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I am submitting herewith a thesis written by Laura Elizabeth Dotson entitled "Organizational Cultural Competence of Post-Secondary Health-Related Academic Units." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science in Nutrition.

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Organizational Cultural Competence of Post-Secondary Health-Related Academic Units

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Abstract
Each year, the United States is becoming more racially and ethnically diverse and creating many challenges for healthcare professionals. Extensive literature has documented a gap between minority and majority populations' health outcomes. According to the Institute of Medicine, one way to eliminate health disparities is by providing cross-cultural training to future and current healthcare professionals. A few models in healthcare delivery systems have assessed their own organizational cultural competence. However, due to the unique differences between health care delivery systems and post-secondary health-related academic units, there exists a need to develop and validate a model for organizational cultural competence of post-secondary health-related academic units. This literature review builds the foundation for this research project, which is to provide initial construct validity of a model for organizational cultural competence of post-secondary health related academic units.

Preface

The format of this thesis is included here. The thesis consists of two parts. Part I includes an introduction, literature review, and the research questions. Part II consists of a manuscript for publication.

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Chapter 1 Introduction and Literature Review

Introduction

Each year, the United States population is becoming more racially and ethnically diverse and creating many challenges for healthcare professionals (1). Extensive literature has documented a gap between minority and majority populations' health outcomes (2-6). In efforts to reduce health disparities, national initiatives have attempted to address the challenge of this vastly growing diverse population. For example, one of the proposed Healthy People 2020 goals is to "Achieve health equity, eliminate disparities, and improve the health of all groups" (7).

One hypothesized reason why health disparities exist in healthcare utilization is due to healthcare professionals' lack of cultural competence (8). Therefore, one potential way to eliminate health disparities is by providing educational opportunities in cultural competence to healthcare professionals (2). A study requested by Congress and conducted by the Institute of Medicine, stated that health disparities may be reduced through the implementation of cross-cultural training programs for current and future healthcare professionals (3). For these current and future healthcare professionals, accredited academic units have a unique opportunity to provide cross-cultural training in degree-based and continuing professional education programs. Academic units also can institute organizational cultural competence in terms of their own policies, programs, and activities.

Organizational cultural competence in a post-secondary health-related academic unit refers to the teaching, research, service and outreach, administrative and personnel policies and practices that provide students cultural competencies needed to work effectively in healthcare delivery systems (9). Healthcare delivery systems have proposed a few models for assessing their own organizational cultural competence (10-13). However, due to the differences between healthcare delivery systems and post-secondary health-related academic units, there exists a need to develop and validate a model for organizational cultural competence of post-secondary health-related academic units.

In 2004, the Department of Nutrition at The University of Tennessee, Knoxville proposed a model for assessing organizational cultural competence of post-secondary health-related academic units. This model defined 11 domains described by 85 criteria statements considered important for organizational cultural competence of health-related academic units (14). Using The University of Tennessee, Knoxville model as a foundation and the input of an expert panel, Krause developed a refined model for organizational cultural competence with 12 domains described by 73 criteria statements considered relevant and important (9).

The purpose of this research was to test whether the Krause model's domains and criteria statements are essential for organizational cultural competence of post-secondary health-related academic units. Administrators and tenured/tenure-track faculty of post-secondary health-related academic units from counseling psychology, family medicine, nursing, nutrition, and public health (health behaviors and/or community health) rated the essentiality of each criteria statement in the model. Therefore, this project was designed to answer the following research question: Are there essential domains and criteria statements for organizational cultural competence of post-secondary health-related academic units?

Literature Review

Diversity

Since the 1950s, the United States (US) has had an annual increase in population growth of 1.2% (1). This increased growth can be attributed to an increase in racial and ethnic diversity. Future projections are that the non-Hispanic white population will decrease, while the Hispanic, African American, and Asian populations will increase. In 2000, the non-Hispanic white population accounted for 75.1% of the total US population and by 2008, it accounted for only 65.6% (15). In contrast the projections are that, by 2050 the Hispanic, African American, and Asian populations will increase and account for 47% of the total US population (1). The 2 major forces driving the increase in diversity are increased fertility rates and increased net immigration rates (1, 16).

Minority

According to Jenkins in *The Ethnic Dilemma in Social Services*, a group that is small compared to the broader society constitutes a minority (17). The Equal Employment Opportunity Commission more specifically defines minority as a group of people that differs in race, religion, or nationality from the dominant group (18). In a similar vein, the US Maternal and Child Health Bureau (MCHB) defines diversity as underrepresented groups or "groups based on race, ethnicity, geographic location, gender, disability status, etc. who are underrepresented in the field of study" (19). Despite the improvements in Americans' health outcomes, minorities are still experiencing poorer health. This gap between minority and majority populations' health outcomes has been well documented through extensive literature (2-6, 20).

Health Disparities

Health disparities are gaps between the minority and majority population groups largely due to insufficient access to care and poor-quality of care (20). Many populations are affected by health disparities, such as racial and ethnic minorities, residents of rural areas, women, children, the elderly, and persons with disabilities (5). For example, minorities experience shorter life expectancy and higher rates of chronic diseases when compared to affluent non-Hispanic whites (5). Socioeconomic status (SES) is a major cause for health disparities among the majority and minority populations in the US (21). In 2007, 32.2% of African Americans and 28.4% of Hispanics lived in poverty compared to 11.5% of non-Hispanic whites (21). According to Brach and associates (22), those who are poor, uneducated, and unemployed are those who are American minorities. Furthermore, access to healthcare services and health outcomes are positively correlated with SES, which is especially an issue for these populations (22). Additional factors that contribute to health disparities in the US, according to the US Office of Minority Health and Health Disparities (OMHD), include geography, gender, age, and disability status (2).

Health disparities exist at the same time that healthcare costs are high. In 2010, the National Health Expenditure is expected to reach 2.6 trillion US dollars, which is equivalent to 17.6% of the Gross Domestic Product (GDP) (23). These projections are expected to double by 2019, reaching 4.5 trillion US dollars, which is equivalent to 19.3% of the GDP (23). The US has the highest annual healthcare expenditure per capita compared to any other industrialized nation

(24). However, the US has more than 83,000 preventable deaths attributed to the majority-minority gap each year (23). For instance, 46 million Americans are uninsured and 23 of the 46 million uninsured are minorities (25). According to the Institute of Medicine (25), uninsured adults are less likely to receive primary prevention services when compared to insured adults. No single factor contributes more to health disparities than access to care (24).

Initiatives to Address Health Disparities

In efforts to reduce health threats facing Americans, a national initiative, Healthy People, was developed to improve the nation's health (26). In response to extensive documentation of health disparities, one of the Healthy People 2010 goals was to eliminate health disparities (26). Currently, Healthy People 2020 is being developed; however, elimination of health disparities remains one of 4 proposed goals (7).

In 2005, the Executive Leadership Board of the Centers for Disease Control and Prevention (CDC) expanded the Office of Minority Health (OMH) to the Office of Minority Health and Health Disparities (OMHD). [From this point on, OMHD will be used to refer to the current office and its predecessor.] The new OMHD mission is "to accelerate CDC's health impact in the US population and to eliminate health disparities for vulnerable populations as defined by race/ethnicity, socio-economic status, geography, gender, age, disability status, risk status related to sex and gender, and among other populations identified to be at-risk for health disparities" (2).

The OMHD's core functions are:

1) *Maintaining core functions of the Office of Minority Health without loss of priority, resources, or visibility;*
2) *Developing CDC-wide health disparities elimination strategies, policies, goals, and programs;*
3) *Managing health disparities elimination goals through scanning, analysis, knowledge management, decision-support systems, and reporting;*
4) *Supporting internal and external partnerships to advance the science, practice, and workforce for eliminating health disparities inside and outside CDC; and*
5) *Synthesizing, disseminating, and encouraging use of scientific evidence about effective interventions to achieve health disparities elimination outcomes (2).*

The OMHD has suggested that a way to close the gap between minority and majority populations' health outcomes is through cultural competence (27). For example, research has shown an association between provider-patient communication and health outcomes (28). Therefore, poorer health outcomes may occur when there are cultural differences between providers and patients (28).

Defining Cultural Competence

According to Betancourt and associates (28), the lack of understanding of cultural factors, such as race, gender, and ethnicity, may obscure progress in eliminating health disparities and improving health outcomes. However, cultural competence can result in positive health

outcomes according to the OMHD (27). Cultural competence is defined as "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable the system, agency or those professionals to work effectively in cross-cultural situations" (29, p28). Cultural competence at both the individual and organizational levels may be accomplished through training, experience, guidance, and self-evaluation (29).

Defining individual cultural competence. Academic units or healthcare agencies can provide cultural competence training to individuals through their polices, programs, and activities. According to Sue (30), individual cultural competence includes cultural awareness, knowledge, and skills, which are defined as follows:

> Cultural awareness is the cognitive process in which individuals (i.e. faculty, students, and healthcare providers) are open to the values, beliefs, and practices of the populations they serve (30);
> Cultural knowledge is the process of understanding different cultural worldviews other than one's own (30). Purnell defines worldview as the process individuals or groups of people use to view the world and form values about their lives (i.e. behaviors) (31).
> Cultural skills are the process of learning how to assess, communicate, and manage diverse populations (30).

Defining organizational cultural competence. To produce culturally competent individuals, organizations need to foster an environment that incorporates cultural competence in all areas of the organization and is determined by strategic goals that establish expectations for how the organization will operate (32). In healthcare delivery systems, organizational cultural competence refers to the process in which the systems (individuals, programs, and activities) strive to work effectively within the cultural context of the populations they serve (9). In academic units organizational cultural competence refers to the establishment of an environment where teaching, research, service and outreach, and administrative and personnel policies and practices allow students to learn cultural competencies needed to work effectively in healthcare delivery systems (9).

Healthcare delivery systems have made headway in developing and validating models for organizational cultural competence, while academic units have only more recently begun this process. Therefore, understanding how different models for organizational cultural competence in healthcare delivery systems were created is helpful to inform models for academic units.

Organizational Cultural Competence in Healthcare Delivery Systems

Culturally and Linguistically Appropriate Services (CLAS). Many agencies, such as the US Department of Health and Human Services (DHHS), monitor organizations to ensure that specify standards have been achieved; such measures include patient satisfaction, adherence to medical treatment, and protocols (33). Unlike these standards, cultural competence is more difficult to measure and therefore may require different approaches to evaluate achievement (33). One way to monitor cultural competence in healthcare delivery systems was developed by the US DHHS and OMHD through the creation of CLAS standards in healthcare delivery systems.

In 1999, the OMHD developed a set of standards for healthcare organizations to help eliminate cultural barriers that contribute to lower quality healthcare (34). The standards are a set of guidelines intended to inform, require, and recommend practices for culturally and linguistically appropriate health services (10). There are 14 standards, organized by culturally competent care, access, and support (Table 1.1). Currently 4 of the CLAS standards are federally mandated, 9 are recommended, and 1 is voluntary.

The CLAS standards were developed in 2 stages. First, a literature review was conducted by a national Project Advisory Committee, which included policymakers, healthcare organizations, and researchers. The Committee's role was to review existing literature and to develop a draft of cultural and linguistic competence standards according to common themes and elements (10). In the second stage, a larger group of stakeholders was encouraged to review and make comments regarding the standards. Following the review, final revisions were made and confirmed by a second Project Advisory Committee (10).

The CLAS standards serve as a framework for healthcare delivery systems to follow when providing services to diverse populations. However, they are not an inclusive model for organizational cultural competence, because they do not address criteria for assessing the CLAS standards. Thus, 2 studies, one of managed care organizations (MCO) and the other of local public health agencies (LPHAs), were supported by the OMHD. These studies demonstrate how the framework for organizational cultural competence can be applied in healthcare delivery systems (11-12).

Managed care organization (MCO) study. Managed care organizations (MCO) are a type of healthcare service provider, but ones that use specific strategies to control access, costs, and quality of healthcare (11). In 2003, a proactive MCO study was conducted to examine the nature and extent of CLAS in MCOs. However, during the time of the MCO study, the concept of CLAS and cultural competence was still emerging; therefore, the MCO study began prior to the final version of the CLAS standards (11). The study developed a theoretical framework of CLAS in healthcare settings through a literature review, which was conducted by two advisory groups: Project Expert Panel and Federal Project Advisory Group. From the literature review, eight domains were suggested as essential components of CLAS (Table 1.2). Each domain was divided into key elements, which were further divided into key variables that described each key element of the domain. Later, the domains and key variables were adapted as an assessment tool for MCOs.

The assessment tool consisted of three questionnaires: Senior Executive Telephone Interview Protocol; Staffing Questionnaire; and Membership Questionnaire. Each questionnaire had items related to the respondent type (11). For example, governance and polices were located in the Senior Executive Telephone Interview Protocol. To validate the instrument a pilot test was conducted at three MCOs sites using cognitive testing techniques. The questionnaires were administered with 288 organizations, of which 77 participated (30%). The respondents were asked to rate each component on a 4-point scale (1 = very appropriate; 2 = appropriate; 3 = somewhat appropriate; and 4 = not appropriate). The understanding and appropriateness of the

instrument on average was rated high by both staff and members serviced by the organizations.

Table 1.1 US DHHS Office of Minority Health Culturally and Linguistically Appropriate Services (10)

Standards	Actions
1**	Healthcare organizations should ensure that patients/consumers receive from all staff member's effective, understandable, and respectful care that is provided in a manner compatible with their cultural health beliefs and practices and preferred language.
2**	Healthcare organizations should implement strategies to recruit, retain, and promote at all levels of the organization a diverse staff and leadership that are representative of the demographic characteristics of the service area.
3**	Healthcare organizations should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery.
4*	Healthcare organizations must offer and provide language assistance services, including bilingual staff and interpreter services, at no cost to each patient/ consumer with limited English proficiency at all points of contact, in a timely manner during all hours of operation.
5*	Healthcare organizations must provide to patients/consumers in their preferred language both verbal offers and written notices informing them of their right to receive language assistance services.
6*	Healthcare organizations must assure the competence of language assistance provided to limited English proficient patients/consumers by interpreters and bilingual staff. Family and friends should not be used to provide interpretation services (except on request by the patient/consumer).
7*	Healthcare organizations must make available easily understood patient-related materials and post signage in the languages of the commonly encountered groups and/or groups represented in the service area.
8**	Healthcare organizations should develop, implement, and promote a written strategic plan that outlines clear goals, policies, operational plans, and management accountability/oversight mechanisms to provide culturally and linguistically appropriate services.
9**	Healthcare organizations should conduct initial and ongoing organizational self-assessments of CLAS-related activities and are encouraged to integrate cultural and linguistic competence-related measures into their internal audits, performance improvement programs, patient satisfaction assessments, and outcomes-based evaluations.
10**	Healthcare organizations should ensure that data on the individual patient's/consumer's race, ethnicity, and spoken and written language are collected in health records, integrated into the organization's management information systems, and periodically updated.

Table 1.1 Continued

Standards	Actions
11**	Healthcare organizations should maintain a current demographic, cultural, and epidemiological profile of the community as well as a needs assessment to accurately plan for and implement services that respond to the cultural and linguistic characteristics of the service area.
12**	Healthcare organizations should develop participatory, collaborative partnerships with communities and utilize a variety of formal and informal mechanisms to facilitate community and patient/consumer involvement in designing and implementing CLAS-related activities.
13**	Healthcare organizations should ensure that conflict and grievance resolution processes are culturally and linguistically sensitive and capable of identifying, preventing, and resolving cross-cultural conflicts or complaints by patients/consumers.
14***	Healthcare organizations are encouraged to regularly make available to the public information about their progress and successful innovations in implementing the CLAS standards and to provide public notice in their communities about the availability of this information.

* Required Standards to receive Federal Funds;
** Recommended Standards by OMHD;
*** Voluntary Standard suggested by OMHD.

Local public health agencies (LPHAs) study. Within the publicly funded healthcare sector, local public health agencies are responsible for the essential public health services but within a specific jurisdiction (12). Many LPHAs provide CLAS to the populations they serve, but the services vary in quantity and quality. The purpose of the LPHA study was to develop a CLAS self-assessment tool for LPHAs. A modified version of the MCO framework model was adopted and the LPHA study was conducted by the project team, OMHD staff, and two advisory committees: Project Expert Panel and Federal Project Advisory Group (12). Like the MCO model, the LPHA model included eight domains and key elements for each respective domain, which were divided further into key variables that described each key element (Table 1.3).

The LPHA study used the conceptual framework of the MCO's self-assessment tool. The framework was modified by a 9 member expert panel. The panelists had expertise in at least one of the following: service provision in LPHAs; cultural competency; healthcare quality; and survey research and evaluation (12). Based on their revisions, the self-assessment tool consisted of 3 questionnaires: Director or Designee Interview Protocol; Staffing Questionnaire; and Client Services Questionnaire (12). The questionnaires were organized by items related to the respondent type. For example, governance and polices were located in the Director or Designee Interview Protocol. To further validate their instrument, LPHA conducted a pilot test using the same testing techniques and respondent scale as the MCO study. The appropriateness of the instrument was rated very high by client services and staffing personnel.

The primary purpose of the MCO and LPHA studies was to validate self-assessment tools for healthcare delivery systems. The self-assessment tools resemble the structure of a model. For instance, each domain was described by key elements, which were explained further by variables. However, these tools are not comprehensive models for organizational cultural competence.

Table 1.2 Essential Components of CLAS in Managed Care Organizations (11)

Domains	Key Elements (n variables within each element)
Organizational Governance	Governing Boards, Committees and Staff Positions (7), and Organizational Structure (0; includes description of organizational type only)
CLAS Plans and Policies	Organizational Planning (5) and Policies (12)
Patient Care	Assessment and Treatment (3) and Environment and Material (2)
Quality Monitoring and Improvement	Tracking (6) and Evaluation (9)
Management Information Systems	Members (6) and Staff (5)
Staffing Patterns	Staffing Diversity (3) and Recruit, Retain, and Promote (3)
Staff Training and Development	Diversity Training (13) and Staff Development (4)
Communication Support	Translation (9) and Interpretation (10) Services

Table 1.3 Essential Components of CLAS in Local Public Health Agencies (12)

Domains	Key Elements (n variables within each element)
Organizational Governance	Governing Boards, Committees and Staff Positions (9), Organizational Structure (2)
CLAS Plans and Policies	Organizational Planning (5) and Policies (17)
Culturally Inclusive Healthcare Environment and Practice	Assessment and Treatment (3), Environment and Material (2)
Quality Monitoring & Improvement	Tracking (9) and Evaluation (9)
Management Information Systems	Clients (8) and Staff (5)
Staffing Patterns	Staffing Diversity (3), Recruit, Retain, and Promote (7)
Staff Training and Development	Diversity Training (16), and Staff Development (6)
Communication Support	Translation (14) and Interpretation (16) Services

Table 1.4 APA Guidelines for Education, Training, Research, Practice, and Organizational Change for Mental Health Services (13)

Guidelines	Statements
1	Psychologists are encouraged to recognize that, as cultural beings, they may hold attitudes and beliefs that can detrimentally influence their perceptions of and interactions with individuals who are ethnically and racially different from themselves.
2	Psychologists are encouraged to recognize the importance of multicultural sensitivity/responsiveness, knowledge, and understanding about ethnically and racially different individuals.
3	As educators, psychologists are encouraged to employ the constructs of multiculturalism and diversity in psychological education.
4	Culturally sensitive psychological researchers are encouraged to recognize the importance of conducting culture–centered and ethical psychological research among persons from ethnic, linguistic, and racial minority backgrounds.
5	Psychologists strive to apply culturally–appropriate skills in clinical and other applied psychological practices.
6	Psychologists are encouraged to use organizational change processes to support culturally informed organizational (policy) development and practices.

Mental health guidelines - American Psychological Association (APA). Like many areas in health, the APA also has experienced an increase in racial and ethnic diversity among its members and the clients they serve. Like the CLAS standards, the APA guidelines for education, training, research, practice, and organizational change attempt to serve the increasingly diverse US population effectively. The APA guidelines were built on a foundation derived from multiple research studies in multicultural counseling psychology (13).

A joint task force, including the Society of Counseling Psychology (Division 17) and the Society for the Psychological Study of Ethnic Minority Issues (Division 45), wrote the mental health guidelines for cultural competence (13). The guidelines (Table 1.4) were intended to promote

psychologists' understanding and practice in multicultural areas, such as education, training, research, service delivery, and organizational change (13). These guidelines can serve as the theoretical framework for mental healthcare services for organizational cultural competence.

Organizational Cultural Competence in Post-Secondary Academic Programs

The CLAS standards provide a theoretical framework for healthcare delivery systems with the intention to eliminate racial and ethnic health disparities. The MCO and LPHA studies' self-assessment tools with domains, key elements, and variables provide the structure of a model for organizational cultural competence in healthcare delivery systems. Both studies seek cultural competence in relation to structure, policies, personnel, and training similar to post-secondary health-related academic units. However, a key difference between healthcare delivery systems and academic units lies within the product of their respective organizations.

In healthcare delivery systems, cultural competence is important to patient or client outcomes, whereas in post-secondary health-related academic units cultural competence is important to student outcomes (9). Due to the unique differences between healthcare delivery systems and academic units, it is important to validate a model specific for academia. A review of the literature reveals some initial research to suggest a model of organizational cultural competence in health-related academic units.

The University of Pennsylvania (Penn) School of Nursing cultural competence curriculum. Penn, School of Nursing has attempted to develop a program that supports diversity by integrating culturally sensitive information into education, research, and practice (35). To contribute to this process, the School of Nursing developed a Blueprint for Cultural Competence (35). The Blueprint was guided by the US Health Resources and Services Administration's (HRSA) culturally competent education curriculum, called *Transforming the Face of Health Professions Through Cultural & Linguistic Competence Education: The Role of the HRSA Centers of Excellence* (36). The HRSA curriculum was developed by a panel of experts and designed for healthcare professionals (36). This tool provides a framework for implementing a culturally competent curriculum in health-related academic program units.

Penn, School of Nursing used the HRSA document as a guide to develop a blueprint for a culturally competent curriculum (37). The Blueprint's goal was to increase cultural competence throughout the nursing curriculum. To accomplish this task Penn developed a process of 8 actions steps (Table 1.5) to be implemented over a 5 year period (37).

The primary purpose of the Blueprint is to ensure that cultural competence is integrated in the nursing curriculum. However, the resulting Blueprint primarily addresses 1 component of an academic unit: the curriculum. In addition, it is a process that does not suggest a comprehensive model that can be evaluated through specific domains and criteria that describe these domains. It is important that a model for organizational cultural competence of health-related academic units include not only curricula, but also all aspects of the academic program.

Table 1.5 The University of Pennsylvania Action Steps for Cultural Competence Curriculum (37)

Action	Steps
1	Appointment of a Director of Diversity Affairs
2	Selection of the Master Teachers Taskforce on Cultural Diversity
3	Implementation of an Intensive Faculty Development Program
4	Dissemination of Information About Cultural Competence Education
5	Use of Innovative Teaching Approaches
6	Student Participation in Curriculum Activities
7	Development of a Blueprint for Integration of Cultural Competence in the Curriculum (BICCC)
8	Surveys of Faculty and Clinical Educators

The University of Tennessee, Knoxville (UTK) model for organizational cultural competence. In 2004, the UTK Department of Nutrition developed a model for cultural competence of post-secondary health-related academic programs. The objective of the model was to improve the cultural competence of the Department's academic program by incorporating cultural competence in all parts of the organization. In addition, the Department also sought to promote its students' cultural competence (14).

During the time of development, no cultural competence models existed for post-secondary academic settings. Therefore, UTK first developed a cultural competence-specific definition for the university environment:

> *Cultural competence is a set of congruent values, policies, behaviors, and practices within a system, organization, program, or individuals that enables effective cross cultural work. Cultural competence also recognizes that there are multiple ways to view the world. Within the education system, cultural competence is the ability to honor and respect beliefs, languages, interpersonal styles, and behaviors of all. Achieving cultural competence is a dynamic, ongoing, developmental process that is also proactive, performance oriented and requires a long-term time commitment (14, p1).*

The model was developed based on a literature review by a Maternal and Child Health (MCH) Leadership Team of faculty and graduate students (Figure 1.1). The literature and 2 instruments, 1 from the Association of University Centers on Disabilities (AUCD) and the other from the Ministry for Children and Families Vancouver Ethncultural Advisory Committee (EAC), were used to guide development of the criteria statements (n=85) identified as important for organizational cultural competence of health-related academic units. The resulting model's criteria statements describe each of their respective domains (n=11). Each domain is grouped into 1 of 4 categories: organizational structure; personnel (faculty, staff, and students); educational environment; and curricular, research and external opportunities.

The organizational structure category includes 2 domains: Mission and Program Policies; and Governance and Organization. The Mission and Program Policies domain has 12 criteria statements, which address the mission and vision of the program and individual and organizational cultural competence through the process of planning. The Governance and Organization domain has 5 criteria statements, each of which addresses policy and practices that include diversity among faculty, staff, students, stakeholders, and advisory committees (14).

The personnel category includes 3 domains: Student Policies, Practices, Recruitment and Retention; Faculty and Staff Policies, Practices, Recruitment and Retention; and Faculty and Staff Training and Development. These domains promote recruitment and retention of faculty, staff, and students from all cultural backgrounds. In addition, the skills and training needed to address cultural competence among faculty and staff are included (14).

The educational environment category includes 2 domains: Campus and Community Collaboration on Cultural Competence; and Environment and Communication. The first domain promotes cultural competence in the academic environmental setting (for example, the recruitment of culturally diverse speakers). The other domain assures access to culturally competent material and communication throughout the program (14).

The last category, Curricular, Research, and External Opportunities, includes 4 domains: Curriculum Supportive of Cultural Competence; Integration of Cultural Diversity in Research Projects/Polices; Outside Class Opportunities Promoting Cultural Competence; and Technical Assistance and Consultation. Cultural competence is incorporated throughout the curriculum, research, and outside classroom opportunities. Also, the Technical Assistance and Consultation domain includes assessment, planning, and evaluation with diverse populations (14).

In 2004, upon completion of the UTK Model, the MCH Leadership Team developed an organizational cultural competence self-assessment tool. The purpose of the self-assessment tool was to identify organizational cultural competence strengths and weaknesses within the Department of Nutrition (14). Faculty, staff, and students across the Department used the tool to assess their Department's organizational cultural competence.

It is important to note that at the time no other comprehensive organizational cultural competence model for post-secondary health-related academic units had been developed. Since that time only 1 other comprehensive model has been developed. That model, developed by Krause (9), used the UTK model as the foundation for a post-secondary educational model describing organizational cultural competence.

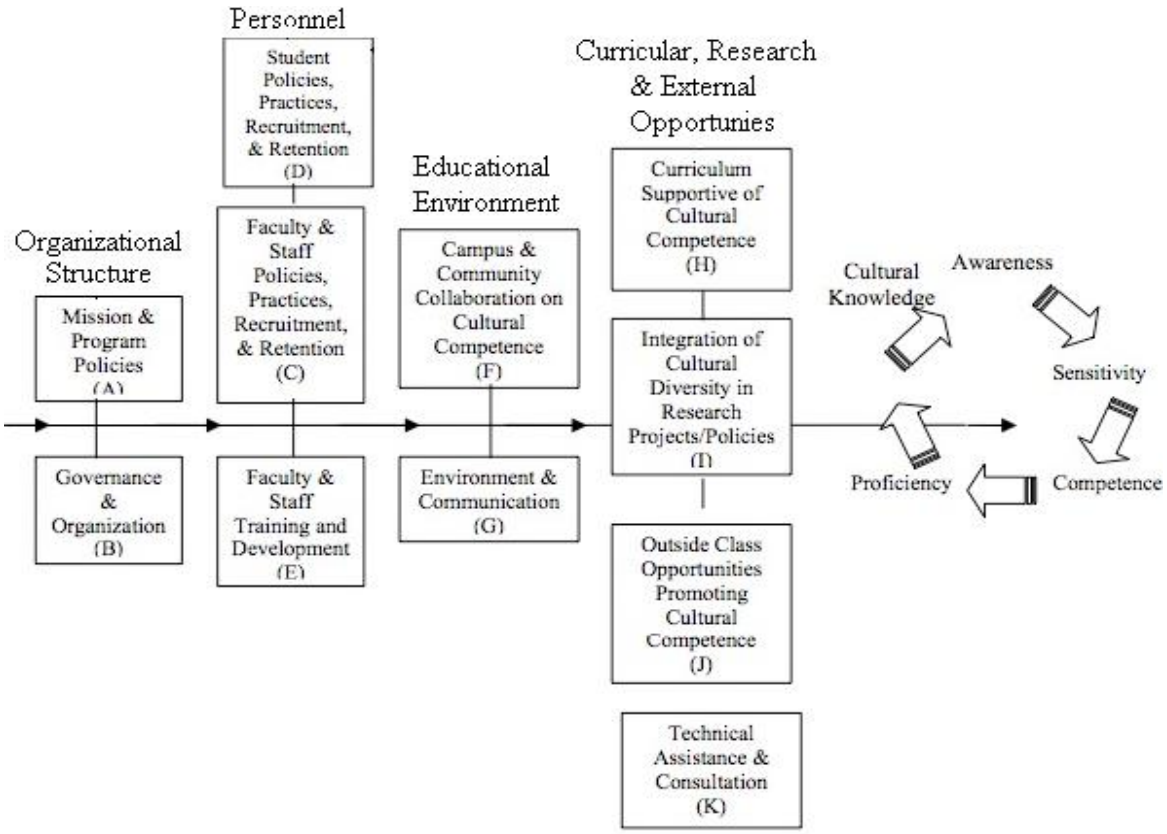

Figure 1.1 The University of Tennessee, Knoxville Model of Organizational Cultural Competence for Post-Secondary Health-Related Programs (14)
Adapted from the UTK Cultural Competence Model

The Krause model. C*ontent validation of an organizational cultural competence model for a health-related post-secondary academic department.* Krause completed research to test the UTK model's content validity. Specifically, using an expert panel, Krause tested each domain and its respective criteria statements for relevance and importance for cultural competence.

Content validity is a subjective assessment conducted by individuals who have expertise in a particular field. It describes the extent to which the instrument reflects the specific intended domain or content (9). The UTK model's content validity was tested by an expert panel (n=9), using an adaptive method of World Café. Specifically, panelists were asked a series of questions by way of email and telephone conference calls through a series of iterative rounds to define the model (9). In Krause's study, panelists were diverse with respect to their gender, race, ethnicity, age, geographical region, health discipline, and expertise in cultural competence (9).

Through a series of 4 virtual teleconference calls, the following questions were asked and responses for each call were used to inform the next round of questions and the resulting new model (9, p31):

1) *Is this domain appropriate for an organizational cultural competence model of a health related post-secondary academic program?*
2) *Is this domain relevant … Is this domain important?*
3) *Which criteria statements are relevant to the domain… important to the domain?*
4) *How does this new model match your views regarding its relevance and importance…?*

The final model developed by the expert panel expanded the original UTK model from 11 to 12 domains and reduced the number of criteria statements from 85 to 73 (Figure 1.2). In this new model, there are 6 categories: Organization and Administration; Curriculum and Experiential Practice; Research; Personnel; Community and Environment; and Technical Assistance and Consultation.

Within the Organization and Administration category, there are 3 domains: Mission and Vision; Program Polices; and Governance and Organization. The first domain describes the purpose of the academic program with respect to cultural competence and diversity. The second domain describes the policies and procedures related to cultural competence within the academic program. The last domain describes principles needed within the academic unit's organizational structures (9).

Within the Curriculum and Experiential Practice category, there are 2 domains: Culturally Competent Curriculum; and Experiential Practice Supporting Culturally Competent Skills. The first domain describes the students' development of individual cultural competence. The second domain describes how students are engaged in field experiences to develop cultural competence skills (9).

Within the Research category, there is 1 domain: Culturally Competent Research, which refers to human research projects that consider cultural competence (9).

Within the Personnel category, there are 3 domains: Faculty/Staff Personnel Polices, Practices, Recruitment, and Retention; Student Polices, Practices, Recruitment, and Retention; and Faculty/Staff Training and Development. The first and second domains describe how faculty, staff, and students are recruited, hired, admitted, and retained to promote diversity and cultural competence (6). The last domain describes training of the faculty/staff to increase their individual cultural competence, described as awareness, knowledge, and skills (9).

Within the Community and Environment category, there are 2 domains: Campus and Community Collaboration on Cultural Competence; and Institutional Environment, Climate and Communication. The first domain describes the campus and community's role in promoting cultural competence. The second domain describes the institution's physical environment and its role in cultural competence 9).

Finally, within the Technical Assistance and Consultation category, there is 1 domain: Technical Assistance and Consultation, which refers to working with diverse individuals and groups external to the academic unit and seeking technical assistance to promote cultural competence (9).

The Krause model is important because it extends and refines the only known comprehensive model of organizational cultural competence of academic units, the UTK Model. Of the 11 original domains, 6 remained the same, 4 were modified, and 1 was subdivided into 2 domains.

Most of the original criteria statements were either modified or deleted to add content and clarify the intent of the original statements. Lastly, Krause reorganized domain categories from 4 to 6 by the addition of the Research and Technical Assistance and Consultation domains. However, while a refinement of the original model, the Krause model requires further validation by testing the model quantitatively.

Comparing the Krause and Penn Models

The Penn Blueprint designs a structure, process, and outcomes, through 8 action steps, for developing a culturally competent curriculum. It is important to note that the Blueprint is not a comprehensive model, because, unlike the Krause model, it cannot be evaluated through specific domains and criteria statements. Despite their differences, some of the action steps in the Penn Blueprint are consistent with the Krause Model. The Blueprint's action steps 1, Appointment of a Director of Diversity Affairs, and 2, Selection of a Master Teacher Taskforce on Cultural Diversity, are similar to criteria statements in the Governance and Organization domain of the Krause Model. One criteria statement is to have an administrator (Director), who is responsible for initiatives related to cultural competence. A second criteria statement is a committee or taskforce that addresses cultural competence priorities, which is similar to the taskforce identified in the Penn Blueprint. The Blueprint's action step 3, Implementation of an Intensive Faculty Development Program, is similar to the Faculty and Staff Training and Development

domain in the Krause Model. Both articulate the need for cultural competence training of faculty and staff. While curriculum implementation is a very important role of academic units, it is only one role and may not address personnel, organization, and governance. Therefore, to enhance cultural competence at an organizational level, a validated model is needed to describe the organizational context of the entire academic setting. This thesis was designed to address this need.

Research Questions

The goal of Krause's research was to validate the content of the UTK model's domains and criteria statements needed for cultural competence of post-secondary health-related academic units. The outcome of this research was a new model developed through a qualitative process by an expert panel. The research conducted for this thesis tested quantitatively whether the Krause model's domains and criteria statements are essential for cultural competence of post-secondary health-related academic units.

Primary question. Are there essential domains and criteria statements in the Krause model for organizational cultural competence of post-secondary health-related academic units?

Secondary questions. If essential domains and criteria statements are confirmed, then the following research questions will follow:

Does academic position have an effect on whether or not there are essential domains for organizational cultural competence? Academic position is defined as administrators and faculty.

Does department home have an effect on whether or not there are essential domains for organizational cultural competence? Academic home is defined in the areas of family medicine, public health, nursing, nutrition, and psychology.

Conclusion of Literature Review

Culturally competent academic units are needed to establish the linkage between academic and practice institutions. Additionally, culturally competent academic units are needed to meet workforce needs for culturally competent personnel. The goal of this project is to enhance the cultural competence of post-secondary health-related academic units thereby impacting students and the future workforce.

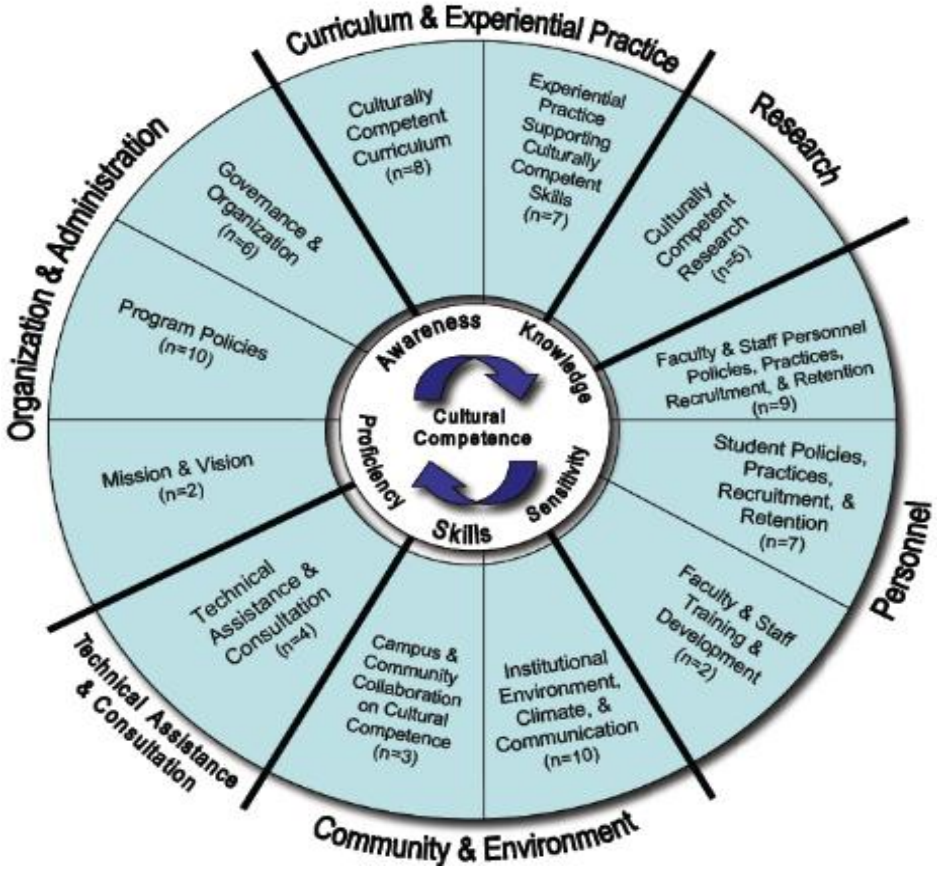

Figure 1.2 Krause Model of Organizational Cultural Competence of Health-Related Post-Secondary Academic Programs: Categories, Domains, and Number (n) of Criteria Statements (9)

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Chapter 2 Organizational Cultural Competence in Post-Secondary Health-Related Academic Units

Abstract

Objective: There are few comprehensive models for organizational cultural competence of post-secondary health-related academic units. The purpose of this study was to test, quantitatively, one model developed by Krause to determine whether its domains and criteria statements are essential for organizational cultural competence of post-secondary health-related academic units.

Methods: Administrators and tenured/tenure-track faculty of post-secondary health-related academic units from counseling psychology, family medicine, nursing, nutrition, and public health (health behaviors or community health) rated how essential each of the 74 criteria statements are for organizational cultural competence using a Likert-like scale (1= Not at all Essential, 7 = Essential) through an online survey. Principle Component Analysis with VARIMAX rotation was performed to identify factors with highly correlated items. Items with factor values greater than 0.500 were accepted. Final factors were reviewed to determine their respective common themes and named accordingly.

Results: A series of four emails, using the Dillman Internet Survey Methodology, produced a 19.2% response rate. Program respondents were highest among the following academic disciplines: public health (34.7%), nursing (24.8%), and nutrition (22.8%). Most respondents were professors (44.6%), female (68.3%), white (79.2%), non-Hispanic (94.6%) and on average had been in a tenured/tenured-track position for 14.7 years. Four domains with 63 criteria statements were identified as essential for organizational cultural competence for post-secondary health-related academic units: Organizational Accountability, Stakeholder Diversity, Access, and Communication.

Conclusion: A model for organizational cultural competence for post-secondary health-related academic units was confirmed. This research sets the foundation to develop a self-assessment tool for health-related academic units to use as a basis for planning improved organizational cultural competence.

Introduction

Each year the United States population is becoming more racially and ethnically diverse, creating many challenges for healthcare professionals, such as difficulties in provider-patient relationships (1-3). Extensive literature has documented a gap between minority and majority populations' health outcomes (2-7). One way to eliminate health disparities is by providing educational opportunities in cultural competence to students who will become future healthcare professionals (3, 8-9). According to Cross and associates (10), cultural competence is "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable the system, agency or those professionals to work effectively in cross-cultural situations" (p28). Health-related post-secondary academic units have implemented cultural competence in their curricula to produce culturally competent graduates (9, 11-12). However, recent research has suggested a need to incorporate cultural competence in all areas of the organization, which in academia includes establishment of an environment where teaching, research, service and outreach, and administrative and personnel policies and practices allow students to learn cultural competencies needed to work effectively in healthcare delivery systems (8, 13).

There are a few models that assess organizational cultural competence of healthcare delivery systems (14-17). However, due to the differences between healthcare delivery systems and health-related academic units, a model is needed for academia that can be used to assess and promote organizational cultural competence in these settings. The University of Pennsylvania (Penn) School of Nursing developed a Blueprint that integrates cultural competence in the nursing curriculum. The Blueprint is not a comprehensive model and primarily addresses one component of an academic unit: the curriculum (9). To our knowledge, prior to the research presented in this paper, only two comprehensive models for organizational cultural competence of post-secondary health-related academic units existed. The first model was developed in 2004 from a literature review by the Department of Nutrition at The University of Tennessee, Knoxville (UTK) (13). It includes 85 criteria statements that comprise 11 domains about policies, programs, and activities (13). Krause and an expert panel (8) developed the second model in 2009 using the UTK model as the foundation. This model includes 73 criteria statements that comprise 12 domains as relevant and important for organizational cultural competence (8). We therefore asked: Are there essential domains and criteria statements in the Krause model for organizational cultural competence of post-secondary health-related academic units? Prior to testing, the project had Human Subjects Approval by the University's Institutional Review Board.

Methods

We asked tenured/tenure-track faculty and administrators from medicine, nursing, nutrition, psychology, and public health academic units to rate how essential each criteria statement in the Krause model is for organizational cultural competence of a post-secondary health-related academic unit.

Selection Criteria for Program Population

Academic disciplines for this study were selected to reflect their roles in primary, secondary, and tertiary prevention, as well as physical and mental health. Because medicine, psychology, and public health cover broad areas, we selected family medicine, counseling psychology, and health behaviors or community health concentrations and/or programs. Specific programs within disciplines were identified through on-line listings of accredited bodies and member associations as follows: Counseling Psychology, American Psychological Association; Family Medicine, Association of American Medical Colleges; Nursing, National League for Nursing Accrediting Commission; Nutrition, Association of Nutrition Departments and Programs; and Public Health, Council on Education for Public Health. Because health behaviors or community health concentrations representing public health could be from an accredited School of Public Health or an accredited program in public health, faculty were selected from either departments of health behaviors and/or community health or from the program at large, respectively. For this study, administrators and tenured/tenure-track faculty provided discipline-specific input.

Selection and Exclusion Criteria of Programs

To be included in the research sample each program in the population met the following criteria:

1) Accessible program website (exclusion: error of website URL as indicated by the Internet as Error 404 or 403);
2) Program in counseling psychology, family medicine, nursing, nutrition, or public health (health behaviors or community health);
3) Program offering graduate level degree;
4) Identification by name of administrator for the program of interest, with administrative titles: Medicine and Psychology (Chair, Interim Chair, or Department Head), Nursing (Dean, Associate of Nursing Dean, Chair, Interim Chair, or Director), Nutrition and Public Health (Chair, Interim Chair, Department Head, Interim Head, Director, Executive Director, or Chief);
5) Identification by name and position title of tenured/tenure-track faculty, with titles of: Assistant Professor, Associate Professor, or Professor, serving as a proxy for tenure status;
6) Determination of email addresses for administrator and tenured/tenure-track faculty from any of the following sources: Program's website, faculty homepage, university directory, or Google search engine.

A total of 333 of 441 accredited and member programs met the selection criteria. Because the resulting distribution of disciplines did not match that of the population, we took a stratified random sample of disciplines from among the programs meeting the selection criteria. In addition, because proportionally fewer family medicine programs met the selection criteria, the number of sample programs was based on this limit (Table 2.1). As respondents for each selected program, 1 administrator and 2 randomly selected tenured/tenure-track faculty were selected.

Table 2.1 Demonstration of Proportional Representation by Programs

Discipline	Population (n=441)		Sample (n=247)	
	Number	Percent	Number	Percent
Family Medicine	96	21.8%	54	21.8%
Nursing	96	21.8%	54	21.8%
Psychology	65	14.6%	36	14.6%
Public Health	120	27.2%	67	27.2%
Nutrition	64	14.6%	36	14.6%
Total	441	100%	247	100%

Survey Development

A survey instrument was developed as 3 sections (Appendix A):

1) Verification of tenured/tenure-track status to exclude respondents who were not tenured/tenure-track;
2) 74 Likert-like criteria statements of organizational cultural competence (1= Not at all essential; 2= Moderately unessential; 3= Slightly unessential; 4 = Neither; 5= Slightly essential; 6= Moderately essential; 7=Essential; 8=No answer); and
3) Demographic (gender, race, and ethnicity) and work characteristics (administrative responsibility, faculty rank, and years of academic experience) and organizational experience related to cultural competence which consisted of 3 variables (experience in an academic unit developing or with a diversity plan, assessing its curriculum, and assessing students' cultural competence) with 3 responses (yes, no, and don't know).

Because 1 criteria statement in the Krause model contained 2 action verbs, this statement was expanded to 2 statements resulting in 74 criteria statements (8). The criteria statements were listed sequentially without designation of respective domains or demarcation to imply categories or domains. Within domains, the criteria statements were ordered in a pattern of planning, implementation, and evaluation; however, the domains were not identified to respondents.

Survey Administration

The survey was administered as an online instrument using IBM SPSS Data Collection Interviewer Web Version 18.0. The survey first was pilot tested with 9 tenured/tenure-track faculty and administrators in family medicine, nursing, nutrition, and public health programs from UTK. Counseling psychology was not included in the pilot study because administrators and faculty did not respond to the pilot test invitation. Pilot subjects were contacted by email and requested to participate in the pilot-test following the same procedures as the proposed study. The results of the pilot test were reviewed as summary statistics, survey completion rate (100%), and average time of survey completion (n=20 minutes). The final instrument and procedures were revised based on this pilot test.

After the instrument was finalized, the survey was administered with the selected programs. The initial invitation email to recruit survey participants explained the participant's role and goal of

the survey and included a hyperlink to the survey and a unique 5 digit login code (Appendix B). The unique login codes allowed participants to enter, leave, and re-enter the survey website without losing any entered responses to survey items. To protect participants' confidentiality the unique login codes were stripped from the response database by a third party not associated with data analysis. To obtain a sizable number of responses and to show survey respondents our appreciation for their valuable time, an offer for a single $100 dollar gift card to Amazon.com was included in the initial email (18). The incentive was given to a randomly selected participant who completed the entire survey (18).

From the initial email, 92% (n=685) of the randomly selected sample received the survey link and login code. The primary reason for some not receiving the initial email was incorrect email addresses, which resulted in undeliverable emails. Either undeliverable emails were corrected or, if email addresses were correct and undeliverable, then, the selected subjects were replaced by other subjects and resent. After corrections, 98% (n=736) of the randomly selected sample received their survey link and login code. One week after the initial email, each selected subject received a reminder email. Three weeks after the initial email, a second invitation to participate was sent to non-respondents. Four weeks after the initial email, a final invitation to participate was sent to both non-respondents and those who had started any portion of the survey, but had not yet completed it.

Data Analysis

Descriptive statistics as frequencies were used to describe the demographics of the respondents, which included academic position, position title, department home, organizational experience related to cultural competence, race, and ethnicity. Mean and standard deviation were used to describe the length of employment (years) as tenured/tenure-track faculty.

Exploratory Principal Component Analysis (PCA) with VARIMAX rotation was used to determine whether criteria statements could be explained by a small number of factors that accounted for most of the variance (19). The analysis was used to reduce the number of criteria statements into groups that aggregate because they are highly correlated with one another (19). Only criteria statements with loading values greater than 0.500 were accepted. Then, to help determine optimal numbers of factors to extract, factor analyses with Maximum Likelihood, Principal Axis, and Generalized Least Square Methods each were run with VARIMAX rotation. All methods confirmed four factor solutions as optimal. Then, PCA with VARIMAX rotation was repeated using four factors. Reliability coefficients (Cronbach α) were calculated for each criteria statement. After reviewing the resulting factors and determining their common themes, the final extracted factors were named.

Multivariate analysis of variance (MANOVA) with the Wilks' Lambda F test was used to determine if ratings among respondents' differed for factor scores by demographic characteristics (gender, race, and ethnicity), work characteristics (administrator, faculty rank, and length of employment), and organizational cultural competence experience (organizational experience related to cultural competence). Where there were problems with the assumption of equal covariance matrices for the four factor scores when compared to responses, we analyzed the data with MANOVA using ranks. Also, MANOVA was used to determine if there were

differences by disciplines for factor scores. Because of comparatively lower response rates in 2 programs, (counseling psychology and family medicine), disciplines were collapsed into 2 categories: 1) physical and mental health (counseling psychology, family medicine, nursing) and community health (nutrition and public health). Post-hoc analysis of between subject effects was used to explore how the collapsed disciplines differed for factor scores.

A cross-tabulation of variable responses using Pearson's Chi-square test was used to determine how respondents' categorized disciplines varied by organizational cultural competence experience (i.e. diversity planning, curriculum assessment, and student assessment). Before running this secondary analysis, Pearson's Chi-square test was used to compare the "don't know" experience responses to the "yes" and "no" responses. Based on the Pearson Chi-square test, no differences were found for those who reported "don't know" and those who had or did not have organizational experience with a diversity plan, curriculum assessment, or students' assessment. Therefore, those who reported "don't know" were removed from further analyses and Pearson's Chi-square test was used again to determine how respondents' categorized disciplines varied by organizational cultural competence experience, but only for respondents who answered "yes" or "no" to having experience with these types of organizational experiences.

Results

Demographic Characteristics

Of the 704 subjects, 19.2% responded to the 4 email invitations to participate in the online survey (n=135); invitation response rates for each round of invitations were 9.4%, 3.8%, 1.3%, and 4.7%. Of email respondents, 74.8% (n=101) met the study selection criterion of tenure status and were included in the analyses. Survey respondents were from all five disciplines: counseling psychology (8.9%: n=9); family medicine (8.9%: n=9); nutrition (22.8%: n=23); nursing (24.8%: n=25); and public health (34.7%: n=35). Most respondents were female (68.3%), white (79.2%) and not of Hispanic, Latino, or Spanish origin (94.6%). About 50% (48.5%) were administrators, 44.6% were professors, and on average respondents had been in a tenured/tenure track position for 14.7 (± 10.1) years (Table 2.2). Lastly, most respondents were involved in a department or unit that was developing or had a diversity plan (67.3%) or assessed the curriculum for cultural competence (60.4%), and almost half evaluated students' cultural competence (45.5%) (Table 2.3).

Organizational Cultural Competence Factors

This research condensed the Krause model from 12 to 4 factors. Of the 74 criteria statements, 11 were dropped because of low eigenvalues and interpretability. The four factors accounted for 66.2% of total variance extracted from the data (Table 2.4). (Appendix C). Eigenvalues for each of the 4 factors were 21.34, 13.85, 7.92, and 5.90; percentage variances were 28.8%, 18.7%, 10.7%, and 7.9%, respectively. Reliability Coefficients (Cronbach alpha) for each of the 4 factors were 0.982, 0.964, 0.905, and 0.831.

Factor 1, named Organizational Accountability, had 32 competencies with factor loadings ranging from 0.845 to 0.509. Factor 2, named Stakeholder Diversity, had 17 competencies with factor loadings ranging from 0.798 to 0.513. Factor 3, named Access, had 9 competencies with

factor loadings ranging from 0.852 to 0.566. Factor 4, named Communications, had 5 competencies with factor loadings ranging from 0.744 to 0.517.

The results of the MANOVA for respondents' demographic characteristics and factor scores were not statistically significant; that is, no difference in responses occurred if respondents differed by gender (F=0.868; P=0.487) or race (F=1.401; P=0.240). Ethnicity was uniform in response and therefore, not tested for differences by factor scores. The results of the MANOVA for respondents' work characteristics also were not statistically significant; that is, no difference in responses occurred if respondents varied by administrative responsibilities (F=0.157; P=0.959), faculty rank (F=0.587; P=0.788), or years of employment (F=0.563; P=0.690).

Table 2.2 Demographic and Work Experience of Survey Respondents

Demographic and Work Experience	Respondents(n=101)	
	No.	%
Faculty Rank		
Assistant Professor	29	28.7
Associate Professor	27	26.7
Professor	45	44.6
Administrative Position		
Administrator	49	48.5
Dean, Associate Dean of Nursing	6	5.9
Chair, Interim Chair	21	20.8
Department Head, Interim Head, Division Head	9	8.9
Director, Executive Director, Chief	13	12.9
None	52	51.5
Race[1]		
White	80	79.2
Black	12	11.9
American Indian or Alaska Native	3	3.0
Chinese	2	2.0
Japanese	1	1.0
Korean	1	1.0
Other	6	5.9
No Answer	3	3.0
Hispanic, Latino, or Spanish Origin		
Non-Hispanic, Latino, or Spanish Origin	88	94.6
Mexican, Mexican American, Chicano	4	4.3
Puerto Rican	1	1.1
No Answer	8	6

[1] Note sum of race does not add up to 100% because respondents could select more than on response.

Table 2.3 Survey Respondents Organizational Cultural Competence Experience

Cultural Competence Experience	Respondents (n=101)	
	No.	%
Have you been involved in a department or unit that was developing or has a diversity plan?		
Yes	68	67.3
No	27	26.7
Don't Know	6	5.9
Have you been involved in a department or unit that assessed the curriculum for cultural competence?		
Yes	61	60.4
No	36	35.6
Don't Know	4	4.0
Have you been involved in a department or unit that has evaluated students' cultural competence?		
Yes	46	45.5
No	47	46.5
Don't Know	8	7.9

The result of the MANOVA for respondents' organizational cultural competence experience questions were not statistically significant for a diversity plan or student assessment; that is, no difference was found if a respondent answered "yes" or "no" for a diversity plan (F=0.33; P=0.855), or student assessment (F=2.163; P=0.080) for any of the 4 factors. However, marginal significance was found for respondents' who answered "yes" or "no" to a curriculum assessment (F=2.425; P=0.051), therefore, a follow-up ANOVA of between subjects effects was completed. Results of the between subjects effect revealed that a curriculum assessment (F=6.508; P=0.012) was statistically significant for scores on factor 4. That is, groups who answered "yes" to assessing their curriculum for cultural competence found the communication domain more essential for organizational cultural competence than those who answered "no."

Results from the MANOVA for collapsed disciplines revealed a slight difference by factor scores (F=2.454; P=0.051). Because of this suggested tendency, a follow-up ANOVA of between subject effects was completed. Results of the between subjects effects revealed that collapsed disciplines were not statistically significant for scores on factor 1, 2, and 4. However, there was significance for factor score 3 (Access) (F=4.755; P=0.032) by categorized disciplines. Specifically, the community health disciplines had a significantly larger mean score (0.1834) than the physical and mental health disciplines (-0.2474), that is, nutrition and public health (community health disciplines) found factor 3, Access, more essential than family medicine, counseling psychology, and nursing (physical and mental health disciplines).

Two of the 3 Pearson's chi-square tests for differences in organizational cultural competence experience and discipline category were significant. There was an association between having

experience with assessing the curriculum for cultural competence and the physical and mental health disciplines (P=0.001), meaning there were more "yes" responses for this group than would be expected if discipline and response were independent. The same was true with having experience with evaluating students' cultural competence and the physical and mental health disciplines (P=0.000), meaning there were more "yes" responses for this group than would be expected if discipline and response were independent. There was no association between having or not having experience with a diversity plan and the categorized disciplines (P=0.616).

Table 2.4 Organizational Cultural Competencies and Factor Loading Scores

Organizational Accountability (Factor 1)	**Factor Loadings**
1. Learning outcomes of students are evaluated to measure knowledge and skills related to cultural competence.	0.845
2. The curricula, materials, and classroom activities are systemically evaluated to determine how they incorporate cultural competence content.	0.821
3. Learning outcomes for outside class opportunities are evaluated to measure student knowledge and skills related to cultural competence.	0.811
4. The academic unit collaborates with other organizations, agencies, and/or academic units to develop and deliver culturally competent curricula, activities, and programs.	0.802
5. Fiscal resources are allocated for initial and ongoing cultural competence training.	0.789
6. Experiential practice sites model cultural competence.	0.788
7. Representatives from diverse backgrounds participate in classroom discussions and presentations (e.g., guest speakers, panel members, and discussants).	0.788
8. Field faculty and others (e.g. guest speakers) are evaluated for modeling and facilitating cultural competence in their practice setting or learning activity.	0.779
9. Faculty and staff participate in education, training, and research to increase their awareness, knowledge, and skills related to cultural competence.	0.770
10. Undergraduate and graduate curricula include cultural competence related training.	0.770
11. Undergraduate and graduate curricula establish the importance of providing relevant and accessible services to diverse populations.	0.764
12. Diverse field faculty (e.g., paid, volunteer, and field experience supervisors) and others (e.g. guest speakers) model cultural competence.	0.763
13. Campus, community, regional, and/or national resources that promote cultural competence are utilized as appropriate, e.g. curriculum development, organizational assessment, field experiences, etc.	0.760
14. The academic unit's academic administrator is accountable for cultural competence and diversity of the unit.	0.745
15. Experiential practice sites are developed with input from individuals from diverse backgrounds.	0.736
16. The academic unit rewards faculty, staff, and student involvement with community, regional and/or national resources that promote cultural competence.	0.730

Table 2.4 Continued

Organizational Accountability (Factor 1)	**Factor Loadings**
17. The academic unit's core values related to diversity influence how marketing and other program materials are developed.	0.712
18. A range of culturally appropriate educational resources and teaching techniques are used to address different learning styles of students.	0.709
19. Experiential practice sites provide students opportunities to work with diverse populations.	0.696
20. Curricula establish the health-related relevance of the cultural backgrounds of individuals and/or families that are served by health professionals.	0.693
21. Faculty and staff who use cultural skills in their work that is above and beyond their required job duties are recognized or rewarded.	0.666
22. Experiential sites and outside class learning opportunities are evaluated for providing students with opportunities to work with diverse populations.	0.644
23. The academic unit implements a policy to conduct regular organizational cultural competence self-assessments to identify priorities and gaps in practice.	0.636
24. A committee, task force, program area, or other entity is formed to develop cultural competence priorities arising out of the unit's organizational self-assessment.	0.628
25. Personnel performance evaluations include knowledge, skills, and ongoing professional development related to cultural competence.	0.628
26. Advising and mentoring services are systematically reviewed for methods, strategies, and ways to better serve students in culturally competent ways.	0.628
27. Forms of communication (reports, appointment notices, telephone message greetings, etc.) are culturally competent for internal and external audiences.	0.614
28. Consultants are involved who have knowledge of and experience with the cultural group requesting the technical assistance and consultation.	0.589
29. Special needs and cultural differences are considered when interpreting student evaluation results and making recommendations for improvement.	0.588
30. Technical assistance and consultation activities are routinely and systematically evaluated for methods, strategies, and ways of serving communities in culturally competent ways.	0.562
31. Research priorities are established collaboratively with individuals from diverse backgrounds and communities.	0.539
32. Evaluation of technical assistance/consultation activities by recipients includes cultural competence.	0.509
Stakeholder Diversity (Factor 2)	**Factor Loadings**
1. Personnel recruitment, employment, and retention practices are implemented to achieve diversity and promote cultural competence.	0.798
2. The composition of the academic unit (faculty, staff, students, boards, committees, and contractors) is diverse.	0.755
3. Diverse participants serve on all advisory boards, committees, and councils to ensure wide cultural representation of the populations served.	0.730

Table 2.4 Continued

Stakeholder Diversity (Factor 2)	**Factor Loadings**
4. Faculty, staff, administration, and board members participate in developing, reviewing, and revising employment equity and personnel policies and procedures.	0.730
5. Input is sought from faculty, staff, administration, and board members in recruiting, hiring, and retaining individuals from diverse backgrounds.	0.720
6. Diversity goals and language about the diversity of faculty, staff, and communities served are included in the organizational policies and procedures.	0.692
7. Academic units implement a plan for employment equity and diversity of personnel that includes policies and procedures for recruitment, employment, retention, and workforce composition assessment.	0.679
8. Student policies on recruitment, admission, and retention are implemented to achieve diversity.	0.672
9. The development of policies and procedures includes diverse faculty, staff, and others from outside the academic unit.	0.664
10. The development of strategic and program plans includes diverse faculty, staff, and others outside the academic unit as appropriate.	0.660
11. The larger academic unit and its component parts implement an employment equity policy to eliminate unfair and discriminatory barriers to positions.	0.649
12. Demographic data about the student population are evaluated to promote diversity.	0.648
13. A policy is in place to address disparities in recruitment, admission, retention, and graduation rates of diverse students.	0.634
14. Position descriptions include skills related to cultural competence, as appropriate.	0.624
15. The academic unit identifies an academic administrator or faculty member with delegated responsibility for initiative and issues related to cultural competence and diversity.	0.571
16. The review of policies and procedures includes diverse faculty, staff, and others from outside the academic unit.	0.556
17. The academic unit implements policies that incorporate goals of eliminating barriers to access educational programs and services.	0.513
Access (Factor 3)	**Factor Loadings**
1. Advising and mentoring services are available to all students.	0.852
2. All aspects of the physical environment are accessible.	0.758
3. Research projects include subjects from diverse backgrounds representative of the targeted research population.	0.712
4. The design, methods, and outcome measures of research projects are culturally appropriate for the targeted research population.	0.687
5. The academic unit's student organizations are welcoming of students.	0.681
6. When providing technical assistance and consultation in communities, input from members reflecting the diverse cultural make-up of these communities is sought and utilized.	0.646

Table 2.4 Continued

Access (Factor 3)	**Factor Loadings**
7. The impact of culture on the health-related behaviors of individuals, families, and communities is considered in all phases of research.	0.627
8. Policies and procedures are clearly communicated to faculty and staff.	0.568
9. The researchers include members of the racial and/or ethnic groups to be studied and/or individuals who have acquired knowledge and skills to work with subjects from those specific groups.	0.566
Communications (Factor 4)	**Factor Loadings**
1. A written statement of core values includes diversity and cultural competence.	0.744
2. The physical environment portrays diverse communities through visual images, such as pictures, posters, and signage.	0.649
3. Supervisors communicate evaluation of student's performance being sensitive to cultural differences.	0.595
4. Cultural competence is included in the mission and vision statements	0.527
5. Administrators communicate evaluations of faculty and staff performance being sensitive to cultural differences.	0.517

Discussion

Factor Names

The purpose of this research was to test whether the Krause model's domains and criteria statements are essential for organizational cultural competence of post-secondary health-related academic units. From our model for organizational cultural competence, 63 criteria statements emerged in 4 factors: Organizational Accountability, Stakeholder Diversity, Access, and Communications. Factor 1, Organizational Accountability, addresses the academic department or unit's capacity to support appropriate settings, infrastructure, and resources to promote cultural competence. Additionally, it is responsible for monitoring and evaluating cultural competence in all parts of the organization. Finally, it is responsible for cultural competence training content for professional development of personnel and students. Factor 2, Stakeholder Diversity, includes policies and procedures that support a diverse academic unit that encompasses the governing body, personnel, and students. Factor 3, Access, supports administrative, personnel, and student services ease of use. It also addresses cultural competence planning at all levels of research. Factor 4, Communications, addresses cultural competence as articulated in the unit's mission, vision, and values statements. As well, it provides a mechanism for systematic and ongoing communication between the organization, personnel, and students that is culturally sensitive. It also supports an accommodating environment that is culturally inviting.

How the Model Relates to Academic Units

The U.S. Health Resources Services Administration (HRSA) developed a cultural competence curriculum guide for health care delivery systems in 2005 (20). This guide proposed that academic units could use the organizational cultural competence models developed for healthcare delivery systems as parallel frameworks to develop an academic model by substituting terms such as "education" and "research" for "services" (8, 20). The Krause model (8) goes beyond this proposal by developing a model for academic units that is uniquely different from healthcare delivery systems. The model developed through our research further validates the Krause model by going beyond content validation and to initial construct validation. As in the Krause model, many criteria statements are unique to academic settings, such as those that encompass culturally competent curricula, culturally competent research, technical assistance and consultation, and culturally competent student policies, practices, recruitment, and retention (8-9, 11, 21-23).

How the Model Relates to the Penn Blueprint and Krause Model

This project is consistent with the Penn Blueprint and Krause model for organizational cultural competence of health-related academic units. In particular, the Penn Blueprint, developed as a series of 8 action steps, provides the framework and processes needed to integrate cultural competence within the curriculum. Three of these action steps are consistent with the current research. Action step 1, Appointment of a Director of Diversity Affairs, and action step 2, Selection of the Master Teachers Taskforce on Cultural Diversity, are consistent with the Stakeholder Diversity domain, because both steps ensure continuous progress toward diversification within the academic unit (9). Lastly, action step 3, Implementation of an Intensive Faculty Development Program, is congruent with the Organizational Accountability domain, because it supports cultural competence training for professional development of personnel and

students (9).

Also the model developed through our research and the Krause model are consistent, because both share common themes, such as cultural competence training, the inclusion of diverse stakeholders, an accessible environment, and culturally competent communications (9). Both models also support a comprehensive model for organizational cultural competence, because they contain appropriate domains and supporting criteria statements for assessing and evaluating organizational cultural competence of post-secondary health related academic units.

How the Model Relates Healthcare Delivery Systems

The results of this research also are consistent with organizational components described in research related to healthcare delivery systems. The Organizational Accountability domain is supported by research describing the need for monitoring and evaluating services and procedures for cultural competence compliance (15-16). For example, the National Standards for Culturally and Linguistically Appropriate Services (CLAS), developed by the U.S. Department of Health and Human Services (DHHS) in 1999, support cultural competence compliance by providing a framework for healthcare agencies to follow when implementing healthcare services (14). In addition, the Organizational Accountability domain is congruent with research that articulates the need for healthcare providers to receive cultural competence training (15-16). The Stakeholder Diversity domain addresses the importance of a diverse group of stakeholders in program planning, which is consistent with healthcare delivery models that include staff diversity and diversity training programs (14-17). Additionally, it is congruent with healthcare delivery models with respect to recruiting and retaining diverse personnel (15-16). The Access domain is supported by research describing the need to improve quality care and service availability (14-16). Similarly, the Communications domain is consistent with domains within health service delivery models (14-16). For instance, in 2002, HRSA developed an organizational assessment profile that indicated domains important for cultural competence in healthcare delivery systems. One of the domains is communications, which is described as the exchange of information in ways that promote cultural competence (24). Furthermore, additional indicators, such as organizational values, describe the need to articulate cultural competence throughout the organization's mission, vision, and values statements similar to the Communications domain of the current research (24).

Access and Health

In this research study, the community health disciplines found factor 3, Access, more essential for organizational cultural competence than the physical and mental health disciplines. Access to care is a vital determinant of health. However, access to healthcare services is not enough to eliminate health disparities (25). According to Bell and Standish (26), factors affecting health extend far beyond the medical care system. Examples are key factors, such as behavior and environmental conditions, that affect health status (27). Spectrums of interventions in the community health disciplines are aimed at behavior and environmental conditions where the physical and mental health disciplines place predominant emphasis on medical care (28). In addition, community health disciplines especially emphasize health promotion and disease prevention rather than diagnosis and treatment as seen in the physical and mental health disciplines (28). Therefore, the variations in the provision of care may explain the differences

found for how essential the community health and physical and mental health disciplines perceived the essentiality of Access for organizational cultural competence.

Communications and the Academic Curriculum

In this research study, academic units that assessed their curricula for cultural competence scored the essentiality of the Communications domain higher than those that did not assess their curricula. In the literature, several health-related cultural competence curricula highlight the significance of learning communication skills required for culturally competent care, which may explain the significance found in our study due to the linkage between education and practice (14-17, 24, 30). For instance, the IOM reported that one way to address health disparities is by providing cross-cultural education in the training of current and future healthcare professionals (3). According to the Liaison Committee on Medical Education, one of the most important training components needed to deliver culturally competent care is appropriate communication skills (29). Effective communications skills have been associated with better health outcomes, which highlights the importance of addressing cross-cultural communication skills in academic units (29).

Disciplinary Organizational Cultural Competence Experience in Academia

In this study, we found for the physical and mental health disciplines an association between having experience with assessing the curriculum for cultural competence and evaluating students' cultural competence. Several models for culturally competent education exist for family medicine, counseling psychology, and nursing academic programs compared to few for nutrition and public health, which may explain our finding for the physical and mental health disciplines, but not the community health disciplines (9, 11, 21, 31, 32-33). For example, the Penn Blueprint for nursing focuses on integrating cultural competence throughout the curriculum (9). Likewise, there are a number of self-assessment tools for cultural competence of students in the physical and mental health disciplines (11, 34-36). One specific example is the Tool for Assessing Cultural Competence Training (TACCT) developed in 2006 by the Association of American Medical Colleges (11, 33-36).

Diversity and Organizational Cultural Competence

While we found that the essentiality of the Communications domain was higher for academic units that assessed the cultural competence of their curricula compared to those that did not, we did not find any domain differences for units involved with diversity planning and those that were not. The explanation for this finding is unclear, especially because one of the domains we found is related to diversity directly, or Stakeholder Diversity. Anecdotal evidence suggests that lack of diversity in healthcare organizations results in systems incongruously designed to serve diverse populations (1-3, 29). The Stakeholder Diversity domain may reinforce the academic-practice linkage, which demonstrates the relevance of a diverse workforce to provide culturally competent care.

It is important to distinguish the difference between diversity and organizational cultural competence because the literature uses the two terms interchangeably. In the workforce, Equal Employment Opportunity laws protect diversity (38). Diversity is recognized by age, disability,

ethnicity, race, religion, gender, etc (38). Our findings suggest that organizational cultural competence is a broader concept of diversity. In particular, organizational cultural competence in academic units establishes an environment where teaching, research, service and outreach, and administrative and personnel policies and practices allow students to learn cultural competencies needed to work in healthcare delivery systems (8). Because organizations are facing more compelling challenges it is important to move beyond diversity awareness alone and towards achieving both diversity and cultural competence in the workforce.

Limitations

Some limitations are apparent in this study. One is that only 19.2% of the selected sample population completed the online survey. More than 500 participants did not click on the survey web-link in their email contacts, which may have been due to spam filters, selective screening of emails, lack of tenured/tenure-track status, or survey administration during the late Spring when faculty may have had end-of-term time demands. However, we instituted several measures to limit the impact of these factors. To promote the response rate, we implemented multiple electronic contacts and offered a modest incentive. In addition, to limit emails screened as "junk mail" by participants' spam filters, key words frequently linked with spam filters were identified through an Internet search and excluded in the subject lines of the four email contacts.

We used position title as a proxy for tenured/tenure-track faculty status, which was verified once respondents went to the survey website. However, anecdotally we had some potential respondents contact us to indicate that they could not complete the survey because they were not tenured or tenure-track, despite having one of the titles we used as a proxy for tenure status. We have no way of knowing the degree to which our response rate is a reflection of fewer faculty being tenured or tenure-track as shown in research (38-39). Future research might consider whether tenure status or some other identifier would be a better means of identifying faculty associated with departmental decision-making and governance.

Despite these limitations, we remain confident in the model especially in light of the model's internal consistency and clear designation of factors, or domains. We tested the model's internal consistency using reliability coefficients (Cronbach alpha) for each criteria statement and factor score. All were above 0.80, thereby demonstrating internal consistency with values greater than 0.70 (19).

Next Steps

This study confirms a model for organizational cultural competence of post-secondary health-related academic units (Figure 2.1). The original model was developed through a literature review, which then was tested for content validity by Krause. This study then tested the Krause

model for initial construct validity (41). Therefore, to determine if the model is reflecting its construct accurately, confirmatory factor analysis should be conducted to confirm the four factors established in this study (41). In addition, the practical application of this model should be tested. Finally, a self-assessment tool should be developed for academic units to use as a basis for planning improved organizational cultural competence.

Conclusion

This research has confirmed a model for organizational cultural competence of post-secondary health-related academic units. The model's domains are congruent with the research relating to academic and healthcare delivery systems. It is a comprehensive model that is unique for academic units.

Figure 2.1 Schematic of Model Domains and Number (n) of Criteria Statements for Organizational Cultural Competence of Post-Secondary Health-Related Academic Units

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Appendix A. Organizational Cultural Competence Online Survey

Organizational Cultural Competence of Post-Secondary Health-Related Academic Units

Thank you for participating in our survey!

Purpose of Study

The University of Tennessee's Public Health Nutrition Program is conducting a study to test whether there is a model for organizational cultural competence of health-related post-secondary academic units.

Survey Instrument

We hope you will participate in this study by completing this online survey about what you think is important for cultural competence in academia. The first section includes activities related to organizational cultural competence. The second section is a personal inventory with demographic items and experience related to cultural competence.

Benefits of this Study

By completing this survey you will help contribute to our understanding of how academic units can be culturally competent and promote that of their students and alumni. We anticipate submitting our findings for presentations and publications. Upon request, we would be very happy to communicate our findings with you.

Incentive to Participate

If you choose to provide contact information at the end of the survey, you will be entered in a drawing for a $100.00 Amazon.com gift card. After we have finished data collection, we will conduct the drawing. The winners will receive the gift card via e-mail.

Risks

There are no foreseeable risks in completing the survey and any anticipated risk of participation is no greater than the risks encountered in daily life. In addition, there are no penalties for withdrawal or non-participation.

Confidentiality

Your responses will be kept confidential and we will report group results only. Neither individuals nor programs will be identified and no reference will be made to data that could link you to the research study. The data will be stored securely on a University server. To assure that we cannot link survey responses to individuals, a statistical consultant not associated with the study will remove unique login codes and contact information for those participating in the gift card drawing from the online database. The researchers will have access to a response database without unique identifiers and contact information and also to a second database that has only unique identifiers of non-respondents, so that we can follow-up on unanswered questionnaires. The personal inventory questions are used for analytic purposes only. Completion of the survey will constitute consent to participate.

If you have any questions, please contact either of us.

Thank you,

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Survey Questions:

Are you a tenure/tenured track faculty?	
Yes	No

[Note if survey respondents replied no the following message was displayed – "Thank you for your interest in participating in the study. However, we are only surveying tenured/tenure-track faculty and administrators. Thank you for your time."]

Instructions:

What follows are activities for organizational cultural competence for post-secondary health-related academic units

An academic health-related unit is defined as an academic organization that is an accredited post-secondary health-related academic program, department, school, or college.

Cultural competence is defined as a "set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable that system, agency or those professionals to work effectively in cross-cultural situations" (Cross, 1989.

To move within the survey please use the previous (to move back), next (to move forward), or stop (to exit, or log-out) buttons. Please do not use your cursor arrows or back button or your browser.

If you wish to stop at any point during the survey please press the stop button. All responses will be saved. If you close the browser without pressing the stop button there will be a 10 minute waiting period before you can reenter to finish the survey.

Thank you!

Please rate each of these proposed activities for its importance to cultural competence of a post-secondary health-related academic unit.

Criteria Statements	Not at all Essential	Moderately Unessential	Slightly Unessential	Neither	Slightly Essential	Moderately Essential	Essential
Cultural competence is included in the mission and vision statements.							
A written statement of core values includes diversity and cultural competence.							
The development of policies and procedures includes diverse faculty, staff, and others from outside the academic unit.							
Cultural competence goals and language are included in the organizational policies and procedures.							
Diversity goals and language about the diversity of faculty, staff, and communities served are included in the organizational policies and procedures.							
Policies and procedures are available in accessible modes of communication, such as Braille, as appropriate.							
The academic unit has a policy that makes reference to its alignment with university policies on racism, harassment, discrimination, and complaint resolution or appeals processes.							
The academic unit has a policy that faculty, staff, and students are informed of policies on racism, harassment, discrimination, and complaint resolution or appeals.							
Fiscal policies include resources for translation and interpretation assistance to meet any identified needs of faculty, staff, and students.							
The academic unit implements policies that incorporate goals of eliminating barriers to access educational programs and services.							
The academic unit implements policies on multiculturalism.							
The academic unit implements a policy to conduct regular organizational cultural competence self-assessments to identify priorities and gaps in practice							

Criteria Statements	Not at all Essential	Moderately Unessential	Slightly Unessential	Neither	Slightly Essential	Moderately Essential	Essential
The review of policies and procedures includes diverse faculty, staff, and others from outside the academic unit.							
The composition of the academic unit (faculty, staff, students, boards, committees, and contractors) is diverse.							
Diverse participants serve on all advisory boards, committees, and councils to ensure wide cultural representation of the populations served.							
The academic unit identifies an academic administrator or faculty member with delegated responsibility for initiatives and issues related to cultural competence and diversity.							
The academic unit's academic administrator is accountable for cultural competence and diversity of the unit							
A committee, task force, program area, or other entity is formed to develop cultural competence priorities arising out of the unit's organizational self-assessment.							
The development of strategic and program plans includes diverse faculty, staff, and others outside the academic unit as appropriate.							
Faculty, staff, administration, and board members participate in developing, reviewing, and revising employment equity and personnel policies and procedures.							
Policies and procedures are clearly communicated to faculty and staff.							
Position descriptions include skills related to cultural competence, as appropriate.							
The larger academic unit and its component parts implement an employment equity policy to eliminate unfair and discriminatory barriers to positions.							

Criteria Statements	Not at all Essential	Moderately Unessential	Slightly Unessential	Neither	Slightly Essential	Moderately Essential	Essential
Academic units implement a plan for employment equity and diversity of personnel that includes policies and procedures for recruitment, employment, retention, and workforce composition assessment.							
Personnel recruitment, employment, and retention practices are implemented to achieve diversity and promote cultural competence.							
Input is sought from faculty, staff, administration, and board members in recruiting, hiring, and retaining individuals from diverse backgrounds.							
Personnel performance evaluations include knowledge, skills, and ongoing professional development related to cultural competence.							
Faculty and staff who use cultural skills in their work that is above and beyond their required job duties are recognized or rewarded.							
Demographic data about the student population are evaluated to promote diversity.							
Students from diverse backgrounds participate in developing and reviewing student related policies and procedures.							
A policy is in place to address disparities in recruitment, admission, retention, and graduation rates of diverse students.							
Student policies on recruitment, admission, and retention are implemented to achieve diversity.							
Policies and practices of the academic unit's student organizations are implemented to achieve diversity and cultural competence.							
Advising and mentoring services are available to all students.							
Advising and mentoring services are systematically reviewed for methods, strategies, and ways to better serve students in culturally competent ways.							
Fiscal resources are allocated for initial and ongoing cultural competence training.							

Criteria Statements	Not at all Essential	Moderately Unessential	Slightly Unessential	Neither	Slightly Essential	Moderately Essential	Essential
Faculty and staff participate in education, training, and research to increase their awareness, knowledge, and skills related to cultural competence.							
The academic unit collaborates with other organizations, agencies, and/or academic units to develop and deliver culturally competent curricula, activities, and programs.							
Campus, community, regional, and/or national resources that promote cultural competence are utilized as appropriate, e.g. curriculum development, organizational assessment, field experiences, etc.							
The academic unit rewards faculty, staff, and student involvement with community, regional and/or national resources that promote cultural competence.							
The academic unit's core values related to diversity influence how marketing and other program materials are developed.							
Recruitment materials are culturally competent.							
Print and electronic materials, educational tools, and recruitment materials portray diversity.							
Forms of communication (reports, appointment notices, telephone message greetings, etc.) are culturally competent for internal and external audiences.							
All aspects of the physical environment are accessible.							
The physical environment portrays diverse communities through visual images, such as pictures, posters, and signage.							
The academic unit accommodates faculty, staff, and students in their cultural and religious practices and celebrations.							
The academic unit's student organizations are welcoming of all students.							
Administrators communicate evaluations of faculty and staff performance being sensitive to cultural differences.							

Criteria Statements	Not at all Essential	Moderately Unessential	Slightly Unessential	Neither	Slightly Essential	Moderately Essential	Essential
Supervisors communicate evaluation of student's performance being sensitive to cultural differences.							
Undergraduate and graduate curricula include cultural competence related training.							
Curricula establish the health-related relevance of the cultural backgrounds of individuals and/or families that are served by health professionals.							
Undergraduate and graduate curricula establish the importance of providing relevant and accessible services to diverse populations.							
A range of culturally appropriate educational resources and teaching techniques are used to address different learning styles of students.							
Representatives from diverse backgrounds participate in classroom discussions and presentations (e.g., guest speakers, panel members, and discussants).							
The curricula, materials, and classroom activities are systemically evaluated to determine how they incorporate cultural competence content.							
Special needs and cultural differences are considered when interpreting student evaluation results and making recommendations for improvement.							
Learning outcomes of students are evaluated to measure knowledge and skills related to cultural competence.							
Experiential practice sites are developed with input from individuals from diverse backgrounds.							
Experiential practice sites provide students opportunities to work with diverse populations.							
Experiential practice sites model cultural competence.							
Diverse field faculty (e.g., paid, volunteer, and field experience supervisors) and others (e.g. guest speakers) model cultural competence.							
Experiential sites and outside class learning opportunities are evaluated for providing students with opportunities to work with diverse populations.							

Criteria Statements	Not at all Essential	Moderately Unessential	Slightly Unessential	Neither	Slightly Essential	Moderately Essential	Essential
Field faculty and others (e.g. guest speakers) are evaluated for modeling and facilitating cultural competence in their practice setting or learning activity.							
Learning outcomes for outside class opportunities are evaluated to measure student knowledge and skills related to cultural competence.							
Research priorities are established collaboratively with individuals from diverse backgrounds and communities.							
The design, methods, and outcome measures of research projects are culturally appropriate for the targeted research population.							
Research projects include subjects from diverse backgrounds representative of the targeted research population.							
The researchers include members of the racial and/or ethnic groups to be studied and/or individuals who have acquired knowledge and skills to work with subjects from those specific groups.							
The impact of culture on the health-related behaviors of individuals, families, and communities is considered in all phases of research.							
When providing technical assistance and consultation in communities, input from members reflecting the diverse cultural make-up of these communities is sought and utilized.							
Consultants are involved who have knowledge of and experience with the cultural group requesting the technical assistance and consultation.							
Technical assistance and consultation activities are routinely and systematically evaluated for methods, strategies, and ways of serving communities in culturally competent ways.							
Evaluation of technical assistance/consultation activities by recipients includes cultural competence.							

Instructions:

You have completed 90% of the survey! Please answer the next 10 demographic research items, which will be used to describe your academic role and experience. At the end of the survey you will be asked if you would like to participate in the gift card drawing. Thank You!

What is your Faculty Rank?			
Assistant Professor	*Associate Professor*	*Professor*	*Other*

Currently, which best applies to you, if any?				
Dean or Associate Dean of Nursing	Chair or Interim Chair	Department Head, Interim Head, or Division Head	Director, Executive Director, Chief	None

What department or unit is your academic home?				
Family Medicine	Nursing	Counseling Psychology	Nutrition	Public Health

What is your Gender?		
Male	Female	No Answer

What is your Race, mark all that apply?			
White	Black, African Am., or Negro	American Indian, or Alaska Native	Asian Indian
Chinese	Filipino	Japanese	Korean
Vietnamese	Other Asian	Native Hawaiian	Guamanian or Chamorro
Samoan	Other Pacific Islander	Other	No Answer

Are you of Hispanic, Latino or Spanish Origin?		
No not of Hispanic, Latino, or Spanish Origin	Yes, Mexican, Mexican Am., Chicano	Yes, Puerto Rican
Yes, Cuban	Yes, Other	No Answer

How many years have you been in a tenure/tenure-track position?	
	0 to 255

Please indicate your prior experience related to cultural competence:	*Yes*	*No*	*Don't Know*
Have you been involved in a department or unit that was developing or has a diversity plan?			
Have you been involved in a department or unit that assessed the curriculum for cultural competence?			

Have you been involved in a department or unit that has evaluated students' cultural competence?			

Additional comments (optional):

If you wish to enter the drawing, please enter your name, address, and email address. *These will only be used to contact the winners and will not be used in conjunction with the data in any way. If you do not wish to be entered into the drawing please hit the next button to submit the survey.*

[Note at the End of the survey the following message would display: "Thank you for completing the survey!"]

[Note if a participant stopped during the survey the following message would display:
" We appreciate your valuable time! Please remember to come back and complete the survey! Once you reenter the survey you may be directed back to the beginning of the activities. However, all responses will be saved. Please press the next button to pick up from your last point of entry."]

[Note on each page a stop, next, and previous button were at the bottom of each webpage]

Appendix B. Respondent Emails

Initial Email Invitation to Survey Respondents

The University of Tennessee's Public Health Nutrition Program is conducting a study to test whether there is a model for organizational cultural competence of a health-related post-secondary academic unit. This is important given the increasing diversity in the US. Results from this study will provide an understanding about how our academic programs should function. We hope you will participate by completing an online survey about what you think is important by April 15th, 2010!

To complete the survey, please go to this website [Enter Web Link]

Use the following login code: [Enter Code].

[Enter Sentence] Your responses are important and we would appreciate your voluntary participation. Of course, there are no penalties to you or your program, if you are unable to participate or withdraw.

We recognize that your time is valuable! Therefore if you complete the survey and also elect to participate in a drawing, you will be eligible to receive one $100 dollar gift card to Amazon.com. The time commitment to complete this survey should take less than 20 minutes.

The online survey is self-administered and we ask that you follow the instructions carefully and please be candid when responding to questions. Your responses will be kept confidential and we will report group results only. There are no foreseeable risks in completing the survey and no penalties for withdrawal or non-participation. Neither individuals nor programs will be identified and no reference will be made to data that could link you to the research study. The data will be stored securely on a University server. To assure that we cannot link survey responses to individuals, a statistical consultant not associated with the study will remove unique login codes and, for those participating in the gift card drawing, contact information from the online database. The researchers will have access to a response database without unique identifiers and a second database that has only unique identifiers, so that we can follow-up on unanswered questionnaires. The personal inventory questions are used for analytic purposes only. Completion of the survey will constitute consent to participate.

We value your input so it is important to respond by April 15th, 2010 for your information to be included in the survey. If you have any questions, please do not hesitate to contact us by email or phone. Thank you!

Sincerely,
Laura Dotson
Graduate student in Nutrition & Public Health
Department of Nutrition

1215 Cumberland Avenue
University of Tennessee
Knoxville, TN 37996-1920
ldotson3@utk.edu
Phone: (865) 974-5229
Betsy Haughton, EdD, RD, LDN
Professor; Director, Public Health Nutrition
Department of Nutrition
1215 Cumberland Avenue
University of Tennessee
Knoxville, TN 37996-1920
haughton@utk.edu
Phone: (865) 974-6267

[Note sentence was used to tailor the email message to each discipline it either read:
You have been selected randomly among faculty within your program or as the administrator of a randomly selected program because your program is accredited by the Association of American Medical College; National League for Nursing Accrediting Commission; Association of Nutrition Departments and Programs; American Psychology Association; or Council on Education for Public Health.]

Reminder Email to Survey Respondents

An invitation to participate in a research study to test whether there is a model for organizational cultural competence of a health-related post-secondary academic unit was emailed to you last week. We are interested in your participation, because your input will help identify how academic programs should function in relation to the increasing diversity in the US.

To complete the survey, please go to this website [Enter Web Link]

Use the following login code: [Enter Code].

If you have already completed the online survey, please accept our sincere thanks. If not, please do so today. It is important that your experience and thoughts be included.

Sincerely,
Laura Dotson
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Second Invitation Email to Non-Respondents

Recently, within the past three weeks we contacted you about participating in a research study by The University of Tennessee's Public Health Nutrition Program to test whether there is a model for organizational cultural competence of a health-related post-secondary academic unit. Your participation is important! We hope that you will participate now! Cultural competence is important given the increasing diversity in the US. Results from this study will provide an understanding about how our academic programs should function. We hope you will participate by completing an online survey about what you think is important today!

To complete the survey, please go to this website [Enter Web Link]

Use the following login code: [Enter Code].

[Enter Sentence]. Your responses are important and we would appreciate your voluntary participation. Of course, there are no penalties to you or your program, if you are unable to participate or withdraw.

We recognize that your time is valuable! Therefore if you complete the survey and also elect to participate in a drawing, you will be eligible to receive one $100 dollar gift card to Amazon.com. The time commitment to complete this survey should take less than 20 minutes. Completion of the survey will constitute consent to participate.

The online survey is self-administered and we ask that you follow the instructions carefully and please be candid when responding to questions. Your responses will be kept confidential and we will report group results only. There are no foreseeable risks in completing the survey and no penalties for withdrawal or non-participation. Neither individuals nor programs will be identified and no reference will be made to data that could link you to the research study. The data will be stored securely on a University server. To assure that we cannot link survey responses to individuals, a statistical consultant not associated with the study will remove unique login codes from the response database. The researchers will have access to a response database without unique identifiers and a second database that has only unique identifiers, so that we can follow-up on unanswered questionnaires. The personal inventory questions are used for analytic purposes only.

We value your input so it is important to respond today for your information to be included in the survey. If you have any questions, please do not hesitate to contact us by email or phone. Thank you!

Sincerely,
Laura Dotson
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[Note sentence was used to tailor the email message to each discipline it either read:
You have been selected randomly among faculty within your program or as the administrator of a randomly selected program because your program is accredited by the Association of American Medical College; National League for Nursing Accrediting Commission; Association of Nutrition Departments and Programs; American Psychology Association; or Council on Education for Public Health.]

Final Email Invitation to Non-Respondents

The University of Tennessee's Public Health Nutrition Program is testing whether there is a model for organizational cultural competence of a health-related post-secondary academic unit. We have not heard from you and your participation is important! We hope you will complete the online survey (less than 20 minutes) about what you think is important today!

To complete the survey, please go to this website [Enter Web Link]

Use the following login code: [Enter Code].

We recognize that your time is valuable! Therefore, if you complete the survey and also elect to participate in a drawing, you will be eligible to receive one $100 dollar gift card to Amazon.com.

If you have any questions, please do not hesitate to contact us by email or phone. Thank you!

Sincerely,
Laura Dotson
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Final Invitation to Survey Respondents with Partial Completion

We appreciate you starting our survey on cultural competence and academic units. Your participation is really important to what we will learn from this project.

To complete the survey, please go to this website [Enter Web Link]

Use the following login code: [Enter Code].

You will resume the survey where you stopped.

We greatly appreciate your participation and by completing the survey you can elect to participate in a drawing for a $100 dollar gift card to Amazon.com.

Sincerely,
Laura Dotson
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Appendix C. Criteria Statements not Found to be Essential for Organizational Cultural Competence of Post-Secondary Health-Related Academic Units using Exploratory Principal Component Analysis

Criteria Statements not Essential for Organizational Cultural Competence of Post-Secondary Health-Related Academic Units.

The academic unit implements policies on multiculturalism.
Students from diverse backgrounds participate in developing and reviewing student related policies and procedures.
Policies and practices of the academic unit's student organizations are implemented to achieve diversity and cultural competence.
Cultural competence goals and language are included in the organizational policies and procedures.
Policies and procedures are available in accessible modes of communication, such as Braille, as appropriate.
The academic unit has a policy that makes reference to its alignment with university policies on racism, harassment, discrimination, and complaint resolution or appeals processes.
The academic unit has a policy that faculty, staff, and students are informed of policies on racism, harassment, discrimination, and complaint resolution or appeals.
Fiscal policies include resources for translation and interpretation assistance to meet any identified needs of faculty, staff, and students.
Recruitment materials are culturally competent.
Print and electronic materials, educational tools, and recruitment materials portray diversity.
The academic unit accommodates faculty, staff, and students in their cultural and religious practices and celebrations.

Vita

Laura Elizabeth Dotson, MS-MPH, completed her Bachelors of Public Health Degree in Nutrition in 2008 from The University of North Carolina, Chapel Hill. At the time of thesis submission, she is in the process of completing a dual Nutrition and Public Health degree from The University of Tennessee, Knoxville and is expected to graduate in December 2010. This dual degree includes a Master of Science Degree in Nutrition with a concentration in Public Health Nutrition and a Master of Public Health Degree with a concentration in Health Planning and Administration.