

4-18-2017

# Cultural Competence of Pre-Licensure Nursing Faculty

Colleen Marzilli

*University of Texas at Tyler, cmarzilli@uttyler.edu*

Beth Mastel-Smith

*University of Texas at Tyler*

Follow this and additional works at: [https://scholarworks.uttyler.edu/nursing\\_fac](https://scholarworks.uttyler.edu/nursing_fac)



Part of the [Nursing Commons](#)

---

## Recommended Citation

Marzilli, C., & Mastel-Smith, B. (2016). Cultural competence of pre-licensure nursing faculty. *Journal of Nursing Education and Practice*.

This Article is brought to you for free and open access by the School of Nursing at Scholar Works at UT Tyler. It has been accepted for inclusion in Nursing Faculty Publications and Presentations by an authorized administrator of Scholar Works at UT Tyler. For more information, please contact [tbianchi@uttyler.edu](mailto:tbianchi@uttyler.edu).

ORIGINAL RESEARCH

# Cultural competence of pre-licensure nursing faculty

Colleen Marzilli \*, Beth Mastel-Smith

School of Nursing, The University of Texas at Tyler, Tyler, Texas, United States

Received: August 1, 2016

Accepted: March 22, 2017

Online Published: April 18, 2017

DOI: 10.5430/jnep.v7n9p90

URL: <https://doi.org/10.5430/jnep.v7n9p90>

## ABSTRACT

The purpose of this study was to determine the level of cultural competence (CC) in Texas pre-licensure nursing faculty and examine the relationships between demographics and CC scores. The researchers conducted a study to determine if demographics predicted the level of CC and explored the perceptions of CC. A convergent parallel mixed-methods design used data from a 2014 online survey with a qualitative interview component. Demographics were evaluated with descriptive statistics and CC was measured with The Nurses' Cultural Competence Scale (NCCS). Qualitative data were analyzed using a constant comparative method. The level of CC was low to moderate. Three themes emerged from the interviews: knowledge is experiential, skills require emotional intelligence, and desire requires a catalyst. Nursing faculty could benefit from experiences with culturally diverse patients and students. Continuing education offerings and courses should follow best practices models of CC education and focus on providing meaningful experiences may also increase the knowledge and skills to help faculty members.

**Key Words:** Culture, Cultural competence, Nursing, Nursing education, Nursing faculty, Pre-licensure program

## 1. INTRODUCTION

The United States (U.S.) is a culturally diverse nation, requiring that nurses be prepared to provide culturally competent care to a diverse patient population. More than 37% of the US population is considered ethnically diverse.<sup>[1]</sup> However, only a fraction of health care jobs are held by the 24.6% of nurses from ethnic minority backgrounds, and minority health care leaders comprise an even smaller proportion of the total at 13%.<sup>[2,3]</sup> This makes clear the mismatch between the demographics of the US population and the demographic profile of those providing health care. The incongruity is important because culturally and ethnically diverse groups account for the majority of health disparities in the U.S., and are more likely to require hospital care.<sup>[4-8]</sup> The demographic mismatch is exacerbated in some geographic locations because the population mix is rapidly changing. Five states, Texas included, are now classified as minority-majority states.<sup>[9]</sup>

Evidence suggests that providing culturally competent health care is crucial to combat health disparities.<sup>[10,11]</sup> Health care providers who are culturally competent, can help reduce health disparities.<sup>[12,13]</sup> It is a complex phenomenon, and health care professionals charged with the task of providing culturally competent care have varying degrees of education and preparation to meet this challenge.

While nursing faculty serve as role models to students, it is not clear that nursing faculty members are prepared to teach culturally competent care.<sup>[14,15]</sup> There is limited research measuring nursing faculty's cultural competence (CC) and perceptions of individual CC is not well-documented. Therefore, the purpose of this mixed-methods study was to determine the level of CC in pre-licensure nursing educators teaching at the associate degree and baccalaureate level in Texas and explore faculty perceptions of what it means to be culturally competent.

\*Correspondence: Colleen Marzilli; Email: [cmarzilli@uttyler.edu](mailto:cmarzilli@uttyler.edu); Address: School of Nursing, The University of Texas at Tyler, 3900 University Blvd. Tyler, Texas, United States.

The Campinha-Bacote Process of Cultural Competence in the Healthcare System (PCCHS) model is based upon the idea that cultural competence is not a destination. Rather, it is an ongoing process that is a result of exposure to various encounters, and the knowledge, attitudes, skills and cultural competence desire gained from one's life journey.<sup>[16]</sup> Campinha-Bacote's model includes five concepts titled cultural awareness, cultural skill, cultural knowledge, cultural encounters, and cultural desire. These five concepts are woven together as integral to the process of providing culturally competent care to patients, and together, they form the ASKED framework.

## 2. METHODS

Guided by Campinha-Bacote's model, a convergent parallel mixed-methods design was used to determine the predictiveness of demographic factors for CC and to examine CC and perceptions of CC in nursing faculty.<sup>[17,18]</sup> The quantitative strand measured CC and demographic variables to predict CC. The qualitative strand explored faculty perceptions of CC. The quantitative and qualitative strands were mapped to compare the two strands of data using a triangulation approach.

### 2.1 Sample

G-power 3.1 was used to determine the required sample size. Based on the most complex analysis planned with a moderate effect size of 0.5 and power of .80, a priori sample size was indicated as 89.<sup>[19]</sup> Following Institutional Review Board approval, a convenience sample of 104 nursing faculty in Texas were recruited through the Texas Organization of Baccalaureate and Graduate Nursing Education (TOBGNE) and the Texas Organization for Associate Degree Nursing (TOADN) Listservs, which, together, comprise a listing of all nursing program deans and directors in Texas. This represents approximately 0.5% of total nursing faculty members in Texas.<sup>[20]</sup> It is important to note that some participants did not answer all items and only 89 participants answered all items fully. Inclusion criteria included full-time nursing faculty teaching pre-licensure nursing students teaching in associate and baccalaureate degree programs at a program in Texas. Completion of the anonymous surveys implied consent. At the end of the survey, participants had an opportunity to link to a new site and provide contact information to engage in the qualitative interview portion of the study. From this convenience sample the qualitative participants were identified, and data saturation was reached after analysis of eight interviews. A signed informed consent was obtained prior to the interview process.

### 2.2 Instruments

General demographic questions were included in the survey (CC education, CC experiences, age, gender, race, and ethnicity). CC was measured using the Nurses' Cultural Competence Scale (NCCS).<sup>[21,22]</sup> NCCS is a 41-item survey with four subscales (cultural awareness-10 items, cultural knowledge- nine items, cultural sensitivity- eight items, and cultural skills- 14 items). Each subscale uses a five-point Likert scale to measure the participant's response: 1 = totally disagree, 2 = 25% agree, 3 = 50% agree, 4 = 75% agree, and 5 = 100% agree. The total score ranges from 41 to 205. Each subscale is summed separately with scores ranging from 10-50 (cultural awareness), 9-45 (cultural knowledge), 8-40 (cultural sensitivity), and 14-60 (cultural skills). Higher NCCS scores are indicative of a higher level of CC. The NCCS was originally written in traditional Chinese and evaluated by four experts; it has been translated into English. Previous studies report Cronbach's  $\alpha$  ranges from 0.78 to 0.96 in the English version and 0.79 to 0.89 in the Chinese version.<sup>[21-23]</sup>

The NCCS is closely related to the PCCHS framework. The NCCS measures awareness, knowledge, sensitivity and skills, while the PCCHS examines awareness, skills, knowledge, education, and desire. The NCCS measures sensitivity not matched in the PCCHS, and the PCCHS measures education and desire not matched in the NCCS. The researchers recognized that sensitivity and knowledge both had overlap with other areas measured, but the concept of desire was not matched between the framework and instrument. To address the concept of desire, three questions were included to determine the desire to provide culturally competent care.

Qualitative data were obtained through semi-structured interviews using open-ended questions. These questions were intended to solicit information from the participants regarding their cultural encounters, existing knowledge, and feelings associated with CC. The qualitative interview also examined their desire related to CC. The interview guide was read to the interview participants. During the interview process, it was determined that a question should be added for clarification. The question, "Do you have one experience that stands out in your mind when you think of CC? Can you tell me about that?" was added to solicit deeper information from the participants.

## 3. RESULTS

The sample was primarily female, white, educated at the MSN level, with a mean age of 55 (see Table 1). Most spoke English as a first language, and the majority had experience traveling abroad. Participants indicated desire to provide culturally competent care (97.6%), to learn how to

provide culturally competent care (95.1%), and to teach CC (96.3%). As these measures are near 100%, it may indicate that those that do not desire to learn about CC may choose to not participate in the study.

**Table 1.** Select demographic description of study participants (n = 89)

Demographic	Groups	Frequency	Percentage
Race*	American Indian	1	1.1%
	Asian	3	3.4%
	Black	4	4.5%
	Mixed Race	1	1.1%
	White	79	89.8%
	Omitted	1	
Ethnicity*	Hispanic	5	5.7%
	Non-Hispanic	82	94.3%
	Omitted	2	
Languages Spoken	1	66	74.2%
	2	19	21.3%
	3	4	4.5%
Faculty Cultural Competence Education*	Undergrad	13	14.8%
	Grad	65	73.8%
	Never	10	11.4%
	Omitted	1	

\*n < 89

As shown in Table 1, selected demographic variables.

**3.1 Level of cultural competence**

Means and standard deviations were calculated for the each of the four CC subscales and the overall level of CC. Total NCCS scores ranged from 81 to 197. The NCCS total and subscale scores, along with associated Cronbach’s alphas, are presented in Table 2. The NCCS total and subscale means as a percentage of the total possible scores also were calculated.

As shown in Table 2, the descriptive statistics of the NCCS and subscales with mean, Cronbach’s Alpha, and mean as a percent of total possible.

**Table 2.** Descriptive statistics of NCCS and subscales

	Mean (S.D.)	Cronbach’s Alpha	Mean as a % of Total Possible
Awareness Subscale	41.5 (7.2)	.79	83%
Knowledge Subscale	33.8 (6.5)	.75	75%
Sensitivity Subscale	32.8 (5.3)	.79	82%
Skill Subscale	54.3 (9.2)	.73	78%
NCCS Total with Outlier	162.3 (21.7)		
NCCS Total without Outlier	197 (20)	.75	79%

One-way ANOVAs were used to evaluate if any demographic variables were predictors for CC. The ANOVAs found only two variables to be significant, including when CC was taught

**3.2 Differences in cultural competence scores based on demographic variables**

Independent *t*-tests and ANOVA were used to evaluate demographic data for the effect on various demographic variables. The independent *t*-tests conducted of the variables gender (male or female), age (20-30, 31-40, 41-50, 51-60, 61-70, 71 and up, and omitted), highest degree (MSN or doctorate), race (American Indian, Asian, Black, Mixed Race, or White), and ethnicity (Hispanic or non-Hispanic). Also evaluated were the variables teaching in a program that borders Mexico (yes or no), when CC is taught in the curriculum where they teach (semester one, semester two, semester three, semester four, or other), marital status (partnered or single), and continuing education in CC (yes or no). The researchers also evaluated the variables of first language spoken (English or other), travel abroad (yes or no), university enrollment (self-report), percent of minorities in the nursing program (self-report), and years of teaching experience (0-5, 6-10, 11-20, 21-30, 31-40) were important to evaluate. Further included were the desire variables of desire to provide culturally competent care (yes or no), desire to learn to provide culturally competent care (yes or no), and desire to teach culturally competent care (yes or no). The researchers also looked at programs taught (ADN, BSN, MSN, doctoral), city population (self-report), and level of students taught (semester one, semester two, semester three, semester four, or other). There were no significant differences in the CC identified based on: scores of individuals of different ages, races, ethnicities, highest degree, whether the program bordered with Mexico, continuing education, first language spoken. travel abroad, university enrollment, percent of minorities in the nursing program, years of teaching experience, programs taught, city population, levels of students taught, desire elements, desire to provide CC care, desire to learn to provide CC care, or desire to teach CC care.

in the faculty members’ education and whether they spoke two or more languages. The point in time at which a faculty member received instruction in CC was significant (F

= 4.793,  $p = .004$ ). Post hoc analysis revealed that faculty members who received CC education at the undergraduate level scored significantly higher ( $M = 165.692$ ,  $SD = 22.68$ ) than faculty members not receiving any CC education ( $M = 139.5$ ,  $SD = 25.9$ ). The CC scores of individuals who received CC education at the graduate level did not differ significantly from the scores of those who had not completed (nor received) CC education at all. Those receiving CC education at the graduate level ( $M = 164.962$ ,  $SD = 19.06$ ) did not score statistically different compared to those that did not receive CC education. This suggests that CC education is more likely to be effective if it is received during the learners' undergraduate education.

Differences in CC across groups differed significantly as a function of number of languages spoken ( $F = 2.79$ ,  $p = .003$ ). Post hoc analysis for different numbers of languages spoken showed that faculty members that spoke two or more languages had higher CC scores ( $M = 184$ ,  $SD = 8.67$ ) than

faculty members who spoke only English ( $M = 159.93$ ,  $SD = 22.6$ ).

### 3.3 Nursing faculty perceptions of cultural competence

Perceptions of CC in the nursing faculty member were evaluated using the constant comparative method. Trustworthiness was maintained by having a second researcher review, code, and analyze the data for comparison with the PI's coded data. Theoretical constructs were independently conducted and mutually agreed upon. Additionally, triangulation, member checking, and a field journal were used to ensure trustworthiness. Themes were identified by using a phenomenography inspired qualitative analysis procedure whereby the interviews provided a description, then analysis was completed, and finally understanding of the experience was gained.<sup>[24]</sup> Content analysis of qualitative data identified three main themes: knowledge is experiential, skills require emotional insight, and desire stems from a catalyst. The three themes and seven subcategories are presented (see Table 3).

**Table 3.** Themes and sub-themes of faculty perceptions of cultural competence

Theme	Sub-Theme	Example
Knowledge is Experiential	Distinct Cultural Differences and Experiences	Caring for Hmong patient
	Differences in Populations	Change in student and/or patient population
	Ethnocentrism	Ethnocentrism gets in the way of students seeing the value in others
	Education	Education examples focus on experience
Skills Require Emotional Insight	Cultural Competence	Definition focuses on the needs of the other
	Accommodating	Making trade-offs or breaking the rules for the other
	Modeling	Showing through actions how to care for those that are different
Desire Stems from a Catalyst	Desire	Linked to an individual thought or attitude that causes the individual to buy-into caring for the other

As shown in Table 3, the themes and sub-themes of faculty perceptions of cultural competence.

#### 3.3.1 Knowledge is experiential

The theme of "Knowledge is experiential" was supported in the findings when considering the subthemes of distinct cultural differences and differences in population. The two other subthemes of ethnocentrism and education were also identified in the literature. These important subthemes capture how important experiences play in the concept of cultural competence.

The idea of knowledge is experiential is highlighted in a discussion of the subtheme of distinct cultural differences and experiences. Several participants recalled experiences of caring for Hispanic patients as indicative of CC. Participant F recalled caring for a patient at home, and the patient of-

ferred the nurse a beverage. The participant had learned about providing culturally competent care to Hispanic patients and the importance of social exchange before initiating care, but the experience of accepting the beverage is what came to mind when thinking about providing culturally competent care. Participant C described needing social space when conversing with a Hispanic individual. The participant felt that her personal space was being encroached upon so she proceeded to step back, and every time she stepped back, the other person would step forward. The participant eventually recalled learning about the issue of personal space with the Hispanic culture, but that knowledge did not guide her actions until she had the actual experience.

Knowledge is experiential is also highlighted in the subtheme of differences in population. Participants focused on differences in the population as they considered how they became

culturally competent. When participants talked about the diversity of the community and the setting in which students had clinical practicums, Participant A remarked, "...our students work in [a large, metropolitan area] when they graduate so that is very multicultural as far as the work staff and patient population because [the city] itself is very diverse." This participant expressed that the experience caring for this diverse population provided students with the skills to be culturally competent. Participant E remarked, "Back in the 80s there was some mention of cultural differences, but it was not the emphasis or focus." Thirty years ago, the participant was surrounded primarily by Caucasian nurses, students, and patients, but this was no longer the case. As the population has changed, so has the need to recognize the differences.

Knowledge is experiential was supported in the research findings regarding ethnocentrism. Participant A noted that students lacked experiences in interacting with people from diverse cultures, which contributed to their ethnocentrism, "Just making them aware that there are different cultures and belief systems." Participant A went on to say "Unfortunately a lot of my students are very ethnocentric and they only view their culture and they are not aware of others or their beliefs or practices". Participant D noted "The biggest challenge is students either not believing in culture or not believing that it matters. That sort of ethnocentrism. The belief that "oh well, all patients have the same symptoms".

When considering the theme of knowledge is experiential, it is important to note that education plays a role in helping the nursing educator make that connection between what is explored and learned and cultural competence. Education, while important, emerged as secondary to the experiences that cemented CC. Participants shared that they received a wide variety of education in cultural competence ranging from separate classes in CC, to a curriculum that threaded it throughout the nursing school experience, to graduate school electives, immersion experiences, and continuing education courses. Participant E, when interviewed disclosed, "It wasn't in the curriculum ... so it was more part of going to the clinical" where the students could experience it.

### 3.3.2 Skills require emotional insight

Three sub-themes; CC, accommodating, and modeling, underscored the need for a culturally competent nurse to be aware of the feelings of a diverse patient population while also being cognizant of their own feelings and thoughts. Participant A epitomized this noting, "If you stayed small and in your own values I don't know that you could be successful." Participant A continued, "As a nurse, you take care of patients that on a personal level you could not stand. You just go into your persona of 'I am a nurse' and whatever my

own personal, religious, cultural values, I am a nurse."

CC is highlighted as a subtheme considering comments from Participant F as they defined CC as "A skillset that helps you interact with people [so] you are mindful and operating [based on] the values and beliefs and things that are familiar to them." Identifying CC as a skill set based on value supports the idea that emotional intelligence is key to becoming culturally competent. Further, Participant B defined CC as "Recognizing that people whose cultures are different than your own are going to have different ways" further noting "It is important for the health care provider to realize that even if those ideas clash with their own they are not wrong and they have very, very strong beliefs that work for them."

The skill of accommodating included the actions of incorporating, negotiating, honoring, explaining, and integrating thoughts, values, and actions. Participants described how they would focus on what the patient wanted or needed based on their cultural values and adapting nursing care accordingly. For example, Participant C talked about caring for a patient before CC was "a big deal" and said, "He wouldn't eat, and... once we figured out that the food was just not acceptable [based on his culture], ... we also allowed the family to bring in food for the patient."

Modeling is an important subtheme to consider. Participant G believed faculty should "think modeling to students and showing what [CC] look[s] like so they can try it next time." Participant A remarked that CC comes later in a nursing student's career, once they get past the anxiety of doing procedures correctly. This participant stated, "Modeling for [students] so they at least tuck it away so when their anxiety goes down and their skill level goes up they are more competent with the basics and can add that next layer [of providing culturally competent care]."

### 3.3.3 Desire stems from a catalyst

Desire emerged as a theme in and of itself. Desire motivated participants to seek educational opportunities to improve CC. Travel abroad experiences and self-directed studies in different cultures represented fulfilling the desire for increased "understanding of other cultures." Participant G further said she would read all the material she could locate on different cultures in order to recognize differences and skillfully provide patient care.

### 3.4 Bringing the data together

In the spirit of using the triangulation approach from the qualitative strand, the quantitative data was mapped to the qualitative results. This showed that the information regarding the number of languages spoken and when CC was taught in the education process was highlighted in both the quan-

titative strand and qualitative strand. It is important to note that the quantitative data from the participants also involved in the qualitative strand of the study was never linked to the participants as all quantitative data obtained was anonymous.

## 4. DISCUSSION

### 4.1 Level of cultural competence

Texas nursing faculty members' CC score as measured with the NCCS was moderate. There was one outlier with a score of 81. With the outlier removed, the mean changed (with outlier,  $M = 162.3$ ,  $SD = 21.7$  vs. without outlier,  $M = 197$ ,  $SD = 20$ ). The outlier scored 50 points lower than the next lowest NCCS score, but a decision was made to leave the outlier in the analysis as this faculty member identified demographically as a minority and indicated no desire to be culturally competent. Participants scored lower on the skills and knowledge subscale but scored slightly higher in the awareness and sensitivity subscales. This is consistent with the literature that shows that nurses typically score higher in sensitivity and awareness and lower in knowledge and skills.<sup>[25,26]</sup>

It is important to note that the data consists of a small sample size for the quantitative strand and an even smaller sample size for the qualitative strand. Data saturation was reached for the qualitative strand so sample size is less of a concern. The number of participants for the quantitative strand is important to note, but additional participants could not be recruited for the survey, and generalizability is a concern. It is worth considering that a low response rate brings up the question as to whether those who do not respond to such a survey might be substantially different from those who do not respond. The issue of CC can be a polarizing discussion, and those who are not interested in being CC may have not chosen to participate in the study.

### 4.2 Differences in cultural competency scores based on demographic variables

CC was not found to be related to demographic differences, which is consistent with Campinha-Bacote's (2006) model and theory (Liu, 2013; Truong, Paradies, & Priest, 2014).<sup>[16,27,28]</sup> Campinha-Bacote's theory is based on the idea that CC is a journey and an ongoing process rather than something that can be obtained through certain criteria or meeting specific requirements on a checklist.<sup>[29,30]</sup>

Part of the journey and ongoing process to CC is through education. The point at which a nursing faculty member received CC education appeared to be important, however the researchers could not determine if this is a difference attached to early training. The nursing faculty members who received CC education as an undergraduate student scored

significantly higher than those receiving no education in CC. A possible explanation is that early exposure to clinical competence provides nursing faculty increased opportunity to practice CC.<sup>[31]</sup> Early exposure may also establish a foundation for assessment of CC. It could also be argued that receiving CC education at the graduate level is too late and the lack of ability to provide culturally competent care is already engrained in the faculty member at the graduate level.

Nursing faculty members who spoke two or more languages had higher CC scores suggesting that exposure to language increases cultural awareness which might in turn lead to an increase in CC.<sup>[32]</sup> Speaking multiple languages could mean the individual was raised in a multicultural home, and learning new languages typically exposes an individual to a different culture. Similarly, an individual often chooses to learn a language, suggesting a component of desire, and this concept of desire is consistent with the Campinha-Bacote model and the research findings. It is also likely that those who choose to learn another language are more interested in cultural concepts and thus, more likely to learn about cultural differences. This would be consistent with the concept of desire in the Campinha-Bacote model, in which persons with a desire to learn about cultural differences become more culturally competent.

### 4.3 Nursing faculty perceptions of cultural competence

The qualitative data provided key insight into faculty members' perceptions of CC. There was a wide range of interpretation among the faculty participants, but the data yielded similar themes whether the participant was discussing nursing, being a faculty member, or working with students.

#### 4.3.1 Knowledge is experiential

Nursing faculty in Texas work with patients and students from distinct cultural backgrounds. Though faculty members' experiences vary, their work is greatly impacted by the changes in population demographics that have occurred over time. Repeatedly, it was the experiences working with students, patients, and other faculty members from different cultures that shaped faculty members' perception of CC. Nursing knowledge may have been formally introduced through any number of educational processes, but these formal educational settings did not allow the individual to integrate the knowledge needed to enable them to provide culturally competent care, rather, experience was the key to CC care. Language and the number of languages was also highlighted as providing cultural experience. It appears that experience is the key to CC, and there are several aspects of experience that are interrelated. Distinct cultural differences and experiences, differences in populations, ethnocentrism, and education are subthemes of this theme.

### 4.3.2 Skills require emotional insight

Skills are an important part of Campinha-Bacote's model (2006) for CC, which was supported by participant statements in the interview. Interestingly, when participants discussed CC skills, they focused on the emotional insight necessary to be culturally competent. The concept described by the participants subsequently identified by the researcher as emotional insight really epitomizes the concept of emotional intelligence. Emotional intelligence explains how an individual can process how they are feeling and identify the emotions, feelings, and experiences of others and use this to guide their experience as they interact with others.<sup>[33]</sup> CC, modeling, and accommodating are subthemes of this theme.

### 4.3.3 Desire stems from a catalyst

Desire is a fundamental concept represented in Campinha-Bacote's model, and desire emerged as a major theme in the qualitative interview process.<sup>[16]</sup> Participants excitedly discussed their own onset of interest in providing culturally competent care. This was described similarly as a spark or catalyst that ignited an internal desire to experience and provide the appropriate skills to a patient that was from a culturally diverse background.

## 4.4 Conclusion

Since Texas nursing faculty members participating in this study were moderately culturally competent, as measured

by the NCCS, improving the level of CC among nursing faculty members is needed. Nursing faculty overwhelmingly desire to be culturally competent and experiential learning appears to be key. Thus it is recommended that continuing education programs for nursing faculty members focus on educational modalities that will give an authentic feel to different cultural experiences. In today's technologically rich environment, high-fidelity virtual simulations of culturally diverse experiences can provide experiences to help improve nursing faculty's level of CC.

Further research should be conducted to determine the most effective way to provide CC education that focuses on experiences, emotional insight, and desire. A replication study with a larger sample size should be conducted for the future.

CC is an important skill for nursing faculty as they serve as role models for nursing students and future practitioners. Understanding the level of CC in nursing faculty will provide a justification to develop an educational program to increase the CC in nursing faculty. This research suggests opportunities for further research related to understanding how nursing faculty members acquire CC and to evaluate whether CC exposure makes a difference on the nursing faculty member's ability to model CC to students.

## CONFLICTS OF INTEREST DISCLOSURE

The authors declare that there is no conflict of interest.

## REFERENCES

- [1] USA state and country quickfacts [Internet]. US Census Bureau 2013 [cited June 1, 2016]. Available from: <http://quickfacts.census.gov/>
- [2] Minority nursing statistics [Internet]. Minority Nurse 2014 [cited June 1, 2016]. Available from: <http://www.minoritynurse.com/>
- [3] Selvam A. Making progress: sustained efforts to increase minority representation in healthcare executive ranks are delivering results, but barriers still remain. *Modern Healthcare* [Internet]. 2013 May 18 [cited June 1, 2016]. Available from: <http://www.modernhealthcare.com/>
- [4] Bahls C. Achieving equity in health. *Health Policy Brief*. 2011; 30(10).
- [5] Giddings LS. Health disparities, social injustice, and the culture of nursing. *Nursing Research*. 2005; 54(5): 304-12. PMID:16224316 <https://doi.org/10.1097/00006199-200509000-00004>
- [6] Emergency care/hospitalizations [Internet]. Agency for Healthcare Research and Quality 2012 [Cited June 1, 2016]. Available from: <http://www.ahrq.gov/>
- [7] Hausmann LR, Jeong K, Bost JE, et al. Perceived discrimination in health care and health status in a racially diverse sample. *Medical Care*. 2008; 46: 905-914. PMID:18725844 <https://doi.org/10.1097/MLR.0b013e3181792562>
- [8] Pesquera M, Yoder L, Lynk M. Improving cross-cultural awareness and skills to reduce health disparities in cancer. *MEDSURG Nursing*. 2008; 17(2): 114-120. PMID:18517172
- [9] Aaronson B. On the records: Texas 1 of 5 minority-majority states. *Texas Tribune* [Internet]. 17 May 2012 [cited 2016 July 23]. Available from: <http://www.texastribune.org>
- [10] Keehan C. Culturally competent care. *Journal of Healthcare Management*. 2013; 58(4): 250-252. PMID:24396944
- [11] Noe TD, Kaufman CE, Kaufmann L, et al. Providing culturally competent services for American Indian and Alaska Native Veterans to reduce health care disparities. *American Journal of Public Health*. 2014; 104(S4): S548-S554. PMID:25100420 <https://doi.org/10.2105/AJPH.2014.302140>
- [12] Alvarez KI. Integrated health care best practices and culturally and linguistically competent care: practitioner perspectives. *Journal of Mental Health Counseling*. 2014; 36(2). <https://doi.org/10.17744/mehc.36.2.480168pxn63g8vkg>
- [13] Clear communication: a NIH health literacy initiative [Internet]. Bethesda (MD): National Institutes of Health US. 2012 - [cited 2016 Jun 23]. Available from: <http://www.nih.gov/clearcommunication/>
- [14] Davis J. Modelling as a strategy for learning and teaching in nursing education. *Singapore Nursing Journal*. 2013; 40(3): 5-10.

- [15] Montenero SM, Jones AD, Perry N, et al. Cultural competence in nursing faculty: a journey, not a destination. *Journal of Professional Nursing*. 2013; 29: e51-e57. PMID:24267941 <https://doi.org/10.1016/j.profnurs.2013.09.003>
- [16] Campinha-Bacote J. Cultural competence in nursing curricula - how are we doing 20 years later? *Journal of Nursing Education*. 2006; 45: 243-244. PMID:16863103
- [17] Creswell JW. *Mixed method research: introduction and application*. San Deigo, CA: Academic Press; 1999. pp. 455-472. <https://doi.org/10.1016/b978-012174698-8/50045-x>
- [18] Tashakkori A, Teddlie C. *Mixed methodology: combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage; 1998.
- [19] Faul F, Erdfelder E, Lang AG, et al. G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*. 2007; 39: 175-191. PMID:17695343 <https://doi.org/10.3758/BF03193146>
- [20] Texas Center for Nursing Workforce Studies [Internet]. Austin (TX): Texas Department of State Health Services (US). 2016 – [cited 2016 Jun 24]. Available from: <https://www.dshs.texas.gov/chs/cnws/>
- [21] Perng SJ, Lin CJ, Chuang JL. Cultivating cultural competence through education. *Tzu-Chi Nursing Journal*. 2007; 6(4): 90-102.
- [22] Perng S, Watson R. Construct validation of the Nurse Cultural Competence Scale: A hierarchy of abilities. *Journal of Clinical Nursing*. 2012; 21(11/12): 1678-1684. PMID:22239136 <https://doi.org/10.1111/j.1365-2702.2011.03933.x>
- [23] Lin CN. *Cultural competence of Taiwanese nurses [dissertation]*. [Tyler (TX)]: The University of Texas at Tyler; 2012.
- [24] Marton F. *Phenomenography-Describing conceptions of the world around us*. *Instructional Science*. 1981; 10: 177-200. <https://doi.org/10.1007/BF00132516>
- [25] Mahabeer S. A descriptive study of the cultural competence of hemodialysis nurses. *CANNT Journal*. 2009; 19(4): 30-33. PMID:20136033
- [26] Molewyk DM, Zandee GL, DeGroot J. Attending to communication and patterns of interaction: Culturally sensitive mental health care for groups of urban, ethnically diverse, impoverished, and underserved women. *Journal of the American Psychiatric Nurses Association*. 2014; 20(4): 239. <https://doi.org/10.1177/1078390314543688>
- [27] Liu S. Bilingual social workers in mental health service provision: Cultural competence, language, and work experience. *Asian Social Work & Policy Review*. 2013; 7(2): 85-98. <https://doi.org/10.1111/aswp.12009>
- [28] Truong M, Paradies Y, Priest N. Interventions to improve cultural competency in healthcare: A systematic review of reviews. *BMC Health Services Research*. 2014; 14(1): 1-31. PMID:24589335 <https://doi.org/10.1186/1472-6963-14-99>
- [29] Harris MS, Purnell K, Fletcher A, et al. Moving toward cultural competency: Dream work online summer program. *Journal of Cultural Diversity*. 2013; 20(3). PMID:24279129
- [30] McMillan LR. Exploring the world outside to increase cultural competence of the educator within. *Journal of Cultural Diversity*. 2012; 19(1): 23-25. PMID:22611839
- [31] Shuang L. Becoming intercultural: exposure to foreign cultures and intercultural competence. *China Media Research*. 2014; 10(3): 7-14.
- [32] Costea LM, Buluc RR, Tomescu SS. The role of online foreign language courses in developing intercultural and cross-cultural competence. *Elearning & Software for Education*. 2013; 1: 543-548.
- [33] Salovey P, Mayer JD. Emotional intelligence. *Imagination, Cognition, and Personality*. 1990; 9: 185-211. <https://doi.org/10.2190/DUGG-P24E-52WK-6CDG>