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SURVEY

The Assessment of Athletic Training Students' Knowledge and Behavior to Provide Culturally Competent Care

Suzette Marie Nynas, EdD
Department of Health and Human Performance, Montana State University, Billings

Context: Culturally competent knowledge and skills are critical for all healthcare professionals to possess in order to provide the most appropriate health care for their patients and clients.

Objective: To investigate athletic training students' knowledge of culture and cultural differences, to assess the practice of culturally competent care, and to determine efficacy of cultural competency instruction.

Design: A mixed methods research design with a case study approach was utilized for this study.

Setting: This study was conducted in an athletic training course over a 2-week time period.

Patients or Other Participants: Ten athletic training students enrolled in a professional athletic training program at the master's level participated in this project. Sampling of participants was purposeful and based on convenience.

Data Collection and Analysis: The Cultural Competence Assessment (CCA) instrument was administered and analyzed to determine athletic training students' cultural awareness, sensitivity, and behavior. An assessment questionnaire and focus group were used to determine the athletic training students' experiences in diversity and cultural competency education, to evaluate the efficacy of classroom activities, and to solicit athletic training students' feedback for recommendation regarding the delivery of cultural competency knowledge and skills in the athletic training curriculum.

Results: The study revealed that athletic training students demonstrated good cultural awareness and sensitivity. However, it was also discovered that athletic training students were less likely to practice culturally competent care.

Conclusion(s): Both didactic and clinical experiences increased athletic training students' cultural competency; however, athletic training students wanted to spend more time on cultural competency within the curriculum. Athletic training students also believed it was important to use various tools to teach about cultural competency.

Key Words: Cultural competency, healthcare professionals, communication

Dr Nynas is currently an Assistant Professor of the Department of Health and Human Performance at Montana State University, Billings. Please address all correspondence to Suzette Nynas, EdD, Department of Health and Human Performance, Montana State University, Billings, 1500 University Drive, Billings, MT 59101. snynas@msubillings.edu.

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The Assessment of Athletic Training Students' Knowledge and Behavior to Provide Culturally Competent Care

Suzette Marie Nynas, EdD

INTRODUCTION

Culturally competent care is critical to decrease the disparities in health care,[1] to improve the communication between patient and practitioner, and to improve the health care delivered and received.[2] Providing culturally competent care also motivates providers to deliver holistic health care to meet the social, cultural, language, and communication needs of their patients or clients.[3] In order to provide culturally competent care, it is necessary for health care professionals to develop a higher level of cultural competency. Culturally competent care occurs when a medical provider acknowledges, understands, appreciates, and values cultural differences and takes those differences into account when caring for their patient.[4]

To ensure athletic trainers have the knowledge and the skills necessary to provide culturally competent care, the Commission on Accreditation of Athletic Training Education (CAATE) and the National Athletic Trainers' Association (NATA) Executive Committee for Education (ECE) requires all accredited athletic training programs (ATPs) to teach cultural communication and culturally competent care within their curriculums.[5–7] In fact, the NATA ECE has included cultural competence in both its fourth and fifth editions of the Athletic Training Education Competencies.[5,6] Not only are cultural factors, issues, and skills addressed within athletic training programs (ATPs), but cultural competency has been revered and embraced by many health care professions. Nursing has led the way, addressing and teaching cultural competency in their education programs. Pharmacy, physical therapy, occupational therapy, medicine, and education also address cultural competency within their curriculums.[8–12]

Review of Literature

Since the inception of the United States, immigrants from all over the world have migrated in search of opportunity and freedom. Because of this influx of immigrants, the United States became known as the "melting pot," which has resulted in a multiplicity of races, religions, cultures, and ethnicities.[5] Race, religion, culture, and ethnicity are often used to describe diversity; however, diversity also includes variables such as ability, sex, gender, class, sexual orientation,[13] socioeconomic status (SES), national origin, gender identity, veteran status, and age.[14] Due to all forms and modes of diversity, biases, barriers, prejudices, and disparities within the US health care system may occur.[1] As a matter of fact, the Institute of Medicine (IOM) has discovered that individuals from diverse backgrounds often suffer from health care disparities which lead to the decrease in the quality of health care. These occurrences in health care disparities continue to be a significant concern in the United States.[1]

To date, the United States continues to be the "melting pot." When solicited during the 2010 census, over 35% of the US population identified themselves as belonging to a minority racial group. Minority racial groups, as indicated by the Centers of Disease Control and Prevention, included "American Indian or Alaskan Native, Asian American, Black or African American, Hispanic or Latino, and Native Hawaiian or other Pacific Islander."[15] In an additional study, the percentage of minority populations in the United States during the same 2010 census was recorded as more than 40%.[1] Despite the growth in racial diversity of the American population, the profession of athletic training has not grown equivocally in ethnic or racial diversity. As of April 2013, the National Athletic Trainers Association (NATA) reported that a mere 19.45% of its membership identified as belonging to an ethnic or racial minority group.[16] Since the NATA does not collect or report demographic data regarding religion, culture, ability, gender, class, sexual orientation, SES, and gender identity, one could posit these modes of diversity are also underrepresented in the athletic training membership and profession. This underrepresentation of diverse populations and homogeneity could be a potential barrier to delivering culturally competent care[1] and result in a deficiency of culturally competent skills within the athletic training profession. Moreover, this lack of culturally competent behaviors could create the makings for unintentional and offensive behavior as well as patient noncompliance.[7] That being said, it is necessary that all athletic trainers, regardless of culture and background, have the knowledge and skills to properly and ethically address the needs of their patients who are from diverse backgrounds.[7]

To assess the current status of culturally competent health care in athletic training Marra et al[17] investigated certified athletic trainers' perceived and actual level of "cultural competence in the delivery of health care." [17(p380)] What the researchers reported was the certified athletic trainers' perceived level of cultural competency was higher than their actual level of cultural competency.[17] They also indicated the certified athletic trainers' knowledge of culturally competent health care was higher than the actual behaviors of culturally competent health care. The results from the Marra et al[17] study supports the continued need for cultural competency education and cultural encounters as well as the development of culturally competent skills to bridge the gap between cultural knowledge and culturally competent behavior. The disconnect between the knowledge and actual practice of culturally competent health care found in the Marra et al[17] study may be due to barriers presented in the different settings. Some barriers to providing culturally competent care include the lack of diversity in practitioners, health care systems and facilities not adequately designed to meet the needs of a diverse population, and poor communication skill between practitioners and patients.[1] In spite of the barriers, all health care practitioners still have a professional responsibility to respect all cultural groups "and to ask individuals how they refer to themselves."[7(p63)]

Another potential disconnect between knowledge and actual practice of culturally competent health care may be that

certified athletic trainers' are not self-aware of their own identity. In order to provide culturally competent care, practitioners must first become self-aware of their own biases, values, beliefs, languages, religious practices, attitudes, and communication styles.[7] Self-awareness requires individuals to recognize their own cultural identity as well as to understand that their personal beliefs and values shape how they view and interact with others.[1] Health care professionals must become aware of how their own culture and differences affect how they view others, particularly patients.[7] Therefore, it is the health care provider's professional responsibility to be cognizant and educate themselves about the differences within the cultural groups with whom they treat.[7] Moreover, health care professionals should encourage their patients to communicate their culture, beliefs, and health care practices with them so as to achieve optimal treatment.[7] Thus, it is only when health care professionals treat their patients with "empathy, humility, respect, and sensitivity"[1(p17)] that culturally competent care can be delivered.

Conceptual Approach

The theoretical constructs which informed this study were the Campinha-Bacote Model of Cultural Competence[4] and the theory of Transformative Learning.[18] Campinha-Bacote's Model of Cultural Competence (2008) states that "the journey to cultural competence includes the central concepts of cultural awareness, cultural knowledge, cultural skill, and a cultural encounter where the cultural desire motivates those involved to engage in the process of cultural competence."[19(p3)]

As indicated by Dr Campinha-Bacote, cultural competence is a process, a continuous journey, where learning is dynamic and ongoing.[4] Along this journey towards becoming more culturally competent, there are 5 phases or stages. These stages include: developing an awareness of self, obtaining knowledge, gaining skills, experiencing encounters, and displaying the desire to becoming more culturally competent.[4] Most importantly, the desire to deliver culturally competent care is critical. With this desire, one wants to provide culturally competent care rather than being required to do so by their employers or others.[4] Just as all professionals need to remain current and stay abreast of the advances within their field of expertise, so too should professionals desire to engage in meaningful dialogue with their patients in order to deliver culturally competent care.

Transformative Learning theory by Mezirow addresses the change in viewpoint or lens from which one operates.[18] For this study, the frame of reference or the lens in which one views his or her own and others is through his or her own culture or through cultural differences. Because we learn through cultural experiences, we often make judgments based on our frame of reference.[18,20] Therefore, individuals must be aware of their own frame of reference or lens in which they view the world because they often act and react according to preconceived notions and biases.[20] Using the theory of Transformative Learning to teach cultural competence, health care professionals need to learn how to be open, to engage patients in conversation in order to learn about them and their cultural beliefs, to dispel any myths about their patients' culture, and to create a new frame of reference from which one views that individual.[20]

Since culturally competent knowledge and skills are critical for all health care professionals to possess in order to deliver the most appropriate health care for their patients and clients, it was the purpose of this study (1) to investigate athletic training students' current cultural awareness and sensitivity, (2) to assess athletic training students' current culturally competent behavior, (3) to determine if athletic training students desired to provide culturally competent care, and (4) to investigate best practices to teach diversity and cultural competency in the athletic training curriculum.

METHODS

Study Design

A mixed methods research design with a case study approach was utilized for this study. A case study approach was appropriate for this study as it explored the issue of cultural competence within a particular population and institution.[21] This study was conducted in an athletic training course over a 2-week time period, with the majority of time dedicated to instruction and learning, with some time devoted to assessment of athletic training students' awareness, perceptions, behaviors, and learning. This study occurred in 3 phases which included initial assessment, focused instruction, and assessment of instruction. In the initial phase, athletic training students were administered the Cultural Competence Assessment (CCA) by Schim[22] to determine their cultural awareness and sensitivity as well as cultural competence behavior. After the initial assessment, athletic training students underwent focused instruction regarding cultural competency knowledge and skills. During the second phase, athletic training students engaged in self-awareness activities as well as instruction on culture and cultural differences. In this phase, self-awareness exercises required athletic training students to list 10 items/words to describe themselves. After the athletic training students listed their descriptive items or words, they were asked to reflect how their personal frame of reference or lens may affect how they interact with others. Other examples of self-awareness exercises mobilized during this phase included *Unpacking the Invisible Knapsack* by McIntosh,[23] *Hidden Rules of Class* by Payne,[24] as well as a contemporary song regarding racism. During the last part of the focused instruction phase, the *Cultural Competence in Sports Medicine* textbook by Cartwright and Shingles[4] was utilized to teach about culture, cultural differences, and cultural competency. Here, athletic training students were taught about different cultures as well as different cultural skills and patient care techniques. During the last phase of this study, all athletic training students completed an assessment of the instruction. All athletic training students completed an assessment questionnaire, and 6 athletic training students volunteered to participate in a focus group to determine the efficacy of instruction. This last phase was used to determine best practices to teach diversity and cultural competence as well as to solicit feedback for making improvements in the ATP to better address and teach culturally competent skills. This study was approved by the IRB, and all athletic training students signed a consent form prior to the implementation of the study.

Participants

Ten athletic training students enrolled in a professional athletic training program at the master's level participated in

Table 1. Assessment Questionnaire

1. What in your past experiences (undergraduate, work, travel, etc) have increased your cultural competency?
2. Have you received diversity training in the past? If yes, where and how?
3. What has been done within the context of the athletic training program (didactic coursework, clinical experiences, etc) which has increased your cultural competency?
4. The activities on cultural competency have increased my awareness of my personal beliefs, biases, knowledge and skills.

6	5	4	3	2	1
Strongly agree	Agree	Somewhat agree	Somewhat disagree	Disagree	Strongly disagree

5. I have a desire to provide cultural competent care now.

6	5	4	3	2	1
Strongly agree	Agree	Somewhat agree	Somewhat disagree	Disagree	Strongly disagree

6. Of the following exercises and materials, rank in order of most helpful to least helpful, 6 being the most helpful, 1 being the least helpful:
   Cultural competence survey
   Unpacking the Invisible Knapsack
   Hidden Rules of Class
   PowerPoint discussion on cultural competency
   PowerPoint discussion on cultural skill
   Handout regarding different beliefs and practices for ethnic backgrounds
7. Do you believe the cultural competence survey was an accurate and reliable measure of your cultural competency? Please explain.
8. What recommendations would you make for future coursework and changes within the athletic training program in the delivery, understanding, and practice of culturally competent care (for example, more time spent on subject, materials, experiences, etc)?

this project. Sampling of participants was purposeful and based on convenience. Mean age for participants was 25, with an age range of 24–28. The majority of the athletic training students self-identified as white, and the greater part of the participants were female. Other identifiers, such as socioeconomic status, religion/spirituality, and sexual orientation, for the participants were not investigated in this particular study. Additional demographic data has not been disclosed so as to protect the identity of the participants and potential identifying variables.

Setting

It is particularly important to note that this case study was bound by the setting, type, and location of the institution.[21] The setting for this study was a final-semester course in a 2-year professional athletic training program at the master's level. Moreover, the study took place at a public institution located in the western United States. The average age for a student at this institution is 25 years of age; over 60% of the student population are female and largely homogenous, with over 80% of the students being white.

Instruments and Measurement

The CCA survey developed by Schim[22] was utilized for this study. The author of the CCA provided a copy of the survey, instructions, and permission to use the CCA prior to implementation. The CCA survey was used to determine the amount of interaction the athletic training students had with people from diverse backgrounds within the last year. The athletic training students were also asked to indicate the percentage of people from diverse backgrounds (from the total population) with whom they had worked with or encountered within the last year. Since the meaning of diverse backgrounds and diversity can be wide ranging, the operational definition of diversity and diverse backgrounds for this study was delineated by the Cultural Competence Survey by Schim.[22] For this study, diversity and diverse backgrounds included similarities and differences within races, ethnicities, religions, SES, ability, health status, and sexual orientation. The CCA also assessed athletic training students on their cultural awareness and sensitivity (CAS) and culturally competent behaviors (CCB). Here, athletic training students were asked to indicate on a 7-point Likert scale whether they agreed or disagreed with the statements presented. Lastly, true-or-false questions where used to assess social desirability.[22] Even though the social desirability was assessed, only the data from the CAS and CCB subscales were utilized for this study. Previous studies have demonstrated the CCA has Cronbach α ranging from 0.89 to 0.92 and test-retest reliability at $r = 0.85$[17] when investigating certified athletic trainers, and Cronbach α of 0.91 and 0.75 for the CAS and CCB subscales, respectively, when investigating hospice providers.[25]

Additionally, an assessment questionnaire was developed by the researcher to gauge the athletic training students' prior experience, to assess the usefulness of instruction, and to solicit feedback. The assessment questionnaire queried athletic training students to disclose their prior diversity training as well as past experiences in undergraduate, graduate, or work experience, which may have increased cultural competency. Athletic training students were also solicited to provide feedback addressing the efficacy of the classroom activities and the survey, as well as to provide recommendations for future coursework and programmatic changes to better address cultural competency. Please refer to Table 1 to view the assessment questionnaire.

Lastly, volunteers were solicited to participate in a focus group following the initial survey and focused instruction to determine the efficacy of classroom instruction and to make suggestions or recommendations for changes to the ATP and/

Table 2. Semistructured Focus Group Protocol

1.	Classroom activities			
	3	2	1	0
	Very important	Important	Somewhat important	Not important
	____Cultural competence survey			
	____*Unpacking the Invisible Knapsack*			
	____*Hidden Rule of Class*			
	____PowerPoint discussion on cultural competency			
	____PowerPoint discussion on cultural skill			
	____Handout (beliefs and practices for ethnic backgrounds)			
2.	Cultural competence survey			
	Perceived validity—any suggestions for adaptations to make it more relevant to athletic training students?			
	How might the Cultural Competency Assessment contribute to your vitality and growth?			
3.	Would you recommend the *Cultural Competence in Sports Medicine* text?			
4.	Suggestions for improvement			

or the curriculum. The semistructured focus group protocol can be found in Table 2.

DATA ANALYSIS

Data Collection and Analysis

The CCA instrument was administered anonymously to the athletic training student via paper/pencil. The quantitative data from the CCA instrument was hand scored by the researcher per instructions supplied by Schim.[22] Microsoft Excel software was used to tabulate descriptive statistics. Qualitative data was also collected during the last phase of the study and analyzed. During the qualitative phase of this study, an assessment questionnaire was used to determine the athletic training students' experiences in diversity and cultural competency education, to evaluate the efficacy of classroom activities, and to solicit athletic training students' feedback for recommendation regarding the delivery, understanding, and practice of culturally competent care. After students completed the assessment questionnaire, it was reviewed, collated, and analyzed for themes by the researcher. Furthermore, 6 athletic training students volunteered to participant in a focus group. At the time of the focus group, notes were taken by the researcher to record the group consensus during the discussions. The focus group was also audio recorded and transcribed. The transcription of the focus group was coded and analyzed by the researcher to determine themes regarding the efficacy of classroom activities, perceived validity of the CCA in measuring the athletic training students' cultural competency, and recommendations for improvement in the ATP and coursework to address cultural competency and culturally competent skills. In order to establish validity of the data, this study used data and methodological (survey, assessment questionnaire, and focus group) triangulation.[26,27] This study also utilized investigator triangulation,[26,27] where 2 peer reviewers[21] who have knowledge and experience in athletic training education reviewed the assessment questionnaire and focus group transcription to validate the findings and themes.

RESULTS

CCA Survey Results

The CCA collected data regarding the amount of encounters athletic training students had with different ethnic/cultural groups and special populations. Tables 3 and 4 provide a summary of the responses.

All 10 of the athletic training students stated that the largest racial/ethnic population with whom they worked with was white. Regarding special population groups, the largest special groups with whom the athletic training students worked with were the physically challenged/disabled. Additionally, when asked for a self-assessment of cultural competence, 20% of the athletic training students believed themselves to be very competent, 70% believed themselves to be somewhat competent, and 10% were neither competent nor incompetent.

The data from the CCA and its subscales indicated that, overall, the athletic training students had good awareness and sensitivity of cultural differences; however, fewer students actually exhibited behaviors related to culturally competent care. For the CAS subscale, which measures cultural awareness on a scale of 1 to 7 (with the larger number

Table 3. Percent of Students Encountering Racial/Ethnic Group (Clients or Families) Within Past 12 Months (in Health Care Environment or Workplace)

	Percent
White	100%
American Indian	90%
Black	90%
Hispanic	80%
Asian	50%
Pacific Islander	40%
Arab American/Middle Eastern	20%

Table 4. Percent of Students Encountering Special Groups (Clients or Families) Within Past 12 Months (in Health Care Environment or Workplace)

	Percent of students
Physical challenged/disabled	70%
Mentally ill	60%
Substance abusers	60%
Gay, lesbian, bisexual, transgender	50%
Different religions/spiritual backgrounds	50%
Homeless/housing insecure	40%

meaning greater sensitivity), the average score was 5.66 out of 7.00 with a range of scores of 5.5 to 6.0. For the CCB scale, which measures cultural behaviors on a scale of 1 to 7 (again with the larger number meaning greater sensitivity), the average score was 3.76 out of 7.00 with a range of scores from 2.3–5.9.

Student Assessment Questionnaire Results

The 3 overarching themes from the questionnaire were discovered. First, students had a varied level of previous experiences with cultural competency, with the majority of the students indicating they did not have formal diversity training. Next, both classroom and clinical experiences have increased their cultural competency. To finish, students recommended spending more time on culturally competent care, either through a specific course on cultural competency or integrating the information into other courses.

Varied Previous Experiences Including Lack of Diversity Training. The aggregation of the findings from the student assessment questionnaire revealed the past experiences which have led to increased cultural competency were travel (50%), work (40%), and undergraduate education and experience (30%). Other factors or experiences which led to an increase in cultural competency were the ATP program, parents, personal relationships, and place of residency. When asked about past experiences which have increased cultural competency 1 athletic training student wrote that he/she "lived in a big city that was a huge melting pot of people, I've traveled to other parts of the world." However, another student mentioned that, in "undergrad there were people from different cultures but I didn't interact very much."

Seventy percent of the athletic training students did not have diversity training prior to this study. Of those 30% who had training, it was a result of an undergraduate course or training for work.

Classroom and Clinical Experiences. When athletic training students were solicited about what has been done in the context of the ATP (ie, didactic coursework, clinical experiences) to increase their cultural competency, 50% of the students replied clinical experiences, and 30% responded that this study with its focused instruction increased their cultural competency. Other students believed that a few additional courses and the resultant classroom discussions also assisted with the attainment of culturally competent skills. In particular, 1 student replied that "multiple rotation sites with the ability to meet and interact with many ethnicities and cultural backgrounds" has increased his/her cultural competency. On the assessment questionnaire, the athletic training students were also asked to indicate if the classroom instructional activities increased awareness of personal beliefs, biases, knowledge, and skills; 20% somewhat agreed, 60% agreed, and 20% strongly agreed. Ten percent of the athletic training students stated that the activities somewhat increased their desire to provide culturally competent care, whereas 70% agreed and 20% strongly agreed that these activities increased their desire to provide culturally competent care. Athletic training students were also asked to rank the exercises and materials on a scale of 1 to 6, with 6 being the most helpful for learning about culturally competent care. Here, the scores were tallied and averaged. The following exercises and materials were ranked from most helpful to least helpful: discussion on cultural competency, handouts on different beliefs and practices, discussion on cultural skills, the CCA survey, the *Unpacking the Invisible Knapsack* exercise, and the *Hidden Rules of Class* exercise.

Furthermore, the athletic training students were queried to indicate if they believed the CCA survey was an accurate and reliable measure of their personal cultural competency. The responses were mixed. Forty percent said yes, 30% answered somewhat, and the others indicated it could be an accurate measure, whereas others said, no, it was not an accurate measure, or they did not recall the CCA survey. When asked if the CCA was an accurate and reliable measure of cultural competency, 1 individual responded with, "[S]omewhat, I feel there were instance(s) where I didn't have adequate experiences to answer. I also think I would have answered differently a few years ago." To the same question, another student replied, "[Y]es, but I have changed over the years so some questions I had to say, yes, I have done that in the past, but I wouldn't do it now."

More Coursework on Culturally Competent Care. Lastly, on the assessment questionnaire, the athletic training students were also requested to provide recommendations for future coursework or changes within the ATP in regards to delivery, understanding, and practice of culturally competent care. The 1 recommendation which had the greatest number of responses was to create a course on diversity and cultural competency. Other recommendations included spending more time on the subject matter, integrating the information into other courses, and starting the discussion about cultural competency during 1 of the first courses in the 2-year program.

Focus Group Results

Three main themes were revealed during the focus group. Theme 1, students believed it was important to use various tools (ie, PowerPoints and handouts based on textbook and activities) to teach culturally competent skills. Theme 2, the CCA was not completely embraced by the students as a measurement tool. Here, the students did not like some of the questions in the CCA survey, particularly when it did not account for changes in behaviors over time (what they did when they were younger versus what they would do now) as well as the use of "never." Finally, for theme 3, students suggested ideas to increase exposure to culturally diverse populations.

Various Tools. At the beginning of the focus group, athletic training students were asked to rank activities as 3 (very important), 2 (important), 1 (somewhat important), or 0 (not important). The group consensus was the PowerPoint discussions on cultural competency and skill as well as the handouts on the beliefs and practices for diverse ethnic backgrounds based off of Cartwright and Shingles' *Cultural Competence in Sports Medicine*[4] were very important. The activities utilizing *White Privilege: Unpacking the Invisible Knapsack* by McIntosh[23] and the CCA survey exercise by Schim[22] were viewed as important. The *Hidden Rule of Class*

activity by Payne[24] was viewed as important to somewhat important.

When discussing the use of *Unpacking the Invisible Knapsack*, the word interesting was mentioned again. Here, 1 student stated "that one was calling things to your attention like you've never felt like you couldn't live in a neighborhood or go somewhere, and not see people that were of your same. . ." Another student thought that the exercise was important "because it makes you more aware of those things; what you are aware of and what you aren't aware of." The athletic training students believed the *Hidden Rule of Class* exercise was important or somewhat important. Here, a student mentioned that "that one kind of seemed to resonate more with me than the *Invisible Knapsack* one. That one kind of stood out to me in my memory more than the other one and I just feel like sometimes you are not always in environments where there are cultural differences, but you are almost always in class or social or economic differences." Another student stated that "yes, I think it definitely just kind of brought up some things that I didn't necessarily think of especially on the lower class on though. Like some of those things like the skills that they had or things that they had to think about. I was like, I have never even; that has never even crossed my mind."

Lastly, when asked about the *Hidden Rule of Class*, he or she thought the exercise was important or somewhat important "because you have got to realize who has got what."

The students believed the PowerPoint discussions on cultural competency and skills based on the *Cultural Competence in Sports Medicine* text were very important, if not the most important, for the focused instruction. When asked why they believed these to be most important, 1 student replied, "[Y]ou actually got to discuss things if you had a thought. It just promoted more discussion and questions and I feel like that is how we learn better." Another student stated that "it covered a broader base too. There was a lot more information that could be gathered from the PowerPoints than saying yes or no or just checking a box or something." The students also believed the handout regarding different beliefs and practices, again based off of the *Cultural Competence in Sports Medicine* text, were very important for student learning. The following is part of the conversation which occurred when discussing the importance of the handout. One student stated:

> *I think it would be pretty important to have around because, if we are out there in the field and we have got someone of a different cultural background, we have a list of things that could possibly be part of their culture so we know somewhat what to be aware of, but also what you said. Ask questions to them because maybe what is on the sheet isn't part of their culture.*

Another student then stated, "[R]ight, or even they might be from that culture, but maybe they don't necessarily practice it. But it would be nice to be aware of what things might offend them just so that you. . ." with another student completing the thought, "[Y]ou can be prepared."

When asked if the *Cultural Competence in Sports Medicine* text should be adopted for future coursework, the group consensus was yes. When probed about changes in the ATP or curriculum, the athletic training students recommended learning about cultural competency earlier in the program to establish a base, throughout the program in additional courses, and if possible, as a standalone course. When solicited feedback, a student mentioned that information regarding cultural competency should occur "right before you really even start working with patients," with another student adding, "[B]ecause then they'll start critically thinking about it, I think, before they start. . ." Yet another student stated:

> *. . . and kind of having that base. You can definitely add it into other courses and that way you are building on it, but you are also keeping it fresh so it is that repetition that you were talking about at the beginning of the year. You know, the more repetition you have the better it sticks, and like student A said, the more aware you are of it from day 1.*

CCA Survey. In regards to the CCA survey, the students were hesitant to associate their entire cultural competency based on the results of the survey. One student in particular mentioned when taking the survey that he or she may have displayed some of those behaviors "when I was younger, like yes, I used to do, but I have not done or even thought about doing since I have grown older and matured but . ." with another student finishing the thought by, "[Y]ou almost have to reword them like, 'in my adult year, have you done this?'" When addressing specific questions on the CCA survey, another student said, "[J]ust like different ones where it is like yes, you know, I have probably done this at some point in time or something, but it doesn't mean that I have done it recently or intentionally."

Some of the words or phrases used to describe the use of the CCA were "interesting," "important," "calls back memories," and "enlightening." When referring to a specific question in the CCA, 1 student stated, "[T]he biggest 1 was I have never deliberately said something to hurt someone's feelings. I sat there, and I was feeling like a bad person because. . ." When asked about the importance of the CCA survey, another student responded, "I think it was important. It kind of calls back memories of when I did things or didn't do things that maybe I should have or at least thought about maybe." Additionally, another student stated that "yeah, it is kind of enlightening. It makes you think, okay, am I really culturally competent or less than I think?"

Increased Exposure to Cultural Diverse Populations. To finalize the focus group, the athletic training students were invited to make suggestions for improvement to either the overall ATP or to the curriculum. One student believed it was a good idea to maintain the public health rotation because he or she thought, "[E]veryone needs to experience it. It really teaches you how to keep composed with certain people. When I say composed, I mean verbally, body language, facial expressions." Another student suggested an emergency room (ER) rotation. He or she believed an ER rotation "would be very beneficial as a clinical (site) but also it would kind of mimic (public health rotation) where you would get a more diverse population." Other suggestions included keeping the diversity in rotation so as to experience different socioeconomic statuses or to have students from diverse backgrounds "come in and talk."

DISCUSSION

After reviewing all the data collected for this research study, key findings surfaced. Some of the key findings were (1) despite the fact that athletic training students had little to no prior diversity training, many of them were considered culturally aware and sensitive (as measured by the CCA), (2) the majority of athletic training students found classroom activities and clinical education helpful in increasing culturally competent skills, (3) athletic training students indicated they wanted more information regarding cultural competency earlier and throughout the ATP. To begin, this study determined that athletic training students had a good sense of cultural awareness and sensitivity on the CAS (5.66 out of 7.00). However, it was also discovered that athletic training students did not display cultural competence behaviors as measured by the CCB (average of 3.76 out of 7.00). The lower numbers on the CCB assessment may be due to lack of experiences available or the shortage of exposures to individuals from diverse backgrounds. This finding is similar to the findings by Marra et al,[17] where they surveyed certified athletic trainers, and of those who responded, they scored an average of 5.65 ± 0.526 on the CAS subscale and 3.95 ± 1.51 on the CCB subscale.[17] The results from both Marra et al[17] and this study indicate that both athletic training students and practicing athletic training professionals are overall culturally aware and sensitive. However, both studies also found that athletic training students and practicing athletic training professionals did not display culturally competent behaviors, meaning both populations may be aware and sensitive of cultural differences but not practicing or exhibiting culturally competent skills.

The findings from this research study are also comparable to the findings from Edgren and Bacote,[28] where they utilized a different assessment tool (the Inventory for Assessing the Process of Cultural Competency among Health Care Professionals, Revised [IAPCC-R]) to assess nursing students' cultural competency.[28] Edgren and Bacote[28] reported that nursing students were culturally aware however, not culturally proficient nor culturally competent as demonstrated by their IAPCC scores.[29] This current study as well as the study by Edgren and Bacote[28] suggest both athletic training students and nursing students may possess the awareness and sensitivity for culturally competent care; however, both student populations may need more exposure to diverse patient populations in order to practice and to develop more culturally competent skills and behaviors. Additionally, both studies reiterate Bacote's Model of Cultural Competence[4] in that cultural competency is a journey rather than a destination. Utilizing this model, future health care providers (ie, nursing students and athletic training students) will begin with a certain level of awareness and behaviors; however, as they encounter more diverse patient populations, they will continue to learn and to develop culturally competent skills as well as hopefully increase their desire to deliver culturally competent care.

The theory of Mezirow's[18] Transformative Learning was also supported in this study as demonstrated in the results from qualitative data collected. Some of the athletic training students stated that the classroom activities made us "more aware" or provoked the realization of "who has got what," which reinforces the notion of the importance of becoming aware of one's own frame of reference, so as health care providers, athletic training students can "start critically thinking" about their interactions with patients.

CONCLUSIONS

Overall, the results from this study indicated that the athletic training students had good cultural awareness and sensitivity; however, they were less likely to demonstrate culturally competent behaviors. One potential reason for not demonstrating culturally competent behaviors may be due to the fact that this athletic training student sample did not have opportunities to engage in a great deal of encounters with individuals from diverse backgrounds, as indicated on the CCA. When asked, athletic training students appeared to want more information regarding culture and culturally competent care throughout the curriculum. Moreover, athletic training students recommended different clinical education experiences and rotations to help them practice their skills to increase their culturally competent skills and behaviors.

Significance of the Study

This study is extremely valuable to the field of athletic training, as there are few studies addressing culturally competent care,[17] especially in the athletic training student population. This study discovered that athletic training students possessed cultural awareness and sensitivity; however, they may lack opportunities to encounter diverse populations to practice and to display their culturally competent behaviors. Despite the small sample size, this study suggests that athletic training students want more information on cultural differences and need more encounters with diverse populations to develop their skills to deliver culturally competent care. Although these findings cannot be generalized to the entire athletic training student population, the findings do support Bacote's Model of Cultural Competence.[4] Here, athletic training students need to experience all 5 constructs of cultural competence (awareness, knowledge, skill, encounter, and desire) in becoming more culturally competent. Bacote's Model of Cultural Competence[4] was also supported in the finding that athletic training students wanted the instruction and the practice of culturally competent skills early on and throughout the curriculum. One suggestion for the continuous development of cultural competency is that ATPs should continue to increase the education and instruction of culturally competent knowledge and skills throughout the curriculum as well as increase the number of opportunities for athletic training students to experience and work with diverse populations within the clinical education settings. The increase in both instruction and practice of culturally competent skills may lend itself well to athletic training students developing culturally competent proficiencies and behaviors as well as increasing their desire to deliver culturally competent care to their patients.

Culturally competent care is critical for all allied health care professionals, with athletic trainers being no exception. With the patient population continuing to become more diverse, it is imperative that all athletic trainers (current and future) become aware of cultural differences, learn how cultural differences affect patient care, and become more responsive to the diversity and needs of the patients they serve.

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