective if it acts as catalyst for change. Ultimately, it is the practitioner who must use the information to adequately change and update his/her clinical practice, but this can be influenced, to an extent, by responsibly engaging in meaningful continuing education.

Selection Criteria of Continuing Education Activities

Criteria used to select continuing education varied. Cost, location, applicability to the current work setting, and topic of presentation were among some of the reasons motivating participants to engage in continuing education. It was clear that the educational content of the continuing education offering was critical.

The participants perceived that continuing education needed to be applicable to them in order to be valuable. For example, one participant stated:

We get to pick what [continuing education we engage in] so I think that's definitely a positive because you can, you know, focus on your weaknesses, explore something you haven't done, but I think as a negative to that I think there's some people that just stay so focused on, "Let me go to all of McKenzie," "Let me go to all this little ... stuff" and they don't learn a lot of stuff about the, you know, various aspects of athletic training. So I think it's what media you take your CEUs in and if you're staying so focused on that, I think that can affect your practice in a good way and a bad way, you know. You can branch out and learn different things but you can also get so narrowly focused that you're not learning a whole lot about the profession.

A different participant also commented on the need for the continuing education to be applicable. He stated:

I think that we've gotten to the point, more so at the national convention than at the district [level] or... state meetings, where there is a lot less available for you to take back and directly apply to the day to day practice of athletic training.

Interest was factor influencing a participant's selection criteria. One participant commented:

Sometimes, the choices of the workshops and the seminars aren't as interesting as you would like and, you know, that's just, you know, the luck of the draw. But when there's a lot of stuff that, there's a lot of information that you'd like to know that you know you can use in your setting, then it makes it a lot more exciting, you know, to be able to go back home and ... I learned and go to the coaches and "This is what we should do," go to my athletic director and ..., you know, things like that. Then it reinforces to your coaches, athletic director ... and your principal who are like glad you were gone for 3 days, you know. What did you learn? Bring me back something. And you say, "Look, this is what I learned and I'm glad you sent me away."

Not only must continuing education offerings address interest and applicability, but cost and timing are substantial issues as well. With respect to cost, one participant commented:

I think it depends on how you get the info but, #1, if it's interesting to me, then I have to look at the cost because we're not given a lot of money for the reimbursement, so cost is a factor. Time of year for me isn't necessarily important because I know we have support ... to take off if we're really interested and, you know, go get that paper ... if you're interested in it, so for me it's definitely the topic and I think ... like for me, I choose topics that I'm weak in and I want to explore new areas or, you know, revisit something that I haven't seen in awhile. So it's the topic and then the cost comes into play for me personally.

This was echoed by another participant who suggested:

I think cost is probably the biggest factor when I consider my CEU. I'm going to choose the national convention over all the workshops that I want to attend because the national convention is going to give me a lot of variety for the cost versus, you know, for 3-day workshops but I have to pay for the transportation and the hotel and, you know, only get the 3 days of one specific issue or topic.

For another participant, not only was cost an issue, but also the timing of the program:

I think I got something in the mail for a sport supplement CEU [program, but] there was no way I could go to it during football season. Not to mention it was \$245, and so I will probably go find a [home study course] on the same topic unless I can find it somewhere else.

This concept was supported by another participant who asked some questions and commented:

When is it being offered? Can I even get to it? When I was at the high school, I was the only person there so there wasn't anyone to cover for me, so if it wasn't actually during my down time when I wasn't covering something, I had no shot at attending.

Other participants alluded to the above complex integration of factors (e.g., cost, location, applicability) that influence the selection of continuing education. Indeed, the continuing education activities selected appear to be extremely personal, and participants suggested that many factors play a role in the decision of engaging in continuing education. One participant elaborated on this quite well:

One, your own personal learning style. How do you like to learn things? Are you more hands-on or do you just like to sit in the lecture hall? So I think knowing your own personal learning style helps you pick that. Two, are you reimbursed from your employer or do you have to pay for this on your own? You know if you're paying for it on your own, more than likely you're going to be a little bit more specific on what you want to learn, but then cost becomes a factor. If your employer's willing to reimburse you on whatever you want to go to as long as, you know, it's something that suits your practice, if you're going to apply it, I think that definitely plays a role. Three, the time of year. If you're so focused and, you know, football in the fall, then you can't choose something in the fall even though it may be really interesting and you have to get your CEUs in a different way whether it's ... convention or, you know, if you're covering summer sports or summer camps and you can't get to the convention, then you have to do a home study course. So I think there's a lot of different things that factor into how people choose which way they get their information.

In summarizing the findings of the study, when continuing education programs are appropriately selected and responsibly engaged in, continuing education can be effective. The benefits of effective continuing education are the maintenance of competency, improved self-efficacy, and enhanced professional respect, all of which can have a positive impact on and advance the profession.

DISCUSSION

Maintaining Competency and Advancing Professional Standards

The results of this study indicate that ATCs value continuing education and believe it is needed to maintain professional competency. Cervero also found that physicians participated in continuing education to improve or maintain competency.⁸ This is consistent with others that have concurred that professionals need to continually learn throughout their careers in order to maintain competency.⁹ ATCs are defined by the BOC as medical professionals who are experts in injury prevention, assessment, treatment, and rehabilitation.¹⁰ Depending on the work setting (e.g., high school, college/university, physicians office), an ATC may not use and apply their expertise in all domains of athletic training (e.g., prevention, clinical evaluation and diagnosis, therapeutic modalities, immediate treatment). For example, an ATC in the high school setting may not use any electrical modalities while an ATC in a college/university setting would use various electrical modalities often for patient treatment. Regardless of the work setting, it is expected that all ATCs have entry-level knowledge, and it seems engaging in continuing education helps ATCs perceive they maintain their competency.

In addition to assisting with a feeling of competence, participation in continuing education results in a perceived improvement in self-efficacy. Self-efficacy relates to one's confidence in performing various skills and/or confidence in one's knowledge and ability. Perhaps attendees, after hearing experts speak, feel more confident and have proper knowledge to use and implement the information learned. Murdock and Neafsey suggest that self-efficacy may be an extremely viable measure of continuing education impact on practitioner learning, because self-efficacy is considered a critical mechanism for influencing one's behavior.¹¹

The current study also found participants believed that continuing education advances the profession and helps garner respect from other health care professionals as well as patients. This finding is similar to the classic findings of Cervero who found that among the reasons physicians participated in continuing education was to enhance their personal and professional position, meaning to enhance individual prestige.⁸ It appears ATCs also feel part of their role as a health care provider is to engage in continuing education in order to enhance the athletic training profession.

These feelings of increased competence and self-confidence undoubtedly have a profound impact on both individual professional practice and the discipline itself. Whether such advantages transpire for every practitioner is unclear. However, it seems to be a matter of personal responsibility within the current continuing education framework. In other words, in order for continuing education to be effective in adding value, practitioners must take professional responsibility on behalf of the learner. Also, the learner is accountable for his/her professional growth and development that can result from authentic participation in the continuing education process.

Responsibility and Accountability

The participants believed that continuing education can be effective, providing learners engage in the continuing education process in an authentic and responsible manner. Participants felt it was the responsibility of the learner to engage themselves during educational sessions to obtain the most applicable information. Also, continuing education sessions should be chosen not only on topic, but based also on the format of the session (e.g., lecture, workshop, discussion) and individuals' learning style. Some participants spoke of attending sessions where they perceived their knowledge was weak to enhance their competency. Instead of attending sessions to learn more about topics that are familiar, individuals also attend sessions that will challenge them with unfamiliar or new information. Ultimately, the learners are accountable for what they learn and whether any goals and objectives are achieved. This finding is consistent with much of the adult learning literature that underscores the self-directed nature of learning in adulthood.^{12,13} From this view, the role of continuing education is to facilitate learning rather than delivering information. This runs counter to many continuing education programs that still rely on lecture formats at symposia and conferences to promote learning.

Selection Criteria of Continuing Education Activities

Learning interests and applicability of educational information to the employment setting were key factors for selecting continuing education. In addition, cost and location were also strong considerations. Weidner found that employment setting was a factor in deciding on the type of continuing education in which a practitioner will engage.³ The selection of continuing education based on applicability is consistent with Knowles' adult learning characteristics. Knowles suggested that as learners mature, they tend to become more problem-centered and look for an immediate application of learning.¹⁴ Of interest, however, is that there was mention of continuing education programs needing to address individual specific learning goals or objectives. Perhaps ATCs know they must accumulate a certain number of hours and engage in continuing education based on their own learning goals and objectives in addition to other factors such as cost and location. Eustace stated that appropriate selection of continuing education activities is paramount and can determine whether continuing education is effective or not.¹⁵ Eustace also noted that [practitioners] should focus on goal-directed continuing education to address their needs.¹⁵ This finding underscores the need to perform continuous and ongoing individual needs assessment related to continuing education content in athletic training.

CONCLUSIONS

It appears that continuing education has value, is perceived to help to maintain competency, and is perceived to advance the athletic training profession. A continuing education program that is applicable and pertains to employment setting is perceived as more meaningful. Individuals are ultimately accountable for their learning and should responsibly engage in continuing education in a purposeful way. This includes planning continuing education activities based on needs as well as interest to maintain entry-level competence. Moreover, many different factors are being considered when selecting continuing education including learning style, personal interest, applicability, cost, and timing.

IMPLICATIONS

These results have many implications. It is clear that mandatory continuing education is used to maintain competency. Moreover, for certified athletic trainers, continuing education acts to promote respect from other allied health professions. These may be two critical pieces of information that support the continued use of mandatory continuing education. With respect to selection criteria, despite the variety of continuing education offerings (e.g., home study, online sessions, and workshops), the traditional symposium or conference is still at the forefront of credential holders' minds. Thus, cost and location of continuing education were key factors in selecting programs. The discipline is encouraged to continue exploring alternative forms of continuing education activity such as journal clubs, practicum by design, and on-line activity to break the barriers of location and minimize cost.

The responsibility and accountability issue raises some interesting thoughts. It was suggested that individuals should be properly engaging in continuing education in a more purposeful way, including planning continuing education activities based on needs as well as interest to maintain entry-level competency. This provides support for utilizing a mechanism or tool to guide continuing education activity, such as a self-assessment of learning needs. Moreover, facilitating an individual's reflection on his/her learning styles may influence how and why various modes of continuing education might be more useful. Both of these strategies, if implemented, could likely lead to a purposefully planned continuing education activity.

This investigation suggests that better education for newly certified athletic trainers regarding professional development is needed. Perhaps this socialization of continuing education needs to occur with athletic training students during their entry-level education programs as well as during the first few years of certification. Affects such as professionalism, honesty, and integrity should be rewarded and encouraged in our future certified athletic trainers. In addition, it is strongly suggested that those offering the continuing education programs approach continuing education as a catalyst for change or patient care instead of

presentation of material. Information for all continuing education activities should present information as to how and where certified athletic trainers can go to investigate more into a content area and or topic. Continuing education for ATCs should be approached to promote change and lifelong learning that effects patient care.

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