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Cultural Competence of Baccalaureate Nurse Faculty: Relationship to Cultural Experiences☆

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ABSTRACT

Background: Introducing and fostering cultural competence development in nursing students only may occur with well-qualified, committed nurse faculty who are self-aware of their own cultural values and beliefs, unfortunately, there is limited research on the factors that influence the development of nurse faculty cultural competence.

Purpose and methods: This descriptive, correlational study examined cultural experiences of 118 full-time nurse faculty in the United States (U.S.). Marianne Jeffreys' Cultural Competence and Confidence (CCC) model was used to examine cultural experiences and transcultural self-efficacy (TSE), or confidence. Jeffrey's Transcultural Self-Efficacy Tool (TSET) was used to measure nurse faculty cognitive, affective, and practical nursing skills as influenced by cultural experiences.

Results: Results indicate that nurse faculty are most confident about their attitudes (8.61), and least confident about their transcultural knowledge (7.39). Study results identified nurse faculty TSE as influenced by cultural experiences within the U.S. ($r_s = 0.23$, $p < .01$), teaching transcultural nursing care concepts in courses ($r_s = 0.35$, $p < .01$), and formalized preparation in training and workshops ($r_s = 0.30$, $p < .01$). In addition, nurse faculty lacked international experiences abroad, teaching transcultural nursing care concepts, and formalized education training and workshops.

Conclusions: Nurse faculty are most confident about their attitudes and least confident about their transcultural knowledge. The results of this study indicate that nurse faculty cultural experiences within the U.S., development in teaching cultural nursing care concepts, and preparation in training and workshops influence nurse faculty TSE and overall cultural competence.

Introduction

As the world becomes increasingly more diverse in global and local populations, health care professionals also must increasingly possess culturally competent knowledge, skills, and attitudes to care for culturally dissimilar patients. Providing culturally appropriate education to nursing students requires nurse faculty to enhance individual cultural competency development through formalized education and other learning experiences. Unfortunately, nurse faculty have varying levels of cultural competence, which may thwart their ability to deliver cultural education to nursing students. Cultural competence may be defined in a variety of ways. According to Jeffreys (2016), cultural competence is an ongoing, multidimensional learning process that integrates transcultural skills in all three dimensions (cognitive, affective, and practical), involves Transcultural self-efficacy (TSE), or confidence, as a major influencing factor, and aims to achieve culturally congruent care. Cultural experiences, whether actual hands-on or through formalized education, have been used as strategies to enhance nurse faculty cultural knowledge, skills, and attitudes. There is limited research that studies the relationship between these cultural experiences and nurse faculty TSE in performing cognitive, affective, and practical nursing skills.

Background

Cultural competency is a complex, multidimensional concept explored within many disciplines and is especially important for nurses who provide care to patients. The United States (U.S.) Census Bureau (2013) predicts that by 2060, nearly one in five residents in the U.S. (19%) will be foreign born, compared with about one in eight (13%) in 2014. Since there is diversity in the population, one of the initiatives of Healthy People 2020 is an emphasis to achieve health equity, eliminate

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disparities, and improve the health of foreign-born groups (Office of Disease Prevention and Health Promotion) (ODPHP). This rapid growth of multicultural and multiethnic individuals in the U.S. necessitates a change in nursing practice. Future efforts will need to focus on the deployment of a primary care workforce that is better geographically distributed and trained to provide culturally competent care to diverse populations (ODPHP). Improving the health of the underserved and vulnerable populations involves preparing a workforce that increases the number of diverse, culturally competent primary care providers representing various disciplines (Bureau of Health Workforce, 2016). As the diversity in the population of the U.S. continues to grow, healthcare professionals, including registered nurses (RN), are challenged to provide care for patients from diverse cultures.

According to the Commission on Collegiate Nursing Education (CCNE) (2008), nurse faculty and nursing students practice in multicultural environments and must possess the knowledge, skills, and attitudes to provide culturally appropriate care. In addition, professional nursing organizations have developed guidelines and resources to facilitate cultural care in education and practice (American Association of Colleges of Nurses (AACN), 2008); yet, nursing education has been slow to implement the cultural education needs in nurse faculty and nursing students. In addition, academic institutions and nurse faculty are required to provide education to nursing students about caring for culturally diverse patients (CCNE, 2013). Nurse faculty are expected to adhere to the National League of Nursing's (NLN) (2012a, 2012b) nurse educator core competencies, which embody the knowledge, skills, and attitudes required of nurse educators to prepare graduates to function effectively in the healthcare environment. As nurse faculty enhance their knowledge, skills, and attitudes to provide culturally appropriate care, they gain essential components in learning culture and teaching students the role that cultural values and beliefs (CVB) have in patient care. Measuring TSE, or confidence, in nurse faculty is imperative since they influence student education of transcultural nursing care (TNC) concepts, which has a leading impact on student development of cultural competence.

Theoretical framework

Over the past decade, cultural theories and conceptual models (Campinha-Bacote, 2003; Giger & Davidhizar, 2002; Jeffreys, 2000; Leininger, 2006; Purnell, 2002; Spector, 2004) have been used to determine the most effective teaching-learning strategies to promote positive outcomes. Although there are nursing models on cultural competency that are used to measure cultural competence, Jeffreys' (2006) Cultural Competence and Confidence (CCC) model is the only model that correlates the role of TSE with cultural competence development and served as the conceptual framework for the study. Bandura's (1986) Social Cognitive Theory is an essential component of Jeffreys' CCC model and highlights the relationship that learning and motivation have to self-efficacy (confidence). Jeffreys uses self-efficacy and confidence interchangeably throughout the CCC model. This is an assumption of the model (2016). According to Jeffreys, culturally congruent care is achieved through the learning process that integrates transcultural nursing skills in all three dimensions (cognitive, affective, and practical), and involves TSE as a major influencing factor. TSE is the perceived confidence for performing or learning transcultural nursing skills. Jeffreys' uses the Transcultural Self-Efficacy Tool (TSET) (1994) to measure confidence in performing cognitive, affective, and practical nursing skills among diverse client populations. Jeffreys (2000) reported one of the underlying assumptions of the CCC model and the TSET is “learners are most confident about their attitudes (affective subscale) and least confident about their transcultural nursing knowledge (cognitive subscale)” (p. 53).

The application of the CCC model supports there is a positive relationship between nurse faculty's cultural experiences and formalized education, and TSE in performing cognitive, affective, and practical nursing skills. As measured by the TSET, cognitive nursing skills include knowledge outcomes, intellectual abilities, and skills. Affective nursing skills are concerned with attitudes, values, and beliefs, which are components of self-awareness. Practical nursing skills refer to communication skills, which are essential to assess the CVBs during the interview process with patients of different cultural backgrounds (Jeffreys, 2016). Based on the CCC model, this study asked nurse faculty how many cultural experiences they had in the past five years as full-time (FT) nurse faculty and included: (1) cultural experiences within the U.S. with diverse patients or diverse students; (2) international experiences abroad (vacation, missionary, or volunteer work abroad); (3) teaching TNC concepts in courses (service learning courses and experiences); and (4) formal preparation in training and workshops (continuing education units, previous college courses in TNC or cultural competency and certification in TNC).

Literature review

There were a number of studies that investigated nurse faculty increased cultural competence after cultural experiences (Beard, 2016; Jeffreys & Dogan, 2012; Kardong-Edgren, 2007; Reneau, 2013; Sealey, Burnett, & Johnson, 2006; Ume-Nwagbo, 2012; Wilson, Sanner, & McAllister, 2010). The research conducted on nursing students and faculty support that experience with culturally diverse patients improves comfort levels and caring for diverse patients (Jeffreys & Dogan, 2012). Other studies reported nurse faculty had increased levels of perceived cultural competence after cultural immersion experiences (Kardong-Edgren, 2007) or after cultural educational workshops or training (Beard, 2016; Wilson et al., 2010). Ume-Nwagbo reported a significant positive correlation between nurse faculty levels of cultural competence with increased exposure to larger numbers of minority nursing students. In addition, correlational design studies describe that cultural knowledge subscales were the strongest predictor for cultural competence (Reneau, 2013; Sealey et al., 2006; Wilson et al., 2010) supporting that education via cultural workshops and course preparation enhanced nurse faculty cultural competence and confidence (Wilson et al., 2010).

Faculty members serve as role models to nursing students, and therefore, need a comprehensive understanding of their own perceptions of the behaviors, actions, and attitudes that influence the development of nursing students' skills, competence, and professionalism (Felstead, 2013). This understanding will involve cultural care awareness and sensitivity, cultural competence, cultural skills, teaching strategies, culturally diverse clinical sites, and cultural immersion experiences (Easterby et al., 2012; Mixer, 2008). Although nurse faculty are in a position to integrate cultural competency development in the nursing curriculum and teach students how to care for culturally diverse patients, many lack the cultural diverse experiences or formal training or educational activities that promote cultural competence learning outcomes for students. Kontzamanis (2013) used the TSET to compare nurse faculty's formal experiences, which included college courses in transcultural nursing, and informal experiences, which included continuing education in transcultural nursing without a college course in transcultural nursing, and TSE. The researcher reported that there was no significant relationship between faculty's TSE with formal and informal education in TNC concepts as compared with faculty's TSE without formal and informal education in TNC concepts. Therefore, further research is needed specifically to determine nurse faculty's TSE after specific variables such as cultural experiences and formalized education.

Purpose of the study

The main purpose of this study was to investigate cultural experiences and TSE of nurse faculty who teach at least 50% of the time in baccalaureate nursing programs in the U.S. Results may be used to

determine nurse faculty's TSE after examining specific variables such as cultural experiences and formalized education. A question addressed was: what are nurse faculty's TSE in performing cognitive, affective, and practical nursing skills among diverse client populations? Specific hypotheses tested included: (a) there is a positive relationship between nurse faculty's cultural experiences within the U.S. and TSE, (b) there is a positive relationship between nurse faculty's international experiences abroad and TSE, (c) there is a positive relationship between faculty's teaching TNC concepts in courses and TSE, (d) there is a positive relationship between nurse faculty's teaching formalized preparation in training and workshops and TSE, and (e) the combination of nurse faculty's cultural experiences and formalized education will predict TSE better than either experience alone.

Methods

Data collection and sample

The descriptive, correlational design explored nurse faculty TSE and its relationship cultural experiences and formalized education. After Internal Review Board (IRB) approval was obtained from Widener University, data were collected using a researcher developed demographic questionnaire and the TSET Tool (Jeffreys, 1994). Four questions on the demographic questionnaire ask nurse faculty how many cultural experiences they had in the past five years as FT nurse faculty and included: (1) cultural experiences within the U.S. with diverse patients or diverse students; (2) international experiences abroad (vacation, missionary, or volunteer work abroad); (3) teaching TNC concepts in courses (service learning courses and experiences); and (4) formal preparation in training and workshops (continuing education units, previous college courses in TNC or cultural competency and certification in TNC). To answer these questions, the researcher computed scores based on narrative and numerical responses.

This study utilized a stratified random sample of FT nurse faculty who teach at least 50% of the time in baccalaureate programs accredited by CCNE throughout the U.S. This inclusion criteria were self-identified by the individual since the individual nursing programs define characteristics and requirements for FT nurse faculty differently. Stratified random sampling was used by stratifying each state into groups by using the AACN U.S. regions. This included the Midwest, North Atlantic, South, and West regions. The researcher randomly selected one state from each region, yielding four states, which included Iowa, Mississippi, New Jersey, and California. Using the AACN public web address, the researcher identified all of the CCNE baccalaureate nursing programs within the randomly selected states and placed them into a container representing their respective state. For the second strata, this researcher randomly selected an equal representation sample of baccalaureate nursing programs from each of the randomly selected four states. Using the baccalaureate nursing programs' public web address, participants were recruited by sending an electronic email contact to FT nurse faculty in those randomly selected programs. Consent to participate in the study was presumed when surveys were completed. FT nurse faculty status was defined per each individual. All data were collected anonymously by SurveyMonkey®, over a six-week period in June and July 2014. The SurveyMonkey® data server was password protected and only was accessible by the researcher. The participants were informed of the anonymity of their survey responses within the informed consent. Reminder emails were sent to nurse faculty in week two and four of data collection. After the sixth week, the researcher received a total of 148 nurse faculty responses; 118 of the responses met the inclusion criteria for the study. According to a priori power analysis for this study, a final sample of 109 FT nurse faculty was needed. The level of statistical significance was set at 0.05. The sample consisted of 118 nurse faculty whose workload was at least 50% in baccalaureate education in baccalaureate programs in the U.S., which met the required sample size to achieve power of 0.80.

Instrument

Jeffreys' (1994) Transcultural Self-Efficacy Tool (TSET) was used to measure and explore nurse faculty's TSE in performing cognitive, affective, and practical nursing skills among diverse client populations. The 83-item instrument has three subscales: Cognitive (25 items-knowledge skills), Affective (30 items- attitudes, values, and beliefs), and Practical (28 items- interview skills). The Cognitive subscale asks participants to rate their confidence regarding their knowledge of the ways that cultural factors may influence their nursing care among clients of different cultural backgrounds. Examples include health promotion (item 4), pain relief and comfort (item 10), and grieving and loss (item 22). The Practical subscale asks participants to rate their confidence regarding interviewing clients of different cultural backgrounds to learn about their values and beliefs. Examples include language preference (item 26), traditional health and illness beliefs (item 45), and role of family during illness (item 49). The Affective subscale asks participants to rate their confidence regarding attitudes, values, and beliefs as a nurse caring for many different people and includes examples such as being aware of insensitive and prejudicial judgments (item 57), appreciating the role of family in providing healthcare (item 69), and advocating for culture-specific care (item 83). Consistent with the self-efficacy instrument development recommendations by Bandura (1986, 1997), self-efficacy strength (SEST) measured nurse faculty's confidence on a 10-point rating Likert scale (1 = not confident to 10 = totally confident). SEST scores were calculated for each subscale by dividing the total sum score by the number of items (subscale average). TSE was determined by measuring the total scores obtained by the summations of all of the participants' responses for each of the subscales of the TSET, Cognitive, Affective, and Practical subscales and by dividing by the total number of questions (83).

TSET reliability

Jeffreys explored, measured, and evaluated the use of the TSET with nurses (Jeffreys, 2002, 2006, 2010); nursing students (Jeffreys, 1993; Jeffreys, 2000, 2004, 2006, 2010; Jeffreys & Dogan, 2012; Jeffreys & Smodlaka, 1999a); and nurse faculty in clinical practice and academia (Jeffreys, 2006, 2010, 2012). The researcher continued to develop the TSET and reported psychometric evaluations over the years based on research (Jeffreys, 2004; Jeffreys & Dogan, 2010, 2012; Jeffreys & Smodlaka, 1996, 1998, 1999b). Reliability tests for internal consistency and stability indicated adequate reliability of the nursing student population. Cronbach's alpha (coefficient alpha) and split-half reliability were used. A summary of the TSET reliability test and results included internal consistency Cronbach's alpha calculated across four studies, each time yielding coefficient alpha ranging from 0.92 to 0.98 on the total TEST instrument and its subscales (Jeffreys, 2000). The TSET recently was used on nurse faculty to examine the relationship between nurse faculty formal and informal experiences, and TSE (Kontzamanis, 2013). Kontzamanis reported TSET Cronbach's alpha scores were 0.96 (Affective subscale), 0.99 (Cognitive subscale), 0.99 (Practical), and total reliability was 0.99. For this study, Cronbach's alpha scores on 118 participants were 0.97 to 0.99 for the three TSET subscales and total reliability for the TSET was 0.99.

The study data were transferred into SPSS 24.0 statistical analysis software for analysis. Descriptive statistics were used to describe the sample and determine if the sample population was representative of the nurse faculty target population (Tables 1 and 2). Of the 118 participants who participated in the study, the majority of the participants were white (n = 101), females (n = 111), and Assistant Professor level or above (n = 89). The majority of participants' highest degree earned was an MSN (n = 60), while 36 participants were prepared with a PhD. Participants ranged in age from 29 to 79 years (M = 53); had been licensed as an RN from 7 to 55 years (M = 28); and had been in academia 1 to 50 years (M = 12) (Table 3). Most participants were born in the

Table 1
Description of nurse faculty (N = 118).

Category	n	%
Gender		
Female	111	94
Male	4	3
Transgender	0	0
Do not wish to answer	1	0.8
Race		
White (including Middle Eastern)	101	85
Black or African American	8	7
Asian	3	3
Native American	2	2
Multiracial	1	0.8
Alaskan Native	0	0
Native Hawaiian or Other Pacific Islander	0	0
Do not wish to answer	2	2
Ethnicity		
Non-Hispanic or Latino	113	96
Hispanic or Latino	3	3
Highest degree earned		
BSN	1	0.8
MSN	60	51
DNP	10	9
EdD	10	9
DNS or DSN	1	0.8
PhD	36	31
Current academic rank		
Instructor	24	20
Assistant Professor	55	47
Associate Professor	17	14
Full Professor	16	14
Other	5	4
Primary specialty area		
Adult medical/surgical	46	39
Community	27	23
Obstetrics	25	21
Critical care	24	20
Pediatrics	18	15
Behavioral health/psychiatry	15	13
Gerontology	14	12
Oncology	10	9
Culture care or competency	8	7
Emergency department	5	4
Operating room/post anesthesia	5	4
Other	18	15

*Scores < 100% are due to missing data.

U.S. with English as the primary language (n = 109). A small number of nurse faculty (n = 18) reported that they fluently spoke a language other than English, which included Spanish (n = 7). More than half of participants (n = 70) had not completed previous college courses in transcultural nursing care or cultural competency in healthcare within the last five years. A lower percentage of participants (n = 36) did not complete continuing educational (CE) units within the last five years in transcultural nursing or cultural competence in healthcare. Only a small percentage of participants reported a Certification in Transcultural Nursing (CTN) (n = 6).

The researcher measured nurse faculty's TSE in performing cognitive, affective, and practical nursing skills by using the SEST subscale scores from the TSET. Using the TSET 10-point rating scale, participants were asked to rate their overall confidence as 1 (not confident) to 10 (totally confident). From a sample of 118 nurse faculty, descriptive statistics for the SEST scores showed the highest mean scores were found in the Affective subscale (8.61) and lowest in the Cognitive subscale (7.39). The Practical subscale mean scores were 7.41 (Table 4). Therefore, nurse faculty are most confident about their attitudes (Affective subscale), and least confident about their transcultural knowledge (Cognitive subscale), which supports Jeffreys' aforementioned theoretical assumption in relation to the CCC model and the TSET. Descriptive statistics (number and percentage) explored the four

Table 2
Characteristics of nurse faculty (N = 118)

Category	n	%
Born in the United States		
Yes	109	92
No	7	6
English as primary language		
Yes	109	92
No	4	3
Speak another language		
No	99	84
Yes	18	15
Professional career prior to nursing		
No	99	84
Yes	18	15
Previous College course in transcultural course or cultural competence		
Undergraduate level	1	0.8
Undergraduate and graduate level	12	10
Graduate level	35	30
None	70	59
Continuing educational (CE) units in Transcultural course Or Cultural Competence		
In-services at job	28	23
On-line or mailed CE	30	25
Conferences	49	41
None	36	32
Certification in transcultural nursing		
No	111	94
Ye	6	5

*Scores < 100% are due to missing data.

Table 3
Ratio findings of nurse faculty (N = 118)

Category (in years)	Mean (SD)	Range
Age	53 (8.77)	29–79
Licensed as a registered nurse	28 (9.62)	7–55
Employed in academia	12 (9.73)	1–50

*Scores < 100% are due to missing data.

Table 4
Descriptive statistics for self-efficacy strength (SEST) scores of TSET (N = 118).

Cognitive SEST	1.00	10.00	7.39	1.61	6.63–7.75
Practical SEST	1.00	10.00	7.41	1.78	7.06–7.65
Affective SEST	1.00	10.00	8.61	1.13	7.88–9.16

research questions (Table 5). To answer the hypotheses, Spearman's rank order coefficient (rho) correlation coefficient (r_s) were computed to determine the relationship between nurse faculty's cultural experiences and formalized education identified by the four questions on the demographic questionnaire and total scores on the TSET.

Hypothesis #1 and #2

The first hypothesis was that there would be a positive relationship between nurse faculty's cultural experiences within the U.S. with diverse patients or diverse students and TSE. From a sample of 116 nurse faculty, data revealed that 12% (n = 10) had 0 (none) and 45% (n = 53) had between 1 and 25 cultural experiences within the U.S. with diverse patients or diverse students. Based on the results of the Spearman's correlation, there was a positive statistically significant relationship between nurse faculty's cultural experiences within the U.S. and TSE ($r_s = 0.23$, $p < .01$). The second hypothesis was that there would be a positive relationship between nurse faculty's international experiences abroad and TSE. From a sample of 116 nurse faculty, data revealed that 46% (n = 54) had 0 (none) and 46% (n = 55) had between 1 and 25 international experiences abroad. Based on the

Table 5
Descriptive statistics of cultural experiences within the last five years (N = 116)

Category n (%)	None	1–25	26–50	51–75	76–100	> 101
Cultural experiences (U.S.)	12 (10%)	53 (45%)	2 (1.7%)	3 (2.5%)	0	46 (39%)
International experiences	54 (46%)	55 (46%)	0	0	0	7 (1.7%)
Teaching TNC in courses	50 (42%)	59 (50%)	0	0	0	7 (6%)
Formalized preparation	33 (28%)	78 (66%)	0	0	0	5 (4.2%)

Scores < 100% are due to missing data.

Table 6
Spearman Correlations between Perceived TSE and Nurse Faculty Cultural Experiences (N = 116).

	p value	r_s
Cultural experiences (U.S.)	.012[a]	0.23
International experiences abroad	.13	0.14
Teaching TNC in courses	.01[b]	0.35
Formalized preparation	.01[b]	0.30

[a] Correlation is significant at the 0.05 level (2 - tailed).
[b] Correlation is significant at the 0.01 level (1 - tailed).

results of the Spearman's correlation, there was no statistically significant relationship between nurse faculty's international experiences abroad and TSE (Table 6).

Hypothesis #3 and #4

The third hypothesis was that there would be a positive relationship between nurse faculty's teaching TNC concepts in courses and TSE. From a sample of 116 nurse faculty, data revealed that 42% (n = 50) had 0 (none) and 50% (n = 59) had between 1 and 25 experiences teaching TNC in courses. Based on the results of the Spearman's correlation, there was a positive statistically significant relationship between nurse faculty's teaching TNC concepts in courses and TSE ($r_s = 0.35$, $p < .01$). The fourth hypothesis was that there would be a positive relationship between nurse faculty's formalized preparation in training and workshops and TSE. From a sample of 116 nurse faculty, data revealed that 28% (n = 33) had 0 (none) and 66% (n = 78) had between 1 and 25 formalized preparation in training and workshops. Based on the results of the Spearman's correlation, there was a positive statistically significant relationship between nurse faculty's formalized preparation and TSE ($r_s = 0.30$, $p < .01$) (Table 6).

Hypothesis #5

The fifth hypothesis was that the linear combination of the four variables would predict nurse faculty's TSE better than either experience alone. Using the stepwise multiple regression method, analysis revealed that the change was statistically significant ($F[1, 114] = 5.636$, $p = .01$). Multiple regression coefficient (R) of 0.22 for cultural experiences within the U.S. were computed with a 5% (R^2) explained variance (Table 7). Teaching TNC concepts and formalized preparation failed to enter the regression equation, with approximately 95% variance unexplained. Tolerance of 1.00 to 0.94 indicated that cultural experiences within the U.S., teaching TNC concepts, and formalized preparation are independent of each other and had low multicollinearity with the outcome variable TSE. This research hypothesis was rejected since the linear combination of three variables failed to predict nurse faculty TSE better than either experience alone. Since there were small significant relationships obtained between cultural experiences within the U.S., teaching TNC concepts, and formalized preparation and nurse faculty TSE, it is plausible that the minimal correlation in the variables was not significant enough to produce an overall linear combination effect with nurse faculty TSE. There is a large unexplained variance that seemingly affects nurse faculty TSE.

Table 7
Summary of stepwise multiple regression analysis for variables predicting TSE (N = 114).

Variable	B	SE B	β	t	R2 change
Step 1					
Cultural experiences (U.S.)	11.33	4.77	0.217	2.37*	0.047

Note. $R^2 = 0.05$ for Step 1; Teaching TNC concepts and \formalized educational experiences did not enter the equation.
* $p < .01$.

Lastly, additional analyses explored relationships between demographic variables and nurse faculty TSE using chi-squared analysis. There was a small, inverse, statistically significant relationship between nurse faculty with a CTN, and nurse faculty TSE. Finally, there were no statistically significant relationships between any of the demographic variables (age, race, ethnicity) and nurse faculty's TSE.

Limitations

Of the 1007 total nurse faculty emails sent, 148 nurse faculty (15%) initiated the survey, and 118 nurse faculty (12%) participated in this single-mode method survey indicating an overall low response rate. With this response rate, care should be taken when reviewing the results. According to Dillman, Smyth, and Christian (2014), nonresponse error results from those who do not return the survey differing in attitudes, beliefs, behaviors, and characteristics from those who do return the survey on the item or items of interest. It is possible, therefore, for a survey with a low response rate to adequately represent the survey population; however, researchers should use caution generalizing the findings. Consequently, these study limitations may have affected how generalizable the data findings were for all baccalaureate nurse faculty in the U.S. Another limitation was the timing of the export of the survey for solicitation of participants. Data for this study were collected using email solicitation and SurveyMonkey®, between June 1 to July 14th. This time period was ineffective since many nurse faculty only teach during the academic calendar year and may not have responded to the solicitation to participate in the study. The researcher received many automatic out-of-of the office replies including, but not limited to vacations, either local or international, or sabbaticals.

The aim of this study was to randomly select nurse faculty from the four AACN regions, thus assuring generalizability. Although the sample size yielded met a priori assumptions set to ensure a sufficiently powerful sample, a minimum sample of nursing programs was not achieved from one of the four geographic regions. It was difficult to determine if the study sample mirrored characteristics of supported this particular region, as it only contained eight baccalaureate nursing programs. From a proportional point of view, it was appropriate to assume that the fourth region actually may have been overrepresented; therefore, no further email solicitations for the study were sent to nurse faculty in this region. Future studies should include randomized selection of two states from each of the four regions of the U. S. This would provide a larger accessible sample of nurse faculty from each region and provide a wider U.S. region representation. In addition, future research should

employ the aforementioned recommendation to use a mixed-mode survey method to improve participant response rates and reduce non-response error and alter the timing of the study to solicit nurse faculty before the semester ends or a few weeks after the beginning of the semester.

Discussions and Implications

Recent emphasis on providing cultural care in healthcare has generated initiatives to assess cultural competence and promote culturally congruent care (Jeffreys, 2016). Cultural knowledge, skills, and attitudes have been investigated in the nurse faculty population (Marzilli, 2016; Reneau, 2013; Sealey et al., 2006). These studies used other instruments, such as the *Cultural Diversity Questionnaire for Nurse Educators* (CDQ-NE) or the *Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals* (IAPCC), to measure knowledge, skills, and attitudes; however, confidence in knowledge, skills, and attitudes was not measured. The results of this current study found that nurse faculty were most confident about their attitudes (Affective subscale), and least confident about their knowledge (Cognitive subscale), adding support to one of the assumptions of the CCC model. In addition, participants in this study reported few cultural experiences to enhance their knowledge of cultural care, and therefore, may lack the confidence concerning their knowledge skills resulting in lower scores in the cognitive subscales. It is possible that nurse faculty in this study may have acquired cultural awareness and acceptance of patient diversity, and express attitudes acceptable as nurse educators to promote student understanding and acceptance of culturally diverse patients. The findings of this study were consistent with others that identified faculty's knowledge as an essential component in cultural competence; yet, nurse faculty reported lower cultural knowledge scores (Reneau, 2013; Sealey et al., 2006). Consequently, this may validate the contention that nurse faculty are confident in caring for culturally diverse patients (McMillan, 2012; Wilson et al., 2010), and are confident about their attitudes (Kontzamanis, 2013), yet, lack the formal preparation or skills and knowledge to teach transcultural nursing care (TNC) concepts (Marzilli, 2016; Reneau, 2013; Sealey et al., 2006). Future studies are needed to understand if improving preparation through cultural knowledge of diverse populations may enhance nurse faculty's confidence and predict overall cultural competency.

The statistical significance and insignificance of this study should be viewed cautiously. In this study, data revealed a gap among nurse faculty regarding cultural experiences within the U.S. with diverse patients or diverse students within the last five years. Although a majority of participants reported 12% (n = 10) had 0 (none) and 45% (n = 53) had between 1 and 25, a large quantity of participants (n = 46, 39%) reported > 101. Therefore, it is reasonable to assume that there is a disparity between nurse faculty regarding their encounters with culture or actual immersion of cultural experiences within the U.S. Since most nurse faculty lacked experiences overall, it may be possible that nurse faculty whom participated may not practice in environments where exposures to culturally diverse patients or students exist. According to Kardong-Edgren, the most frequent response for increasing nurse faculty comfort level teaching and taking care of people from other cultures was immersion or working in another culture and repeated exposure to people from other cultures is most helpful in developing cultural competence (2007). Nurse faculty whom engage in actual cultural experiences will have more have confidence caring for the increasingly diverse U.S. population (Jeffreys & Dogan, 2012), and may promote cultural competence development in nursing students (Easterby et al., 2012; Kardong-Edgren, 2007: Reneau, 2013). As a result, the study supports that immersion or working with another culture may improve culture awareness and comfort levels caring for diverse patients. Since results reported statistical significance between cultural experiences in the U.S. and nurse faculty TSE, the current study findings support the necessity for nurse faculty to incorporate experiences that include cultural diversity in the classroom and clinical settings in the U.S. and support previous findings.

In addition, data revealed that 46% (n = 54) had 0 (none) and 46% (n = 55) had between 1 and 25 international experiences abroad, which suggests that nurse faculty in this study may not have the opportunity to travel internationally. Literature supports that international experiences allow a limited number of nurse faculty and students to participate, lack a planned follow-up in the curriculum to build on cultural sensitivity and awareness, and dependence of the experience on one faculty member runs the risk of the experience being discontinued if that faculty member leaves (Lipson & Desantis, 2007). Although many schools of nursing use immersion in other cultural or socioeconomic groups, urban or rural, to teach cultural competence in the U.S., there is limited ability to provide experiences outside the U.S. to nurse faculty. One plausible explanation is the tremendous challenge that hinders nurse faculty in pursuing international experiences is securing adequate resources, as well as budget allocation for airfare and accommodations (McMillan, 2012). While there is a surge of cultural competency literature directed toward students' learning and international cultural immersion experiences, there are gaps in the research literature on the relationship between these international experiences, and nurse faculty TSE, and further research is needed. At the baccalaureate level, it is conceivable that a majority of immersion experiences are usually senior level electives or may be part of a community-based nursing course within the U.S., therefore, it is conceivable that only a limited amount of nurse faculty seek international experiences.

In this study, there was a statistically significant relationship between nurse faculty's teaching TNC in courses and TSE. Data revealed that 42% (n = 50) had 0 (none) and 50% (n = 59) had between 1 and 25 experiences teaching TNC in courses (including service learning) in the last five years, suggesting that this sample of nurse faculty may not have received formal education on transcultural care concepts, and therefore, support previous findings (Kontzamanis, 2013; Wilson et al., 2010). It is plausible that the current study population may represent nurse faculty whom do not teach in courses that necessitate inclusion of cultural content and concepts. It also is possible that nurse faculty did not seek formalized training in cultural care concepts unless it is a prerequisite to enhance individual cultural knowledge and skills or teach cultural content to students. While there is some literature on faculty role and integration of community engagement in higher education, and on students' learning in service learning activities, there is little published literature on the relationship of teaching TNC (including service learning) and nurse faculty's TSE. Using the CCC model, one study supports that exposure in immersion experiences increased nurse faculty and student awareness of cultural differences (Jeffreys, Bertone, Douglas, Li, & Newman, 2007), which is consistent with the findings of the current study; still more research is warranted to examine teaching TNC concepts (including service-learning experiences) and nurse faculty TSE. Since the study revealed that few nurse faculty teach TNC concepts in courses, nurse faculty should incorporate cultural concepts and learning activities outside the community-based courses and partnerships with agencies and institutions into other medical-surgical and critical care courses and clinical experiences, if possible.

Finally, data revealed that that 28% (n = 33) had 0 (none) and 66% (n = 78) nurse faculty had between 1 and 25 formalized cultural preparation activities in training and workshops. These results support previous findings that nurse faculty lack the formal preparation or skills and knowledge to teach TNC concepts (Marzilli, 2016; Reneau, 2013; Sealey et al., 2006), which are important in predicting the overall cultural competency of nurse faculty. This current study is slightly different since it examined the relationship between nurse faculty's formalized education and confidence in knowledge, skills, and attitudes. It is possible that nursing programs do not necessitate the inclusion of cultural content in curricula that requires nurse faculty to obtain ceu's or attend conferences which focus on cultural care,

therefore, nurse faculty lack the formalized education. Similarly, this current study supports recommendations that more opportunities for nurse faculty growth should be made available so nurse faculty may develop more knowledge skills through formal preparation in cultural competence (Beard, 2016: Reneau, 2013). Given the current nursing professional organization guidelines to facilitate cultural care in education and practice, the study findings support that nurse faculty who participate in formal educational experiences may develop more confidence teaching students cultural concepts and may serve as models to nursing students (Felstead, 2013; Kontzamanis, 2013; Wilson et al., 2010).

Future recommendations

Nurse faculty's active participation in cultural experiences and formalized educational activities is a minimally explored area of research that renders further investigation in order to fully understand the impact learned through cultural knowledge and skills for both nurse faculty and students caring for diverse populations (Amerson, 2010; Jeffreys & Dogan, 2012; Kardong-Edgren, 2007). Cultural competence experiences, formally or informally, may provide nurse faculty with the vital skills needed to assess, plan, intervene, and evaluate patients from diverse backgrounds (Jeffreys, 2016), and teach nursing students sensitivity to cultural values and behaviors. This study's findings support the literature related to the necessity for nurse faculty to participate in cultural experiences within the U.S. and internationally. If international experiences are limited, nurse faculty should examine cultural experiences with diverse and vulnerable populations within the U.S. In addition, current findings support the necessity for nurse faculty to seek formal and informal educational training in cultural competence to enhance cultural knowledge and skills. Future research should include purposive cross-sectional and correlational studies of nurse faculty using the TSET to explore specific cultural experiences, and the relationship to nurse faculty TSE, as well as student nurses TSE. Future studies using SurveyMonkey® suggest using a mixed-mode survey, which offers participants a choice of response modes in the first contact. In addition, it would have been more feasible to solicit nurse faculty before the semester ends or a few weeks after the beginning of the semester. Finally, future studies may include solicitation of nurse faculty in the U.S. at regional, national, or international nursing educational conferences. These studies should consider measurement of more specific variables to determine which cultural experiences will have the greatest impact on nurse faculty TSE and should consider the quality and practical significance that exposure to diverse populations has on an individual's knowledge, skills, and attitudes.

Conclusions

Research supports that nurse faculty are inadequately prepared to develop cultural competence in nursing students. By identifying factors that affect TSE, nurse faculty may facilitate the achievement of cultural competence in new nursing graduates moving into practice environments. As a result, culturally competent students transitioning into practice may promote a more diverse, culturally competent workforce of practicing nurses. The effective integration of cultural competence in nursing practice requires nurse faculty commitment and development in cultural competence for it is an evolution involving many experiences and on-going self-reflection. The findings of this study provide evidence to support that cultural experiences within the U.S., teaching TNC concepts, and formalized cultural training and workshops have significant relationships to nurse faculty TSE. Nursing programs that promote formal preparation of nurse faculty in TNC concepts through cultural immersion experiences and innovative cultural training and workshops may facilitate the achievement of nurse faculty cultural competence. As the nursing profession and education needs continue to evolve, adapt, and amend over time, nurse faculty should continue to seek opportunities to enhance individual cultural knowledge, skills, and attitudes through professional development. This may facilitate confidence in teaching baccalaureate nursing students how to provide culture congruent and competent care. Culturally competent nurse faculty create culturally competent nurses.

Conflicts of interest

None

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