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Cultural Competence Education in Undergraduate Athletic Training Programs

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CULTURAL COMPETENCE EDUCATION IN
UNDERGRADUATE ATHLETIC TRAINING PROGRAMS

by

Katherine L. Liesener

A Dissertation Submitted in
Partial Fulfillment of the
Requirements for the Degree of

Doctor of Philosophy
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ABSTRACT

CULTURAL COMPETENCE EDUCATION IN UNDERGRADUATE ATHLETIC TRAINING PROGRAMS

by

Katherine L. Liesener

The University of Wisconsin-Milwaukee, 2017
Under the Supervision of Professors Larry G. Martin and Barbara J. Daley

It is critical for athletic trainers to understand and practice culturally competent health care, which involves being responsive and sensitive to all cultural differences present in the population. The Commission on Accreditation of Athletic Training Education (CAATE) requires that all Athletic Training Programs teach cultural competence in their curriculum. However, programs have the autonomy to determine how and when their curriculum content will be delivered. Furthermore, the current original research examining athletic training and cultural competence is very limited and there is a lack of research focused on the educational practices of cultural competence education in athletic training.

This research study investigated the following three research questions: to what extent is cultural competence education in undergraduate Athletic Training Programs being implemented; how is athletic training cultural competence education being taught; and what challenges do athletic training educators face when implementing cultural competence education. The Program Directors for all 310 undergraduate CAATE Accredited Athletic Training Programs in the United States were contacted, requesting participation in an electronic survey; 64 respondents completed the survey. Once the electronic survey data were preliminarily analyzed, five

programs were contacted by email and asked to participate in a follow-up telephone interview; four agreed to complete the follow-up interview.

The results of this research study indicate that Athletic Training Programs are attempting to teach cultural competence thoroughly, but there are still several areas in need of improvement. Athletic training educators need more opportunities for formal training in cultural competence, in order to better prepare for teaching this content. This training should focus on incorporating interprofessional education, using theory to inform practice, and adapting to various influences. Educators also need more guidance regarding suggested topics to address, effective delivery modes, and successful classroom exercises. In addition, Athletic Training Programs need to re-examine how to infuse cultural competence across the entire program as well as how to increase patient encounters in diverse settings. It is suggested that accreditation requirements should address the need for immediate attention to improving cultural competence education in athletic training.

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LIST OF ABBREVIATIONS

AACN	American Association of Colleges of Nursing
ATP	Athletic Training Program
BOC	Board of Certification
CAATE	Commission on Accreditation of Athletic Training Education
CAPTE	Commission on Accreditation in Physical Therapy Education
CCHPA	Cultural Competence Health Practitioner Assessment
CCNE	Commission on Collegiate Nursing Education
CLAS	Culturally and Linguistically Appropriate Services
HBCU	Historically Black College or University
IPEC	Interprofessional Education Collaborative
LCME	Liaison Committee on Medical Education
LGBTQ	Lesbian, Gay, Bisexual, Transgender, and Queer (and/or Questioning)
NATA	National Athletic Trainers' Association
TAACT	Tool for Assessing Cultural Competence Training
TCN	Transcultural Nursing
TCNS	Transcultural Nursing Society

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CHAPTER 1: INTRODUCTION AND STATEMENT OF THE PROBLEM

Introduction

Athletic trainers are allied health care professionals who specialize in injury prevention, emergency care, clinical examination and diagnosis, and therapeutic intervention and rehabilitation. They provide medical care for physically active individuals, focusing on improving functional outcomes, injury education, and reducing the risk of re-injury. Athletic trainers can work in a variety of settings, from schools to the workforce, providing medical services to active individuals from various backgrounds. The profession of athletic training is recognized by the American Medical Association, the Department of Health and Human Services, and the Health Resources Services Administration, and athletic trainers are licensed or regulated in 49 states and the District of Columbia (National Athletic Trainers' Association, 2017). In order to become an athletic trainer, one must successfully complete a Commission on Accreditation of Athletic Training Education (CAATE) accredited Entry-Level Athletic Training Program (ATP) and pass the Board of Certification (BOC) Examination (Commission on Accreditation of Athletic Training Education, 2013). Athletic trainers are then regulated by his/her state of employment, through licensing or other similar regulation standards, in 49 states and the District of Columbia. Additionally, state practice acts further dictate the athletic trainer's scope of practice within that particular state (National Athletic Trainers' Association, 2017).

The National Athletic Trainers' Association (NATA) reports a membership consisting of 80.77% 'White Not of Hispanic Origin (Table 1) (National Athletic Trainers' Association, 2016). According to the 2010 United States Census, the 'White alone' population in the United States is 72.4%, however, it is projected that this population will decrease to 46% of the total population by 2042 (Table 2) (United States Census Bureau, 2008; United States Census, 2010).

Table 1. 2016 National Athletic Trainers' Association Membership Ethnicity

Ethnicity	Members	Member Type Percentage
White Not of Hispanic Origin	37,611	80.77%
Hispanic	2,138	4.59%
Ethnicity N/A	2,030	4.36%
Black Not of Hispanic Origin	1,742	3.74%
Asian or Pacific Islander	1,618	3.47%
Multi-Ethnic	782	1.68%
Other	437	0.94%
American Indian / Alaskan Native	205	0.44%
Total	46,563	100%

(National Athletic Trainers' Association, 2016)

Table 2. 2010 United States Census Results: National Population by Race

Ethnicity	Percent of Population	Change 2000-2010
White alone	72.40%	5.70% increase
Hispanic or Latino	16.30%	43.00% increase
Black or African American alone	12.6%	12.30% increase
Some Other Race alone	6.20%	24.40% increase
Asian alone	4.80%	43.30% increase
Two or More Races	2.90%	32.00% increase
American Indian and Alaska Native alone	0.90%	18.4% increase
Native Hawaiian and Other Pacific Islander alone	0.20%	35.40% increase

(United States Census, 2010)

The high percentage of White athletic trainers compared to the increasingly diverse United States population indicates that current and future athletic trainers must prepare for increasing cross-cultural patient encounters (Maurer-Starks, Whalen, & Halls, 20076). Athletic trainers will be called upon to prevent, diagnose, and intervene with emergency, acute, and chronic medical conditions involving a growing diverse patient population. However, since athletic trainers' ethnicity is predominantly White, this imbalance can lead to cultural inequalities and dominance, with regards to the type of health care provided. (Please note that the US Census analyzed race while the NATA membership statistics analyzed ethnicity).

The term *cultural competence* “refers to the ability to respect the beliefs, language, interpersonal styles, and behaviors of individuals, families, and communities receiving care services as well as other health care professionals who are providing care services” (Andrews et al., 2011, p. 300). It requires a set of behaviors, knowledge, and attitudes that foster effective interactions in cross-cultural situations and reduce healthcare disparities (National Center for Cultural Competence; Rose, 2013). Similarly, the term *culturally competent health care* involves being responsive and sensitive to all cultural differences present in the population, when providing medical care. These differences include psychosocial influences on lifestyle behaviors, patient compliance, epidemiology, disease management, treatment efficacy, and racial or ethnic differences in health beliefs (Chin, 2000; Hobgood, Sawning, Bowen, & Savage, 2006; Rose, 2013).

Purpose of the Study

The purpose of this study is to explore the application of cultural competence education in Athletic Training Programs. In addition, it examines how educators prepare for teaching cultural competence competencies and the pedagogical strategies commonly implemented in

medical and allied health education programs. The field of medicine has focused on cultural competence training for the practice of health care delivery for many years, yet refining the delivery and application of this content in Medical Schools is still ongoing. Since the 1980s, movements to increase cultural competence, in relation to anthropology and biomedicine, have been present in cultural competence education (Chin, 2000; Jenks, 2011). At that time, anthropological analyses indicated that medical professionals were being trained to separate signs, symptoms, diseases, and illnesses from the social person. Therefore, educational reform was required to increase attention to the sociocultural context of patient encounters, the diagnosis of conditions, and the treatment plans recommended by Western medical practitioners (Jenks, 2011). The conceptual framework chosen for this research study combines social justice theory, social learning theory, and insurgent multiculturalism to inform the practice of cultural competence education in athletic training. This conceptual framework supports the philosophy that culturally competent health care reduces health disparities and improves the efficiency and equity of care for all patients.

Research Problem

A review of the literature revealed that Athletic Training Programs are required to teach cultural competence, yet no research exists to document the current practice of cultural competence education in these programs, thus, there is a gap in the knowledge of practice. The current literature does not illustrate the extent to which athletic training cultural competence education is being implemented, how it is being taught, and the challenges faced when implementing it. Thus, researching these areas in an effort to provide a snapshot of the current practices of cultural competence education in athletic training is necessary and is the focus of this study.

Research Questions

This research study is the first known study to investigate cultural competence education practices in Athletic Training Programs. It investigates current practices by addressing the following research questions:

- 1) To what extent is cultural competence education in undergraduate Athletic Training Programs being implemented?
- 2) How is athletic training cultural competence education being taught?
- 3) What challenges do athletic training educators face when implementing cultural competence education?

Need for the Study

In order to promote culturally competent care, many health care related education programs have changed, modified, and added cultural competence education to their curriculum, and no longer rely upon general education courses to teach diversity and cultural knowledge (Geisler, 2003). While great strides in cultural competence education have been made in several health disciplines, it must be noted that this education continues to be revised and refined, in an effort to strengthen the instruction and application of this content. In nursing education, teaching strategies to “utilize multiple approaches for diffusion of this information [cultural competence] across the curriculum; increase awareness of complex culture issues and conflicts in health care systems, with emphasis on bridging the provider-patient cultural gap within the clinical encounter; and provide baseline information and culturally specific experiences” have been incorporated (Cross, Brennan, Cotter, & Watts, 2008, p. 151). In medical education, “the faculty of a medical school ensure that the medical curriculum provides opportunities for medical students to learn to recognize and appropriately address gender and cultural biases in themselves,

in others, and in the health care delivery process” (Liaison Committee on Medical Education, 2017, p. 11). However, the field of athletic training has only recently increased its focus on cultural competence education and, therefore, has very little research concerning teaching cultural competence in the athletic training classroom and clinical settings.

The minimum Athletic Training Program curriculum is created and disseminated by the National Athletic Trainers’ Association, with the expectation that programs will adopt and effectively teach the competencies listed therein. While the quantity and scope of cultural competence competencies required to be taught by ATPs has increased dramatically over the past 25 years, ATPs have the autonomy to determine how their curriculum will be delivered (Appendix A) (National Athletic Trainers’ Association, 1980; National Athletic Trainers’ Association, 1982; National Athletic Trainers’ Association, 1992; National Athletic Trainers’ Association, 1999; National Athletic Trainers’ Association, 2006; National Athletic Trainers’ Association, 2011). Therefore, cultural competence may be taught to athletic training students as a stand-alone course, a unit within a course, a discussion within a course, or another form of training (Marra, Covassin, Shingles, Canady, & Mackowiak, 2010). Athletic training educators can utilize frameworks previously established by nursing, medical, and physical therapy educators in order to incorporate cultural competence into the athletic training curriculum. For instance, “multiple teaching-learning strategies such as the online cultural self-assessment, clinical case scenario, critiques of multicultural skill vignettes, and the cultural assessment of the clinical agency” have helped nursing educators in promoting culturally competent nursing practitioners (Cross et al., 2008, p. 153). However, there appears to be very limited to no formal continuing education support for athletic training educators who have not recently attended an ATP or have not received extensive training in education and cultural competence. Therefore,

the preparation to teach cultural competence is likely to vary greatly, with self-conducted reviews of the literature to experiential learning dictating the content presented in the current undergraduate athletic training cultural competence courses.

Significance of the Study

The current research on cultural competence in athletic training is very limited and mainly focuses on the practice of cultural competence rather than the education of this topic. In order to assess cultural competence in athletic training, Volberding (2012) and Marra et al. (2010) studied the perceived level of cultural competence of athletic training students and practicing athletic trainers. This research was very informative, but it studied outcomes and influences rather than the educational process of creating cultural competence curriculum. Several other researchers have studied complementary domains of cultural competence and athletic training, such as Ford (2003) and Maurer-Starks et al.'s (2007) exploration of the importance of teaching cultural competence in order to improve the clinical application of cultural competence, and Rodriguez and Romanello's (2008) brief overview of how multiculturalism can be integrated into the athletic training curriculum. Geisler (2003) also presented a theoretical and rational argument for cultural competence education in ATPs, but concluded that future work must focus on the specific strategies for implementation of a multicultural agenda in the athletic training curriculum. Finally, Guyer (2011) and Jutte (2011) reported the cultural competence benefits of faculty-led, short-term study abroad experiences.

No research currently exists to provide researchers, administrators, and educators a summary of current practices, with regards to cultural competence education in Athletic Training Programs. This research will significantly contribute to the foundation of athletic training cultural competence education research and guide future education initiatives and reform. It will

also determine if current educational practices in athletic training align with, and support, the best approaches documented by other health care education disciplines. This will determine if current practices require change, the quality of the education being delivered, and if significant challenges or needs should be addressed. Whether or not curricular changes are necessary is directly related to a program's CAATE accreditation. Athletic training programs are required to teach and assess cultural competence, however, if a program fails to deliver the required curriculum in an effective manner, the program's CAATE accreditation could be at risk due to noncompliance. While CAATE currently does not require that programs demonstrate specific efficacy benchmarks and/or outcomes of each academic competency, it does require that programs create a master assessment plan and that programs demonstrate regular assessment of the educational program (Commission on Accreditation of Athletic Training Education, 2012).

Operational Definitions

Due to the variety of terms and definitions used in the context of cultural competence and athletic training education, the following terms have been defined.

Critical consciousness speculates that the thinking subject exists in relationship to others in the world, rather than in isolation (Kumagai & Lypson, 2009).

Critical multiculturalism focuses on cultural factors related to political oppression, economic oppression, and discrimination dynamics (Geisler, 2003).

Critical thinking requires critical consumption of information, with a drive to seek explanations, causes, and evidence (Kumagai & Lypson, 2009).

Cross-cultural education focuses on effective treatment and communication with patients by enhancing personal insight and empathy with individuals from diverse cultures (Núñez, 2000).

Cross-cultural efficacy “implies that the caregiver is effective in interactions that involve individuals of different cultures and that neither the caregiver’s nor the patient’s culture is the preferred or more accurate view” (Núñez, 2000, p. 1072).

Culture “is a set of learned beliefs and behaviors that shapes the way its participants view and experience the world” (Robins, Fantone, Hermann, Alexander, & Zweifler, 1998, p. S31).

Cultural awareness involves self-exploration of one’s own cultural background, prejudices, and biases, in an effort to appreciate diverse values, beliefs, practices, and problem solving strategies present within society (Campinha-Bacote, 1999).

Cultural competence “refers to the ability to respect the beliefs, language, interpersonal styles, and behaviors of individuals, families, and communities receiving care services as well as other health care professionals who are providing care services” (Andrews et al., 2011, p. 300). It requires a set of behaviors, knowledge, and attitudes that foster effective interactions in cross-cultural situations (National Center for Cultural Competence).

Cultural diversity refers to inclusiveness and acceptance of cultural differences, especially those which are different from one’s own cultural characteristics (Perrin, 2000).

Cultural humility involves an enduring commitment to: (1) self-evaluation, exploration, and critique; (2) recognizing and addressing the patient-clinician power dynamic; and (3) developing advocacy partnerships with the community (Chun, 2010).

Cultural knowledge involves a critical exploration and educational foundation regarding the various world views, physical variations, and biological differences associated with diverse cultures (Campinha-Bacote, 1999).

Cultural skill, in medical fields, is the ability to decipher the relevant cultural information regarding a patient's health history and current ailment, and conduct a culturally specific examination (Campinha-Bacote, 1999).

Culturally competent health care involves being responsive and sensitive to all cultural differences present in the population, when providing medical care. These differences include psychosocial influences on lifestyle behaviors, patient compliance, epidemiology, disease management, treatment efficacy, and racial or ethnic differences in health beliefs (Chin, 2000; Hobgood et al., 2006).

Diversity refers to unconditionally including, accepting, and welcoming others who differ from oneself, with regards to national origin, race, religion, gender, sexual orientation, and color (Perrin, 2000).

Essentialism refers to the practice of categorizing items or humans based on differences alone, which often leads to false conclusions due to oversimplification (Fuller, 2002).

Ethnic represents similarities in language, religion, rituals, ancestry, music, and food preferences (Ford, 2003).

Ethnocentrism is where one scales, rates, and judges others based on their own culture (Capell, Dean, & Veenstra, 2008).

Minority describes a group of individuals who experience limited social resources, opportunities, status, and power (Ford, 2003).

Multicultural education "focuses on the redesign of American school and the schooling process to make them more pluralistic and just" (Geisler, 2003, p. 144).

Multiculturalism involves an exploration, understanding, acceptance, and inclusion of multiple cultures (Geisler, 2003).

Stereotyping is associated with oversimplifying cultural facts or trends and making assumptions prior to gathering all the appropriate information (Ford, 2003). It involves superficial knowledge, as an end point (Jenks, 2011).

CHAPTER 2: REVIEW OF LITERATURE

Introduction

The purpose of this literature review was to identify a conceptual framework associated with cultural competence education, present current literature on cultural competence education, identify the preparation strategies current athletic training educators' use during their preparation for teaching cultural competence, and ascertain the common pedagogical approaches utilized by such educators. However, due to limitations in the research directly related to cultural competence and athletic training education, the literature review was expanded to include medical, nursing, and physical therapy education, in an effort to comprehensively explore culturally competent health care education. Based on the literature available, the specific intent of this review of the literature evolved into: (1) identifying the common definitions and applications of cultural competence; (2) determining the literature-based context of culturally competent healthcare; (3) exploring the research and literature on a conceptual framework of cultural competence athletic training education; (4) collating the research regarding the implementation and application of cultural competence in healthcare and athletic training education; (5) determining the preparation and pedagogical strategies necessary to teach cultural competence; and (6) identifying specific cultural competence exercises commonly used in the education of cultural competence. This chapter examines the current literature, as it relates to these six areas, in application to cultural competence and health care education.

In order to identify and secure all relevant research for the literature review, several databases were used, including EBSCO Host, Elsevier, Ovid, and ProQuest, as well as Google Scholar. The key terms used in the searches included: *assessment, athletic training, culture, cultural competence, cultural competency, culturally competent care, diversity, education,*

ethnicity, health care, medicine, nursing, physical therapy, and race. An exhaustive search was conducted and the literature was included in this review if it met certain criteria, such as: peer-reviewed, original research, relevancy to athletic training education, and application to educational preparation and initiatives. The articles that met the inclusionary criteria have been utilized and cited as references for this literature review.

Cultural Competence

When defining and applying cultural competence, it is vital to understand that while individuals may be placed into groups based on culture and race, not all individuals in any given culture group may share the same experiences, identities, or expressions. In fact, due to influences such as age, gender, personality, education, religion, profession, socioeconomic background, sexual orientation, and geographical location, an individual may identify with multiple cultures or one of many subcultures (Black & Purnell, 2002; Dupre & Goodgold, 2007; Ford, 2003; Robins et al., 1998). Other influences, such as family, community, peers, and media, must also be recognized as important facets in cultural development and identity (Black & Purnell, 2002; Dupre & Goodgold, 2007; Maurer-Starks et al., 2007; Rose, 2013).

In health care, cultural competence extends beyond simply addressing race, for it must involve connecting cultural competence with evidence-based practice (Musolino, Burkhalter, Crookston, Ward, Harris, Chase-Cantarini, & Babitz, 2010). When health care professionals are trained to deliver culturally competent care to diverse patient populations, they must first acknowledge that cultural differences can influence the patient's health care desires and experiences, and that these variations should affect the care provided. "If a 'recipe' approach is followed in health care, reverse cultural bias could prevail, along with potential increases in disparity of care and medical errors" (Musolino et al., 2010, p. 26). Furthermore, avoiding

positions such as ‘culture does not dictate the care provided’ is critical in the prevention of color blindness, culture blindness, cultural insensitivity, and cultural incompetence (Ford, 2003).

Health care professionals should also recognize that cultural competence is a continuous developmental process that occurs across several stages (Table 3) (Black & Purnell, 2002; Dupre & Goodgold, 2007). Therefore, it is essential that any individual engaging in cultural

Table 3. *Stages of Cultural Competency*

Stage	Definition
1. Cultural Destructiveness	<ul style="list-style-type: none"> • Purposefully destructs culture • Dehumanizes or sub-humanizes minority clients
2. Cultural Incapacity	<ul style="list-style-type: none"> • Holds paternal posture toward “lesser” races • Believes in the supremacy of the dominant culture
3. Cultural Blindness	<ul style="list-style-type: none"> • Holds philosophy of being unbiased • Believes that helping approaches traditionally used by the dominant culture are universally applicable • Behaviors reflect a well-intended liberal philosophy • Ignores cultural strengths, encourages assimilation, and blames the victim for their problems • Views differences from the cultural deprivation model which asserts that problems are the result of inadequate cultural resources
4. Cultural	<ul style="list-style-type: none"> • Precompetence • Realizes own weakness in serving minorities and attempts to improve some aspect of service • Desires to deliver quality services by asking “What can we do?” • Has begun the process of becoming culturally competent but lacks information on what is possible and how to proceed • Has a false sense of accomplishment or of failure that prevents the person from moving forward along the continuum
5. Cultural Competence	<ul style="list-style-type: none"> • Engages in continuous self-assessment • Focuses attention on the dynamics of difference, continuously increases cultural knowledge, and implements a variety of adaptations to service models
6. Cultural Proficiency	<ul style="list-style-type: none"> • Holds culture in high esteem • Conducts research, develops new therapeutic approaches, publishes, and disseminates

(Dupre & Goodgold, 2007)

competence development first conducts a self-assessment to determine which stage he or she is presently in as well as how to progress into the advanced stages of cultural competence (Dupre & Goodgold, 2007).

Culturally Competent Health Care

During every patient-clinician encounter, at least two different cultural perspectives are present, that of the clinician and that of the patient. In addition, as a result of formal classroom training, many health care providers often interpret illness, identify causes and symptoms, and determine the management of the illness differently than the patient, possibly creating a third culture present, a health care profession culture (Black & Purnell, 2002; Robins et al., 1998). Research has found that Blacks, Hispanics, American Indians and Alaska Natives, and Asians and Pacific Islanders consistently receive poorer health care than non-Hispanic Whites in the United States, primarily due to access to care and medical errors due to cultural or linguistic misunderstandings (Thompson, 2005). Therefore, it is vital that culturally competent health care is provided to all individuals, in an effort to decrease health disparities, provide better patient outcomes, and to account for various cultural, racial, ethnic, and socioeconomic influences on health care (Hobgood et al., 2006; Rose, 2013). Culturally competent health care should focus on access to care, utilization of care, and quality of services (Chin, 2000). Without this multi-faceted systems approach to culturally competent health care, initiatives in this domain will become unilateral and underestimate the complexity of the issues.

It is critical that health care providers develop their cultural competence skills, conduct a cultural assessment, and execute culturally based physical assessments (Bjarnason, Mick, Thompson, & Cloyd, 2009; Campinha-Bacote, 1999). The development of cultural competence skills will provide health care providers with the ability to determine how a patient's physical

and biological variations influence key medical aspects, such as drug metabolism, disease, and health conditions. The cultural assessment and culturally based physical assessment should involve interviewing the patient regarding his or her cultural beliefs, cultural values, alternative medicine, family roles in illness, and cultural practices, in an effort to identify the needs and management practices within the patient's cultural context (Bjarnason et al., 2009; Campinha-Bacote, 1999). "Clinicians must deal not only with such obvious cultural differences of their patients as language, dress, and diet, but also with more subtle cultural influences, such as the patient's perceptions of health, illness, and appropriate approaches to treatment" (Núñez, 2000, p. 1071). This approach may reduce assumptions based on superficial cultural categorization (Campinha-Bacote, 1999). Chun (2010) stated that "although one wants to avoid stereotyping, if a doctor has little knowledge of the role culture may play in patient care, he or she may miss a critical issue" (p. 616). For example, "the inability of a provider to understand socioeconomic differences may lead to patient noncompliance, which can affect health outcomes" (Bjarnason et al., 2009, p. 500).

Current trends in culturally competent health care delivery often combine health and mental health care, in an effort to address the many facets of cultural influence on health care. Chin (2000) stated that:

A growing recognition of psychosocial influences on lifestyle behaviors, patient compliance, and disease management, along with evidence that the onset and course of chronic conditions can be modified by lifestyle behaviors, have resulted in increased emphasis on prevention and patient education. The contribution of sociocultural factors to lifestyle behaviors and 'racial'/ethnic differences in health beliefs, lifestyle behaviors, and health behaviors make this an issue of cultural competence. (p. 26)

This culturally competent approach will also require extensive interpersonal and communication skills in order to decrease miscommunications and misunderstandings that may lead to cultural barriers (Black & Purnell, 2002). Furthermore, communication between the patient and health care provider is critical to the development of trust, which is linked to optimal patient care (Bjarnason et al., 2009; Black & Purnell, 2002; Rose, 2013). “In health care, challenges to effective communication may be exacerbated by culturally distinctive dialect, speech patterns, or colloquialisms of patients and/or providers” (Bjarnason et al., 2009, p. 500). The United States Department of Health and Human Services (2017) has created a list of standards for culturally and linguistically appropriate health care services, which should be integrated in all health care organizations (Table 4). These must be mandated and monitored in order to ensure responsiveness to all segments of the population and the provision of services that embrace a patient’s culture (Bjarnason et al., 2009; Chin, 2000; Rose, 2013).

As described earlier, the landscape of athletic training is changing and athletic trainers must focus on enhancing the level of culturally competent care provided to all populations (Maurer-Starks et al., 2007). “As the population becomes increasingly diverse, it becomes increasingly clear that a uniform standard based on the white population can no longer be the norm for public health indicators” (Chin, 2000, p. 32). In the rehabilitation of an injury or illness, cultural interpretations and values play a significant role in the design, goal setting, and implementation of therapy programs. In addition, certain cultural practices, such as modesty concerns, gender interactions, fasting, and management choices may directly affect the care provided by a clinician (Ford, 2003). Therefore, the clinician must be prepared to adapt treatment and rehabilitation programs individually, with one’s culture significantly considered (Black & Purnell, 2002). Ford (2003) summarized culturally competent care in athletic training

Table 4. *National Standards on Culturally and Linguistically Appropriate Services (CLAS) in Health and Health Care*

Theme	Standard
Principal Standard	1. Provide effective, equitable, understandable, and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy, and other communication needs.
Governance, Leadership, and Workforce	2. Advance and sustain organizational governance and leadership that promotes CLAS and health equity through policy, practices, and allocated resources. 3. Recruit, promote, and support a culturally and linguistically diverse governance, leadership, and workforce that are responsive to the population in the service area. 4. Educate and train governance, leadership, and workforce in culturally and linguistically appropriate policies and practices on an ongoing basis.
Communication and Language Assistance	5. Offer language assistance to individuals who have limited English proficiency and/or other communication needs, at no cost to them, to facilitate timely access to all health care and services. 6. Inform all individuals of the availability of language assistance services clearly and in their preferred language, verbally and in writing. 7. Ensure the competence of individuals providing language assistance, recognizing that the use of untrained individuals and/or minors as interpreters should be avoided. 8. Provide easy-to-understand print and multimedia materials and signage in the languages commonly used by the populations in the service area.
Engagement, Continuous Improvement, and Accountability	9. Establish culturally and linguistically appropriate goals, policies, and management accountability, and infuse them throughout the organization's planning and operations. 10. Conduct ongoing assessments of the organization's CLAS-related activities and integrate CLAS-related measures into measurement and continuous quality improvement activities. 11. Collect and maintain accurate and reliable demographic data to monitor and evaluate the impact of CLAS on health equity and outcomes and to inform service delivery. 12. Conduct regular assessments of community health assets and needs and use the results to plan and implement services that respond to the cultural and linguistic diversity of populations in the service area. 13. Partner with the community to design, implement, and evaluate policies, practices, and services to ensure cultural and linguistic appropriateness. 14. Create conflict and grievance resolution processes that are culturally and linguistically appropriate to identify, prevent, and resolve conflicts or complaints. 15. Communicate the organization's progress in implementing and sustaining CLAS to all stakeholders, constituents, and the general public.

(U.S. Department of Health & Human Services, 2017)

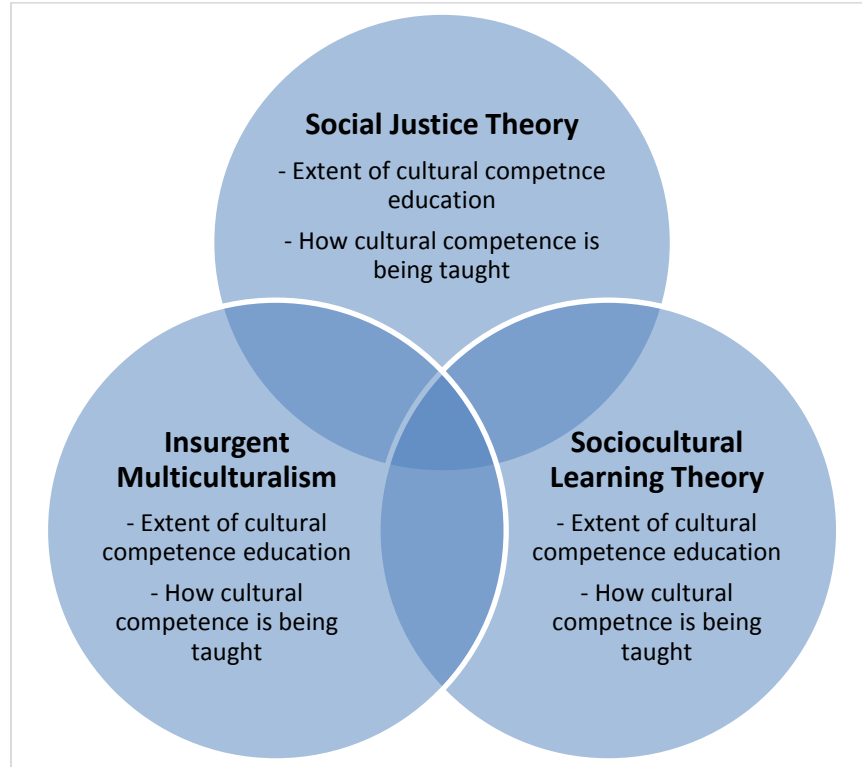
by stating that “athletic trainers who provide culturally competent care have a unique opportunity to educate physically active individuals concerning general health issues endemic to specific sectors of the population” (p. 61).

Marra et al. (2010) stated that health care providers must provide quality and accurate care to patients from diverse cultures and that “only through applying culturally competent care can [Athletic Trainers] provide an optimal healing environment that ultimately will lead to greater patient outcomes and a more holistic level of athletic medicine” (p. 283). They are the only research team that has investigated the level of cultural competence current practicing athletic trainers possess, which is one of the steps in developing a culturally competent system. Marra et al. (2010) concluded that while athletic trainers believed they were highly culturally competent, they operated at a lower level of competence and their behaviors did not reflect their cultural awareness and sensitivity. Furthermore, significant differences in the level of cultural competence were identified when comparing genders, race, and ethnicity. The female, multiracial/other, and black/African American groups displayed the highest levels of cultural competence, the white/Caucasian group scored in the midrange, and the American Indian/Alaskan native group ranked as the least culturally competent group (Marra et al., 2010). This isolated research indicates that the field of athletic training must increase its research, preparation, and knowledge of culturally competent health care.

Conceptual Framework

A review of the literature regarding cultural competence education and theory resulted in very limited information. Therefore, a conceptual framework was created for this research study, combining social justice theory, insurgent multiculturalism, and sociocultural learning theory to inform the practice of cultural competence education in athletic training (Figure 1). This

Figure 1. Conceptual Framework



conceptual framework was created by first identifying which theories were present in the literature. Rather than indiscriminately identifying and focusing on only one theory, a conceptual framework was designed, utilizing the theories that best informed each research question.

Social justice theory frames the justification for cultural competence and can be applied to athletic training and education. When applied to health care, social justice theory states that human rights, fairness, and equality should be the center of appropriate care and it is essential that health care providers seek justice for the inequities and injustices experienced by their patients (Edwards, Delany, Townsend, & Swisher, 2011). In order to accomplish this, Edwards et al. (2011) cited that justice in health care should focus on contractarianism, utilitarianism, and capability:

In order to achieve equity in health, contractarianism focuses on fair procedures in the distribution of resources, whereas utilitarianism focuses on maximizing the utility or benefit across a population. ...we have presented a newer perspective on justice in the form of the capability approach, which focuses on the actual lives and situation of people and emphasizes opportunity, choice, and agency. The capability approach to justice offers practitioners a means of becoming active in enacting justice within clinical practice situations, understanding inequity and injustice in more inclusive and relational terms. (p. 1651).

With regards to education and educators, social justice theory dictates that education literature must focus on education in a social and political context and explore how individuals are recognized or misrecognized as deserving of rights (Apple, 2011). Apple (2011) cited that “teachers and teacher educators need to know much more about the home countries – and about the movements, politics, and multiple cultural traditions and conflicts from where diasporic populations come” (p. 223). In addition, the curricular framework for baccalaureate nursing programs specifically references social justice several times throughout the nine Essentials, citing that social justice is fundamental to the discipline of nursing (American Association of Colleges of Nursing, 2008). When social justice theory was applied to cultural competence education, Humphreys (2011) found that undergraduate students’ level of cultural competence increased through educational models of intergroup dialogue focused on cultural diversity and social justice. “This must be accomplished within a framework that integrates knowledge about past and present social forces and its impact on oppressed specific populations, as well as the integration of skills for changing oppressive conditions” (Humphreys, 2011, p. 201). Thus,

social justice theory can be applied to athletic training cultural competence education, focusing on social justice knowledge, skills, and self-awareness.

Insurgent multiculturalism, when applied to society and education, states that unequal distributions of power lead to inequalities and dominance (Kanpol, Giroux, and McLaren, 1996). Educational curriculums must progress from simply informing students of cultural differences to teaching insurgent multiculturalism from a social justice perspective. In order to accomplish this, students must begin to understand how power imbalances lead to limitations on the ability of subordinate cultural groups to seek fair and equitable treatment (Kanpol et al., 1996). Wear (2003) stated that:

Insurgent multiculturalism, particularly when it is tied to professional development focusing on altruism, duty, and respect, must take into account personal attitudes in the patient-doctor relationship and then move on into the community where patients live, patients whose health is often impeded by policies, structures, institutions, and governmental protocols... Longitudinal curricular experiences must be developed that allow students to develop relationships with individuals and families whose “differences” – nondominant ethnic identities, poverty, disability, language difficulties – put them at disadvantage for health-related services and at risk for illness.

When applied to athletic training education, insurgent multiculturalism theory can provide depth to a cultural competence curriculum and defines cultural competence education as a longitudinal process of correlating cultural differences with power inequalities.

Finally, sociocultural learning theory states that individuals learn through a process of observation, rehearsal, and reinforcement, and it emphasizes the interconnectivity of social and individual processes (John-Steiner & Mahn, 1996). Sociocultural learning theory is rooted in

Vygotsky's radical "reorientation of learning theory from an individualistic to a sociocultural perspective" (Kozulin, 2003, p. 15). Kozulin (2003) further explained this theory by stating:

The key concept in this new orientation is that of psychological tools. Psychological tools are those symbolic artifacts – signs, symbols, texts, formulae, graphic organizers – that when internalized help individuals master their own psychological functions of perception, memory, and attention. (p. 16)

John-Steiner and Mahn (1996) also stated that sociocultural approaches "are based on the concept that human activities take place in cultural contexts, are mediated by language and other symbol systems, and can be best understood when investigated in their historical development" (p. 191). In order to facilitate learning, athletic training educators must embrace the sociocultural learning theory in both the classroom and the clinical setting. According to Peer and McClendon (2002), "a constructive, self-regulated, and goal-oriented environment with the student at the center of the educational process" is critical (p. S-136). When applied to cultural competence education, it is clear that learning over time, active learning, and experiential opportunities are essential components of a cultural competence curriculum.

While many theories can be applied to cultural competence, social justice theory, insurgent multiculturalism, and sociocultural learning theory, when combined, can inform comprehensive cultural competence education in athletic training. This conceptual framework illustrates how culturally competent health care can reduce health disparities and improve the efficiency and equity of care for all patients. It also supports a world view that previous experiences and resultant biases influence daily interactions and interpretations of situations and individuals, with regards to health care education and delivery. Finally, it frames the process of cultural competence education.

Cultural Competence Education

Athletic training educators are currently faced with the challenging task of integrating multicultural curriculum in an effective and comprehensive manner (Rodriguez & Romanello, 2008). The National Athletic Trainers' Association (NATA) creates and disseminates the minimal content required in Commission on Accreditation of Athletic Training Education (CAATE) accredited athletic training curriculums, with certain competencies having particular focus on cultural competence (Table 5) (National Athletic Trainers' Association, 2011). This, combined with the NATA Code of Ethics, provides a framework for cultural competence

Table 5. *2011 National Athletic Trainers' Association Cultural Competencies*

Content Area	Competency
Foundational Behaviors of Professional Practice – Cultural Competence	1. Demonstrate awareness of the impact that clients'/patients' cultural differences have on their attitudes and behaviors toward healthcare.
	2. Demonstrate knowledge, attitudes, behaviors, and skills necessary to achieve optimal health outcomes for diverse patient populations.
	3. Work respectfully and effectively with diverse populations and in a diverse work environment.
Psychosocial Strategies and Referral – Knowledge and Skills: Theoretical Background	PS-4. Summarize and demonstrate the basic processes of effective interpersonal and cross-cultural communication as it relates to interactions with patients and others involved in the healthcare of the patient.
	PS-5. Summarize contemporary theory regarding educating patients of all ages and cultural backgrounds to effect behavioral change.
Psychosocial Strategies and Referral – Knowledge and Skills: Psychosocial Strategies	PS-10. Explain the impact of sociocultural issues that influence the nature and quality of healthcare received (e.g., cultural competence, access to appropriate healthcare providers, uninsured/underinsured patients, insurance) and formulate and implement strategies to maximize client/patient outcomes.

(National Athletic Trainers' Association, 2011)

curriculum development (Appendix B) (National Athletic Trainers' Association, 2016).

The increase in athletic training cultural competence competencies suggests that current or recent students are becoming increasingly culturally competent (Maurer-Starks et al., 2007). However, the survey administered by Marra et al. (2010) revealed that of the 53.8% of the participants who had received some form of diversity training, 89.7% felt that their diversity training was not specific to athletic training. Marra et al. (2010) also found that the athletic trainers who had received previous diversity training scored higher on a Cultural Competence Assessment, which indicates that diversity training or education may increase one's cultural competence level (Marra et al., 2010). Furthermore, research suggests that athletic trainers who have not been exposed to formal education settings recently may benefit from continuing education opportunities (Maurer-Starks et al., 2007).

Other medical professions have also recently added or increased cultural competence curriculum, in an effort to meet the demands of current and future diverse patient populations (Fuller, 2002; Green, 2008; Kripalani, Bussey-Jones, Katz, & Genao, 2006). In medicine, cultural competence is essential to providing competent care and navigating patient care issues related to ethnic diversity (Seeleman, Suurmond, & Stronks, 2009). The Liaison Committee on Medical Education (LCME) accredits medical education programs and outlines cultural competence and health care disparities in the Curricular Content Standard (Table 6) (Liaison Committee on Medical Education, 2017). Fuller (2002) noted that "it is incumbent on medical educators to train physicians who are capable of interacting appropriately and effectively with a broad array of individuals from a broad array of populations and cultures" (p. 198). She argues that essentialism must be eradicated from cultural competence education. While focusing on deviations or differences from the 'normal' is at the foundation of medical practice, medical

Table 6. 2017 Liaison Committee on Medical Education Cultural Competence Standard

Standard	Description
7: Curricular Content 7.6 Cultural Competence and Health Care Disparities	<p>The faculty of a medical school ensure that the medical curriculum provides opportunities for medical students to learn to recognize and appropriately address gender and cultural biases in themselves, in others, and in the health care delivery process. The medical curriculum includes instruction regarding the following:</p> <ul style="list-style-type: none"> • The manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments • The basic principles of culturally competent health care • The recognition and development of solutions for health care disparities • The importance of meeting the health care needs of medically underserved populations • The development of core professional attributes (e.g., altruism, accountability) needed to provide effective care in a multidimensional and diverse society

(Liaison Committee on Medical Education, 2017)

educators must not enforce essentialist approaches to deciphering ‘normal.’ That is, current medical practice must not mirror 18th century essentialism, where essentialists subdivided the human species into ‘races,’ where each member within a certain ‘race’ was assumed to possess identical psychosocial and cultural traits. Current medical educators must ensure that essentialist approaches are dismantled by ethnographic, historical, and archaeological research. This can be accomplished by emphasizing individual diversity within cultures and races in medical cultural competence education (Fuller, 2002).

In nursing, cultural competence training has been discussed and researched since at least the 1970s. The Commission on Collegiate Nursing Education (CCNE) accredits nursing programs and utilizes the American Association of Colleges of Nursing’s (AACN) Essentials of Baccalaureate Education for Professional Nursing Practice to inform accreditation standards (Commission on Collegiate Nursing Education, 2013). Culture or cultural competence is cited in seven of the nine AACN Essentials, indicating that the AACN views cultural competence as an

entity that must be infused into different areas of nursing practice (Table 7) (American Association of Colleges of Nursing, 2008). While the long-standing cultural competence focus has been strong in nursing, Sargent, Sedlak, and Martsof (2005) indicated that cultural competence can be increased by including more structured cultural content in nursing curriculum throughout the entire program of studies.

Likewise, physical therapy educators have been integrating cultural competence training as threads throughout the curriculum, seminars, modules, and specific courses since at least the 1990s (Dupre & Goodgold, 2007). The Commission on Accreditation in Physical Therapy Education (CAPTE) grants accreditation to physical therapy education programs and disseminates the Physical Therapy Standards and Required Elements. Unlike athletic training, medicine, and nursing, the physical therapy educational standards do not specifically address culture or cultural competence at all. The only citation of the words diverse or diversity were utilized in reference to achieving a diverse student body, “consistent with societal needs for physical therapy services for a diverse population” (Commission on Accreditation in Physical Therapy Education, 2016, p. 17). Thus it is not surprising that Dupre and Goodgold (2007) noted that the development and refinement of this cultural competence curriculum in physical therapy is necessary and ongoing.

Preparation and Teaching Strategies

According to Rose (2013), cultural competence training and education should focus on knowledge-based, attitude-based, and skill-building approaches (Table 8). “Ideally, an ATEP [Athletic Training Education Program] should facilitate development of knowledge, skills, and attitudes needed to participate in reflective civic action, which will enable students to function effectively in a pluralistic democratic society” (Rodriguez & Romanello, 2008, p. 41). Andrews

Table 7. 2008 American Association of Colleges of Nursing Essentials Referencing Culture

Essential	Description
I: Liberal Education for Baccalaureate Generalist Nursing Practice	<ul style="list-style-type: none"> • Successful integration of liberal education and nursing education provides graduates with knowledge of human cultures, including spiritual beliefs, and the physical and natural worlds supporting an inclusive approach to practice. The study of history, fine arts, literature, and languages are important building blocks for developing cultural competence and clinical reasoning. • Liberal education, including the study of a second language, facilitates the development of an appreciation for cultural and ethnic diversity. • The baccalaureate program prepares the graduate to: 5. Apply knowledge of social and cultural factors to the care of diverse populations. • Sample content: principles related to working with peoples from diverse cultures
II: Basic Organizational and Systems Leadership for Quality Care and Patient Safety	<ul style="list-style-type: none"> • Baccalaureate nursing graduates are distinguished by their abilities to identify, assess, and evaluate practice in care delivery models that are based in contemporary nursing science and are feasible within current cultural, economic, organizational, and political perspectives.
V: Healthcare Policy, Finance, and Regulatory Environments	<ul style="list-style-type: none"> • The baccalaureate program prepares the graduate to: 6. Explore the impact of socio-cultural, economic, legal, and political factors influencing healthcare delivery and practice.
VI: Interprofessional Communication and Collaboration for Improving Patient Health Outcomes	<ul style="list-style-type: none"> • Sample content: interprofessional and intraprofessional communication, collaboration, and socialization, with consideration of principles related to communication with diverse cultures
VII: Clinical Prevention and Population Health	<ul style="list-style-type: none"> • The baccalaureate program prepares the graduate to: 7. Collaborate with other healthcare professionals and patients to provide spiritually and culturally appropriate health promotion and disease and injury prevention interventions. • Sample content: cultural, psychological, and spiritual implications of clinical prevention and population health

VIII: Professionalism and Professional Values

- Through this connection, the nurse and patient work toward an understanding of a wide variety of physical, psychosocial, cultural, and spiritual needs, health illness decisions, and life challenges. ... In this global society, patient populations are increasingly diverse. Therefore, essential to the care of diverse populations is the need for evidence-based knowledge and sensitivity to variables such as age, gender, culture, health disparities, socioeconomic status, race, and spirituality.
- Sample content: cultural humility and spiritual awareness

IX: Baccalaureate Generalist Nursing Practice

- The increasing diversity of this nation's population mandates an attention to diversity in order to provide safe, humanistic high quality care. This includes cultural, spiritual, ethnic, gender, and sexual orientation diversity. In addition, the increasing globalization of healthcare requires that professional nurses be prepared to practice in a multicultural environment and possess the skills needed to provide culturally competent care.
 - The baccalaureate program prepares the graduate to: 1. Conduct comprehensive and focused physical, behavioral, psychological, spiritual, socioeconomic, and environmental assessments of health and illness parameters in patients, using developmentally and culturally appropriate approaches. 7. Provide appropriate patient teaching that reflects developmental stage, age, culture, spirituality, patient preferences, and health literacy considerations to foster patient engagement in their care.
 - Sample content: culturally diverse care
 - The nursing program determines and assesses clinical sites to ensure the clinical experiences for students provide: patients from diverse backgrounds, cultures, and of differing gender, religious, and spiritual practices
-

(American Association of Colleges of Nursing, 2008)

et al. (2011) stated that in nursing, cultural competence training should focus on cognitive, affective, and psychomotor cultural competencies. Particular attention should also be placed on the development of skills required for addressing the “nursing and culture care needs of individuals, groups, and communities that are diverse, with special emphasis on those at risk for health disparities” (Andrews et al., 2011, p. 303). However, achieving cultural competence education efficacy requires extensive faculty preparation, meticulous curriculum design and

Table 8. *Approaches to Cultural Competence Training and Education*

Approach	Focus	Content and Goals
1. Knowledge-based	Specific information of relevance to cultural competence	<ul style="list-style-type: none"> • Definitions about culture, race, ethnicity, linguistic competence, and related concepts • Details about health-seeking behaviors of various cultures
2. Attitude-based	Improving awareness of factors that may impact the provision of optimal services to patients	<ul style="list-style-type: none"> • Awareness of attitudes, values, and beliefs • Perspectives about language and other culturally and linguistically relevant factors
3. Skill building	Specific skill sets to prepare individuals to provide culturally competent care	<ul style="list-style-type: none"> • Communications skills • Trust, value, and appreciation

(Rose, 2013)

implementation, interdisciplinary collaboration, effective application, and appropriate assessment.

Faculty Preparation

The first step to implementing cultural competence curriculum in any educational program is to ensure that the classroom and clinical educators have the appropriate training in culturally competent health care (Hobgood et al., 2006; Kumagai & Lyson, 2009; Lazaro & Umphred, 2007). A study by Lazaro and Umphred (2007) found that the majority of physical therapy educators perceived their cultural diversity knowledge to be ‘inadequate.’ This is most likely not isolated to physical therapy educators and it is hypothesized that similar results would be found in other medical disciplines. Educators focused on implementing critical cultural competence education must be ready for pedagogic and personal challenges, for this endeavor is often difficult and complex (Geisler, 2003; Romanello, 2007). This normally requires additional training as well as continued education, and must also be linked to steadfast administrative

support for the teaching of content that is sensitive to the core of one's values, beliefs, and attitudes (Musolino et al., 2010).

In order to prepare for teaching cultural competence, educators must first explore their own cultural competence, seek opportunities to enhance their level of training, and continually adapt to a changing patient demographic and student population (Ford, 2003; Geisler, 2003; Kumagai & Lypson, 2009; Romanello, 2007). Geisler (2003) noted that:

Critically reflective educators must start talking, exploring, and allowing their individual and collective positions to be challenged and flexible to reformation and enhanced clarity. In effect, an educator must begin this internal process of critical discourse with the self before he or she is able to externalize perspectives and initiate like conversations with others. (p. 148)

The University of Michigan Medical School provides cultural competence educators with reference and background information, thought pieces, and self-reflective exercises. This, combined with extensive faculty development workshops, active learning, feedback, and stimulated reflective learning, facilitates the preparation phase of multicultural education (Kumagai & Lypson, 2009). In a descriptive piece, Fan et al. (2011) indicated that the most important step in designing faculty development courses is to identify the areas that the faculty report they need improvement, such as professional development, personal growth, and mentoring skills. In conclusion, most cultural competence educators require extensive preparation training that is customized to their particular cultural knowledge and skill deficiencies.

Curriculum Design

Once an educator has the appropriate background knowledge, skills, and tools, he or she must face the fact that there are no ‘best practices’ since cultural competence education must be longitudinal, fluid, and adaptive to the students, educators, and institutional culture (Geisler, 2003; Lyson, Ross, & Kumagai, 2008). However, several researchers have proposed cultural competence frameworks or formats for educators to follow when designing and implementing cultural competence curriculum, resulting in organized and prioritized learning for the student (Crenshaw et al., 2011; Seeleman, Suurmond, & Stronks, 2009). Nevertheless, it must be noted that just as cultural competence is fluid and on-going, so too should be the educational design and approaches (Seeleman et al., 2009). All educators must evaluate the university culture and the students’ backgrounds in order to adapt their curriculum to ever-changing academic and clinical environments (Chun, 2010). For example, assuming that certain populations, such as minority students, will be naturally culturally sensitive or that Western medicine is an accepted approach would create educational shortcomings (Chun, 2010). Thompson (2005) found that even though minority physicians often feel that they are more culturally competent than they are, studies show that the culture of the physician has little to no direct relationship to the level of culturally competent care provided. This is supported by Capell et al.’s (2008) findings regarding a moderately strong inverse relationship between cultural competence and ethnocentrism. Customizing cultural competence curriculums to the audience and context is crucial to creating effective learning outcomes.

Several examples of cultural competence frameworks were located in the research studies used in this literature review. Seeleman et al. (2009) and Núñez (2000) proposed that educators focus on several essential cultural competence competencies in medicine, categorized by

knowledge, attitudes and awareness, and skills and abilities. Romanello's (2007) theoretically grounded integration of cultural competence includes the examination of values, beliefs, and attitudes, immersion experiences, knowledge of cultural differences, and a willingness to work with others different from oneself. Similarly, Crenshaw et al. (2011) noted that cultural competence medical education should focus on four concepts: patient's background, provider/health care, cross-culture, and resources to manage cultural diversity. If focusing on learning objectives, Robins et al. (1998) suggested that the curriculum should facilitate the ability to: discuss one's cultural values and worldviews, recognize unity and diversity within small groups, engage in nonjudgmental and respectful discussions, and discuss the positive outcomes of culturally competent health care. More specifically, Musolino et al. (2010) created a Cultural Competency and Mutual Respect program that focuses on four modules: (1) accountability and mutual respect; (2) attitudes, beliefs, and expectations: disparity of care and relationships; (3) systems diversity: solutions to cultural clashes; and (4) cross-cultural communication. Finally, Kripalani et al. (2006) created a comprehensive list of elements that may improve cultural competence education, based on educational principles and aspects of successful programs (Table 9). This active, multi-level curriculum was designed to yield long-term results. In summary, it is clear that there are a variety of educational models for cultural competence education, with several common key features such as an infusion across the curriculum, learning about attitudes, beliefs, and respect, completing self-reflection exercises, and building communication skills.

Interdisciplinary Collaboration

The athletic training educator does not need to feel compelled to create cultural competence curriculum alone, for one can seek the assistance of other educators. Referring to

Table 9. *Prescription for Success in Cultural Competence Education*

Features
1. Teach practical skills
2. Use interactive educational methods, such as standardized patient encounters, role-play, and self-reflective journal assignments
3. Provide direct faculty observation and feedback
4. Discuss cultural competence throughout clinical education, rather than in isolated workshops
5. Get buy-in from the top
6. Promote cultural diversity among medical students and at all levels of the Medical School faculty
7. Involve an “opinion leader” as the physician champion
8. Develop a cadre of dedicated faculty
9. Make it a “real science”

(Kripalani et al., 2006)

professors and previously established curriculum in cultural competence, or related disciplines, is critical to the planning and implementation of cultural competence education, as well as vital to promoting interdisciplinary collaboration (Geisler, 2003; Núñez, 2000). The Core Competencies for Interprofessional Collaborative Practice was developed by the Interprofessional Education Collaborative (IPEC), which is sponsored by six professional associations: the American Association of Colleges of Nursing, the American Association of Colleges of Osteopathic Medicine, the Association of Schools of Public Health, the American Association of Colleges of Pharmacy, the American Dental Education Association, and the Association of American Medical Colleges. The IPEC derived interprofessional collaborative practice competencies from the educational competencies specific to individual health professions, by linking them to the five Institute of Medicine core competencies for all health professionals. The focus of the four

competency domains is to enhance safe, high quality, accessible, patient-centered care by fostering a team-based care approach (Interprofessional Education Collaborative, 2011). Three of the interprofessional collaborative practice competencies specifically reference culture, in respect to patients, health professions, and individuals (Table 10).

In medical education, Green, Betancourt, and Carrillo (2002) recommended that educators should combine other content areas often not covered by cultural competence education. For example, social factors such as socioeconomic status, illiteracy, immigration, religion, social stressors, life control, and social support networks should be explored within cultural competence curriculum. “What is important is that doctors in training be sensitive to the patient’s social context, know how to explore the relevant issues, and to use what they learn to provide better care and to avoid developing negative stereotypes” (Green, 2008, p. 194). In women’s health education, Núñez (2000) noted that with an interdisciplinary approach:

Not only is faculty buy-in broadened, but various viewpoints – gained from primary care, medical anthropology, psychiatry, clinical skills educators, ethicists, health services researchers, and epidemiologists – all bring unique perspectives that enable learners to delineate the complex reality of the woman’s world and of cross-culturally appropriate health care. (p. 1073)

The use of combined curriculum will often illustrate more clearly the cultural differences of individuals, as they relate to social barriers to effective health care and cultural beliefs surrounding appropriate health care (Green, 2008). Furthermore, collaboration can extend beyond institutional walls. Andrews et al. (2011) reported on a collaborative partnership between the Transcultural Nursing Society (TCNS) and two nursing schools at different

Table 10. 2011 Interprofessional Practice Competencies Referencing Culture

Competency Domain	Competency
1: Values/Ethics for Interprofessional Practice	VE3. Embrace the cultural diversity and individual differences that characterize patients, populations, and the health care team. VE4. Respect the unique cultures, values, roles/responsibilities, and expertise of other health professions.
3: Interprofessional Communication	CC7. Recognize how one's own uniqueness, including experience level, expertise, culture, power, and hierarchy within the healthcare team, contributes to effective communication, conflict resolution, and positive interprofessional working relationships.

(Interprofessional Education Collaborative, 2011)

universities, the University of Michigan-Flint and Madonna University. Through this type of collaboration, it was noted that:

The University of Michigan-Flint and Madonna University are benefiting from the partnership through networking opportunities with TCNS scholars and other leaders in the discipline of TCN [transcultural nursing]; enhancing the reputation of the two universities as sources of knowledge and expertise on current, state-of-the-art, evidence-based, best practices in cultural competence; TCN in general; increasing the cultural competencies of nursing students and faculty in each university; and building programs that meet the needs of counterparts in service and education settings. (p. 306)

While collaboration between several institutions or groups requires additional funding and staffing, it appears to be a useful option for those teaching cultural competence in health care education.

Curriculum Implementation

The first task in the implementation of cultural competence curriculum is to clearly define the terms utilized in cultural competence training, for learners may often confuse the

many terms used in conjunction with cultural competence. Furthermore, distinguishing the differences between cultural competence, cultural humility, patient-centered care, professionalism skills, interpersonal skills, and communication skills will increase awareness that cultural competence is different from previously acquired knowledge and skills. It will also provide reasoning for the cultural competence training, for an individual who has excellent interpersonal and communication skills would still benefit from cultural competence training. This leads to a second task, establishing a buy-in. The educators and students must commit to cultural competence training in order to facilitate effective and meaningful education (Chun, 2010; Sargent et al., 2005). This commitment must also be long-term, for cultural competence is an evolving, life-long process. The final critical step in successful cultural competence education is to create an environment of active learning, open dialogue, exploration, and sharing (Ford, 2003; Geisler, 2003; Jenks, 2011; Kumagai & Lyson, 2009; Maurer-Starks et al., 2007; Rodriguez & Romanello, 2008; Sargent et al., 2005). This will create a non-threatening climate, which will lead to deeper explorative exercises, where personal boundaries, viewpoints, and cultural backgrounds can be examined (Geisler, 2003).

While observing several cultural competence educators, Jenks (2011) noted that experienced cultural competence “facilitators and educators made a conscious effort to emphasize that culture cannot be thought of as a bound object or uniform list of traits and that providers must be careful not to make assumptions about how their patients will think or behave” (p. 217). However, this is often difficult in reality, for “cultural competence educators walk a fine line between presenting specific examples that highlight the relevance of cultural difference and discouraging health providers from assuming that all members of one particular group will be the same” (Jenks, 2011, p. 217). In fact, “many textbooks provide insufficient, incorrect, or

stereotypic information about cultural groups that, when used, only teach students how to stereotype” (Núñez, 2000, p. 1073).

In order to navigate the need to illustrate the importance and gravity of cultural competence while refraining from providing specific lists of cultural beliefs and actions, educators are encouraged to present information in a ‘generalization’ context rather than in a ‘stereotyping’ manner. When discussing specific cultural differences, it is imperative that the educator emphasizes viewing these differences as ‘generalizations,’ or a “beginning point that indicates common trends but leaves room for individual differences” (Jenks, 2011, p. 218). This allows for the presentation of specific examples of cultural differences, in an effort to provoke understanding and exploration, rather than accepting cultural stereotypes. However, reactions to this type of ambiguous approach in medical education is often varied; while medical students are not taught a specific ‘list of traits’ for any given culture, they are also often left yearning for more detail about specific cultural differences (Jenks, 2011). Furthermore, the effectiveness of a ‘generalization’ approach has not yet been studied in detail.

Clinical Application

The clinical application of cultural competence education must not be ignored. The findings of Thompson et al. (2010) indicated that the classroom and clinical cultural competence curriculum must be interconnected. Kent State University’s College of Nursing connects the classroom cultural content to the clinical coursework by including cultural competence in the course objectives of every clinical course throughout the entire program of studies (Sargent et al., 2005). Supporting this curricular approach, all of the participants of a pilot cultural competence program directed by Robins et al. (1998) felt that diversity training is more effective when grounded by clinically relevant topics. One approach to incorporating clinically relevant

learning initiatives is to use first-person narratives or other stories to foster perspective-taking and enhance empathic connections, while illustrating relevancy (Kumagai & Lybson, 2009).

Preparing clinical faculty to teach cultural competence is just as important as preparing the classroom instructors, as was discussed earlier. Thompson et al. (2010) recently studied the cultural competence perceptions of medical students in clinical training. They found that the students perceived that they were often more cultural competent than their clinical educators. The researchers hypothesized that this disparity was possibly due to: the students entering into the clinical phase with a strong classroom background in cultural competence, informal clinical cultural competence education that is not recognized by the student, ineffectiveness on the part of the student to recognize their own weaknesses and biases, generational differences, or teaching exposure length. This study reveals that extensive training, guided discussions, and reflections should accompany clinical application experiences, in order to facilitate effective cross-context learning.

Assessment Strategies

Educators must identify and use validated assessment and evaluation tools in order to determine a student's preparedness to serve diverse populations (Rose, 2013). While cultural competence may be viewed as unscientific, several assessment tools have been established, such as the Tool for Assessing Cultural Competence Training (TACCT) and the Cross-Cultural Care Survey. Using established assessment tools will validate the importance of cultural competence training in a predominantly scientific field, as well as provide informative efficacy feedback (Chun, 2010). However, formal assessment tools for cultural competence must be implemented carefully. The term "cultural competence" may often imply an understanding of and proficiency in all cultures, or an accomplishment of a list of goals or competencies (Chun, 2010; Kumagai &

Lypson, 2009; Seeleman et al., 2009). Educators must recognize that cultural competence is a life-long process that should not be considered complete at any point in time (Ford, 2003; Marra et al., 2010). Therefore, assessment tools should reflect understanding, progress, and continued development rather than full completion or failure (Kumagai & Lypson, 2009). Multiple-choice questions often oversimplify culture and promote stereotyping, so some examples of appropriate assessment tools include longitudinal activities and reflection, self-awareness assessments, thoughtful discussions, interpretive projects, and essays (Kumagai & Lypson, 2009; Lypson et al., 2008; Núñez, 2000).

The assessment of cultural competence education must also evaluate the students' perspectives, for educational techniques that might work for one cohort may falter with the next. Lypson et al. (2008) found extreme value in surveying current medical students' perspectives and they were able to identify several key areas in need of improvement within the University of Michigan Medical School curriculum. The students suggested that full integration of multiculturalism curriculum was necessary (with an emphasis during the third year clerkship), they questioned if the topic could even be taught or learned, they thought that some of the case studies presented reinforced stereotypes, they wanted more 'real' patient experiential learning opportunities, and they recognized a lack of formalized assessments (Lypson et al., 2008). Perception assessment results from within a particular curriculum, such as those from the University of Michigan, can guide improvement initiatives in educational programs and enhance learning outcomes.

Specific Cultural Competence Exercises

Marra et al. (2010) and Rodriguez and Romanello (2008) suggested that educators must better prepare students for serving diverse populations by focusing on increased diversity

awareness and training. Athletic training students should be engaged in learning strategies that promote an understanding, acceptance, and respect for cultural differences (Rodriguez & Romanello, 2008). This usually requires a certain level of higher-level thinking, in order to critically examine social injustices and biases, and effectively empathize with patients (Geisler, 2003). Geisler (2003) stated that “perhaps instilling and developing a genuine appreciation and mastery of critical multicultural issues will help with the development of physical and cognitive skills pertaining to the medical and human sciences” (p. 147). Kumagai and Lybson (2009) added that “from a pedagogic perspective, development of true fluency (and not just ‘competence’) in these areas [humanism, medical ethics, professionalism, and multiculturalism] requires critical self-reflection and discourse and anchors a reflective self with others in social and societal interactions” (p. 783). If implemented properly, these educational techniques involving critical thinking, reflection, interactive dialogue, and engaging discussions can lead to the knowledge and awareness necessary to carry out culturally competent health care (Kumagai & Lybson, 2009)

Ice Breakers

Jenks’ (2011) research included attending many cultural competence sessions and workshops, during which, she was exposed to several different exercises. Often, cultural competence training sessions opened with an icebreaker aimed at illustrating the cultural diversity within the audience itself. One exercise involved a ‘cultural scavenger hunt,’ where the participants were given a list of characteristics that they needed to ‘find’ in others in the audience. In a similar activity, the ‘Diversity Shuffle,’ the audience members were instructed to cross the room when a particular characteristic that was announced applied to oneself. Both of

these icebreaker exercises illustrated the diversity as well as the common characteristics present in the audience.

Self-Exploration

Several authors indicated that in order to provide culturally competent care, athletic trainers must first explore their own values, beliefs, biases, attitudes, and styles of communication (Black & Purnell, 2002; Ford, 2003; Geisler, 2003; Kumagai & Lypson, 2009; Lazaro & Umphred, 2007; Maurer-Starks et al., 2007; Rodriguez & Romanello, 2008; Romanello, 2007). This can begin with a preliminary online cultural self-assessment, such as the Cultural Competence Health Practitioner Assessment (CCHPA). This particular online assessment tool focuses on six elements of cultural competence: values and beliefs, cultural aspects of epidemiology, clinical decision making, life-cycle events, cross-cultural communication, and empowerment-health management. Following completion of the CCHPA, the students receive feedback regarding their cultural awareness, knowledge, and skills, along with suggested reading materials (Cross et al., 2008).

The preliminary self-assessment can be complemented with written reflections regarding oneself as well as real or simulated patient encounters, for recognizing how one's own perspectives, values, beliefs, and biases influence patient care can challenge students' perceptions of the care they provide (Dupre & Goodgold, 2007; Geisler, 2003; Jenks, 2011; Lazaro & Umphred, 2007; Núñez, 2000; Rodriguez & Romanello, 2008). Campinha-Bacote (1999) describes this as the development of cultural awareness and explains that:

These tasks are imperative because there is a tendency to be ethnocentric regarding one's own values, beliefs, and practices. Without being aware of the influence of one's own

cultural values, there is a risk that health care providers may engage in cultural imposition. (p. 204).

Lazaro and Umphred (2007) supported Campinha-Bacote by explaining that without cultural awareness, the risk for perpetuation of cultural stereotypes and misconceptions rises. A specific example of a cultural awareness exercise is the ‘My Health Care Culture’ activity, where the health care providers are instructed to detail the foods and medicines they use when they are ill. The differences noted within the audience can illustrate how even health care providers differ on common approaches to the management of injuries and illnesses (Jenks, 2011). However, facilitating quality reflection exercises usually requires small, facilitator-led groups so multiple well-trained educators or peer facilitators are usually necessary (Musolino et al., 2010; Núñez, 2000).

Individuals who identify discomfort in the presence of others from different cultures or during cultural conversations should also explore their anxiety and biases (Maurer-Starks et al., 2007; Romanello, 2007). “Athletic training education must promote the ability to create and carry on meaningful discourses that cause each person to reflect, reformulate, and transform our respective ways of seeing, hearing, and thinking” (Geisler, 2003, p. 148). Robins et al. (1998) found that many medical students reported significant discomfort with culture, sexual orientation, and power curriculum. It is vital to recognize that uneasiness is often a component of the process and the educator must be prepared to facilitate the students’ progression from discomfort to comfort.

Guest Speakers

Once the students’ personal cultural competence has been explored, cultural competence issues in health care can be integrated into the classroom (Geisler, 2003). When implementing

cultural competencies in a curriculum, cultural competence guidelines, speakers, assessment tools, resources, and comprehensive curriculum must be established. Health care providers who currently work in diverse health care settings are excellent guest speakers, for they can provide critical perspectives and experiences (Geisler, 2003).

Classroom Exercises

Vredenberg and Wimer (2006) recommended implementing exercises and discussions that focus on how people judge others, based on external characteristics. For example, Rodriguez and Romanello (2008) suggested sentence completion exercises such as ‘Men are ____.’ This will allow the students an opportunity to explore their own, and society’s, unconscious and conscious stereotyping, in an effort to promote diversity open-mindedness (Rodriguez & Romanello, 2008; Vredenburg & Wimer, 2006).

The University of Pennsylvania’s Master’s of Science in Nursing program utilizes clinical case scenarios. In this exercise, the students must prepare a clinical case scenario based on an acute or chronic health problem. They are to incorporate cultural, spiritual, or ethical considerations in the management plan, which also requires investigations into the community services provided, in the field of nontraditional medicine (Cross et al., 2008).

Immersion Experiences

Rodriquez and Romanello (2008) recommend that athletic training students should engage in ‘immersion’ experiences, where diverse populations are served, in order to increase understanding, decision making, and social action skills. Campinha-Bacote (1999) and Dupre and Goodgold (2007) also note that cultural encounters may reverse preliminary stereotyping that may be a result of formal classroom training, for face-to-face interactions with patients will often refine or modify one’s existing knowledge and beliefs regarding a cultural group. This can

be accomplished locally or internationally, dependent upon the experiences available. Johns and Thompson (2010) illustrated programming aimed at taking nursing ‘immersion’ experiences internationally to Guatemala and Dupre and Goodgold (2007) also documented international community service in physical therapy education, where students were encouraged to travel to Nicaragua to enhance their cultural training. Since studying abroad is not always feasible in restrictive athletic training curriculum, Guyer (2011) and Jutte (2011) recommend developing short-term, faculty-led study abroad experiences. A short-term, faculty-led study abroad program “is a course that provides academic credit and that involves travel to another country to explore aspects of the country’s language, culture, history, society, environment, architecture, and art” (Guyer, 2011, p. 17). Studying abroad will often enhance the development of global understanding and cultural sensitivity, thus training practitioners to be competent in the global health arena (Dupre & Goodgold, 2007; Guyer, 2011; Johns & Thompson, 2010; Jutte, 2011; Pechak & Thompson, 2009). It should also be noted, however, that successful ‘immersion’ programming should focus on pre-placement preparations, for it is wise to perform preliminary self-assessments as well as research the popular cultures served (Johns & Thompson, 2010).

From a cultural assignment perspective, while students are placed at a clinical ‘immersion’ site, they can conduct a community agency assessment. This involves investigating how well the clinical site serves diverse populations and identifying cultural concerns with the associated strategies for intervention, within seven key features (Table 11) (Cross et al., 2008). In summary, several authors agree that immersion or cultural encounters will enhance the opportunities to apply newly acquired cultural understandings and competencies, in an effort to move towards cultural competence (Campinha-Bacote, 1999; Guyer, 2011; Jutte, 2011; Rodriguez & Romanello, 2008; Sargent et al., 2005).

Table 11. *Description of Community Agency Attributes*

Feature	Investigation
1. Agency characteristics	<ul style="list-style-type: none"> • Philosophy • Nature and scope of services • Source of funding • Relationship to other agencies • Unique function
2. Target population	<ul style="list-style-type: none"> • Older persons • Families • Homeless • Homebound
3. Environmental	<ul style="list-style-type: none"> • Accessibility to public transportation • Accommodations for patients with special needs • Wayfinding in a language other than English
4. Personnel	<ul style="list-style-type: none"> • Degree of diversity • Levels of responsibility
5. Resources	<ul style="list-style-type: none"> • Interpretive services • Multicultural educational materials • Multicultural consent forms
6. Reimbursement	<ul style="list-style-type: none"> • Acceptance of all insurances
7. Evaluation tools	<ul style="list-style-type: none"> • Consumer feedback • Quality assurance programs

(Cross et al., 2008)

Limitations

Due to limited research directly related to cultural competence and athletic training, the literature review was expanded to include cultural competence in medicine, nursing, and physical therapy. The application of research to athletic training that was conducted in a different discipline must be done with caution, in order to ensure that misguided generalizations do not occur. A second limitation is that the research included in the review focused on cultural competence education, in relation to health care only. Other cultural competence research exists in many fields such as business; however, the application of such research to the field of health

care education was not attempted in this literature review. A third limitation is that the literature chosen for this review focused on cultural competence education in the United States only. An international review of cultural competence education may be necessary in order to support or refute the common practices used in the United States. A final limitation involves the research obtained for this review. Overall, very few original research studies have been conducted regarding many of the topics in this literature review, such as pedagogical practices and associated outcomes. Therefore, the research and concepts presented within must often be recognized as single or isolated evidence-based research, rather than research supported by numerous authors.

Future Research

This literature review revealed that athletic training severely lacks research regarding cultural competence. An exhaustive search yielded ten articles published on cultural competence and athletic training, only two of which were original research. Marra et al. (2010) was the first in the field to conduct original research on this topic, focusing on Certified Athletic Trainers' level of cultural competence and Volberding (2012) followed up with similar research regarding athletic training students. Their conclusions that self-reported cultural competence was higher than reality illustrates a need to explore possible reasons why athletic training students and practicing athletic trainers are not as culturally competent as desired or perceived. Therefore, an investigation into the educational strategies implemented by Athletic Training Programs is warranted. Several areas of exploration should focus on the Athletic Training Programs' cultural competence educator preparation, curriculum design, curriculum implementation, and assessment strategies. Specifically, research must assess athletic training educators' cultural

competence preparation, pedagogical strategies, and assessment tools, and compare that information with other successful health care education programs.

Future research should also focus on outcomes assessments for the common pedagogical approaches detailed in the literature. While specific educational activities were detailed and defended, very few exercises were presented with corresponding empirical effectiveness evidence. For example, while the exercises may be effective in a classroom or workshop environment, they may underestimate the emotional underpinnings of cultural differences (Jenks, 2011). Therefore, assessing the application of newly acquired cultural competence knowledge is required, in an effort to determine the effectiveness of the ‘common’ pedagogical strategies documented. This can be accomplished by assessing the quality of care provided by athletic trainers, from the patient’s perspective.

Conclusion

“Cultural competence is an essential component in rendering effective health care services to culturally and ethnically diverse clients” (Campinha-Bacote, 1999, p. 206). In cultural competence education, focusing on learning specific skills or specific details about a particular culture should be avoided; rather, students and health care providers should be encouraged to “recognize that [cultural] differences exist, welcome more knowledge about these differences, and seek to treat each patient as an individual” (Jenks, 2011, p. 229). Cultural competence education must also focus on open dialogue and ‘open-mindedness’ in a comprehensive and longitudinal format. This curriculum must be integrated into the educational process, across several years, which requires constant communication in order to reduce content redundancy and ensure that the consecutive phases of the students’ cultural growth are fostered (Cross et al., 2008; Núñez, 2000). In conclusion, cultural competence education is complex and

appears to be underestimated in athletic training education. Several facets of this topic must be explored in the future in order to enhance and support educational initiatives in athletic training cultural competence education.

CHAPTER 3: METHODOLOGY

Introduction

The previous chapter's literature review revealed that athletic trainers are predominantly White, which can lead to cultural inequalities and dominance, with regards to the type of health care provided. In addition, Athletic Training Programs are required to teach cultural competence, yet no research exists to document the current practice of cultural competence education in these programs, thus, there is a gap in the knowledge of practice. Therefore, this study investigated the extent to which athletic training cultural competence education is being implemented, how it is being taught, and the challenges faced when implementing it. The following chapter describes the research methods that were used to investigate this research topic.

Research Questions

This research study is the first known study to investigate cultural competence education practices in Athletic Training Programs. It investigates current practices by addressing the following research questions:

- 1) To what extent is cultural competence education in undergraduate Athletic Training Programs being implemented?
- 2) How is athletic training cultural competence education being taught?
- 3) What challenges do athletic training educators face when implementing cultural competence education?

Methodological Design

The three research questions focus on providing a “snapshot” of the current state of cultural competence education in athletic training. Since the research study assessed cultural

competence education at one point in time without determining causal relationships, it is a descriptive research study. And since the research questions sought factual and subjective states, a survey and an interview were the appropriate data collection methods (Groves, Fowler, Couper, Lepkowski, Singer, & Tourangeau, 2009). An electronic survey was also appropriate for this research study because a large sample can be accessed, the survey can be disseminated and completed in an efficient manner, the possible answers are more controlled for comparison and analysis, and it can be completed at the participants' convenience (Reitz & Anderson, 2013; Schleyer & Forrest, 2000; Sheehan & McMillan, 1999). In addition, this electronic survey was designed to promote a high response rate by using the following strategies, which have been shown to promote higher response rates: maintaining a relatively short survey, asking simple questions, refraining from aggressive dialogue that would be perceived as threatening one's cultural competence, and directing the survey towards individuals who would be able to provide the requested information fairly effortlessly (Dillman & Smyth, 2007; Dillman, Sinclair, & Clark, 1993). The follow-up interview collected additional information that was not appropriate for the electronic survey, such as information that the participant would have to research while completing the survey and information that would be easier to communicate through an open dialogue.

Research Design

In order to explore the current practice of athletic training cultural competence education, a national, cross-sectional survey was performed, with Athletic Training Programs as the unit of analysis. Since this is the first study of its kind in athletic training, survey development was required. In order to locate an appropriate survey to utilize as a framework, the parameters of the literature review were expanded and a study performed by Rowland, Bean, and Casamassimo

(2006) was located. Rowland et al.'s (2006) study, titled "A Snapshot of Cultural Competency Education in U.S. Dental Schools," involved an electronic survey that was sent to assistant or associate deans for academic affairs at dental schools in the United States. The focus of this study was to describe the status of cultural competency education in dental schools, which closely mirrors the research goals for this study. Therefore, Dr. Rowland was contacted and permission to adapt and modify his survey was obtained (Appendix C).

In order to modify Dr. Rowland's survey to athletic training, questions that were not applicable to athletic training were removed. Then, a framework was created using the three research questions for this study as a foundation, followed by the focus of each question and the theories that inform each question (Table 12). Upon completion of the initial framework, questions from Dr. Rowland's study and information obtained from the literature review were used to create the questions and response options for this survey instrument (Appendix D).

During the design of the electronic survey, it was determined that certain detailed information and explanations were not appropriate for an efficient electronic survey. Therefore, a follow-up telephone interview was created, which focuses on obtaining detailed information

Table 12. *Survey Instrument Design*

Research Question	Focus	Theory
1. To what extent is cultural competence education in undergraduate Athletic Training Programs being implemented?	<ul style="list-style-type: none"> • Data 	<ul style="list-style-type: none"> • Social justice • Insurgent multiculturalism • Sociocultural learning
2. How is athletic training cultural competence education being taught?	<ul style="list-style-type: none"> • Data • Behavior 	<ul style="list-style-type: none"> • Social justice • Insurgent multiculturalism • Sociocultural learning
3. What challenges do athletic training educators face when implementing cultural competence education?	<ul style="list-style-type: none"> • Data • Belief 	

that would likely not be obtained by an electronic survey as well as elaborating upon certain aspects of cultural competence education (Appendix E). This telephone interview was designed to be administered to approximately three to six institutions that, upon preliminary analysis of the electronic survey results, appear to demonstrate comprehensive cultural competence education.

Prior to Institutional Review Board approval, the electronic survey and the follow-up telephone interview were reviewed by four researchers in the field of statistics (one researcher) and athletic training (three researchers) in order to clarify questions and establish face validity. Establishing face validity was appropriate due to the descriptive nature of the study, the lack of relevant content domain, and the responses being reported at the item level. In addition, due to the small sample size, full pilot testing was not appropriate. Two individuals who would not be solicited to complete the research study were selected to pre-test the instrumentation. These individuals held similar roles and responsibilities as the respondents but were not the specific individuals who were asked to complete the study. This process yielded information regarding expected length of time for completion, instruction and question clarity, and overall impression of the survey and interview.

Variables and Instrumentation

Variables

The ATP type (undergraduate) served as the inclusion criteria and verified that all of the responses analyzed were from undergraduate programs. Background information was collected, focusing on: the size, type, and setting of the institution; the length and size of Athletic Training Program (ATP); and the racial background of the ATP students. The size of the institution is a nominal variable, based on the Carnegie Classification System (2010). The type of institution,

the institution setting, and the student racial background are also nominal variables. In addition, the length of the ATP and the number of athletic training students are ratio variables.

Curriculum design and implementation was explored through questions regarding courses, teaching discipline, curriculum design, theories, and topics covered. The following nominal variables were included in this section of the survey: where cultural competency is offered in the curriculum, the department responsible for this content, interdisciplinary course offerings, theoretical influences, and the topics covered. Whether or not the cultural competence curriculum is designed based on institutional and student cultures is a dichotomous variable, which semester the cultural competence content is offered is an interval variable, and how many courses contain this content is a ratio variable.

The preparation strategies used by the Athletic Training Programs were investigated through questions regarding the number and racial backgrounds of the instructors, the professional training of the primary instructor, and the preparation techniques used by the primary instructor. The number of instructors is a ratio variable and whether or not the primary instructor is an Athletic Trainer is a dichotomous variable. In addition, the racial background, professional training, and preparation techniques are nominal variables.

The teaching strategies being used were identified through information gathered regarding textbooks, methods of instruction, and immersion experiences. Textbook requirements is a dichotomous variable and methods of instruction and immersion experiences are nominal variables. Finally, challenges encountered were explored through curriculum challenges, preparation challenges, and teaching challenges, all of which are nominal variables (Appendix F).

Instrumentation

The first research question, to what extent is cultural competence education in undergraduate Athletic Training Programs being implemented, was investigated using the information obtained in the curriculum design and implementation and the preparation strategies sections of the electronic survey, as well as seven of the telephone interview questions. The second research question, how is athletic training cultural competence education being taught, was explored through the background information, curriculum design and implementation, preparation strategies, and teaching strategies from the electronic survey and five of the telephone interview questions. Finally, research question three, what challenges do athletic training educators face when implementing cultural competency education, was addressed through the challenges encountered section of the electronic survey as well as one of the telephone interview questions (Table 13).

Population and Sample

The sample for this study was undergraduate Athletic Training Programs in the United States. Most undergraduate Athletic Training Programs require four years of undergraduate education. However, the other types of programs, such as Post-Professional and Residency Programs, typically vary in duration from one to five years. Therefore, in order to adequately compare cultural competence practices between programs and report cultural competence practices in undergraduate programs, this study was restricted to undergraduate programs only. The specific participants who were selected to complete this research study were the Program Directors for each undergraduate ATP or the instructor or professor who primarily teaches cultural competence in the ATP. The participants were chosen based on their knowledge of, and

Table 13. *Research Questions and Correlated Instrumentation*

Research Question	Electronic Survey Questions	Telephone Interview Questions
1. To what extent is cultural competence education in undergraduate Athletic Training Education programs being implemented?	<ul style="list-style-type: none"> • Curriculum design and implementation • Preparation strategies 	<ul style="list-style-type: none"> 1. Course description and location 3. Topics 4. Topics 6. Theories 7. Theories 8. Strengths 10. Future directions
2. How is athletic training cultural competence education being taught?	<ul style="list-style-type: none"> • Background information • Curriculum design and implementation • Preparation strategies • Teaching strategies 	<ul style="list-style-type: none"> 2. Instructor background and training 5. Working definition 6. Theories 7. Theories 10. Future directions
3. What challenges do athletic training educators face when implementing cultural competence education?	<ul style="list-style-type: none"> • Challenges encountered 	<ul style="list-style-type: none"> 9. Challenges

(See Appendices D and E)

familiarity with, their program’s curriculum and the instructors or professors who teach cultural competence content to undergraduate athletic training students at their institution.

The sample and population consisted of the following:

Target population: All undergraduate Athletic Training Programs in the United States. (Professional baccalaureate, active – in good standing programs only).

Accessible Population: All 310 undergraduate Athletic Training Programs in the United States, with publicly listed email addresses for the Program Director.

Sample: All 310 undergraduate Athletic Training Programs.

Data Collection Procedures

In order to collect data for this research study, each undergraduate Athletic Training Program Director was contacted by email and possibly telephone. An initial email was sent to all 310 Program Directors, with follow-up emails sent one and two weeks after the initial email, requesting their participation. The email explained the research study, requested participation, explained and obtained consent, assured confidentiality, and included a URL link to the electronic survey questionnaire (Appendix G). Following these three emails, a colleague who is also a Program Director sent the email out again. After four attempts via email to solicit responses, a second strategy was employed to increase the response rate. The email distribution list was randomized and the first 60 Program Directors were selected to receive a phone call followed up by an email, soliciting participation. It has been shown that follow-up contact requesting participation may increase the response rate and minimize nonresponse error (Martins, Lederman, Lowenstein, Joffe, Neville, Hastings, & Abel, 2012). After seven weeks, the emails and telephone calls resulted in: 91 surveys accessed, for a view rate of 29.35%, 64 completed surveys, for a response rate of 20.65%, and a 70.34% completion rate. Fourteen of the participants indicated that they would be willing to participate in a follow-up telephone interview. The electronic survey data for these 14 participants were preliminarily analyzed, and five Athletic Training Programs were identified as programs that appeared to be implementing cultural competence education well. The participants at these five programs were contacted by email, requesting their participation in a follow-up telephone interview (Appendix G). Four of the five selected Athletic Training Programs agreed to participate in a telephone interview. The telephone interviews were conducted over a two week period and were audio recorded for

transcription purposes. Throughout the data collection, data analysis, and any publication of this study, confidentiality was and will be maintained by the researcher.

Data Analysis

The results of the survey were analyzed to determine the current status of athletic training cultural competence education, with Athletic Training Programs as the unit of analysis. The survey data were collected and the data analyses included: frequencies; mean, mode, and/or standard deviation; frequency distribution comparison; and chi square. Some of the frequency distribution comparisons were represented in a contingency table, which “summarizes the (joint) frequencies observed in each category of the variables” (Azen & Walker, 2011, p. 45). The audio recordings of the follow-up telephone interviews were transcribed and then coded. Anticipatory codes were not used, for the interview responses determined the emergent codes and common themes that were used to analyze the data. Once the data were transcribed and coded, summaries of each question were written. An analysis of the summaries of each interview question was performed, in order to identify common content. The interview question summaries were then thematically analyzed in an effort to identify natural themes that emerged, in relation to the three research questions. See Table 14 for the mixed methods data analysis of each research question.

Limitations

Since the accessible population for this study was not very large (310) and the survey was sent electronically, there is a possibility that sampling error could occur (Groves et al., 2009). Nonresponse error or response bias must also be accounted for, for there may be differences between the programs that did and did not complete the survey. In addition, measurement error, or errors due to question design, may occur (Dillman & Smyth, 2007; Groves et al., 2009).

Table 14. *Data Analysis of Research Questions*

Research Question	Data Analysis
Demographics	<ul style="list-style-type: none"> • Frequency <ul style="list-style-type: none"> ▫ Institution size (SQ1) ▫ Institution type (SQ2) ▫ Institution setting (SQ3) ▫ Athletic Training Student race (SQ6) • Mean, mode, and/or standard deviation <ul style="list-style-type: none"> ▫ Length of enrollment (SQ4) ▫ Number of Athletic Training Students (SQ5)
1. To what extent is cultural competence education in undergraduate Athletic Training Programs being implemented?	<ul style="list-style-type: none"> • Frequency <ul style="list-style-type: none"> ▫ Number of courses (SQ7) ▫ Course description and location (IQ1) ▫ Semester(s) offered (SQ8) ▫ Design factors (SQ11) ▫ Theory knowledge (SQ12) ▫ Theory use (SQ13) ▫ Working definition (IQ5) ▫ Theories (IQ6, IQ7) ▫ Topics (SQ14) ▫ Topics (IQ3, IQ4) ▫ Strengths (IQ8) ▫ Future directions (IQ10) • Frequency Distribution Comparison <ul style="list-style-type: none"> ▫ Theory knowledge (SQ12) and Theory use (SQ13)
2. How is athletic training cultural competence education being taught?	<ul style="list-style-type: none"> • Frequency <ul style="list-style-type: none"> ▫ Interdisciplinary course (SQ9) ▫ Course description and location (IQ1) ▫ Responsible department (SQ10) ▫ Number of instructors (SQ15) ▫ Instructor race (SQ16) ▫ Athletic trainer instructor (SQ17) ▫ Instructor background (SQ18) ▫ Instructor background and training (IQ2) ▫ Instructor preparation (SQ19) ▫ Published material (SQ20) ▫ Methods of instruction (SQ21) ▫ Immersion experience (SQ22) ▫ Strengths (IQ8) ▫ Future directions (IQ10) • Mean, mode, and/or standard deviation <ul style="list-style-type: none"> ▫ Number of instructors (SQ15)

2. How is athletic training cultural competence education being taught? (cont.)	<ul style="list-style-type: none"> • Frequency Distribution Comparison <ul style="list-style-type: none"> ▫ Interdisciplinary course (SQ9) and Institution size (SQ1) ▫ Interdisciplinary course (SQ9) and Responsible dept. (SQ10) ▫ Immersion experience (SQ22) and Institution type (SQ2) ▫ Immersion experience (SQ22) and Institution setting (SQ3) • Chi Square <ul style="list-style-type: none"> ▫ Interdisciplinary course (SQ9) and Institution size (SQ1) ▫ Immersion experience (SQ22) and Institution type (SQ2)
3. What challenges do athletic training educators face when implementing cultural competence education?	<ul style="list-style-type: none"> • Frequency <ul style="list-style-type: none"> ▫ Curriculum challenges (SQ23) ▫ Preparation challenges (SQ24) ▫ Teaching challenges (SQ25) ▫ Challenges (IQ9) ▫ Future directions (IQ10)
SQ = Survey question	IQ = Interview Question

Furthermore, an electronic survey questionnaire may have presented additional challenges, such as the respondent's comfort level with electronic surveys, a distrust of electronic communication and the protection of one's confidentiality, and computer issues such as internet speed (Dillman & Smyth, 2007).

The researcher's positionality must also be identified and discussed. One of the researcher's motivations for this research study stemmed from pursuing a terminal degree in urban education. As a result, relative to other Athletic Training Program Directors, professors, and instructors, the researcher may place a higher value and emphasis on cultural competence education than others do. The other motivation for this research study was lived experience as a cultural competence professor. The researcher acknowledges the growth she has made over the past eight years, having improved the cultural competence education within her Athletic Training Program. But, the researcher also acknowledges that there were many challenges along the way and there will always be room for improvement. This led the researcher to question whether other Athletic Training Programs are teaching cultural competence "well" and if other professors or instructors have faced similar challenges. Thus, the researcher had a personal interest in the

research study and she was predisposed to thinking that other instructors or professors endured similar experiences while delivering cultural competence content. During the survey and follow-up interview design process, the researcher had a significant influence on the formation of each question. Therefore, the researcher's worldview as a White, female, Athletic Training Program Director, and Assistant Professor may have influenced the research and survey instrument design. In addition, the researcher's positionality may have influenced the data collection and analysis processes. During the data collection phase, the researcher personally called potential participants requesting their participation, as well as conducted qualitative telephone interviews. In addition, the researcher chose the statistical analyses to be completed, given the type of data collected. All of these layers of the researcher's positionality may have influenced the research process.

CHAPTER 4: RESULTS

Introduction

This chapter will provide a summary of the electronic survey and follow-up telephone interview responses provided by either the Athletic Training Program Director or the primary instructor or professor teaching cultural competence education in each ATP. First, the participants and response rates are presented. Second, an analysis of the data is presented. The electronic survey questions were categorized into five areas of information: background information, curriculum design and implementation, preparation strategies, teaching strategies, and challenges encountered. Logically, the telephone interview questions were written with purpose but the answer provided dictated where the responses are presented within this section. The key findings of the thematic analysis of the follow-up interviews are listed in Table 15. Finally, an analysis of the data to answer each research question is presented.

Participants and Response Rates

The electronic survey was distributed to 310 undergraduate Program Directors, to be completed by the Program Director or the instructor or professor who primarily teaches cultural competence in the ATP. Of those invited to participate, 64 completed the electronic survey, for a response rate of 20.65%. Fourteen of the electronic survey participants indicated that they were willing to participate in a follow-up telephone interview. Five of these fourteen Athletic Training Programs were identified as programs that appeared to be implementing cultural competency well, and were invited to participate in a follow-up telephone interview. Four of the five selected Athletic Training Programs agreed to participate in the telephone interview.

Table 15. *Thematic Analysis of the Follow-Up Interviews*

Research Question	Interview Questions	Thematic Analysis
1. To what extent is cultural competence education in undergraduate Athletic Training Programs being implemented?	<ul style="list-style-type: none"> • Course description and location (IQ1) • Working definition (IQ5) • Theories (IQ6, IQ7) • Topics (IQ3, IQ4) • Strengths (IQ8) • Future directions (IQ10) 	<ul style="list-style-type: none"> • Early introduction, foundational approach • Infusion over time, in several courses – scaffolding • Working definition strong or weak • Theory use weak • More topics needed
2. How is athletic training cultural competence education being taught?	<ul style="list-style-type: none"> • Course description and location (IQ1) • Instructor background and training (IQ2) • Strengths (IQ8) • Future directions (IQ10) 	<ul style="list-style-type: none"> • Variance in background and training • Multiple courses – scaffolding • More interprofessional education needed • Clinical placements with diverse populations
3. What challenges do athletic training educators face when implementing cultural competence education?	<ul style="list-style-type: none"> • Challenges (IQ9) • Future directions (IQ10) 	<ul style="list-style-type: none"> • More training, guidance, and support • More communication needed • Lack of research • Institutional challenges
IQ = Interview Question		

Data Analysis

Background Information

Of the 64 institutions that responded to the electronic survey, 46.9% ($n = 30$) were large institutions, 18.7% ($n = 12$) were medium institutions, 29.7% ($n = 19$) were small institutions, and 4.7% ($n = 3$) were very small institutions (Table 16). The respondents for the follow-up interview taught in programs at three large institutions (75%) and one small institution (25%). With regards to the type of institution for the 64 electronic responses, 54.7% ($n = 35$) were public, 43.7% ($n = 28$) were private, not-for-profit, and 1.6% ($n = 1$) were private, for-profit.

Table 16. *Frequency Distribution Table of Institution Size*

Institution Size (Carnegie classification)	Frequency (f)	Percentage
Large: At least 10,000 students	30	46.9
Medium: 3,000-9,999 students	12	18.7
Small: 1,000-2,999 students	19	29.7
Very Small: Less than 1,000 students	3	4.7
Total	64	100.0

The follow-up interviews were completed with three public (75%) and one private (25%) institution. Finally, the institution settings were classified as 48.4% ($n = 31$) suburban, 28.1% ($n = 18$) rural, and 23.4% ($n = 15$) urban for the 64 survey respondents. The four programs that also completed the follow-up interview were located in suburban (50%, $n = 2$), urban (25%, $n = 1$), and rural (25%, $n = 1$) settings.

With regards to the actual Athletic Training Programs, the length of enrollment ranged from 2 to 4 years, with a mean of 2.8 years ($SD = 0.55$) and a mode of 3 years ($n = 28$). However, the four programs that participated in the follow-up interviews were 2.5 years in length (75%, $n = 3$) or 2 years in length (25%, $n = 1$). Table 17 presents the complete length of enrollment data. In addition, the total number of students enrolled in the Athletic Training Program ranged from 8 to 167, with a mean of 43 students ($SD = 27.03$). Finally, in the racial breakdown of the Athletic Training Students, White or Caucasian accounted for 78.7% of the students, followed by Black or African American representing 10.0% of the students. Table 18 presents the full Athletic Training Student racial identity breakdown. The four programs from the follow-up interviews were similar in the total group representation for mean number of students ($M = 51.7$, $SD = 14.45$) and a majority of White or Caucasian students (74.9%).

Table 17. *Frequency Distribution Table of Length of Enrollment*

Length of Enrollment	Frequency (f)	Percentage
2 years	10	15.6
2.5 years	16	25.0
3 years	28	43.7
3.5 years	4	6.2
4 years	6	9.4
Total	64	99.9

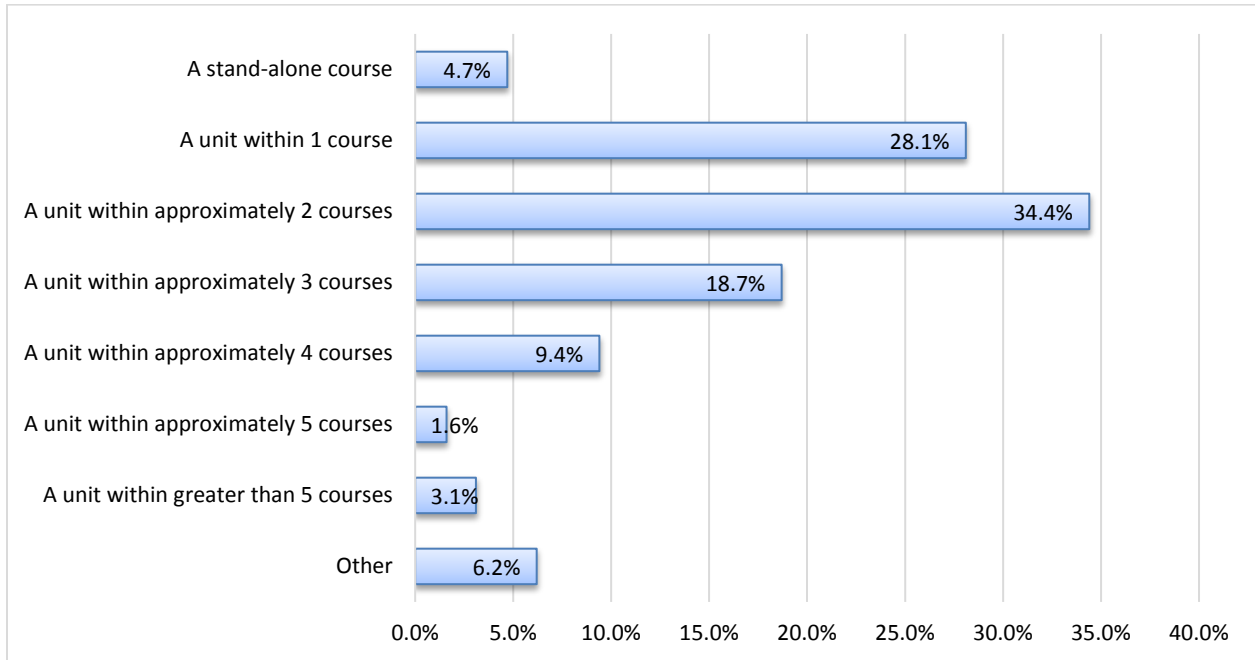
Table 18. *Athletic Training Student Racial Identity Percentages*

Racial Groups	Percentage
White or Caucasian	78.7
Black or African American	10.0
Hispanic or Latino	6.3
Two or More Racial Groups	2.2
Asian	1.8
Native American, Other Pacific Islander, American Indian, or Alaska Native	0.8
Unknown	0.2
Total	100.0

Curriculum Design and Implementation

The most common approach to delivering cultural competence education in the programs surveyed was a unit within approximately two courses (34.4%, $n = 22$), followed by a unit within one course (28.1%, $n = 18$). Only three programs indicated that they offer this curriculum as a stand-alone course, two at small institutions and one at a large institution. Figure 2 presents the full course offerings data; note, participants were able to select all responses that apply.

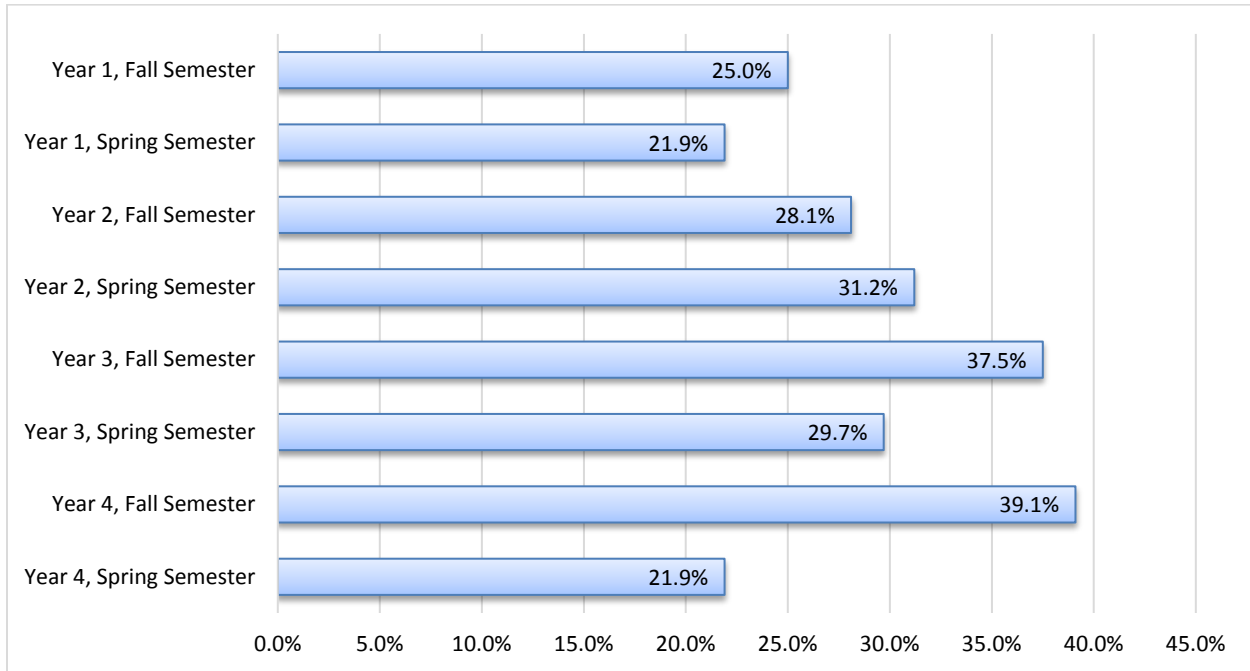
Figure 2. Cultural Competence Course Offerings



Additional “other” responses offered included two programs that offer the content in one course, across several units or the entire term, as well as two programs that infuse cultural competence education throughout the program. The four programs that participated in the follow-up interview all indicated that they taught the cultural competence content in four or five courses. One of these programs indicated that they have a stand-alone course, taught for three credit hours, solely dedicated to cultural competence, titled “Diversity Issues in the Health Profession.”

The specific semesters in which this content was delivered varied greatly, with a fairly even distribution over the length of the programs. It appears that most of the programs offer the cultural competence curriculum during years three (67.2%, $n = 43$) and four (60.9%, $n = 39$), with the least amount of offerings during year one (46.9%, $n = 30$). Figure 3 presents the full semester listings; note, participants were able to select all responses that apply. With regards to the four follow-up programs, they consistently offered this content throughout their programs. A common theme was offering the content early in the students’ studies, with a foundational

Figure 3. Timing of Cultural Competence Education



approach. These foundational teachings often focused on self-reflection, self-discovery, and foundational knowledge acquisition. Following a foundation course, the four programs often then re-introduced the cultural competence content in an application-based course, such as an evaluation course, where clinical skills were enhanced and patient scenarios were utilized. Finally, the foundational coursework and the skill coursework was often complimented by additional courses that were linked to clinical rotations. This allowed the opportunity to fully infuse the cultural competence curriculum into a practical setting. Furthermore, it afforded more opportunities to bring actual patient cases and scenarios from current clinical experiences into the classroom for group discussions.

The Athletic Training Department/Program was responsible for teaching cultural competence content in 81.2% of the programs surveyed ($n = 52$). Ten programs (15.6%) also utilized the Kinesiology or Exercise Science Department and seven programs (10.9%) looked to the Health Sciences Department, for singular or additional teaching. Other departments that

taught cultural competence curriculum within the programs included: Psychology (6.2%, $n = 4$); Sociology, Education, and Health Education or Public Health (3.1%, $n = 2$ each); and Nursing, Social Work, and Social Science (1.6%, $n = 1$ each). Figure 4 presents all of the department data; note, participants were instructed to select all departments that apply since multiple course offerings might present opportunities for more than one department to teach cultural competence.

The type of course where cultural competence is first introduced was interdisciplinary in nine programs (14.1%). Of these nine programs, six were at small institutions, two were at large institutions, and one was at a very small institution (Table 19). A chi-square test was performed and no relationship was found between the nine institutions with an interdisciplinary course offering and size of institution, $X^2 (2, N = 9) = 4.67, p = .10$ (however, all of the expected values were a 3, so the p value may not be accurate). As a whole, 31.8% of the small or very small

Figure 4. Departments Responsible for Teaching Cultural Competence

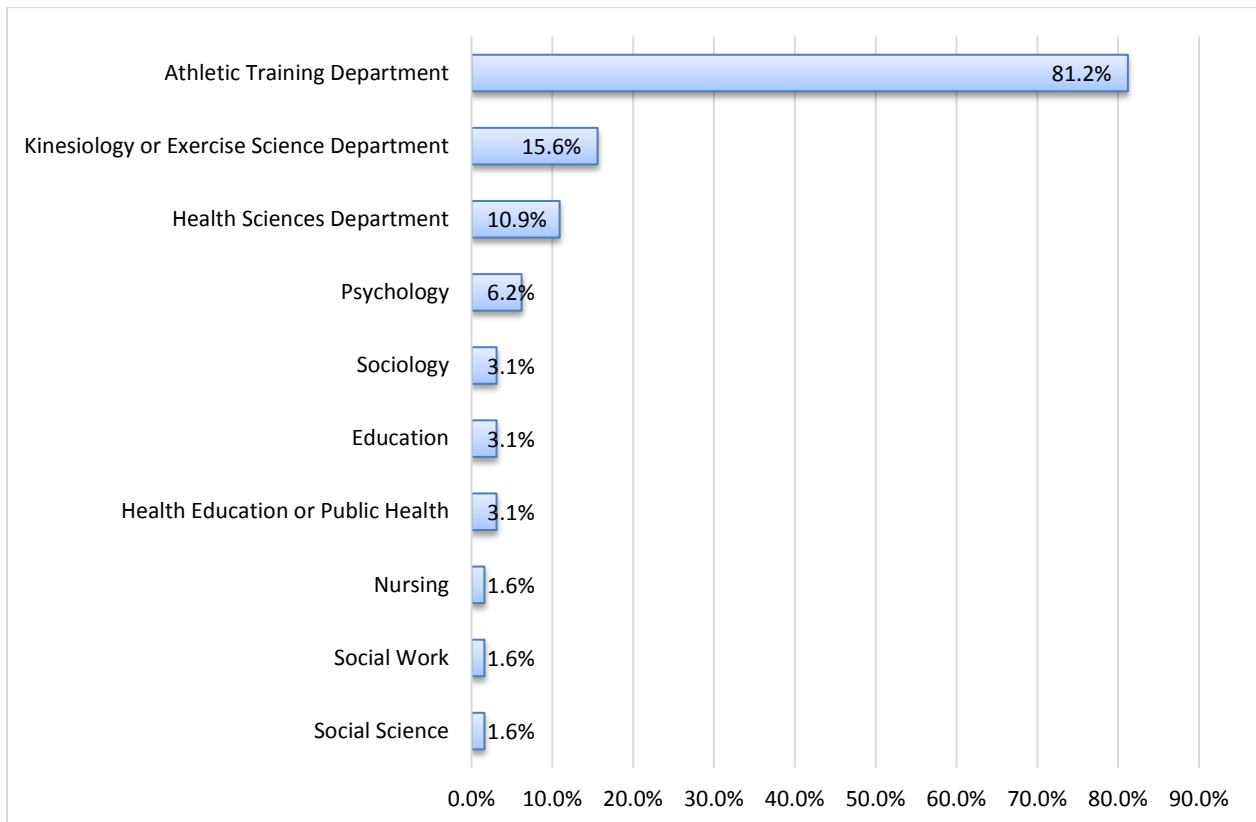


Table 19. *Reported Frequencies for Institution Size and an Interdisciplinary Course*

		Interdisciplinary Course		
		Yes	No	Total
Institution Size	Large: At least 10,000 students	2	28	30
	Medium: 3,000-9,999 students	0	12	12
	Small: 1,000-2,999 students	6	13	19
	Very Small: Less than 1,000 students	1	2	3
Total		9	55	64

institutions offered an interdisciplinary course in cultural competence, compared to 4.8% of the large or medium institutions offering such a course. The specific other majors or individuals commonly enrolled in these interdisciplinary courses included: nursing ($n = 3$), physical education ($n = 2$), exercise and sport science ($n = 2$), general education ($n = 2$), social work ($n = 1$), sport pedagogy ($n = 1$), sport management ($n = 1$), health and exercise ($n = 1$), biology ($n = 1$), and health care management ($n = 1$). Logically, in the nine programs where interdisciplinary courses were utilized, the academic departments responsible for teaching the content across the entire curriculum varied more than with the programs that did not offer an interdisciplinary course. These nine programs utilized the following departments to teach their cultural competence curriculum across the program: Athletic Training (55.5%, $n = 5$); Health Sciences and Kinesiology or Exercise Science (33.3%, $n = 3$ each); Psychology (22.2%, $n = 2$); Social Work, Nursing, Sociology, and Social Science (11.1%, $n = 1$ each). To the contrary, the remaining 55 programs utilized the following departments to teach cultural competence: Athletic Training (85.4%, $n = 47$); Kinesiology (12.7%, $n = 7$); Health Sciences (7.3%, $n = 4$); Education

and Psychology (3.6%, $n = 2$ each); and Sociology and Health Education or Public Health (1.8%, $n = 1$ each).

When designing the cultural competence curriculum for the Athletic Training Program, the following factors were considered, beyond the NATA competencies: the culture of the institution (56.2%, $n = 36$), the students' cultural background (54.7%, $n = 35$), the faculty's cultural background (34.4%, $n = 22$), none (18.7%, $n = 12$), other (15.6%, $n = 10$), and unknown (9.4%, $n = 6$). Twenty of the 64 participants (31.2%) indicated that they use all three main factors, the culture of the institution, the students' cultural background, and the faculty's cultural background, when designing their curriculum. The ten programs who selected "other" included the following in their responses: what is needed to aid in the knowledge of culture, cultural backgrounds and differences of potential patients and patient populations, broad needs, globalization, lifestyles and religions often encountered, cultural diversities in employment settings, ATP mission and goals, student learning outcomes, and health profession literature.

With regards to using theories to inform the cultural competence curriculum, the participants were more knowledgeable of social justice theory than insurgent multiculturalism or sociocultural learning theory. However, being very knowledgeable of any of the three theories was not common: 14.1% ($n = 9$) social justice theory, 12.5% ($n = 8$) sociocultural learning theory, and 3.1% ($n = 2$) insurgent multiculturalism. The majority of the participants responded that they were knowledgeable, aware but not very knowledgeable, or not at all knowledgeable, with regards to the three theories presented. Figures 5, 6, and 7 present the data regarding knowledge of the three theories surveyed.

When surveyed about which theories are being used to inform the cultural competence curriculum, the 64 programs indicated that they use the sociocultural learning theory (46.9%, $n =$

30) and the social justice theory (37.5%, $n = 24$) the most. The remaining responses were unknown (21.9%, $n = 14$), none (17.2%, $n = 11$), insurgent multiculturalism (14.1%, $n = 9$), and other (7.8%, $n = 5$). The participants who selected “other” indicated that they use critical

Figure 5. Knowledge of Insurgent Multiculturalism Theory

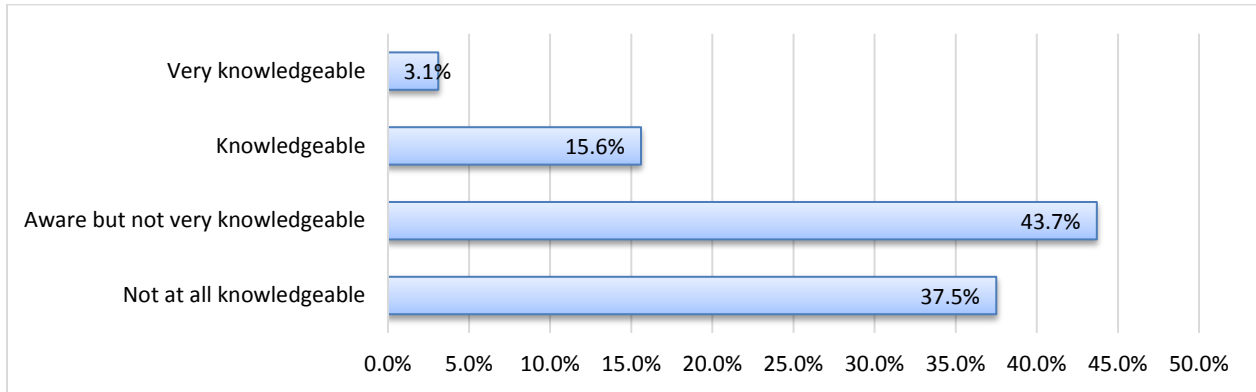


Figure 6. Knowledge of Social Justice Theory

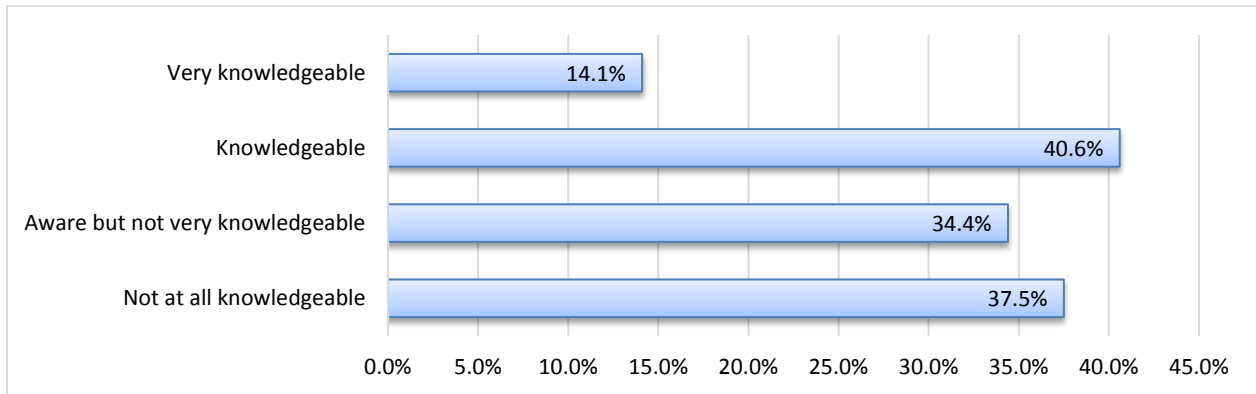
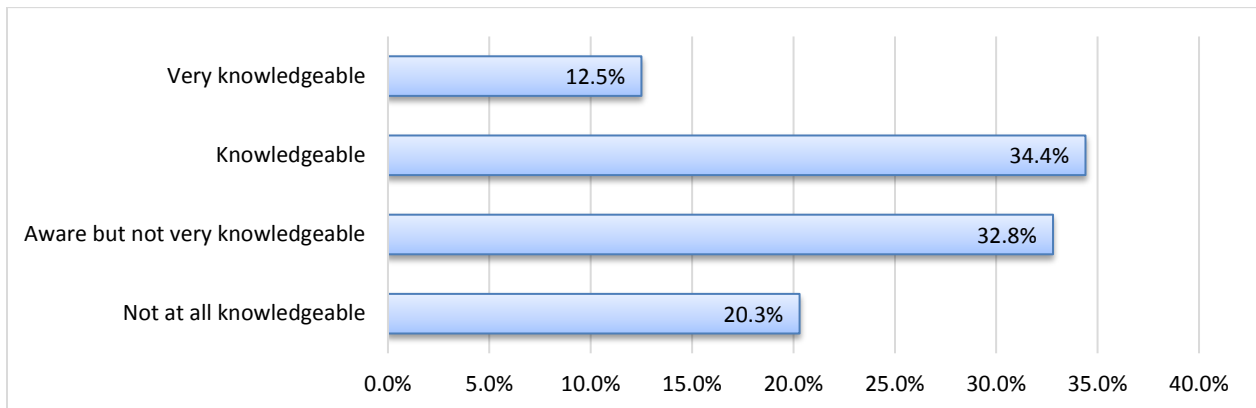


Figure 7. Knowledge of Sociocultural Learning Theory



multiculturalism, the Campinha-Bacote Model, self-discovery, and various theories. Table 20 presents the full data for comparing the utilization frequency of the three theories combined with the theory knowledge reported. It appears that most of the participants were “knowledgeable” in the theories being applied in their curriculum.

During the follow-up interviews, only two of the four programs indicated that they employ any of the theories presented on the electronic survey, the social justice theory and the sociocultural learning theory. More important was the finding that when asked about these theories, it became apparent that the respondents were not very familiar with the theoretical definitions. The remaining two follow-up programs employed the Campinha-Bacote Model and a self-discovery approach, both of which are not considered established theories. Therefore, it appears that none of the four programs interviewed were employing traditional theory to inform cultural competence education, rather they were often utilizing (effective) models or approaches, or they could not frame their approach in established theory.

When the four follow up institutions were asked to explain their working definition of cultural competence, two of the four respondents provided clear, concise definitions that

Table 20. *Reported Frequencies for Theory Use and Knowledge*

	Theory Use Frequency (f)	Theory Knowledge			
		Very knowledgeable	Knowledgeable	Aware but not very knowledgeable	Not at all knowledgeable
Insurgent multiculturalism	9	1	7	1	0
Social justice theory	24	6	16	2	0
Sociocultural learning theory	30	8	16	6	0

compliment current research definitions. For example, one respondent defined cultural competence as “understanding how to communicate to various populations in order to achieve the best goal based on that patient’s needed outcomes ... [being] able to communicate, work with, relate to, and empathize with patients and students from all backgrounds and/or life positions and age groups.” The other respondent cited two published definitions and models as his/her working definition, including the Campinha-Bacote model, “the ongoing process in which health care professionals continuously strive to achieve the ability and availability to work effectively within the cultural context of the patient” and the Spector definition, “culturally sensitive, culturally appropriate and meeting the complex culture bound health care needs of a given person, family, and community.” The remaining two programs framed their definition in vague terms or descriptions rather than a composed definition. These included “not everybody has similar experiences, similar access, ... a common language ... being able to provide an environment of not only understanding what is said but what is meant, and using that to be effective as a medical practitioner” and “being open and respectful to beliefs and cultures beyond that which you have been raised.”

The participants were surveyed regarding course content and the specific topics covered in the cultural competence courses at their institution. Twenty-two topics were presented in the survey, with a check all that apply option. At least 75% of the participants indicated incorporating some or all of the following seven topics: cross-cultural communication (87.5%, $n = 56$), gender issues (84.4%, $n = 54$), cultural barriers and clashes (82.8%, $n = 53$), accountability and mutual respect (82.8%, $n = 53$), access to care (82.8%, $n = 53$), religious differences (78.1%, $n = 50$), and socioeconomic status (75.0%, $n = 48$). Two topics were covered by less than 25% of the institutions surveyed, Hawaiian and/or Pacific Islander culture (20.3%, $n = 13$) and

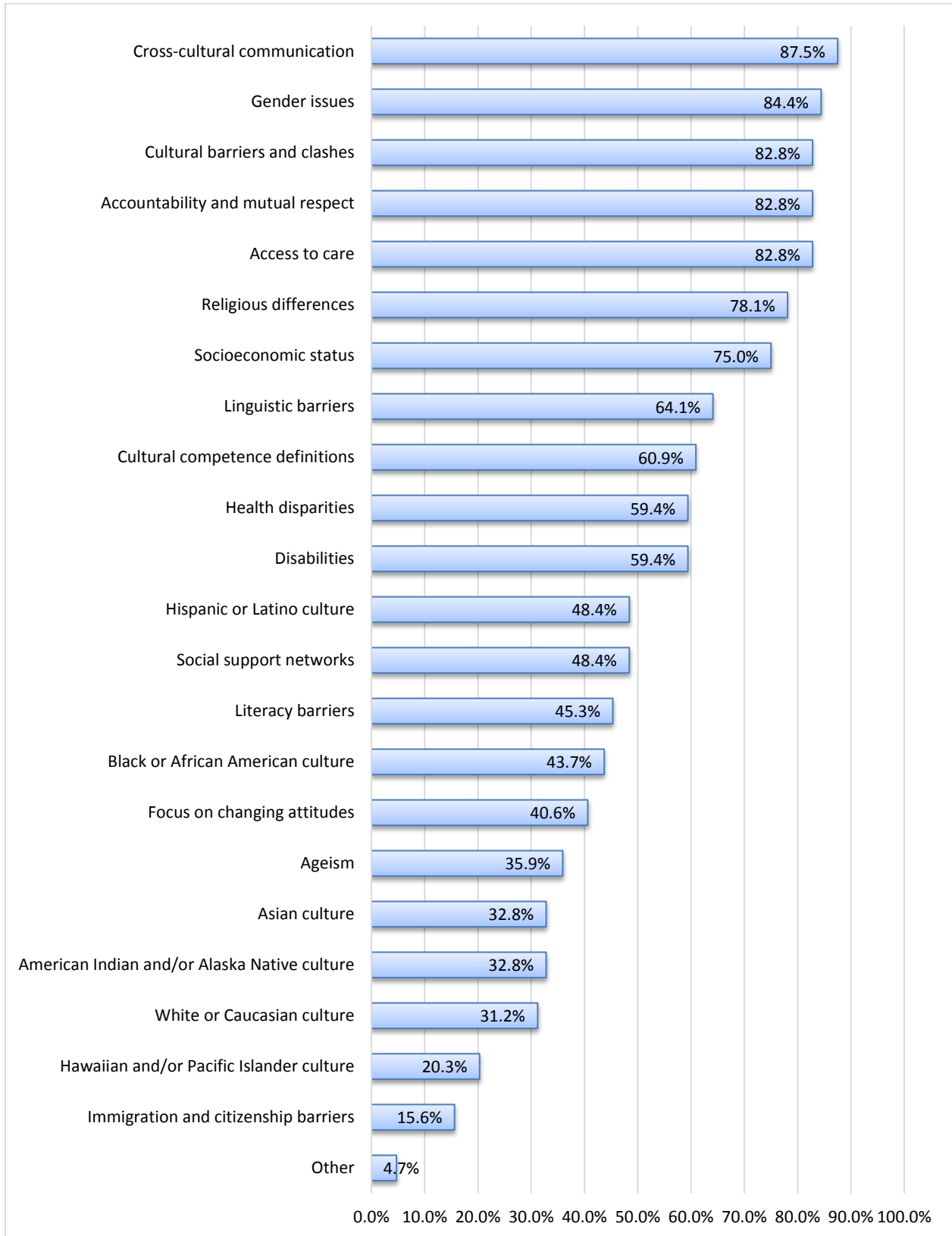
immigration and citizenship barriers (15.6%, $n = 10$). Three respondents selected “other” and indicated the following topics that were covered at their institutions: Eastern Europe; Middle Eastern; Lesbian, Gay, Bisexual, Transgender, and Queer (and/or Questioning) (LGBTQ) issues and culture; privilege including White privilege; and Historically Black Colleges or Universities (HBCUs). Figure 8 presents the full data regarding which topics are covered in the cultural competence courses offered at the 64 institutions surveyed.

During the follow-up interviews, the participants were asked to explain how they had arrived at the “list” of content covered in each of their cultural competence courses. Common themes in their responses illustrated an early focus on self-exploration, self-discovery, and self-awareness, followed by developing high quality communication skills. Then, programs often looked to their common patient population and surrounding demographics to further tailor the curriculum to the specific institution, Athletic Training Students, and patient populations, in an effort to effectively teach the students how to provide the best care to all patients. These four participants were also asked to identify any topics that they foresee adding or removing in the future. None of the participants thought that removing any topics was feasible or logical, rather, as the world continues to change, more topics will likely be added. All four participants indicated that there needs to be more focus on the LGBTQ population, two indicated that they would like to incorporate more about the geriatric population, one would like to explore disabilities more, and one mentioned adding civil rights, as applied to various populations.

Preparation Strategies

Of the programs surveyed, the mean number of different instructors or professors that teach the cultural competence content in the classroom during the course of the Athletic Training Program was 1.8 (SD = 0.83), with a mode of 1 instructor or professor. The results were as

Figure 8. Topics Covered in Cultural Competence Courses



follows: 42.2% utilize one instructor/professor ($n = 27$), 37.5% utilize two instructors/professors ($n = 24$), 17.2% utilize three instructors/professors ($n = 11$), and 3.1% utilize four instructors/professors ($n = 2$). The racial identity of these instructors was then collected; Table 21 presents the instructor/professor racial identity data, in comparison to the Athletic Training Student racial identity data from Table 18.

When focusing on the single instructor or professor who is primarily responsible for teaching the cultural competence content in each program, it was found that 87.5% of these individuals were athletic trainers ($n = 56$). Further exploration of the background or specific training of the primarily instructor or professor found that 87.5% ($n = 56$) had an athletic training background, followed by 20.3% ($n = 13$) having training in social and behavioral science. The background and training areas that eight participants listed under “other” included education (4.7%, $n = 3$), as well as public health, social work, educational administration, curriculum theory, and organizational leadership (1.6%, $n = 1$ each). Figure 9 presents all of the training and

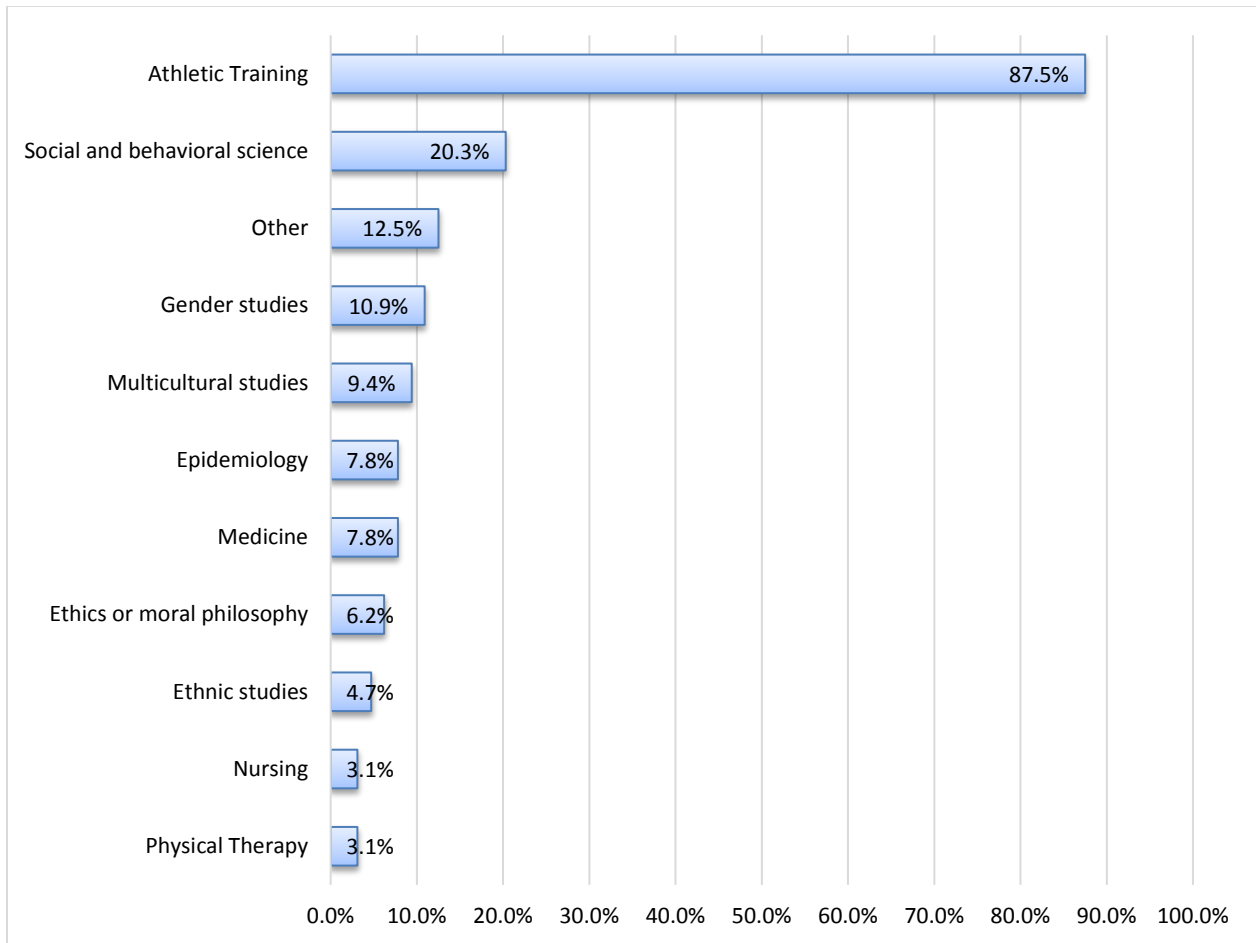
Table 21. *Athletic Training Student and Instructor/Professor Racial Identity Percentages*

Racial Groups	Athletic Training Student Percentage	Instructor/Professor Percentage
White or Caucasian	78.7	75.1
Black or African American	10.0	7.1
Hispanic or Latino	6.3	2.6
Two or More Racial Groups	2.2	7.3
Asian	1.8	1.6
Native American, Other Pacific Islander, American Indian, or Alaska Native	0.8	0
Unknown	0.2	6.3
Total	100.0	100.0

background data; note, the participants were instructed to select all that apply, since the instructor or professor could very likely have training in more than one area. During the follow-up interviews, the background of the primary professors was also explored in more depth. It was found that three of the primary professors had earned terminal degrees and one was in progress. One participant has focused intensely for the past 22 years on this specific content area where the remaining three have drawn from decades of clinical work in diverse settings, working with diverse patient populations.

How the primary instructor or professor of cultural competence prepares for teaching the subject was also investigated. The majority of the participants indicated that the primary

Figure 9. Background or Training of the Primary Cultural Competence Instructor or Professor



instructor or professor prepares in the following ways: informal instruction and experience (70.3%, $n = 45$), independent research (59.4%, $n = 38$), self-exploration and self-reflection (54.7%, $n = 35$), and continuing education workshops and seminars (53.1%, $n = 34$). Formal instruction and training was selected the least of the options provided (34.4%, $n = 22$), two participants (3.1%) indicated unknown under “other,” and one participant (1.6%) indicated travel to other countries under “other.” Figure 10 presents all of the preparation strategies data; note that the participants were instructed to select all that apply.

Teaching Strategies

Within the actual classroom, 57.8% ($n = 37$) of the respondents indicated that they use primary research articles and 56.2% ($n = 36$) of the respondents stated that they use textbooks in order to teach the cultural competence content, while 7.8% ($n = 5$) stated that they use no formal, published materials. Table 22 presents the titles of the textbooks that 22 of the programs use to teach cultural competence. “Unknown” materials was indicated by 10.9% ($n = 7$) of the respondents and “other” was selected by 9.4% ($n = 6$) of the participants, listing the following:

Figure 10. Primary Cultural Competence Instructor or Professor Preparation for Teaching

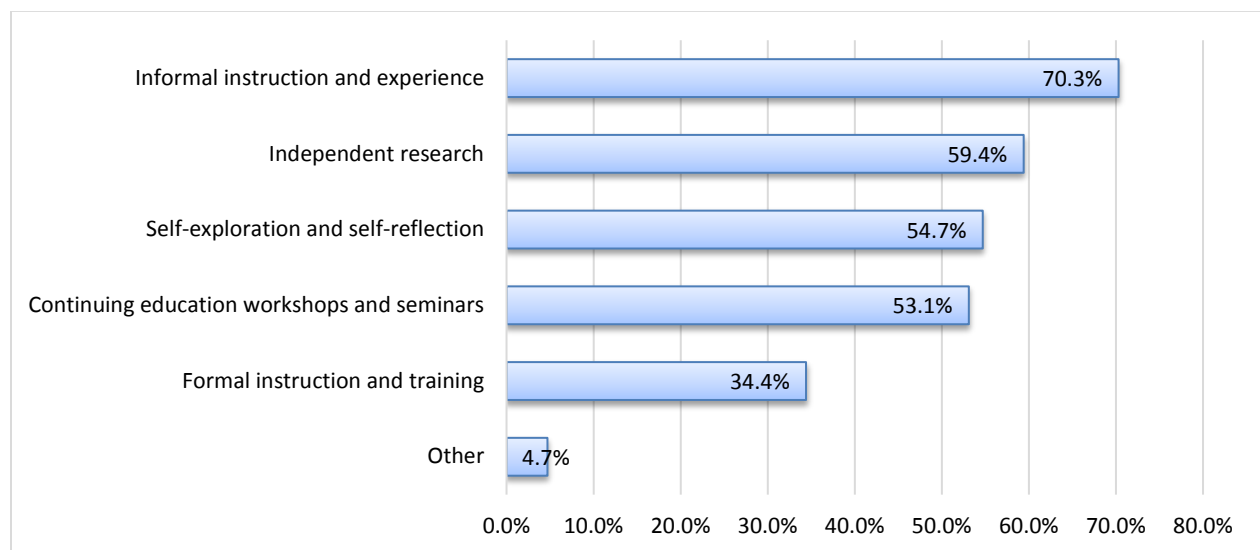


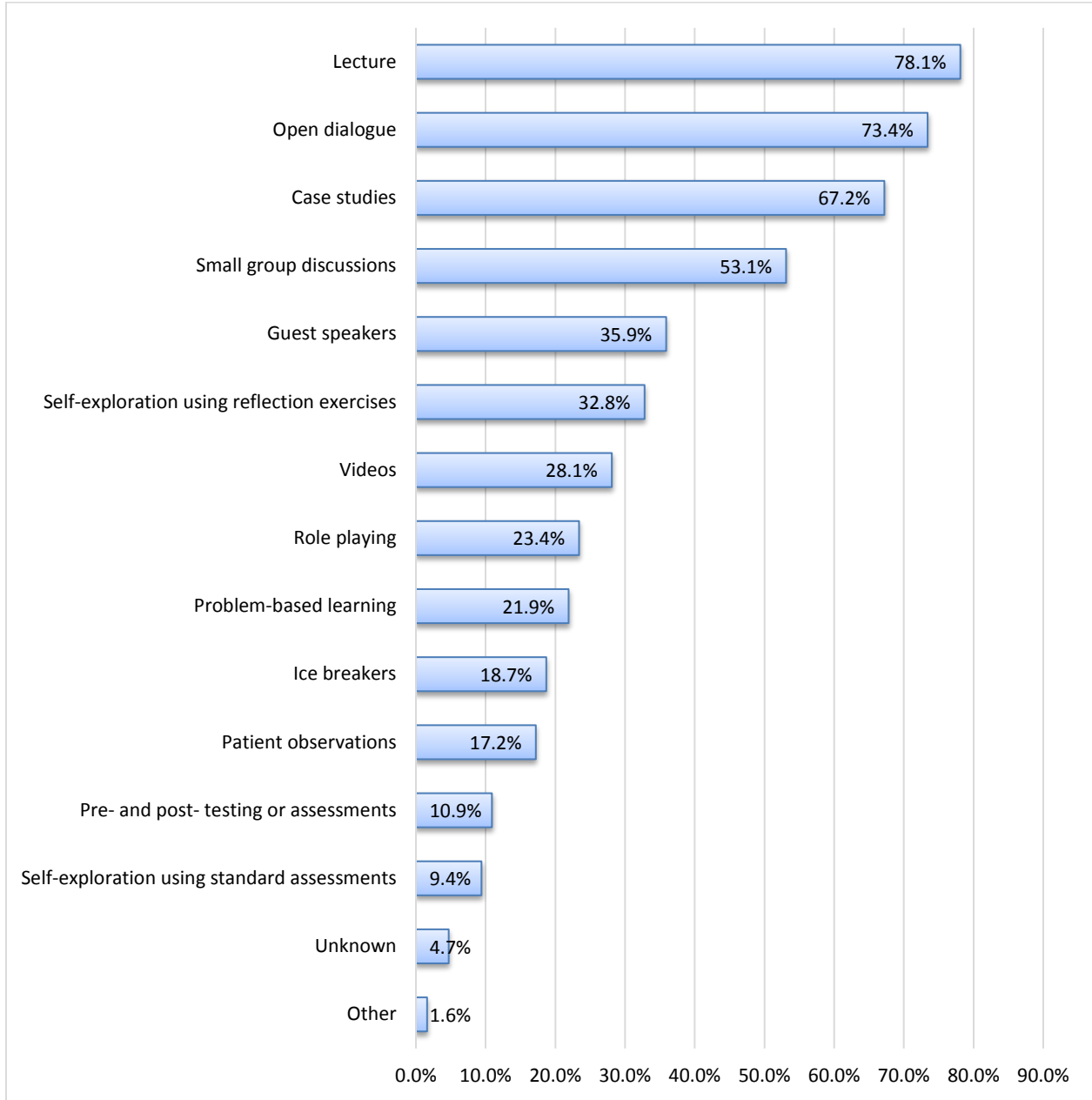
Table 22. *Textbooks Used to Teach Cultural Competence*

Textbook	Frequency (f)
Cartwright & Shingles: Cultural Competence in Sports Medicine	11
Ray & Konin: Management Strategies in Athletic Training	2
Starkey, Brown, & Ryan: Examination of Orthopedic and Athletic Injuries	2
Bates: Guide to Physical Examination and History Taking	1
Cuppett & Walsh: General Medical Conditions in the Athlete	1
Galanti: Caring for Patients from Different Cultures	1
Jarvis: Physical Examination & Health Assessment	1
Purnell: Guide to Culturally Competent Health Care	1
Rose: Cultural Competency for the Health Professional	1
Royeen & Crabtree: Culture in Rehabilitation: From Competency to Proficiency	1

websites (3.1%, $n = 2$) and videos, case studies, textbook sections, continuing education seminars, and clinical experiences (1.6%, $n = 1$ each). The specific methods of instruction that were used to teach the cultural competence curriculum in the classroom setting were also investigated. The majority of the respondents indicated using one or more of the following methods: lecture (78.1%, $n = 50$), open dialogue (73.4%, $n = 47$), case studies (67.2%, $n = 43$), and small group discussions (53.1%, $n = 34$). One participant (1.6%) added website reviews under the “other” selection. Figure 11 presents the full data for methods of instruction; note, participants were instructed to select all that apply.

To enhance the classroom experiences, none of the programs surveyed required a study abroad experience. However, 9 programs (14.1%) required one clinical placement in a diverse setting, 6 programs (9.4%) required more than one clinical placement in a diverse setting, and 49

Figure 11. Methods of Instruction Used to Teach Cultural Competence Content



programs (76.6%) required no such immersion experience. Of the nine programs that required one clinical placement in a diverse setting: seven were public institutions and two were private, not-for-profit institutions; three were urban, three were suburban, and three were rural. A chi-square test was performed and a significant relationship was found between the nine institutions that required one clinical placement in a diverse setting and the type of institution, $X^2 (2, N = 9)$

= 8.67, $p = .01$ (however, all of the expected values were a 3, so the p value may not be accurate). Of the six programs that required more than one clinical placement in a diverse setting: four were private, not-for-profit, one was private, for-profit, and one was public; three were urban and three were suburban.

Challenges Encountered

The challenges that the participants faced with regards to curriculum challenges, preparing to teach, and actually teaching cultural competence were explored in the survey questions. In all three areas, the most common answer was “no, none encountered,” with regards to curriculum challenges (53.1%, $n = 34$), challenges when preparing to teach (45.3%, $n = 29$), and challenges when teaching (65.6%, $n = 42$). The fact that so many respondents indicated that they experienced no challenges was a deviation from the expected responses, given the culture of higher education and the vast challenges associated with cultural competence education, as documented in the literature. It is possible that survey-taking fatigue may have affected the data related to challenges encountered; this will be explored more in Chapter 5. Specific curriculum challenges encountered included finding room in the curriculum (32.8%, $n = 21$), teaching cultural competence across the curriculum (31.2%, $n = 20$), identifying qualified instructors or professors to teach the content (21.9%, $n = 14$), and “other” (1.6%, $n = 1$), explained as “exposure to diverse patient populations.” When preparing to teach cultural competence, the following challenges were selected: opportunities to improve knowledge and skills (37.5%, $n = 24$), previous training and knowledge of cultural competence (31.2%, $n = 20$), and “other” (7.8%, $n = 5$). The participants expanded upon “other” with the following: resources specific to athletic training (3.1%, $n = 2$) and “we don’t do enough,” time and space in the curriculum is limited, and intentional integration into all teachings should occur (1.6%, $n = 1$ each). Finally, with regards

to challenges encountered when teaching the cultural competence content, the participants selected sensitivity of the subject matter (26.6%, $n = 17$), student resistance to the subject matter (25.0%, $n = 16$), and “other” (3.1%, $n = 2$), explained as the inability of the student to apply this to their personal life and students being fearful to be open.

The four institutions that participated in the follow up interview were asked about challenges they face or weaknesses of their cultural competence curriculum. One respondent indicated that the lack of research in the athletic training field is a major obstacle and forces them to refer to mainly nursing research. The remaining three institutions focused on institutional challenges, such as religious affiliation, geographical location and culture, clinical setting reinforcement, and length of the program. With regards to the religiously affiliated institution, discussions about sexual orientation were challenging to foster while maintaining dedication to the institution’s mission and core beliefs. The institution that faced geographical location challenges cited a culture of closed-mindedness, which resulted in increasing challenges to simply achieve an open-mindset with the athletic training students when discussing cultural competence. One respondent expressed that he/she feels that he/she teaches cultural competence very well in the classroom, but it is not always reinforced in the clinical setting due to a variety of factors, including minimal faculty and staff diversity. The final comment regarding program length focused on the ability to (or inability to) teach this content across the curriculum, over an extended period of time.

Additional Information

During the follow up interviews, the respondents were asked to identify positive features or strengths of their cultural competence curriculum. Three out of the four institutions indicated that they infuse this content into several courses, across the curriculum. One program has a three

credit stand-alone course dedicated to cultural competence and strives to connect this content both horizontally (curriculum) and vertically (clinically). Three of the respondents also highlighted clinical placements with diverse patient populations as a strength. These placements are assigned individually in one program, according to each athletic training student's background. In this program, the Athletic Training Students' individual backgrounds are assessed and the students are then placed at a clinical education site that typically sees diverse patients from backgrounds significantly different from the student's background. This individualized clinical placement process often focuses on background categories such as race, socioeconomic status, religion, age, and nationality.

The four follow-up interview respondents were also asked, in their opinion, which directions should athletic training cultural competence education move in the future. Three respondents listed specific content areas in need of more focus and exploration, such as: sexual orientation, social justice (in an effort to better advocate for patients, who might not otherwise be able to advocate for themselves), advocating for the patient while respecting the patient's desires, interpersonal relationship skills with an emphasis on communication, the changing face of culture, and international differences in medical approaches. Two respondents focused on incorporating more interprofessional education with applied cultural competence and possibly standardized patients. Two respondents indicated that athletic training educators need more support and training, specifically, athletic training educators need: more emphasis on self-reflection prior to teaching cultural competence, more help and resources to prepare them for teaching this content since they likely do not have a strong background in cultural competence education, more training on how to manage volatile conversations or disagreements in the classroom, training on how to navigate this content, guidance on how to foster earnest and open

conversations while creating a safe space, more communication between programs with regards to what everyone else is doing, and a published model for cultural competence education in athletic training. One individual emphasized the importance of scaffolding this content over the course of the curriculum rather than addressing it as a single lecture. Finally, one respondent indicated that Athletic Training Programs need to be longer in length if athletic training students are expected to be prepared to deliver culturally competent care.

Research Questions

Research Question 1: To what extent is cultural competence education in undergraduate Athletic Training Programs being implemented?

Cultural competence content was often being taught in Athletic Training Programs as a unit within one (28.1%, $n = 18$) or two courses (34.4%, $n = 22$), with at least one participating university offering a three credit stand-alone course in cultural competence, titled “Diversity Issues in the Health Profession.” This content was being delivered during various semesters within each program, with most programs introducing the content during years three (67.2%, $n = 43$) or four (60.9%, $n = 39$), rather than year one (46.9%, $n = 30$). However, the four follow-up programs introduced the content early in the curriculum, with a foundation approach, followed by infusion in several courses throughout the program’s length. These programs further indicated an infusion over time as a prominent strength of their curriculum and indicated that all programs need to recognize the importance of scaffolding this content over the course of the curriculum, with the length of the program being an important factor in the success of the delivery of this content.

With regards to the specific curriculum, 31.2% of the respondents considered the culture of the institution, the students’ cultural background, and the faculty’s cultural background when

designing their cultural competence curriculum. Several programs ($n = 10$) indicated that they considered other factors when designing their curriculum, such as: what is needed to aid in the knowledge of culture, cultural backgrounds and differences of potential patient populations, broad needs, globalization, lifestyles and religions often encountered, cultural diversities in employment settings, ATP mission and goals, student learning outcomes, and health profession literature. It also was apparent that Athletic Training Programs did not always clearly define cultural competence or deeply root their cultural competence curriculum in theory, indicated by a lack of extensive theory knowledge and use. And when they were using theory, they are often doing so without being very knowledgeable of the actual theory being employed.

The research indicated that the majority of the programs were covering a wide array of topics related to cultural competence, including cross-cultural communication (87.5%, $n = 56$), gender issues (84.4%, $n = 54$), cultural barriers and clashes (82.8%, $n = 53$), accountability and mutual respect (82.8%, $n = 53$), access to care (82.8%, $n = 53$), religious differences (78.1%, $n = 50$), and socioeconomic status (75.0%, $n = 48$). However, it also appeared that some topic areas were not addressed as frequently, such as Hawaiian and/or Pacific Islander culture (20.3%, $n = 13$) and immigration and citizenship barriers (15.6%, $n = 10$). Furthermore, the four follow-up participants indicated that there were several topic areas in need of more focus or expansion, such as the LGBTQ population, social justice, advocating for patients, interpersonal relationship skills, and international differences in medical approaches.

Research Question 2: How is athletic training cultural competence education being taught?

Cultural competence content was generally being taught by the Athletic Training Department/Program (81.2%, $n = 52$) and, therefore, the content was often primarily covered by an instructor or professor who is an athletic trainer ($n = 56$). The courses containing cultural

competence education were often designed for, and delivered to, athletic training students only. However, 14.1% of the respondents ($n = 9$) first introduced the cultural competence curriculum in an interdisciplinary course, where the department responsible for teaching the content varied from athletic training to social science. Furthermore, 31.8% of the small or very small institutions who participated in the survey offered an interdisciplinary course in cultural competence, indicating that small or very small institutions often offer an interdisciplinary cultural competence course.

The entire cultural competence curriculum was often being taught by one (42.2%, $n = 27$) or two (37.5%, $n = 24$) instructors or professors ($M = 1.8$, $SD = 0.83$). As reported in the survey, 75.1% of all of the cultural competence athletic training educators were White or Caucasian. The primary instructors or professors responsible for teaching this content most often prepared for teaching through informal instruction and experience (70.3%, $n = 45$) rather than formal instruction and training (34.4%, $n = 22$). However, anomalies to this trend exist, as represented in one follow-up institution, where the primary professor has been intensely focused on and submerged in this topic for the past 22 years.

Within the actual classroom, the majority of the respondents utilized primary research articles (57.8%, $n = 37$) and textbooks (56.2%, $n = 36$) to deliver the cultural competence content. The respondents who utilized a textbook were asked to provide the title; 22 of the 36 textbook users provided this information, 11 of which used *Cultural Competence in Sports Medicine*, by Cartwright and Shingles. The instructors or professors frequently delivered the cultural competence content through lecture (78.1%, $n = 50$), open dialogue (73.4%, $n = 47$), case studies (67.2%, $n = 43$), and small group discussions (53.1%, $n = 34$). Expanded information was sought in the follow-up interviews and revealed that the four follow-up programs delivered

the cultural competence content in multiple courses, focusing on self-reflection, self-discovery, and foundational knowledge acquisition, followed by skill development and clinical application. Two of these respondents, however, stated that there is still room for improvement, such as incorporating more interprofessional education as well as utilizing standardized patients more.

Outside of the formal classroom, none of the 64 programs surveyed required a study abroad experience and 76.6% ($n = 49$) do not require any type of immersion experience. However, nine programs (14.1%) required one clinical placement in a diverse setting; seven of these were public institutions and two were private, not-for-profit institutions, all located in urban ($n = 3$), suburban ($n = 3$), and rural ($n = 3$) settings. A possibly significant relationship was found between the nine institutions that required one clinical placement in a diverse setting and the type of institution, $X^2(2, N = 9) = 8.67, p = .01$. This indicates that the type of institution (public, private, or not-for-profit) may have an effect on whether or not a program requires a clinical experience in a diverse setting. In addition, six programs (9.4%) required more than one clinical placement in a diverse setting; four of these were private, not-for-profit institutions, one was a private, for-profit institution, and one was a public institution, all located in urban ($n = 3$) and suburban ($n = 3$) settings. Furthermore, when identifying strengths of their programs, three of the four follow-up participants placed an emphasis on ensuring the athletic training students are placed at clinical placements with diverse populations.

Research Question 3: What challenges do athletic training educators face when implementing cultural competence education?

Many of the institutions surveyed indicated that they did not face any challenges when implementing cultural competence education, specifically curriculum challenges (53.1%, $n = 34$), challenges when preparing to teach (45.3%, $n = 29$), and challenges when teaching (65.6%,

$n = 42$). Of the respondents who indicated they did face curriculum challenges, the specific challenges were finding room in the curriculum (32.8%, $n = 21$), teaching cultural competency across the curriculum (31.2%, $n = 20$), identifying qualified instructors or professors to teach the content (21.9%, $n = 14$), and “other” (1.6%, $n = 1$), explained as “exposure to diverse patient populations.” During the preparation to teach this content, certain instructors or professors identified challenges with opportunities to improve knowledge and skills (37.5%, $n = 24$), previous training and knowledge of cultural competence (31.2%, $n = 20$), and “other” (7.8%, $n = 5$), such as resources specific to athletic training (3.1%, $n = 2$), “we don’t do enough” (1.6%, $n = 1$), time and space in the curriculum is limited (1.6%, $n = 1$), and intentional integration into all teachings (1.6%, $n = 1$). Finally, several teaching challenges were identified, such as sensitivity of the subject matter (26.6%, $n = 17$), student resistance to the subject matter (25.0%, $n = 16$), and “other” (3.1%, $n = 2$), explained as the inability of the student to apply this to his/her personal life and students being fearful to be open.

The four institutions that participated in the follow up interview were asked about challenges they face or weaknesses of their cultural competence curriculum. Two respondents stated that they believe that athletic training educators need more training, guidance, and support. They stated that cultural competence athletic training educators need a better understanding of the importance of self-reflection prior to teaching this content, training on managing volatile conversations or disagreements in the classroom, guidance on how to manage this content, training on how to better foster honest and open conversations while creating a safe space, and simply more help and support. They also felt that athletic training educators would benefit from enhanced communication between programs regarding cultural competence educational approaches, as well as a published model for design and implementation guidance. One

respondent indicated that the lack of research in the athletic training field is a major obstacle and forces them to refer to mainly nursing research. The remaining three institutions focused on institutional challenges, such as religious affiliation, geographical location and culture, clinical setting reinforcement, and length of the program.

Conclusion

The results indicated that cultural competence is not being taught across the curriculum very frequently and is often being introduced in the later stages of the Athletic Training Program, during years three or four. During curriculum design, the programs surveyed often take into account certain factors such as the culture of the institution, however the factors used to design the curriculum was not consistent across all respondents. Additionally, programs are not typically utilizing formal definitions and theory as foundations for their curriculum. However, it does appear that the Athletic Training Programs surveyed are addressing an extensive list of topics within their delivery of cultural competence education.

Cultural competence was most frequently being taught by athletic trainers employed by the Athletic Training Department/Program. The programs often looked to one or two instructors or professors within their department to teach this content, and the majority of which are White or Caucasian. The primary instructors often prepared for teaching this content through informal instruction and experience rather than formal instruction and training. They then often utilized primary research articles and textbooks to deliver the content in the classroom. Most of the cultural competence classes at the institutions surveyed were not interdisciplinary, moreover, it was found that interdisciplinary courses were more often offered at small or very small institutions rather than medium or large institutions. In the clinical setting, no institution

surveyed required a study abroad experience, but some of the programs purposefully placed their students at clinical rotations in a diverse setting.

The survey revealed that not many Athletic Training Programs faced challenges when delivering this content. However, those that did face challenges often cited the following obstacles: finding room in the curriculum and teaching it across the curriculum, securing qualified instructors or professors to teach the content, continuing education opportunities and training for the educators, resources specific to athletic training, as well as sensitivity and resistance to the subject matter. The four follow-up institutions further described challenges associated with educator training, preparation, and guidance, a lack of research in the athletic training field, institutional challenges, and clinical reinforcement. The results from this chapter will be further explored, applied, and discussed in chapter five.

CHAPTER 5: DISCUSSION

This research study investigated the extent to which athletic training cultural competence education is being implemented, how it is being taught, and the challenges faced when implementing it. The current research provides very few studies involving cultural competence and athletic training. Furthermore, there is a significant lack of research focused on the educational practices of cultural competence education in athletic training. Therefore, this study addressed a gap in the literature, with a focus on the education of cultural competence content and practices in undergraduate Athletic Training Programs.

This chapter discusses the results presented in chapter four. The results are divided into three sections: extent of cultural competence education, how cultural competence is being taught, and challenges. In addition, implications, limitations, recommendations for future research, and conclusions are presented.

Results

Extent of Cultural Competence Education

During the cultural competence curriculum design phase, the research stated that it is vital to ensure that the curriculum is fluid, adaptive, and considers three layers: the culture of the institution, the students' cultural background, and the faculty's cultural background (Geisler, 2003; Lyson, Ross, & Kumagai, 2008). This study revealed that 31.2% of the respondents consider all of three layers when designing their curricular content. Ten programs indicated that they also consider other factors such as cultural backgrounds and differences of potential patient populations, lifestyles and religions often encountered, and cultural diversities in employment settings. Unfortunately, these results do not illustrate a complete application of social justice theory, insurgent multiculturalism, and sociocultural learning theory, with regards to framing

cultural competence education in relevant historical, social, individual, student-centered, political, and power contexts (Apple, 2011; John-Steiner & Mahn, 1996; Kanpol, et al., 1996; Peer & McClendon, 2002). The results of the survey and interviews also revealed that most Athletic Training Programs are not clearly defining cultural competence or utilizing theory as a foundation for the curriculum. Furthermore, when programs are using theory, they are often doing so without full understanding and working knowledge of the theory. Thus, the conceptual framework identified for this research study is not being applied in its entirety.

It appears that most undergraduate Athletic Training Programs are teaching cultural competence as a single unit in one or two courses, usually during the third or fourth year of education, rather than across the curriculum. Kripalani et al. (2006) stated that cultural competence education should, among other things, be discussed throughout clinical education instead of in isolated workshops; this can be applied to the classroom setting, indicating that cultural competence should be addressed across the curriculum. The four follow-up respondents did introduce cultural competence early in their programs, focusing on developing a foundation that was expanded and reinforced in several courses throughout the length of the program. This approach supports sociocultural learning theory, which dictates that cultural competence education should be learned in a longitudinal format, focused on observation, rehearsal, and reinforcement (John-Steiner & Mahn, 1996).

Cultural competence in health care extends far beyond race, ethnicity, and static culture. Cultural competence education must include a focus on countless layers that comprise one's true identity and culture, such as age, gender, sexual orientation, religion, education, vocation, personality, socioeconomic background and status, geographical location, and family, peer, and community influences (Black & Purnell, 2002; Dupre & Goodgold, 2007; Ford, 2003, Maurer-

Starks et al., 2007; Robins et al., 1998; Rose, 2013). The results of this study indicated that programs are covering a wide variety of topics, with most of the respondents covering cross-cultural communication, gender issues, cultural barriers and clashes, accountability and mutual respect, access to care, religious differences, and socioeconomic status. However, several topic areas appear to need additional focus, such as Hawaiian and/or Pacific Islander culture, immigration and citizenship barriers, the LGBTQ population, social justice (social justice theory), power imbalances (insurgent multiculturalism), interpersonal relationship skills, and international differences in medical approaches.

How Cultural Competence is Being Taught

This study revealed that an Athletic Training Program's entire cultural competence curriculum is often being taught by one or two athletic training instructors or professors, who are usually White or Caucasian. These instructors or professors are typically preparing to teach cultural competence by relying on informal instruction and experience rather than formal instruction and training. Musolino et al. (2010) cited that in order to effectively teach this challenging content, cultural competence educators must have additional training, continued education, and administrative support available. Additionally, as indicated by Dupre and Goodgold (2007), self-assessment and reflection should be the first step in cultural competence education. Of the institutions surveyed, 54.7% stated that primary instructor or professor of cultural competence education uses self-exploration and self-reflection during his/her preparation for teaching this content. All four follow-up interviews also revealed a strong focus on self-reflection and self-discovery prior to knowledge acquisition and skill application. However, in the classroom, only 32.8% of the institutions surveyed used self-exploration using reflection exercises and 9.4% used self-exploration using standard assessments.

The study revealed that cultural competence education is often being delivered by the Athletic Training Department/Program, indicating that the cultural competence curriculum is likely designed for the athletic training field only. Isolating cultural competence education to a single program or profession does not foster interdisciplinary collaboration, which is vital in modern medical practice (Núñez, 2000). However, nine of the respondents did introduce the cultural competence content in an interdisciplinary course, where the department responsible for teaching cultural competence varied from athletic training to social science. Of interest, 7 of the 22 respondents (31.8%) at a small or very small institution offered an interdisciplinary course in cultural competence, compared to 2 of the 42 respondents (4.8%) at a medium or large institution.

The delivery modes employed by the survey respondents often included lecture, open dialogue, case studies, and small group discussions. The follow up interviews added some breadth to these strategies, including delivery in multiple courses, self-reflection, self-discovery, and a deliberate knowledge acquisition followed by skill development and clinical application. This aligns closely with the research that stated that educators must use a multi-faceted approach to teaching cultural competence, including critical thinking, critical appraisal of social injustices and biases (social justice theory), exploration of power imbalances (insurgent multiculturalism), reflection, interactive dialogue, engaging discussions, and empathetic skill development (Apple, 2011; Geisler, 2003; Kanpol et al., 1996; Kumagai & Lyson, 2009). Additionally, the respondents most often rely on primary research articles and textbooks to teach cultural competence; the most common textbook utilized was *Cultural Competence in Sports Medicine*, by Cartwright and Shingles.

The research stated that study abroad and immersion experiences with diverse populations can increase a student's cultural competence. This is achieved through actual patient contact, which often enhances global understanding and cultural sensitivity, increases decision making and social action skills, further explores cultural differences between the patient and the clinician, and reinforces the sociocultural learning theory (Campinha-Bacote, 1999; Dupre & Goodgold, 2007; Guyer, 2001; John-Steiner & Mahn, 1996; Jute, 2011; Rodriquez & Romanello, 2008). This research study found that none of the 64 Athletic Training Programs surveyed require study abroad experiences and the majority do not require an immersion experience. However, several programs do require one or more clinical placements in a diverse setting.

Challenges Encountered

The review of the literature illustrated that cultural competence education is multi-faceted and complex. Naturally, challenges will exist when attempting to implement any curriculum and cultural competence is no different. While many of the institutions surveyed indicated that they do not face any curriculum, preparation, and teaching challenges, some of the institutions do face certain challenges. From a curriculum standpoint, finding room in the curriculum, teaching cultural competence across the curriculum, identifying qualified instructors or professors to teach the content, and exposures to diverse patient populations was cited as challenging. With regards to preparing to teach, the educators identified challenges associated with opportunities to improve knowledge and skills, previous training and knowledge of cultural competence, resources specific to athletic training, "we don't do enough," limitations on time and space in the curriculum, and intentional integration into all teachings. Finally, sensitivity of the subject matter, student resistance to the subject matter, students unable to apply this to their personal life,

and students being fearful to be open were challenges associated with teaching cultural competence content.

The follow-up interviews focused on further exploring challenges encountered. Between the survey and the interviews, several common themes emerged. Athletic training educators need more formal training and support to effectively teach cultural competence. This training should ensure a focus on managing the difficult nature of cultural competence content and building a comfortable, safe classroom environment to discuss this in. Nationally, Athletic Training Programs should be more connected, in terms of sharing ideas and approaches regarding cultural competence education, for the current cultural competence literature available to educators is often not specific to athletic training. And, finally, each institution often faces their own set of challenges, with regards to length of programs, geographical locations, and religious affiliations.

Implications

Several implications and recommendations were developed, based on the results of this study, as well as the current cultural competence education research and literature. First, individual universities and/or CAATE must follow the lead of the University of Michigan Medical School, and provide athletic training educators with better cultural competence resources, workshops, active learning opportunities, exercises, and feedback. Several authors agreed that providing training for cultural competence educators is the first step in delivering quality cultural competence education (Hobgood et al., 2006; Kumagai & Lypton, 2009; Lazaro & Umphred, 2007). This study revealed that the primary instructors or professors of cultural competence at the institutions surveyed are usually White or Caucasian and they typically rely on informal instruction and experience rather than formal instruction and training in preparation to

teach this content. Dupre and Goodgold (2007) indicated that self-assessment should be an early step in the path to cultural competence, yet approximately 55% of the respondents use this for themselves and less than 10% of the educators use this in the classroom. Not surprisingly, approximately 21.9% of the institutions surveyed cited challenges in identifying qualified instructors or professors to teach the cultural competence content. In addition, many of the respondents indicated that they encounter challenges associated with opportunities to improve knowledge and skills, as well as previous training and knowledge of cultural competence. It can be assumed that if an educator is often relying on informal instruction and experience, they likely are not receiving formal training at the local or national level and their level of expertise in this content area is questionable. And it can also be assumed that the educators are not formally trained to present the sensitive nature of cultural competence content, as well as manage resistance to the subject matter. If such trainings were made more available, educators charged with teaching cultural competence in athletic training could improve their preparation strategies and ultimately their teaching effectiveness. Furthermore, this study did not assess the preparation strategies employed by clinical Preceptors, who are often charged with facilitating the implementation of evidence-based cultural competence practice by their Athletic Training Students. One might hypothesize that clinical Preceptors are likely just as untrained in this content area and would benefit from attending the same trainings as educators should be attending. CAATE must design or endorse education driven workshops and seminars dedicated solely to cultural competence. These sessions should focus on preparing faculty and clinical Preceptors to teach cultural competence effectively and they must be offered in several convenient formats, such as stand-alone seminars, sessions at national, regional, and state conferences, as well as online. To further enforce better teaching practices, CAATE should

require that any instructor or professor teaching cultural competence must demonstrate expertise in this area, as evidenced by scholarly research and/or CAATE approved seminar attendance and completion.

In addition to better educator training, Athletic Training Programs must strive to seek more opportunities to collaborate with other medical professionals and educators, as well as offer interdisciplinary learning opportunities, in the delivery of cultural competence education. At the present moment, the curriculum requirements for Athletic Training Programs are switching from “NATA competencies” to “CAATE Standards,” meaning that Curricular Content Standards will be housed in one condensed CAATE document, with other programmatic Standards. The updated CAATE Standards, outlining program design and quality, program delivery, curricular content, institutional organization and administration, and program resources, are due to be published on July 1, 2018. CAATE has released the proposed new Standards, which are yet to be finalized, and the new proposed Standard 11 in Program Delivery reads “planned interprofessional education is incorporated across the professional program” (Commission on Accreditation of Athletic Training Education, 2017, p. 5). It is promising to see that Athletic Training Programs will be required to place a higher emphasis on interprofessional education. It must be noted, however, that simply taking an interdisciplinary course does not fulfill the intent of interprofessional education; properly designed interprofessional education facilitates interprofessional collaboration and reinforces the multi-faceted layers of cultural competence in medicine (Núñez, 2000). Furthermore, the new proposed interprofessional Standard does not specify which curricular content must be delivered in this format, therefore cultural competence content is not necessarily going to be taught in an interprofessional format. This study revealed that the cultural competence content is usually taught solely by one or two athletic training

educators, in the Athletic Training Department/Program, and not in an interdisciplinary course. Therefore, the CAATE Standards should specify that cultural competence must be taught in an interprofessional format at some point. For institutions seeking guidance in developing more interdisciplinary or interprofessional opportunities, the IPEC core competencies outline cultural competence, through an interprofessional lens. It is recommended that Athletic Training Programs should utilize the IPEC competencies related to cultural competence, when designing and implementing interprofessional cultural competence education (Table 10).

Grounding curriculum in theory is an area in athletic training education that requires immediate attention, as linking theory to practice is critical to the application of evidence-based practice. Sales, Smith, Curran, & Kochevar (2006) contend that understanding theory is critical to changing clinician or patient behavior, as it addresses the question of why an intervention may work. Athletic training education, in general, has not traditionally grounded curriculum or practice in theory and the review of the literature yielded very little information regarding cultural competence education and theory in any medical discipline. Therefore, a conceptual framework was developed for this research study by combining social justice theory, insurgent multiculturalism, and sociocultural learning theory. The respondents were asked to rate their knowledge of the three aforementioned theories and indicate whether or not they use these theories in the classroom. In addition, the follow-up interviews explored the working definition of cultural competence at the four institutions interviewed. The results of this study verified that some Athletic Training Programs are not focused on a literature-based definition of cultural competence and most are not using theory to inform the practice of cultural competence education. CAATE should be placing a higher emphasis on grounding all content in theory. This will be new for many athletic training educators and it will be a tremendous learning

process. However, cultural competence is an ideal content area to start with, as theory is inherent to the subject. The conceptual framework developed for this research study must be explored in more detail prior to enforcing its application. By further researching this conceptual framework and possibly modifying it, CAATE can endorse a refined conceptual framework and can teach educators how to implement it during the enhanced training sessions proposed.

While cultural competence curriculum should be grounded in theory, it should also be fluid in order to adapt to changes in the culture of the students, the educators, and the institution, and several frameworks or formats are available to enhance learning (Crenshaw et al., 2011; Geisler, 2003; Lypson, Ross, & Kumagai, 2008; Seeleman, Suurmond, & Stronks, 2009). It is promising to see that many athletic training educators recognize the importance of adapting their cultural competence curriculum to the changing backgrounds and needs of their students, future patients, and institutions, but room for improvement does exist, as less than one third of the respondents customize their curriculum according to the culture of the institution, students, and faculty. Ten programs added other factors to this list presented in the survey, including: ATP mission and goals, student learning outcomes, cultural backgrounds and differences of potential patient populations, globalization, lifestyles and religions often encountered, and cultural diversities in employment settings. Athletic training educators should better utilize guiding frameworks or formats and attend CAATE endorsed formal training on how to adapt to the changing needs of constituents in order to strengthen the cultural competence curriculum and create effective student learning outcomes.

Athletic Training Programs also need to re-examine the extent, timing, and placement of their cultural competence curriculum. Most of the programs surveyed indicated that they are teaching cultural competence as a single unit within one or two courses during the third or fourth

year of the program. This implies that the cultural competence content is not being infused throughout the curriculum, as recommended in the research (Kripalani et al., 2006). In fact, approximately one third of the respondents have encountered challenges finding room in their curriculum for cultural competence as well as teaching it across the curriculum. Furthermore, isolating cultural competence content to a single unit does not represent the necessity to infuse cultural competence into all the layers of patient encounters. With regards to requiring cultural competence content to be taught across the curriculum, this is not specifically addressed in the new proposed CAATE Standards; the only reference to this is in the Background or description subsection of the proposed CAATE Curricular Content Standards (2017), where the following is stated:

To demonstrate compliance with the Standards, program personnel will be asked to identify how the content is incorporated and assessed throughout the curriculum. Given the breadth of these competencies and the emphasis on practice expectations as compared to specific content, we anticipate that programs will need to use multiple courses and educational experiences to meet each. (p. 11).

Athletic Training Programs must be introducing cultural competence in a concentrated format early in the program in order to develop foundational understanding, appreciation, and knowledge, grounded in theory. Thereafter, cultural competence should be infused into every classroom and clinical offering, creating application-based scaffolding. If this approach is too overwhelming, programs should place cultural competence in the course objectives and student learning outcomes for every clinical education course, as does Kent State University's College of Nursing (Sargent et al., 2005). This longitudinal approach will reinforce the necessity to address

cultural differences during every patient encounter and will enhance the program's potential to graduate culturally competent clinicians.

Within the athletic training classrooms, the teaching techniques and modes currently being employed align well with the research, but room for improvement does still exist. The research cited that effective cultural competence education should focus on critical thinking, critical appraisal of social injustices and biases, reflection, interactive dialogue, engaging discussions, and empathetic skill development in the classroom and clinical settings (Geisler, 2003; Kumagai & Lybson, 2009). While the majority of the respondents use most of these modes and techniques, such as lecture, open dialogue, case studies, small group discussions, athletic training educators should strive to incorporate more interprofessional education opportunities as well as standardized patients.

The current athletic training literature and resources do not outline an extensive list of topics that should accompany cultural competence education, therefore, the exact topics covered at each institution is likely to vary greatly. While individual program autonomy is important, it is also vital that a published list of recommended topics is created and made accessible to athletic training educators. This list should include the topic areas that are most frequently covered, such as cross-cultural communication, religious differences, culture barriers and classes, socioeconomic status, and social justice; but additional focus should be on the topics less likely to be currently covered, such as immigration and citizenship barriers, the LGBTQ population, and social justice. This comprehensive curriculum list will assist in curriculum development and ensure a comprehensive approach to cultural competence education.

To enhance the classroom education, Athletic Training Programs should incorporate at least one study abroad or immersion experience, in an attempt to increase the cultural

competence of Athletic Training Students. CAATE is currently proposing a required immersive clinical experience; proposed Program Delivery Standard 19 states “a program’s clinical education component is planned to include at least one immersive clinical experience” (Commission on Accreditation of Athletic Training Education, 2017, p. 8). However, the language for this proposed Standard does not require the immersive experience to be completed in a diverse setting; the intent of the proposed Standard, as described in an Annotation, is to allow the student to “participate in the full-time, day-to-day and week-to-week role of an athletic trainer” (Commission on Accreditation of Athletic Training Education, 2017, p. 8). Since none of the programs surveyed require a study abroad experience and the majority of the programs do not require an immersion experience, this is where CAATE and programs should focus their attention. As a possible compromise to requiring an immersion experience with a diverse patient population, programs should ensure that their students have the opportunity to enhance their cultural competence skills through direct, concentrated exposures to patients from diverse backgrounds. This might come to fruition, as the proposed CAATE Program Delivery Standard 20 requires that students must gain clinical experience with varied patient/client populations (Table 23) (Commission on Accreditation of Athletic Training Education, 2017).

Many implications have been outlined and several areas in need of improvement have been identified. However, as is the case with most change, individuals are most responsive to required policy change. Therefore, re-examining the NATA competencies and the CAATE accreditation Standards is necessary. As mentioned before, the current NATA curriculum competencies will be transformed into CAATE Standards. Table 23 contains all of the proposed CAATE Standards that reference cultural competence loosely, as the terms “culture,” “cultural,” “cultural competence,” “diverse,” or “diversity” do not appear in any of the proposed Curricular

Table 23. 2017 Proposed Standards for Professional Programs at the Master's Degree Level

Content Area	Standard
Program Delivery	20. A program's clinical education component is planned to include clinical practice opportunities with varied client/patient populations. Populations must include clients/patients: <ul style="list-style-type: none"> • throughout the lifespan (for example, pediatric, adult, elderly); • of different sexes; • with different socioeconomic statuses; • of varying levels of activity/athletics (for example, competitive and recreational, individual and team activities, high and low intensity activities); and • with non-sport client/patient populations (for example, participants in military, industrial, occupational, leisure activities).
Curricular Content: Professionalism	29. Practice in a manner that is not prejudicial or discriminatory.
Curricular Content: Patient-Centered Care	36. Advocate for the health needs of clients/patients, communities, and populations. 37. Identify healthcare delivery strategies that account for a variety of social determinants of health.
Glossary: Professionalism	Delivery of patient-centered care, effective participation as a member of an interdisciplinary team, and commitment to continuous quality improvement, and relates to personal qualities of honesty, reliability, accountability, patience, modesty, and self-control. It is exhibited through ethical behavior, a respectful demeanor toward all persons, compassion, a willingness to serve others, and sensitivity to the concerns of diverse patient populations.
Glossary: Social Determinants of Health	The conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. (Definition from the World Health Organization)

(Commission on Accreditation of Athletic Training Education, 2017)

Content Standards. As one can clearly see, the new proposed CAATE Curricular Content Standards (2017) will likely take athletic training cultural competence education backwards, given that:

These Standards are less prescriptive than our current competencies; there are far fewer of them. They are written so that programs can be responsive to changes in clinical practice and healthcare delivery, flexibility that is essential given the pace of change in healthcare. (p. 11).

Furthermore, the fact that the term “cultural competence” does not appear at all in the new Standards will essentially lead athletic training down the path of eliminating and/or neglecting the necessity to teach cultural competence to Athletic Training Students. This is the opposite direction that athletic training education should be taking, given the need for improvement in this content area and the global need for culturally competent healthcare practitioners.

Significant policy change is required. The new CAATE Standards must contain Standards that reference the specific term “cultural competence.” This term is universal across the health disciplines, so to omit it is inconsistent with established practice. The new Standards should expand upon the previous NATA competencies and should include more details regarding the expectations for cultural competence education in athletic training, as this will act as a guide for programs re-examining and re-designing their cultural competence curriculum. The new Standards should contain: a minimum list of topics and populations that must be covered, a requirement to infuse cultural competence content throughout the curriculum, in both classroom and clinical education, a mandate to teach cultural competence in an interprofessional format when possible, a prerequisite for faculty to demonstrate expertise in this content area, recommended theoretical frameworks and topics focused on intersectionality, guidance for outcomes assessments, and a requirement to strive to increase student and faculty diversity. CAATE and Athletic Training Programs should look to the recently endorsed American Association of Colleges of Nursing Position Statement titled *Diversity, Inclusion, & Equity in*

Academic Nursing (American Association of Colleges of Nursing, 2017). This Position Statement outlines a central mission focused on increasing diversity within nursing school student and faculty populations through strategic recruiting, admissions, and hiring (American Association of Colleges of Nursing, 2017). CAATE should adopt similar language within the new Standards, requiring that Athletic Training Programs strive to increase student and faculty diversity, in an effort to improve the quality of athletic training education.

Athletic training programs should also be required to meet certain CAATE mandated cultural competence benchmarks and/or outcomes, in order to maintain accreditation. While the proposed Curricular Content Standards typically require that programs submit course syllabi for all courses that include instruction on each specific curricular content, provide a narrative describing how the program assesses each specific curricular content, and submit an example of an assessment tool utilized to assess the student's ability in each specific curricular content Standard, CAATE does not further dictate specific benchmarks or outcomes that must be met for each specific curricular content Standard (Commission on Accreditation of Athletic Training Education, 2017). In the field of nursing, the AACN Essentials (2008) state that, among many other cultural competence requirements,:

The baccalaureate program prepares the graduate to: 1. Conduct comprehensive and focused physical, behavioral, psychological, spiritual, socioeconomic, and environmental assessments of health and illness parameters in patients, using developmentally and culturally appropriate approaches. 7. Provide appropriate patient teaching that reflects developmental stage, age, culture, spirituality, patient preferences, and health literacy considerations to foster patient engagement in their care. (p. 31)

These AACN Essentials are focused on overall performance outcomes and should be used as a framework when creating specific cultural competence benchmarks and/or outcomes that programs must meet in order to maintain CAATE accreditation. Finally, the BOC should place a greater emphasis on cultural competence by including more cultural competence questions on the BOC Exam. In doing so, the BOC will reinforce the significance of this content area and programs will be forced to improve their cultural competence curriculum.

Limitations

There were several limitations associated with this research study. The research design, in reference to population selection and follow-up interview selection, is the first limitation. The researcher chose to study undergraduate Athletic Training Programs only, while two types of professional programs currently exist, undergraduate and graduate. The researcher chose to study undergraduate programs since this group represented a larger population (310) than the graduate programs (42) at the time. In addition, the undergraduate pool contained a higher percentage of established programs, likely having the time to fully develop their cultural competence curriculum. While the results of this study apply to any professional Athletic Training Program, the results will need to be further explored and modified to fit professional programs of different formats. In addition, the researcher selected the “highest performing” programs to complete the follow-up interview, in order to further explore positive and successful features of cultural competence education. This presents an area of bias and the data collected from the interviews does not fully represent the entire population.

The second limitation was related to actual responses. The participants voluntarily chose to complete the survey and possibly the follow-up interview. The motivation for completion likely varied greatly and cannot be accounted for in the statistical representation of the results.

In addition, the individuals who chose to participate may not fully represent all undergraduate Athletic Training Programs nationwide. Furthermore, the response rate was 20.65% but it is unknown how the results would have been affected if the response rate was higher.

The utilization of a self-report survey and interview were a third limitation of this study. The accuracy of the results was highly dependent on the respondents completing the instrument(s). Therefore, caution must be applied when interpreting these results as a perfect reflection of cultural competence education at the respondents' institutions. Furthermore, as introduced in Chapter 4, the respondents most commonly stated that they had experienced no challenges with regards to curriculum, preparing to teach, and teaching cultural competence. This was surprising, as most professors likely face certain challenges when teaching any content area. Therefore, the researcher is concerned that survey-taking fatigue may have affected the responses in this section of the survey. The three questions related to "challenges encountered" were the last three survey questions, thus it is possible that the respondents were fatigued by the process of taking the survey and chose to select the "easiest" answer for the final three questions in order to simply complete the survey. If this was the case, the results of these three questions must be interpreted and applied with caution. This leads to a fourth limitation, generalization. As with any study that collects information from only a percentage of the population, generalization to the entire population must be done so with restraint.

Finally, the researcher's positionality was previously discussed, relative to the research study design and data collection. However, the researcher's positionality must also be explored, relative to the interpretation of the data. Once again, the researcher's worldview may have influenced the interpretation and application of the results. The researcher admittedly hypothesized that most Athletic Training Programs have areas in need of improvement, relative

to teaching cultural competence. The researcher also hypothesized that most instructors or professors who are charged with teaching cultural competence have faced challenges in doing so comprehensively and effectively. The researcher does not feel that there is an absolute “right” or “wrong” way to teach cultural competence, however the researcher firmly believes that there are certain features of effective cultural competence education that need to be included in all Athletic Training Program curriculums. Therefore, the researcher was focused on these key areas possibly more than others. All of these factors may have influenced how the researcher chose to interpret the results and identify the implications of the research.

Recommendations for Future Research

Marra et al. (2010) identified that most athletic trainers believed that they were more culturally competent than they actually were, as indicated by their clinical behaviors and practice. They also found that female, multiracial/other and black/African American athletic trainers displayed higher levels of cultural competence than white/Caucasian or American Indian/Alaskan native athletic trainers. Future research should focus on deciphering exactly why different groups of individuals are more or less culturally competent, in an effort inform education practice.

This research study found that 31.8% of the small or very small institutions offered an interdisciplinary course in cultural competence, whereas 4.8% of the medium or large institutions offered such a course. Future research should investigate why there appears to be more interdisciplinary course offerings at smaller institutions rather than larger institutions. This investigation should seek information regarding the decision process to offer or not offer an interdisciplinary course, student enrollment demographics, and content covered.

This study provided a “snapshot” of the current status of cultural competence education; it did not address the efficacy of such education. Future directions for research, with regards to efficacy, should investigate specific teaching methods, classroom activities, and clinical placements. These three areas appear to have the most impact on long-term knowledge acquisition and application of cultural competence, and have not been researched in athletic training. To note, all cultural competence assessments should not focus on completion or failure, rather understanding, progress, and continued development, since cultural competence is a life-long process (Ford, 2003; Kumagai & Lypson, 2009; Marra et al., 2010). Educationally, assessing the Athletic Training Students’ perception of their cultural competence education would be the first step in determining the perceived efficacy of curriculum (Lypson et al., 2008). From a skills perspective, interpersonal communication skills are the foundation to quality patient care (Bjarnason et al., 2009; Black & Purnell, 2002; Rose, 2013). This study did not qualitatively assess Athletic Training Students’ interpersonal communication skills, in a cultural competence context, which future research should address. Taking this one step further, researchers should assess Athletic Training Students’ abilities to effectively adapt treatment and rehabilitation programs to the patient’s culture. This research could use the National Standards for Culturally and Linguistically Appropriate Services (Table 4) as a framework for assessing the quality of patient care. Finally, Marra et al. (2010) stated that optimal patient outcomes can only be achieved through quality and accurate care to all patients. Future research should focus on patient outcomes, with regards to providing culturally competent care. Outcomes assessments would provide empirical evidence regarding the effectiveness of the educational approaches employed in Athletic Training Programs. All of these quantitative and/or qualitative assessments can be administered in the educational or clinical setting. Assessing knowledge acquisition and

clinical application is warranted in order to fully determine the efficacy of current cultural competence education practices.

As previously stated, the transition to graduate level education in athletic training is in progress; this presents both opportunities and challenges. Most athletic training programs are in the process of modifying, or have already modified, their existing undergraduate program to a graduate program. This presents an opportunity to re-examine the program's current cultural competence education and re-design a stronger curriculum and approach, if warranted.

However, most programs are transitioning from a longer undergraduate program to a two year graduate program. This will place constraints on the ability to infuse cultural competence education across the curriculum, over a substantial length of time. Therefore, future research should focus on identifying and disseminating guidance for programs transitioning to a graduate program. The first stage of this research should explore in more depth the challenges current programs face when implementing cultural competence content. It was surprising that the majority of the respondents selected "no" challenges encountered, with regards to curriculum, preparing to teach, and teaching cultural competence. It is necessary to first explore this, in an attempt to verify this result as well as identify why certain programs face more or less challenges than others. The second stage would involve the development of a firm curricular model with clear and concise cultural competence curriculum mapping over two academic years, in an effort to strengthen the cultural competence education in Athletic Training Programs nationally. This model should be flexible and fluid in nature, in an effort to be applied at various institutions, and it should be disseminated aggressively, in an effort to promote discussions, personalized application, and an overall emphasis on this curriculum.

Currently, athletic training educators do not have many discipline specific resources available to them. Beyond a curriculum model, simply increasing the number and variety of resources available is necessary. To date, there is only one published textbook on cultural competence in sports medicine, *Cultural Competence in Sports Medicine*, by Cartwright and Shingles. Educators, students, and professionals need more evidence-based resources, in print and electronic form, to refer to regarding cultural competence in athletic training. These resources should contain results from athletic training research studies focused on appropriate training and preparation for teaching cultural competence, specific teaching strategies and classroom exercises, and how to address the challenges associated with cultural competence education. The future resources should also focus on using theory to inform practice, especially given the current emphasis being placed on evidence-based practice.

Conclusion

This research study examined the current practice of cultural competence education in Athletic Training Programs nationwide. Prior to this study, no existing research had established a baseline of cultural competence education practices. Establishing a “snapshot” or baseline was necessary in order to determine if any changes are required, formulate additional research questions, and substantiate the justification for more research in this area.

The purpose of this research study was to investigate the extent to which athletic training cultural competence education is being implemented, how it is being taught, and the challenges faced when implementing it. This study drew upon research in the medical, nursing, and physical therapy disciplines to establish common features of effective cultural competence education. An electronic survey was developed and distributed to all 310 undergraduate Athletic Training Programs nationwide and five programs were contacted for a follow-up interview. The

results were analyzed to report the current status of cultural competence education and to determine if there are areas in need of improvement.

Most significantly, athletic training educators need better resources and training in order to proficiently deliver cultural competence content. Most athletic training educators lack formal training and do not have access to cultural competence resources specific to athletic training. Formal training will not only better prepare the individual educator for teaching this content, but it will also lead to better pedagogical approaches such as ensuring the curriculum is fluid and adaptive, grounding the content in theory, and infusing interprofessional education and encounters. In addition, it will lead to a more comprehensive approach to cultural competence education by ensuring that an extensive list of topics is available to educators, various delivery modes are outlined, and specific classroom exercises are suggested.

From an overall curriculum design perspective, Athletic Training Programs must increase the infusion of cultural competence content across the entire curriculum, rather than present the information in one or two isolated units. Furthermore, classroom education needs to be enhanced by intentional clinical application in diverse settings, with diverse patient populations. In order to achieve this, the proposed CAATE Standards must be re-examined and modified, with regards to cultural competence. It is recognized, though, that changes to accreditation Standards and competencies requires a long period of time and will delay immediate change. However, with the new set of Standards due to be published on July 1, 2018, it is imperative that the proposed CAATE Standards are modified immediately.

The results of this study are significant to the future of cultural competence education in athletic training. As the landscape of athletic training education continues to evolve, so too does approaches to curricular content. To date, minimal focus has been placed on cultural

competence in athletic training, which is evident by the lack of research in this area. This must change and the first step in the process is the dissemination of these research findings.

REFERENCES

- American Association of Colleges of Nursing. (2017). *Diversity, Inclusion, & Equity in Academic Nursing*. Retrieved 12/01, 2017, from <http://www.aacnnursing.org/News-Information/Position-Statements-White-Papers/Diversity>
- American Association of Colleges of Nursing. (2008). *The Essentials of Baccalaureate Education for Professional Nursing Practice*. Retrieved 05/06, 2017, from <http://www.aacnnursing.org/Education-Resources/AACN-Essentials>
- Andrews, M. M., Cervantez Thompson, T. L., Wehbe-Alamah, H., McFarland, M. R., Hanson, P. A., Hasenau, S. M., . . . Vint, P. A. (2011). Developing a culturally competent workforce through collaborative partnerships. *Journal of Transcultural Nursing*, 22(3), 300-306.
- Apple, M. W. (2011). Global crises, social justice, and teacher education. *Journal of Teacher Education*, 62(2), 222-234.
- Azen, R., & Walker, C. M. (2011). *Categorical Data Analysis for the Behavioral and Social Sciences*. New York, NY: Routledge.
- Bjarnason, D., Mick, J., Thompson, J. A., & Cloyd, E. (2009). Perspectives on transcultural care. *The Nursing Clinics of North America*, 44(4), 495-503.
- Black, J. D., & Purnell, L. D. (2002). Cultural competence for the physical therapy professional. *Journal of Physical Therapy Education*, 16(1), 3-10.
- Campinha-Bacote, J. (1999). A model and instrument for addressing cultural competence in health care. *Journal of Nursing Education*, 38(5), 203-207.
- Capell, J., Dean, E., & Veenstra, G. (2008). The relationship between cultural competence and ethnocentrism of health care professionals. *Journal of Transcultural Nursing*, 19(2), 121-125.
- Carnegie Foundation for the Advancement of Teaching. (2010). *Carnegie Classifications*. Retrieved 03/15, 2013, from <http://classifications.carnegiefoundation.org/>
- Chin, J. L. (2000). Culturally competent health care. *Public Health Reports*, 115(1), 25-33.
- Chun, M. (2010). Pitfalls to avoid when introducing a cultural competency training initiative. *Medical Education*, 44(6), 613-620.
- Commission on Accreditation of Athletic Training Education. (2017). *Proposed Standards for Professional Programs at the Master's Degree Level*. Retrieved 06/02, 2017, from https://caate.net/wp-content/uploads/2017/05/2017-CAATE-Stand-for-Profess-Program_MasterDegree_VF.pdf

- Commission on Accreditation of Athletic Training Education. (2013). *Accredited programs*. Retrieved 03/18, 2013, from <http://www.caate.net/imis15/caate/>
- Commission on Accreditation of Athletic Training Education. (2012). *Standards for the Accreditation of Professional Athletic Training Programs*. Retrieved 11/29, 2017, from <https://caate.net/professional-programs/>
- Commission on Accreditation in Physical Therapy Education. (2016). *Standards and Required Elements for Accreditation of Physical Therapist Education Programs*. Retrieved 05/07, 2017, from <http://www.capteonline.org/AccreditationHandbook/>
- Commission on Collegiate Nursing Education. (2013). *Standards for Accreditation of Baccalaureate and Graduate Nursing Programs*. Retrieved 05/06, 2017, from <http://www.aacnnursing.org/CCNE-Accreditation/Resource-Documents/CCNE-Standards-Professional-Nursing-Guidelines>
- Crenshaw, K., Shewchuk, R. M., Qu, H., Staton, L. J., Bigby, J. A., Houston, T. K., . . . Estrada, C. A. (2011). What should we include in a cultural competence curriculum? an emerging formative evaluation process to foster curriculum development. *Academic Medicine*, *86*(3), 333-341.
- Cross, D., Brennan, A., Cotter, V. T., & Watts, R. J. (2008). Cultural competence in the master's curriculum--a course exemplar. *Journal of Professional Nursing*, *24*(3), 150-154.
- Dillman, D. A., & Smyth, J. D. (2007). Design effects in the transition to web-based surveys. *American Journal of Preventive Medicine*, *32*(5 Suppl), S90-S96.
- Dillman, D. A., Sinclair, M. D., & Clark, J. R. (1993). Effects of questionnaire length, respondent-friendly design and a difficult question on response rates for occupant-addressed census mail surveys. *Public Opinion Quarterly*, *57*(3), 289-304.
- Dupre, A., & Goodgold, S. (2007). Development of physical therapy student cultural competency through international community service. *Journal of Cultural Diversity*, *14*(3), 126-134.
- Edwards, I., Delany, C. M., Townsend, A. F., & Swisher, L. (2011). New perspectives on the theory of justice: Implications for physical therapy ethics and clinical practice. *Physical Therapy*, *91*(11), 1642-1652.
- Fan, A. P., Lee, F. Y., Hou, M. C., Chen, C. H., Lee, C. H., Kosik, R. O., Tang, W., & Chen, Q. (2011). Teaching faculty to teach: A new approach to global awareness. *Medical Teacher*, *33*(5), 425-426.
- Ford, M. G. (2003). Working toward cultural competence in athletic training. *Athletic Therapy Today*, *8*(3), 60.

- Fuller, K. (2002). Eradicating essentialism from cultural competency education. *Academic Medicine*, 77(3), 198-201.
- Geisler, P. R. (2003). Multiculturalism and athletic training education: Implications for educational and professional progress. *Journal of Athletic Training*, 38(2), 141-151.
- Green, A. R., Betancourt, J. R., & Carrillo, J. E. (2002). Integrating social factors into cross cultural medical education. *Academic Medicine*, 77(3), 193-197.
- Green, A. R. (2008). The globalization of cross-cultural medical education and patient-centered care. *Bratislavské Lekárske Listy*, 109(5), 238-238.
- Groves, R. M., Fowler, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2009). *Survey Methodology*. Hoboken, NJ: John Wiley & Sons.
- Guyer, M. S. (2011). Faculty-led, short-term study abroad. *International Journal of Athletic Therapy & Training*, 16(1), 17-20.
- Hobgood, C., Sawning, S., Bowen, J., & Savage, K. (2006). Teaching culturally appropriate care: A review of educational models and methods. *Academic Emergency Medicine*, 13(12), 1288-1295.
- Humphreys, M. (2011). Intergroup dialogue: A pedagogical model for integrating cultural competence within a social justice framework. *International Journal of Interdisciplinary Social Sciences*, 6(5), 199-213.
- Interprofessional Education Collaborative. (2011). *Core Competencies for Interprofessional Collaborative Practice*. Retrieved 05/07, 2017, from <https://www.aamc.org/initiatives/meded/>
- Jenks, A. (2011). From 'lists of traits' to 'open-mindedness': Emerging issues in cultural competence education. *Culture, Medicine & Psychiatry*, 35(2), 209-235.
- John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian Framework. *Educational Psychologist*, 31(3/4), 191-206.
- Johns, A., & Thompson, C. W. (2010). Developing cultural sensitivity through study abroad. *Home Health Care Management & Practice*, 22(5), 344-348.
- Jutte, L., S. (2011). Developing a short-term, faculty-led sports medicine study abroad experience. *Athletic Training Education Journal*, 6(3), 163-168.
- Kanpol, B., Giroux, H., & McLaren, P. (1996). The politics of insurgent multiculturalism in the era of the Los Angeles uprising. *Critical Multiculturalism: Uncommon Voices in a Common Struggle*, 107.

- Kozulin, A. (2003). *Vygotsky's educational theory in cultural context*. New York, NY: Cambridge University Press.
- Kripalani, S., Bussey-Jones, J., Katz, M. G., & Genao, I. (2006). A prescription for cultural competence in medical education. *JGIM: Journal of General Internal Medicine*, 21(10), 1116-1120.
- Kumagai, A. K., & Lybson, M. L. (2009). Beyond cultural competence: Critical consciousness, social justice, and multicultural education. *Academic Medicine*, 84(6), 782-787.
- Lazaro, R. T., & Umphred, D. A. (2007). Improving cultural diversity awareness of physical therapy educators. *Journal of Cultural Diversity*, 14(3), 121-125.
- Liaison Committee on Medical Education. (2017). *Functions and structure of a medical school*. Retrieved 05/06, 2017, from <http://lcme.org/publications/>
- Lybson, M. L., Ross, P. T., & Kumagai, A. K. (2008). Medical students' perspectives on a multicultural curriculum. *Journal of the National Medical Association*, 100(9), 1078-1083.
- Marra, J., Covassin, T., Shingles, R. R., Canady, R. B., & Mackowiak, T. (2010). Assessment of certified athletic trainers' levels of cultural competence in the delivery of health care. *Journal of Athletic Training*, 45(4), 380-385.
- Martins, Y., Lederman, R. I., Lowenstein, C. L., Joffe, S., Neville, B. A., Hastings, B. T., Abel, G. A. (2012). Increasing response rates from physicians in oncology research: A structured literature review and data from a recent physician survey. *British Journal of Cancer*, 106(6), 1021-1026.
- Maurer-Starks, S., Whalen, S., & Halls, C. (2007). America's melting pot-- the need for cultural competence. *Athletic Therapy Today*, 12(4), 8-9.
- Musolino, G. M., Burkhalter, S. T., Crookston, B., Ward, R. S., Harris, R. M., Chase-Cantarini, S., & Babitz, M. (2010). Understanding and eliminating disparities in health care: Development and assessment of cultural competence for interdisciplinary health professionals at the University of Utah---a 3-year investigation. *Journal of Physical Therapy Education*, 24(1), 25-36.
- National Athletic Trainers' Association. (1980). *Athletic training education behavioral objectives*. Dallas, TX.
- National Athletic Trainers' Association. (1982). *Competencies in athletic training*. Dallas, TX.
- National Athletic Trainers' Association. (1992). *Competencies in athletic training*. Dallas, TX.

- National Athletic Trainers' Association. (1999). *Athletic training educational competencies* (3rd ed.). Dallas, TX.
- National Athletic Trainers' Association. (2006). *Athletic training educational competencies* (4th ed.). Dallas, TX.
- National Athletic Trainers' Association. (2011). *Athletic training educational competencies* (5th ed.). Dallas, TX.
- National Athletic Trainers' Association. (2016). *Membership statistics*.
- National Athletic Trainers' Association. (2016). *NATA Code of Ethics*.
- National Athletic Trainers' Association. (2017). *Athletic Training*.
- National Center for Cultural Competence. *Conceptual frameworks/models, guiding values and principles*. Retrieved 12/01, 2011, from <http://nccc.georgetown.edu/>
- Núñez, A. E. (2000). Transforming cultural competence into cross-cultural efficacy in women's health education. *Academic Medicine*, 75(11), 1071-1080.
- Pechak, C., & Thompson, M. (2009). International service-learning and other international volunteer service in physical therapist education programs in the United States and Canada: An exploratory study. *Journal of Physical Therapy Education*, 23(1), 71-79.
- Peer, K. S., & McClendon, R. C. (2002). Sociocultural learning theory in practice: Implications for athletic training educators. *Journal of Athletic Training*, 37(4 Supplement), S136-S140.
- Perrin, D. H. (2000). Promoting diversity in athletic training. *Journal of Athletic Training*, 35(2), 131-131.
- Reitz, O. E., & Anderson, M. A. (2013). A comparison of survey methods in studies of the nurse workforce. *Nurse Researcher*, 20(4), 22-27.
- Robins, L. S., Fantone, J. C., Hermann, J., Alexander, G. L., & Zweifler, A. J. (1998). Improving cultural awareness and sensitivity training in medical school. *Academic Medicine*, 73, S31-S34.
- Rodriguez, M., & Romanello, M. L. (2008). Promoting multiculturalism in athletic training education. *Athletic Therapy Today*, 13(3), 40-43.
- Romanello, M. (2007). Integration of cultural competence in physical therapist education. *Journal of Physical Therapy Education*, 21(1), 33-39.
- Rose, P. R. (2013). *Cultural Competency for the Health Professional*. Burlington, MA: Jones & Bartlett Learning

- Rowland, M. L., Bean, C. Y., & Casamassimo, P. S. (2006). A snapshot of cultural competency education in U.S. dental schools. *Journal of Dental Education*, 70(9), 982-990.
- Sales, A., Smith, J., Curran, G., & Kochevar, L. (2006). Models, Strategies, and Tools: Theory in Implementing Evidence-Based Findings into Health Care Practice. *Journal of General Internal Medicine*, 21(Suppl 2), S43-S49.
- Sargent, S. E., Sedlak, C. A., & Martsof, D. S. (2005). Cultural competence among nursing students and faculty. *Nurse Education Today*, 25(3), 214-221.
- Schleyer, T. K., & Forrest, J. L. (2000). Methods for the design and administration of web-based surveys. *Journal of the American Medical Informatics Association*, 7(4), 416-425.
- Seeleman, C., Suurmond, J., & Stronks, K. (2009). Cultural competence: A conceptual framework for teaching and learning. *Medical Education*, 43(3), 229-237.
- Sheehan, K. B., & McMillan, S. J. (1999). Response variation in e-mail surveys: An exploration. *Journal of Advertisement Research*, 39(4), 45-54.
- Thompson, C. A. (2005). Government answers need for cultural competency resource. *American Journal of Health-System Pharmacy: AJHP: Official Journal of the American Society of Health-System Pharmacists*, 62(7), 676-679.
- U.S. Department of Health & Human Services. *National standards on culturally and linguistically appropriate services (CLAS)*. Retrieved 10/1, 2017, from <https://www.thinkculturalhealth.hhs.gov/clas/standards>
- United States Census. (2010). *National population by race*.
- United States Census Bureau. (2008). *An older and more diverse nation by midcentury*.
- Volberding, J. (2012). Understanding the influences on undergraduate athletic training students' perceived cultural competence. *Dissertation Abstracts International Section A*, 72.
- Vredenburg, D., & Wimer, J. W. (2006). Dog-food treats. *Athletic Therapy Today*, 11(4), 14-14.
- Wear, D. (2003). Insurgent multiculturalism: Rethinking how and why we teach culture in medical education. *Academic Medicine*, 78(6), 549-554.

APPENDIX A: NATIONAL ATHLETIC TRAINERS' ASSOCIATION
CULTURAL COMPETENCIES

1980

None listed

1982

None listed

1992

Domain II: Recognition and Evaluation – Affective Domain (Attitudes and Values)

5. Acceptance of the injured athlete's physical complaint(s) without personal bias or prejudice.

1999

Psychosocial Intervention and Referral – Cognitive Domain

1. Describes the current psychosocial and sociocultural issues and problems confronting athletic training and sports medicine and identifies their effects on athletes and others involved in physical activity.
8. Describes the theories and techniques of interpersonal and cross-cultural communication among certified athletic trainers, athletes, athletic personnel, patients, administrators, health care professionals, parents/guardians, and others.

Psychosocial Intervention and Referral – Affective Domain

9. Respects the various social and cultural attitudes, beliefs, and values regarding health care practices when caring for patients.

Health Care Administration – Cognitive Domain

20. Interprets the role and function of nondiscriminatory and unbiased employment practices, which do not base decisions on race, gender, sexual orientation, disability, religion, national origin, or age.

2006

Foundational Behaviors of Professional Practice – Cultural Competence

1. Understand the cultural differences of patients' attitudes and behaviors toward health care.
2. Demonstrate knowledge, attitudes, behaviors, and skills necessary to achieve optimal health outcomes for diverse patient populations.
3. Demonstrate knowledge, attitudes, behaviors, and skills necessary to work respectfully and effectively with diverse populations and in a diverse work environment.

Psychosocial Intervention and Referral – Cognitive Competencies

8. Describe the theories and techniques of interpersonal and cross-cultural communication among athletic trainers, their patients, and others involved in the health care of the patient.

Professional Development and Responsibility – Cognitive Competencies

17. Describe the theories and techniques of interpersonal and cross-cultural communication among athletic trainers, patients, administrators, health care professionals, parents/guardians, and other appropriate personnel.

2011

Foundational Behaviors of Professional Practice – Cultural Competence

1. Demonstrate awareness of the impact that clients'/patients' cultural differences have on their attitudes and behaviors toward healthcare.
2. Demonstrate knowledge, attitudes, behaviors, and skills necessary to achieve optimal health outcomes for diverse patient populations.
3. Work respectfully and effectively with diverse populations and in a diverse work environment.

Psychosocial Strategies and Referral – Knowledge and Skills: Theoretical Background

- PS-4. Summarize and demonstrate the basic processes of effective interpersonal and cross-cultural communication as it relates to interactions with patients and others involved in the healthcare of the patient.
- PS-5. Summarize contemporary theory regarding educating patients of all ages and cultural backgrounds to effect behavioral change.

Psychosocial Strategies and Referral – Knowledge and Skills: Psychosocial Strategies

- PS-10. Explain the impact of sociocultural issues that influence the nature and quality of healthcare received (e.g., cultural competence, access to appropriate healthcare providers, uninsured/underinsured patients, insurance) and formulate and implement strategies to maximize client/patient outcomes.

APPENDIX B: NATIONAL ATHLETIC TRAINERS' ASSOCIATION
CODE OF ETHICS

1. MEMBERS SHALL PRACTICE WITH COMPASSION, RESPECTING THE RIGHTS, WELFARE, AND DIGNITY OF OTHERS

1.1 Members shall render quality patient care regardless of the patient's race, religion, age, sex, ethnic or national origin, disability, health status, socioeconomic status, sexual orientation, or gender identity.

1.2. Member's duty to the patient is the first concern, and therefore members are obligated to place the welfare and long-term well-being of their patient above other groups and their own self-interest, to provide competent care in all decisions, and advocate for the best medical interest and safety of their patient at all times as delineated by professional statements and best practices.

1.3. Members shall preserve the confidentiality of privileged information and shall not release or otherwise publish in any form, including social media, such information to a third party not involved in the patient's care without a release unless required by law.

2. MEMBERS SHALL COMPLY WITH THE LAWS AND REGULATIONS GOVERNING THE PRACTICE OF ATHLETIC TRAINING, NATIONAL ATHLETIC TRAINERS' ASSOCIATION (NATA) MEMBERSHIP STANDARDS, AND THE NATA CODE OF ETHICS

2.1. Members shall comply with applicable local, state, federal laws, and any state athletic training practice acts.

2.2. Members shall understand and uphold all NATA Standards and the Code of Ethics.

2.3. Members shall refrain from, and report illegal or unethical practices related to athletic training.

2.4. Members shall cooperate in ethics investigations by the NATA, state professional licensing/regulatory boards, or other professional agencies governing the athletic training profession. Failure to fully cooperate in an ethics investigation is an ethical violation.

2.5. Members must not file, or encourage others to file, a frivolous ethics complaint with any organization or entity governing the athletic training profession such that the complaint is unfounded or willfully ignore facts that would disprove the allegation(s) in the complaint.

2.6. Members shall refrain from substance and alcohol abuse. For any member involved in an ethics proceeding with NATA and who, as part of that proceeding is seeking rehabilitation for substance or alcohol dependency, documentation of the completion of rehabilitation must be provided to the NATA Committee on Professional Ethics as a requisite to complete a NATA membership reinstatement or suspension process.

3. MEMBERS SHALL MAINTAIN AND PROMOTE HIGH STANDARDS IN THEIR PROVISION OF SERVICES

3.1. Members shall not misrepresent, either directly or indirectly, their skills, training, professional credentials, identity, or services.

3.2. Members shall provide only those services for which they are qualified through education or experience and which are allowed by the applicable state athletic training practice acts and other applicable regulations for athletic trainers.

3.3. Members shall provide services, make referrals, and seek compensation only for those services that are necessary and are in the best interest of the patient as delineated by professional statements and best practices.

3.4. Members shall recognize the need for continuing education and participate in educational activities that enhance their skills and knowledge and shall complete such educational requirements necessary to continue to qualify as athletic trainers under the applicable state athletic training practice acts.

3.5. Members shall educate those whom they supervise in the practice of athletic training about the Code of Ethics and stress the importance of adherence.

3.6. Members who are researchers or educators must maintain and promote ethical conduct in research and educational activities.

4. MEMBERS SHALL NOT ENGAGE IN CONDUCT THAT COULD BE CONSTRUED AS A CONFLICT OF INTEREST, REFLECTS NEGATIVELY ON THE ATHLETIC TRAINING PROFESSION, OR JEOPARDIZES A PATIENT'S HEALTH AND WELL-BEING.

4.1. Members should conduct themselves personally and professionally in a manner that does not compromise their professional responsibilities or the practice of athletic training.

4.2. All NATA members, whether current or past, shall not use the NATA logo in the endorsement of products or services, or exploit their affiliation with the NATA in a manner that reflects badly upon the profession.

4.3. Members shall not place financial gain above the patient's welfare and shall not participate in any arrangement that exploits the patient.

4.4. Members shall not, through direct or indirect means, use information obtained in the course of the practice of athletic training to try and influence the score or outcome of an athletic event, or attempt to induce financial gain through gambling.

4.5. Members shall not provide or publish false or misleading information, photography, or any other communications in any media format, including on any social media platform, related to athletic training that negatively reflects the profession, other members of the NATA, NATA officers, and the NATA office.

APPENDIX C: PERMISSION TO MODIFY SURVEY

From: Rowland, Michael L [mailto:michael.rowland@louisville.edu]
Sent: Friday, February 15, 2013 1:29 PM
To: Liesener, Katherine <Katherine.Liesener@cuw.edu>
Subject: RE: Cultural Competency Dissertation

Dear Kate,

Thank you for your email and interest in our research.

You have my permission to use the survey that was adapted and modified from Dr. Dolhun's survey.

Unfortunately, I do not have any data about the validity of the survey. We established content validity by having the questionnaire reviewed by a panel of experts in the field of dental education and cultural competence and administering a pilot test.

I think if I were to repeat the study now I would focus more on the experiences of the faculty teaching cultural competence courses. For instance, from the perspective of faculty how receptive are students to discussions of culture. What areas of cultural competence do they (faculty) find most challenging to teach? What areas of cultural competence are most challenging for students? These are some of the questions that I pursue now. Of course, this would be a more qualitative approach to the lived experiences of those responsible for teaching cultural competency. I am more interested in the cultural influences and background of those responsible for teaching these courses and its impact on student learning.

Hopefully, this information is useful to you. I would really be interested in the results of your research.

If I can be of further assistance, please do not hesitate to contact me. I wish you well with your dissertation research.

Best wishes,

Michael

Michael L. Rowland, Ph.D.
Assistant Professor, Office of Medical Education
Assistant Professor, College of Education and Human Development
University of Louisville School of Medicine
Instructional Building B, Room 311W
500 South Preston Street
Louisville, KY 40202
(502) 852-1864
(502) 852-4038 FAX
E-mail: michael.rowland@louisville.edu

From: Liesener, Katherine [<mailto:Katherine.Liesener@cuw.edu>]
Sent: Friday, February 15, 2013 10:42 AM
To: Rowland, Michael L
Subject: Cultural Competency Dissertation

Good Morning Dr. Rowland,

My name is Kate Liesener and I am working on my PhD in Urban Education at the University of Wisconsin-Milwaukee. For my dissertation, I intend to study “Cultural Competency Education in Undergraduate Athletic Training Education Programs.” During my research, I discovered your article titled “A Snapshot of Cultural Competency Education in U.S. Dental Schools” in the Journal of Dental Education (September 2006). This research that you completed in the Dental field is very similar to what I would like to research in the Athletic Training Field. Where Cultural Competency Education was in Dental Education 5 years ago is where we are today in Athletic Training Education. Therefore, I feel that a baseline or “snapshot” is warranted in Athletic Training Education at this time.

I am writing you today for three reasons:

1. I am seeking your permission to modify and use your survey that was published with this article: “Survey of U.S. Dental Schools Regarding Cultural Competency Courses.” If granted permission to use this survey as an outline, I would be modifying it to fit Athletic Training Education.
2. Do you have any data regarding the validity of the survey you used? (I would simply be citing this in my dissertation, as a justification for using this survey as an outline).
3. Do you have any advice for me when researching this topic? For example, in hindsight, is there anything you would have done differently, questions you wish you had included in the survey, etc?

I know that we have not met prior to this email, so I do realize that this email may be somewhat forward. But, I am wondering if you would consider granting me permission to use your survey and modify it for the Athletic Training Field.

If you need more information to make this decision, please feel free to email me or call me at the number listed below.

Thank you very much for your time and consideration,
Kate

Katherine L. Liesener, MSEd, LAT
Athletic Training Education Program Director
Assistant Professor of Health and Human Performance
Concordia University Wisconsin
12800 N. Lake Shore Dr.
Mequon, WI 53097
Phone: (262) 243-4338
Fax (262) 243-2969
katherine.liesener@cuw.edu

APPENDIX D: ELECTRONIC SURVEY QUESTIONNAIRE

Cultural Competence Education in Undergraduate Athletic Training Programs

Please complete the following survey by answering the questions or filling in the appropriate information regarding your CAATE Accredited **Undergraduate** Athletic Training Program. If your institution has more than one Athletic Training Program, please respond with information regarding only the Undergraduate Program.

All responses will remain confidential.

1. Approximate institution size: (Carnegie classification):
 - At least 10,000 students (large)
 - 3,000-9,999 students (medium)
 - 1,000-2,999 students (small)
 - Less than 1,000 students (very small)

2. Type of institution:
 - Public
 - Private, not-for-profit
 - Private, for-profit
 - Other, please specify: _____

3. Institution setting:
 - Urban: metropolis or city, population greater than 100,000
 - Suburban: residential, outskirts of a city, population 10,000-1,000,000
 - Rural: outside of a metropolis or city, population less than 10,000

4. Average length of Athletic Training Program enrollment (time from admittance into the program, if using a secondary admission process, to graduation):
 - 1 year
 - 1.5 years
 - 2 years
 - 2.5 years
 - 3 years
 - 3.5 years
 - 4 years
 - Greater than 4 years

5. Please list the total number of Athletic Training Students currently enrolled in the Athletic Training Program. (If using a secondary admission process, report students formally admitted to the Program only): _____

6. Please identify an approximate percentage of your Athletic Training Students that identify with the following racial groups:
- _____ Asian
 - _____ Black or African American
 - _____ Hispanic or Latino
 - _____ Native Hawaiian, Other Pacific Islander, American Indian, or Alaska Native
 - _____ White or Caucasian
 - _____ Two or More Racial Groups
 - _____ Unknown

For the purpose of this survey, "**cultural competence**," "**cultural competence content**," and "**cultural competence education**" refers to the cultural competence curriculum in your Undergraduate Athletic Training Program that addresses the 2011 National Athletic Trainers' Association competencies focused on cultural competence.

7. In your Athletic Training Program, the cultural competence content is offered as: (Check all that apply)
- A stand-alone course
 - A unit within 1 course
 - A unit within approximately 2 courses
 - A unit within approximately 3 courses
 - A unit within approximately 4 courses
 - A unit within approximately 5 courses
 - A unit within greater than 5 courses
 - Other, please specify: _____
8. Typically, during which semester(s) of an Athletic Training Student's entire college education is the cultural competence content taught? (Please place winter courses in the traditional fall semester and summer courses in the traditional spring semester). (Check all that apply)
- Year 1, Fall Semester
 - Year 1, Spring Semester
 - Year 2, Fall Semester
 - Year 2, Spring Semester
 - Year 3, Fall Semester
 - Year 3, Spring Semester
 - Year 4, Fall Semester
 - Year 4, Spring Semester
 - Other, please specify: _____
9. Is the primary course (course of first introduction) of cultural competence content an interdisciplinary course?
- Yes. Please specify which other majors or individuals are often enrolled in the course: _____
 - No

10. Which academic department or school is responsible for teaching the cultural competence content in the Athletic Training Program curriculum? (Check all that apply)

- Athletic Training Department
- Education Department
- Health Sciences Department
- Kinesiology or Exercise Science Department
- Nursing Department
- Physical Therapy Department
- Psychology Department
- School of Medicine
- Sociology Department
- Other, please specify: _____

11. When designing the cultural competence curriculum for the Athletic Training Program, what, if any, factors are considered? (Check all that apply)

- The students' cultural background
- The faculty's cultural background
- The culture of the institution
- None
- Unknown
- Other, please specify: _____

12. Please rate your knowledge of the following theories.

	Very knowledgeable	Knowledgeable	Aware but not very knowledgeable	Not at all knowledgeable
Insurgent multiculturalism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social justice theory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sociocultural learning theory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Which theories are being used to inform the cultural competence curriculum in the Athletic Training Program? (Check all that apply)

- Insurgent multiculturalism
- Social justice theory
- Sociocultural learning theory
- None
- Unknown
- Other, please specify: _____

14. Which of the following topics are explored in the cultural competency course(s)? (Check all that apply)

- Access to care
- Accountability and mutual respect
- Ageism
- Cross-cultural communication
- Cultural barriers and clashes
- Cultural competency definitions
- Disabilities
- Focus on changing attitudes
- Gender issues
- Health disparities
- Immigration and citizenship barriers
- Linguistic barriers
- Literacy barriers
- Religious differences
- Social support networks
- Socioeconomic status
- American Indian and/or Alaska Native culture
- Asian culture
- Black or African American culture
- Hawaiian and/or Pacific Islander culture
- Hispanic or Latino culture
- White or Caucasian culture
- Other, please specify: _____

15. Approximately how many different instructors or professors teach the cultural competence content (in the classroom setting) during the course of the Athletic Training Program?

- 1
- 2
- 3
- 4
- 5
- Greater than 5

16. Please identify an approximate percentage of your cultural competence instructors or professors that identify with the following racial groups:

- _____ Asian
- _____ Black or African American
- _____ Hispanic or Latino
- _____ Native Hawaiian, Other Pacific Islander, American Indian, or Alaska Native
- _____ White or Caucasian
- _____ Two or More Racial Groups
- _____ Unknown

For the next 3 questions, please answer based on the instructor or professor who is **primarily responsible** for teaching the cultural competence content in your Athletic Training Program. "Primarily responsible" refers to the person who covers this topic in the greatest detail and depth.

17. Is the instructor or professor primarily responsible for teaching cultural competence an Athletic Trainer?
- Yes
 - No
18. Please identify the background or specific training of the instructor or professor primarily responsible for teaching the cultural competence content: (Check all that apply)
- Anthropology
 - Athletic Training
 - Epidemiology
 - Ethics or moral philosophy
 - Ethnic studies
 - Gender studies
 - Medicine
 - Multicultural studies
 - Nursing
 - Physical Therapy
 - Social and behavioral science
 - Other, please specify: _____
19. How does the primary instructor or professor of cultural competence prepare for teaching this subject? (Check all that apply)
- Formal instruction and training
 - Informal instruction and experience
 - Continuing education workshops and seminars
 - Self-exploration and self-reflection
 - Independent research
 - Other, please specify: _____
20. What types of formal, published material are used to teach the cultural competence content? (Check all that apply)
- Textbook. Title and author (if known): _____
 - Primary research articles
 - None
 - Unknown
 - Other, please specify: _____

21. Which methods of instruction are used to teach the cultural competence content in the classroom setting? (Check all that apply)
- Case studies
 - Guest speakers
 - Ice breakers
 - Lecture
 - Open dialogue
 - Patient observations
 - Pre- and post- testing or assessments
 - Problem-based learning
 - Role playing
 - Self-exploration using reflection exercises
 - Self-exploration using standard assessments
 - Small group discussions
 - Videos
 - Unknown
 - Other, please specify: _____
22. Are the Athletic Training Students required to complete an immersion experience? For the purpose of this study, an "immersion experience" is a clinical placement that is purposefully selected to expose the student to diverse patient populations (populations not normally encountered during the typical clinical placements for your Program) AND involves at least 25 contact hours. (Check all that apply)
- Yes, one clinical placement in a diverse setting (not including study abroad)
 - Yes, more than one clinical placement in a diverse setting (not including study abroad)
 - Yes, study abroad
 - Yes, other, please specify: _____
 - No, none required
23. Has the Athletic Training Program encountered any curriculum challenges when incorporating cultural competence education? (Check all that apply)
- Yes, finding room in the curriculum
 - Yes, teaching cultural competency across the curriculum
 - Yes, identifying qualified instructors or professors to teach the content
 - Yes, other, please specify: _____
 - No, none encountered
24. Have the cultural competence instructors or professors encountered any challenges when preparing to teach the cultural competence content? (Check all that apply)
- Yes, previous training and knowledge of cultural competence
 - Yes, opportunities to improve knowledge and skills
 - Yes, other, please specify: _____
 - No, none encountered

25. Have the cultural competence instructors or professors encountered any challenges when teaching the cultural competence content? (Check all that apply)
- Yes, sensitivity of the subject matter
 - Yes, student resistance to the subject matter
 - Yes, other, please specify _____
 - No, none encountered

This completes the survey. Thank you very much for your time and participation!

26. Would you be willing to participate in a possible follow-up telephone interview?
- Yes
 - No
27. Thank you for being willing to participate in a possible follow-up telephone interview! Please provide the following information in order to be contacted, if selected:
- Name of the individual completing the survey (optional and excluded from the survey results): _____
 - Institution name (optional and excluded from the survey results):

 - Email address (optional and excluded from the survey results):

APPENDIX E: FOLLOW-UP TELEPHONE INTERVIEW

Hello (.....),

Once again, thank you for taking the time to participate in this research study and complete this additional 10 question interview.

Before we begin, I would like to review a few things with you:

- (if applicable) Please respond to all questions with information regarding only your CAATE Accredited Undergraduate Program.
- Your participation is voluntary and confidential.
- You may withdraw from the interview at any time without any negative effects.
- And completion of the telephone interview is considered consent to participate.
- This interview will be audio recorded for transcription purposes only. Once transcribed, all recordings will be destroyed.

Interview Questions:

1. You stated that cultural competence content is taught in (...#...) of your courses. Could you please list the titles of these courses and the level or year of the student enrolled in these classes?
2. With regards to the instructors and professors who teach these classes, what is their background and training, with regards to cultural competence awareness, knowledge, and skills?
3. You stated that your cultural competence courses focus on (...topics...). How did you arrive at this list of content?
4. As a follow up to the previous question, are there any topics that you foresee changing in the future (adding or removing)?
5. Could you please explain your working definition of cultural competence?
6. You stated that (...theories...) inform your cultural competence education. Could you expand upon how and why you chose these theories?
7. How do these theories relate to the practice of your program, or the practical application of athletic training?
8. In your opinion, what are some of the positive features or strengths of your cultural competence curriculum?
9. In your opinion, what are some of the challenges you have faced or weaknesses of your cultural competence curriculum?
10. In your opinion, which directions should athletic training cultural competence education move in the future?

APPENDIX F: VARIABLES

Survey Question	Variable
1. Approximate institution size	Nominal
2. Type of institution	Nominal
3. Institution setting	Nominal
4. Average length of Athletic Training Program enrollment	Ratio
5. Please list the total number of Athletic Training Students currently enrolled in the Athletic Training Program.	Ratio
6. Please identify an approximate percentage of your Athletic Training Students that identify with the following racial groups...	Nominal
7. In your Athletic Training Program, the cultural competence content is offered as...	Ratio
8. Typically, during which semester(s) of an Athletic Training Student's entire college education is the cultural competence content taught?	Interval
9. Is the primary course (course of first introduction) of cultural competence content an interdisciplinary course?	Nominal
10. Which academic department or school is responsible for teaching the cultural competence content in the Athletic Training Program curriculum?	Nominal
11. When designing the cultural competence curriculum for the Athletic Training Program, what, if any, factors are considered?	Dichotomous
12. Please rate your knowledge of the following theories...	Nominal
13. Which theories are being used to inform the cultural competence curriculum in the Athletic Training Program?	Nominal

14. Which of the following topics are explored in the cultural competency course(s)?	Nominal
15. Approximately how many different instructors or professors teach the cultural competence content (in the classroom setting) during the course of the Athletic Training Program?	Ratio
16. Please identify an approximate percentage of your cultural competence instructors or professors that identify with the following racial groups...	Nominal
17. Is the instructor or professor <u>primarily</u> responsible for teaching cultural competence an Athletic Trainer?	Dichotomous
18. Please identify the background or specific training of the instructor or professor <u>primarily</u> responsible for teaching the cultural competence content...	Nominal
19. How does the <u>primary</u> instructor or professor of cultural competence prepare for teaching this subject?	Nominal
20. What types of formal, published material are used to teach the cultural competence content?	Dichotomous
21. Which methods of instruction are used to teach the cultural competence content in the classroom setting?	Nominal
22. Are the Athletic Training Students <u>required</u> to complete an immersion experience?	Nominal
23. Has the Athletic Training Program encountered any <u>curriculum challenges</u> when incorporating cultural competence education?	Nominal
24. Have the cultural competence instructors or professors encountered any challenges when <u>preparing to teach</u> the cultural competence content?	Nominal
25. Have the cultural competence instructors or professors encountered any challenges when <u>teaching</u> the cultural competence content?	Nominal

APPENDIX G: COMMUNICATION WITH PARTICIPANTS
(WITH INFORMED CONSENT)

Initial Email

Dear Athletic Training Program Director,

My name is **Katherine Liesener** and I am a doctoral student in the Urban Education Doctoral Program at the University of Wisconsin – Milwaukee. For my dissertation, I am conducting a research study that will investigate **Cultural Competence Education in Undergraduate Athletic Training Programs**. I, along with my Dissertation Committee Member **Dr. Jennifer Earl-Boehm**, invite you to participate in the following online survey. If you feel that it is more appropriate to pass this invitation along to the professor or instructor who is most familiar with your Athletic Training Program's cultural competence education and content, please feel free to do so.

University of Wisconsin – Milwaukee
Consent to Participate in Online Survey Research

Study Title: Cultural Competence Education in Undergraduate Athletic Training Programs

Person Responsible for Research: Dr. Larry Martin, P.I., Katherine Liesener, S.P.I.

Study Description: The purpose of this research study is to investigate the extent to which athletic training cultural competency education is being implemented, how it is being taught, and the challenges faced when implementing it. Approximately 310 subjects will be asked to participate in this study. If you agree to participate, you will be asked to complete an online survey that will take approximately 20-25 minutes to complete. The questions will focus on background information, curriculum design and implementation, preparation strategies, teaching strategies, and challenges encountered.

Risks / Benefits: Risks to participants are considered minimal. Collection of data and survey responses using the internet involves the same risks that a person would encounter in everyday use of the internet, such as breach of confidentiality. While the researchers have taken every reasonable step to protect your confidentiality, there is always the possibility of interception or hacking of the data by third parties that is not under the control of the research team.

There will be no costs for participating. There are no benefits to you other than to further research. This research study will provide information to athletic training researchers, administrators, and educators regarding the current climate of cultural competency education nationwide. This information will provide a foundation for future research and educational initiatives, determine if changes are required in the current curriculum, decipher if students are receiving quality cultural competence education, and identify any challenges or needs that should be addressed.

Limits to Confidentiality: Information such as your name (optional), institution (optional), and the Internet Protocol (IP) address of this computer may be collected for the research purposes of conducting a follow-up telephone interview. Data will be retained on the Qualtrics website server for 6 months and will be deleted after this time. However, data may exist on backups or server logs beyond the timeframe of this research project. Data transferred from the survey site will be saved in an encrypted format for 1 year. Only the P.I., S.P.I, and Doctoral Committee Members will have access to the data collected by this study. However, the Institutional Review Board at UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. The research team will remove your identifying information after analyzing the data and all study results will be reported without identifying information so that no one viewing the results will ever be able to match you with your responses.

Voluntary Participation: Your participation in this study is voluntary. You may choose to not answer any of the questions or withdraw from this study at any time without penalty. Your decision will not change any present or future relationship with the University of Wisconsin Milwaukee.

Who do I contact for questions about the study: For more information about the study or study procedures, contact Katherine Liesener at katherine.liesener@cuw.edu.

Who do I contact for questions about my rights or complaints towards my treatment as a research subject? Contact the UWM IRB at 414-229-3173 or irbinfo@uwm.edu

Research Subject's Consent to Participate in Research: By entering this survey, you are indicating that you have read the consent form, you are age 18 or older and that you voluntarily agree to participate in this research study.

This research study and this consent form have been approved by the University of Wisconsin Milwaukee Institutional Review Board.

To participate in the online survey, please utilize the following link:

https://cuw.az1.qualtrics.com/SE/?SID=SV_0kP8u6ZTdn3KTwF

I greatly appreciate your time and assistance with this research study.

Sincerely,

Katherine Liesener, MEd, LAT
Doctoral Student, University of Wisconsin Milwaukee
Athletic Training Program Director, Concordia University Wisconsin
(262) 243-4338
katherine.liesener@cuw.edu

One Week Follow-Up Email

Last week, I sent you an invitation to participate in this cultural competence education research study. If you have already completed the survey, I thank you very much for your time. However, if you have not yet had the time to complete it, please feel free to read the research description below and use the link provided to complete the survey.

Dear Athletic Training Program Director,

My name is **Katherine Liesener** and I am a doctoral student in the Urban Education Doctoral Program at the University of Wisconsin – Milwaukee. For my dissertation, I am conducting a research study that will investigate **Cultural Competence Education in Undergraduate Athletic Training Programs**. I, along with my Dissertation Committee Member **Dr. Jennifer Earl-Boehm**, invite you to participate in the following online survey. If you feel that it is more appropriate to pass this invitation along to the professor or instructor who is most familiar with your Athletic Training Program's cultural competence education and content, please feel free to do so.

University of Wisconsin – Milwaukee Consent to Participate in Online Survey Research

Study Title: Cultural Competence Education in Undergraduate Athletic Training Programs

Person Responsible for Research: Dr. Larry Martin, P.I., Katherine Liesener, S.P.I.

Study Description: The purpose of this research study is to investigate the extent to which athletic training cultural competency education is being implemented, how it is being taught, and the challenges faced when implementing it. Approximately 310 subjects will be asked to participate in this study. If you agree to participate, you will be asked to complete an online survey that will take approximately 5-15 minutes to complete. The questions will focus on background information, curriculum design and implementation, preparation strategies, teaching strategies, and challenges encountered.

Risks / Benefits: Risks to participants are considered minimal. Collection of data and survey responses using the internet involves the same risks that a person would encounter in everyday use of the internet, such as breach of confidentiality. While the researchers have taken every reasonable step to protect your confidentiality, there is always the possibility of interception or hacking of the data by third parties that is not under the control of the research team.

There will be no costs for participating. There are no benefits to you other than to further research. This research study will provide information to athletic training researchers, administrators, and educators regarding the current climate of cultural competency education nationwide. This information will provide a foundation for future research and educational initiatives, determine if changes are required in the current curriculum, decipher if students are receiving quality cultural competence education, and identify any challenges or needs that should be addressed.

Limits to Confidentiality: Information such as your name (optional), institution (optional), and the Internet Protocol (IP) address of this computer may be collected for the research purposes of conducting a follow-up telephone interview. Data will be retained on the Qualtrics website server for 6 months and will be deleted after this time. However, data may exist on backups or server logs beyond the timeframe of this research project. Data transferred from the survey site will be saved in an encrypted format for 1 year. Only the P.I., S.P.I, and Doctoral Committee Members will have access to the data collected by this study. However, the Institutional Review Board at UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. The research team will remove your identifying information after analyzing the data and all study results will be reported without identifying information so that no one viewing the results will ever be able to match you with your responses.

Voluntary Participation: Your participation in this study is voluntary. You may choose to not answer any of the questions or withdraw from this study at any time without penalty. Your decision will not change any present or future relationship with the University of Wisconsin Milwaukee.

Who do I contact for questions about the study: For more information about the study or study procedures, contact Katherine Liesener at katherine.liesener@cuw.edu.

Who do I contact for questions about my rights or complaints towards my treatment as a research subject? Contact the UWM IRB at 414-229-3173 or irbinfo@uwm.edu

Research Subject's Consent to Participate in Research: By entering this survey, you are indicating that you have read the consent form, you are age 18 or older and that you voluntarily agree to participate in this research study.

This research study and this consent form have been approved by the University of Wisconsin Milwaukee Institutional Review Board.

To participate in the online survey, please utilize the following link:
https://cuw.az1.qualtrics.com/SE/?SID=SV_0kP8u6ZTdn3KTwF

I greatly appreciate your time and assistance with this research study.

Sincerely,

Katherine Liesener, MEd, LAT
Doctoral Student, University of Wisconsin Milwaukee
Athletic Training Program Director, Concordia University Wisconsin
(262) 243-4338
katherine.liesener@cuw.edu

Two Week Follow-Up Email

*Two weeks ago, I sent you an invitation to participate in this cultural competence education research study. If you have already completed the survey, I thank you very much for your time. However, if you have not yet had the time to complete it, please feel free to read the research description below and use the link provided to complete the survey. **The survey link will be closing shortly!***

*Followed by One Week Follow-Up Email text (see above)

Four Week Follow-Up Email – Sent by Dr. Jennifer Earl-Boehm

Dear Athletic Training Program Director,

I am sending this friendly reminder on behalf of one of my doctoral students. Please take a few minutes to participate to help add to our knowledge of cultural competence in AT education.

*Followed by One Week Follow-Up Email text (see above)

Jennifer E. Earl-Boehm, PhD, LAT, FNATA
Associate Professor of Kinesiology: Integrative Human Performance Unit
Director, Athletic Training Education
University of Wisconsin-Milwaukee
PO Box 413
Milwaukee, WI 53201
(414)229-3227 Office
(414)229-3366 Fax

Six and Seven Week Phone Calls

Hello (.....)

My name is Katherine Liesener and I'm the Program Director at Concordia University Wisconsin. I'm also a Doctoral Student at the University of Wisconsin – Milwaukee and I'm trying to complete my dissertation on Cultural Competence Education in Undergraduate Athletic Training Programs. I've already sent out my survey link several times, so if you've already completed this survey, I thank you very much for taking the time to do so and please ignore the rest of this voicemail. But, if you haven't yet had the chance to fill out the survey, I was hoping that you could find 5-15 minutes to spare to complete it. I am in need of approximately ... more responses in order to move onto the data analysis phase, so I'm hoping you can help me. After this voicemail, I will be re-emailing you the link to the survey so that you have easy access to it. If you have any questions, please feel free to call me at 262-243-4338. I thank you for your time and have a great day.

Follow-up Email for a Telephone Interview

Dear (.....)

My name is **Katherine Liesener** and you recently completed my online survey titled “Cultural Competence Education in Undergraduate Athletic Training Programs.” I, along with my Dissertation Committee Member **Dr. Jennifer Earl-Boehm**, would like to personally thank you for taking the time to participate in this research study.

A preliminary analysis of the results revealed that your Athletic Training Program appears to be implementing cultural competence education well and merits a follow-up telephone interview. This follow-up interview is designed to obtain a better understanding of how cultural competence education is accomplished at your institution and to profile some of the Athletic Training Programs that are teaching cultural competence content well.

All study results will be reported without identifying information so that no one viewing the results will ever be able to match you with your responses. Direct quotes may be used in publications or presentations. See the Limits to Confidentiality section below.

To participate in the follow-up telephone interview, please respond to Katherine Liesener at katherine.liesener@cuw.edu. Please indicate your willingness to participate, provide your availability next week, and include your contact information to be used in order to establish an interview date and time.

I greatly appreciate your time and assistance with this research study.

Sincerely,

Katherine Liesener, MEd, LAT
Doctoral Student, University of Wisconsin Milwaukee
Athletic Training Program Director, Concordia University Wisconsin
(262) 243-4338
katherine.liesener@cuw.edu

University of Wisconsin – Milwaukee Consent to Participate in Interview Research

Study Title: Cultural Competence Education in Undergraduate Athletic Training Programs

Person Responsible for Research: Dr. Larry Martin, P.I., Katherine Liesener, S.P.I.

Study Description: The purpose of this research study is to investigate the extent to which athletic training cultural competency education is being implemented, how it is being taught, and the challenges faced when implementing it. Approximately 310 subjects were asked to participate in the online survey phase of this study. Approximately 3-6 subjects will be asked to participate in the follow-up telephone interview. During this interview you will be asked

questions about background information, curriculum design and implementation, preparation strategies, teaching strategies, and challenges encountered. This 10 question interview will take approximately 15-30 minutes of your time. The interview will take place via the telephone and it will be audio recorded for transcription purposes only.

Risks / Benefits: Risks to participants are considered minimal. There will be no costs for participating. There are no benefits to you other than to further research. This research study will provide information to athletic training researchers, administrators, and educators regarding the current climate of cultural competency education nationwide. This information will provide a foundation for future research and educational initiatives, determine if changes are required in the current curriculum, decipher if students are receiving quality cultural competence education, and identify any challenges or needs that should be addressed.

Limits to Confidentiality: During the interview your name will be used. Your responses will be treated as confidential and any use of your name and or identifying information about anyone else will be removed during the transcription process so that the transcript of our conversation is de-identified. All study results will be reported without identifying information so that no one viewing the results will ever be able to match you with your responses. Direct quotes may be used in publications or presentations. Data from this study will be saved on a non-networked, password-protected computer in a secure location for 1 year. Only the P.I., S.P.I., and Doctoral Committee Members will have access to your information. However, the Institutional Review Board at UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. Audio recordings will be destroyed following transcription.

Voluntary Participation: Your participation in this study is voluntary. You may choose not to take part in this study, or if you decide to take part, you can change your mind later and withdraw from the study. You are free to not answer any questions or withdraw at any time. Your decision will not change any present or future relationships with the University of Wisconsin Milwaukee.

Who do I contact for questions about the study: For more information about the study or study procedures, contact Katherine Liesener at katherine.liesener@cuw.edu.

Who do I contact for questions about my rights or complaints towards my treatment as a research subject? Contact the UWM IRB at 414-229-3173 or irbinfo@uwm.edu

Research Subject's Consent to Participate in Research: By responding to this email and agreeing to the telephone interview, you are indicating that you have read the consent form, you are age 18 or older and that you voluntarily agree to participate in this research study.

This research study and this consent form have been approved by the University of Wisconsin Milwaukee Institutional Review Board.

CURRICULUM VITAE

Katherine L. Liesener, MEd, LAT
katherine.liesener@cuw.edu

EDUCATION

University of Wisconsin – Milwaukee In Progress: Urban Education Doctoral Program, Educational Administration	2009-Present
University of Akron MSEd: Exercise Physiology	2004
University of Wisconsin – La Crosse BS: Athletic Training, Emphasis in Child & Youth Care	2002

PROFESSIONAL EXPERIENCE

Entry Level Master's Degree Athletic Training Program Director 2016-Present
Assistant Professor of Health and Human Performance
Concordia University Wisconsin

- Direct the management of the Entry-Level Master's Degree Athletic Training Program
- Maintain CAATE Accreditation
- Direct the advising of undergraduate and graduate Athletic Training Students
- Direct the recruitment of Athletic Training Students
- Assistant Professor in the CAATE Athletic Training Program
- Assist with the management of the Athletic Training Department
- Assist with the management of the Athletic Training Room operations
- Preceptor: CAATE Athletic Training Student supervision
- Provide primary care, prevention, treatment, rehabilitation, and athletic training coverage for all student athletes
 - Athletic Training Clinic

Entry Level Master's Degree Athletic Training Program Director 2015-2016
Undergraduate Athletic Training Program Director
Assistant Professor of Health and Human Performance
Concordia University Wisconsin

- Directed the management of the Entry-Level Master's Degree and Undergraduate Athletic Training Programs
- Maintained CAATE Accreditation
- Directed the advising of undergraduate and graduate Athletic Training Students
- Directed the recruitment of Athletic Training Students

- Assistant Professor in the CAATE Athletic Training Program
- Assisted with the management of the Athletic Training Department
- Assisted with the management of the Athletic Training Room operations
- Preceptor: CAATE Athletic Training Student supervision
- Provided primary care, prevention, treatment, rehabilitation, and athletic training coverage for all student athletes
 - Athletic Training Clinic

Athletic Training Program Director 2010-2015

Assistant Professor of Health and Human Performance

Director of Athletic Training

Concordia University Wisconsin

- Directed the management of the Athletic Training Program
- Maintained CAATE Accreditation
- Directed the advising of undergraduate Athletic Training Students
- Directed the recruitment of Athletic Training Students
- Assistant Professor in the CAATE Athletic Training Program
- Directed the management of the Athletic Training Department
- Directed the management of the Athletic Training Room operations
- Approved Clinical Instructor / Preceptor: CAATE Athletic Training Student supervision
- Provided primary care, prevention, treatment, rehabilitation, and athletic training coverage for all student athletes
 - Athletic Training Clinic

Athletic Training Program Director 2009-2010

Instructor of Health and Human Performance

Assistant Athletic Trainer

Concordia University Wisconsin

- Directed the management of the Athletic Training Program
- Maintained CAATE Accreditation
- Assisted with the recruitment of Athletic Training Students
- Instructor in the CAATE Athletic Training Program
- Advisor to undergraduate Athletic Training Students
- Assisted with the management of the Athletic Training Department
- Assisted with the management of the Athletic Training Room operations
- Approved Clinical Instructor: CAATE Athletic Training Student supervision
- Provided primary care, prevention, treatment, rehabilitation, and athletic training coverage for all student athletes
 - Women's Basketball, Athletic Training Clinic

Instructor of Health and Human Performance 2007-2009

Assistant Athletic Trainer

Concordia University Wisconsin

- Instructor in the CAATE Athletic Training Program
- Advisor to undergraduate Athletic Training Students
- Assisted with the management of the Athletic Training Program

- Assisted with the management of the Athletic Training Room operations
- Approved Clinical Instructor: CAATE Athletic Training Student supervision
- Provided primary care, prevention, treatment, rehabilitation, and athletic training coverage for all student athletes
 - Women's Soccer, Women's Basketball

Interim Instructor of Health and Human Performance 2006-2007
 Assistant Athletic Trainer

Concordia University Wisconsin

- Interim Instructor in the CAATE Athletic Training Program
- Advisor to undergraduate Athletic Training Students
- Assisted with the management of the Athletic Training Program
- Assisted with the management of the Athletic Training Room operations
- Approved Clinical Instructor: CAATE Athletic Training Student supervision
- Provided primary care, prevention, treatment, rehabilitation, and athletic training coverage for all student athletes
 - Women's Soccer, Women's Basketball, Women's Softball

Adjunct Instructor of Health and Human Performance 2004-2006
 Staff Athletic Trainer

Concordia University Wisconsin

- Adjunct Instructor in the CAAHEP Athletic Training Program
- Advisor to undergraduate Athletic Training Students
- Assisted with the management of the Athletic Training Program
- Assisted with the management of the Athletic Training Room operations
- Approved Clinical Instructor: CAAHEP Athletic Training Student supervision
- Provided primary care, prevention, treatment, rehabilitation, and athletic training coverage for all student athletes
 - Women's Soccer, Women's Basketball, Women's Softball

Graduate Assistant Athletic Trainer 2003-2004

University of Akron

- Assisted teaching in the CAAHEP Athletic Training Program
- Approved Clinical Instructor: CAAHEP Athletic Training Student supervision
- Provided primary care, prevention, treatment, rehabilitation, and athletic training coverage for all student athletes
 - Women's Soccer
- Assisted with athletic training coverage for various teams
 - Softball, Track & Field, Swimming, Tennis

UNIVERSITY LEVEL COURSES TAUGHT

- EDG 895 Capstone Project
- HHP/MSAT 115 Medical Terminology
- HHP/MSAT 163 Freshman Fast-Track I
- HHP 164 Freshman Fast-Track II
- HHP 171 Introduction to Exercise Science
- HHP/MSAT 272/273 Introduction to Athletic Training
- HHP 291 Athletic Training Practicum I
- HHP 301/302 Rehabilitation Techniques of Athletic Training
- HHP/MSAT 312 Administration & Organization of Athletic Training
- HHP 330 Manual Muscle Testing
- HHP 376/378 Recognition & Evaluation of Athletic Injuries II
- HHP 392 Athletic Training Practicum IV
- HHP 403 Advanced Injury Management
- HHP 408 Pharmacology & Ergogenic Aids
- HHP 493 Senior Seminar for Athletic Training
- MSAT 171/172 Athletic Training Foundations
- MSAT 210 Health Care Delivery
- MSAT 380/382 Recognition & Evaluation of Athletic Injuries III

CERTIFICATIONS AND LICENSURE

- American Heart Association CPR/AED for the Professional Rescuer 2008-Present
- Licensed Athletic Trainer – Wisconsin 2004-Present
- Certified Athletic Trainer 2002-Present
- Advanced First Aid 1998-2008
- American Red Cross CPR/AED for the Professional Rescuer 1998-2008

PROFESSIONAL DEVELOPMENT AND MEMBERSHIPS

- Preceptor Training Workshop
 - Concordia University Wisconsin August 2016
 - Concordia University Wisconsin August 2015
 - Concordia University Wisconsin August 2014
 - Concordia University Wisconsin August 2013
- Approved Clinical Instructor Workshop
 - Concordia University Wisconsin July 2012
 - Concordia University Wisconsin July 2011
 - Concordia University Wisconsin July 2009
 - Concordia University Wisconsin July 2008
 - Concordia University Wisconsin July 2007
 - Concordia University Wisconsin July 2004
 - University of Akron August 2003

- University of Wisconsin - Milwaukee Urban Forum
 - Changing Times, Changing Minds: Dr. Tyrone Howard Nov. 2010
 - Real Issues, Real Needs, Real Possibilities: Tim Wise February 2010
 - Real Issues, Real Needs, Real Possibilities: Dr. James Loewen Nov. 2009
- Athletic Training Educators' Conference
 - Dallas, TX January 2013
 - Washington, DC February 2011
 - Washington, DC February 2009
 - Dallas, TX January 2007
- Athletic Training Education Program Educators' Workshop
 - Cincinnati, OH June 2006
- National Athletic Trainers' Association Member
 - National Convention: St. Louis, MO 2000-Present
 - National Convention: Indianapolis, IN June 2008
 - National Convention: Indianapolis, IN June 2005
- Great Lakes Athletic Trainers' Association Member
 - District 4 Annual Meeting: Madison, WI 2000-Present
 - District 4 Annual Meeting: Chicago, IL March 2005
 - District 4 Annual Meeting: Chicago, IL March 2004
- Wisconsin Athletic Trainers' Association Member
 - State Clinical Symposium: Milwaukee, WI 2000-Present
 - State Clinical Symposium: Eau Claire, WI April 2015
 - State Clinical Symposium: Appleton, WI April 2014
 - State Clinical Symposium: Appleton, WI April 2011
 - State Clinical Symposium: La Crosse, WI April 2007
 - State Clinical Symposium: Brookfield, WI April 2006
 - State Clinical Symposium: Eau Claire, WI April 2002
- Ohio Athletic Trainers' Association Member 2003-2004

PROFESSIONAL SERVICE

- Title IX Investigator: Concordia University Wisconsin 2012-Present
- On-site Drug Screening Collector 2012-Present
- Committee Chair: Concordia University Wisconsin Masters of Science in Athletic Training Board 2011-Present
- Guest Speaker: Youth Health Service Corps 2010-Present
- Committee Member: Concordia University Wisconsin Masters of Science in Applied Exercise Science Board 2010-Present
- Faculty Coordinator: Concordia University Wisconsin First Aid Responders 2009-Present
- Faculty Advisor: Concordia University Wisconsin Sports Medicine Society 2009-Present
- Secretary/Treasurer/President: Concordia University Wisconsin Athletic Training Program Endowment Board 2006-Present
- Committee Member: Concordia University Wisconsin Interprofessional Education Steering Committee 2012-2016
- Committee Chair: Concordia University Wisconsin Athletic Training Faculty Searches 2013-2016

- On-site Drug Screening Collection Coordinator 2012-2015
- Committee Chair: Concordia University Wisconsin Athletic Training Graduate Assistant Searches 2010-2015
- Committee Chair: Concordia University Wisconsin Staff Athletic Trainer Search 2015
- Faculty Advisor: IPE Diabetes Midtown Project 2013-2014
- Faculty Editor: Concordia University Wisconsin Athletic Training Program Annual Newsletter 2005-2014
- Committee Chair: Concordia University Wisconsin Staff Athletic Trainer Search 2013
- Committee Member: Concordia University Wisconsin Summer Workshop: Freshman Fast Track for High School Students 2005- 2013
- Committee Chair: Concordia University Wisconsin Head Athletic Trainer Search 2011
- Committee Chair: Concordia University Wisconsin Staff Athletic Trainer Search 2011
- Committee Chair: Concordia University Wisconsin Athletic Training Faculty Search 2010
- Committee Chair: Concordia University Wisconsin Head Athletic Trainer Search 2010
- Planning Committee Member: Wisconsin Athletic Trainers' Association Annual Symposium 2005