

## Cultural Awareness in Nursing is a Progressive Growth

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### Abstract

During the past four decades, researchers have developed strategies used in nursing programs to promote cultural awareness. Minimal research has focused on the graduating associate degree-nursing students to determine if a relationship existed between the use of an integrated cultural curriculum and the nursing student's level of cultural awareness. The associate degree-nursing program accreditation, statistical and benchmark reports mandated the integration of diversity content, local, national and worldwide perspectives in the curricula. Additionally societal and cultural patterns must be integrated across the entire nursing school curricula.

In this study, a correlational approach was implemented to determine if relationships existed between the integrated cultural curriculum and level of cultural awareness in graduating associate degree nursing students in a large metropolitan area, such as in Los Angeles. In addition, the focus was to determine if differences existed in the level of cultural awareness among the graduating associate degree-nursing students based on demographic factors (gender, ethnicity and age). The Cultural Awareness Scale (CAS) was used during this study. Based on the results of the 51 participants surveyed in this study, the cultural awareness level may be attributed to several factors, including the integrated cultural curricula. The nursing student's learning style, perception of faculty, personal experiences and cultural encounters may also contribute to the cultural awareness level.

**Keywords** Cultural awareness; Cultural knowledge; Cultural skills; Cultural desire; Integrated cultural nursing curricula; Transcultural nursing

### Introduction

Cultural awareness is a progressive growth, built on the continuing increase in familiarity and skill development related to the attributes of cultural knowledge, cultural understanding [1-5], cultural sensitivity, cultural interaction and cultural skill [2,6]. A healthcare professional demonstrates cultural awareness by blending the previously mentioned attributes and their relevant dimensions in human interactions [2,7]. A nurse who is culturally aware ensures that care is culturally pertinent and accepting to the beliefs, values and practices of patients, clients, or consumers [2,7]. Given the demographic changes, all healthcare professionals will require substantial knowledge and skills to function in a multicultural world [2,6]. The knowledge base required is the ability to be culturally aware. It is imperative for nurses to demonstrate they have the essential cultural awareness skills to function, survive and thrive in a multicultural world.

### Problem

The general problem is research studies have not focused on graduating associate degree-nursing students in a large metropolitan area, such as in Los Angeles, to determine if a relationship existed between the use of an integrated cultural curriculum and the level of cultural awareness [2,8]. The associate degree nursing statistical report mandates cultural content integrated into the nursing curricula [3]. The criteria and standards for accreditation of associate degree nursing programs mandate the integration of diversity content, local, national and worldwide perspectives in the curricula [3]. Additionally societal

and cultural patterns must be integrated across the entire nursing school curricula [4]. According to researchers, the specific problem is little research had focused on associate degree-nursing students to determine if a relationship existed between integrated cultural curriculum and the student's level of cultural awareness [2,9].

### Research Questions

1. What relationship exists between the integrated cultural curriculum and the level of cultural awareness as measured by the CAS results of graduating associate degree nursing students in a large metropolitan area, such as in Los Angeles?
2. What differences exist in the level of cultural awareness as measured by the CAS among graduating associate degree nursing students in a large metropolitan area, such as Los Angeles, based on demographic factors (gender, ethnicity and age)?

### Conceptual Framework

#### Dr. Madeline Leininger's theory

The theoretical framework guiding this research included two theorists from the transcultural-nursing arena Dr. Madeline Leininger and Dr. Campinha-Bacote [6] and the constructivist theory. Leininger theorized the importance of the culture, knowledge and care as vital and obligatory to nursing education and practice [10].

#### Dr. Campinha-Bacote [6]

Cultural awareness also involved self-analysis and investigation of one's own culture and method of discerning and performing [2,5].

Cultural skill is the capability of obtaining pertinent information concerning the patient's health record and primary problem, "as well as accurately performing a physical assessment" [5]. The relevant data gathered must include information concerning the patient's opinions, practices and values; helping the health care professional to intervene appropriately based on the patient distinct background [5].

### Constructivist theory

Based on constructivist theory, students participating in this research capitalize on previous experiences and multiple perspectives gained from completing the integrated cultural curriculum [2]. The integrated cultural curriculum gives learners an opportunity to incorporate new information by building upon what they already know [1]. One may think of this theory as a qualitative paradigm, but I was looking at how students construct or assimilate the knowledge from beginning to end.

### Method

The Raosoft online power analysis software was used to calculate the sample size. To determine the minimum sample it was crucial to use a 95% level of certainty or confidence, which revealed a margin of 5% error [2,11]. Prior to IRB approval, there were 60 graduating nursing students in the target population that would be invited to participate in the study. The goal was to select a minimum sample of 53 participants. At the time of the IRB approval, the originally proposed target population graduated from the program. During March 2014, the nursing program director's list of graduating students consisted of 55 students. The goal was to select a minimum sample of 49 participants.

A quantitative method was used because of structured and controlled approach with a formal instrument obtaining the same information from each subject [12]. A correlational design was used to collect baseline data and determine relationships between the integrated cultural curriculum and the levels of cultural awareness as measured by the Cultural Awareness Scale results [12]. The correlational design was the best choice because the focus of this study was not on implementing a treatment, randomizing the sample, or using a control group, which eliminated the choice of experimental design [12].

The CAS, a discrete answers Likert-type tool, was used rather than participant observation or participant interviews.

### Sample

The population included a total of fifty-five graduating associate degree-nursing students in a large metropolitan area, such as in Los Angeles, who had completed the cultural awareness class. In this study, the purposive sample was the approach used because participants were already enrolled and attending the associate degree-nursing program. The study sample was readily available and allowed for an adequate sample size. The purposive sample provided valuable information about the relationship between the integrated cultural curriculum and the level of cultural awareness in graduating associate degree nursing students in a large metropolitan area, such as in Los Angeles, although the sampling method limited the generalizability of the results [13].

In this study, the entire population was selected because the size of the population that met the criteria of interest included 55 students [2]. To select the total population sample three steps were followed. The population criterion was defined. The target population included all

graduating associate degree-nursing students in a large metropolitan area, such as in Los Angeles, which used an integrated cultural curriculum. To ensure that the participants met the criteria the sample was selected from the program director's list of graduating associate degree nursing students currently enrolled and attending the nursing program [2].

### Research tool

The research tool used during this study was the "Cultural Awareness Scale" (CAS), which is a seven-point discrete answer Likert-type survey. The CAS data collection tool was created in response to the desire to measure cultural awareness [14]. Approval to utilize the CAS tool was obtained from Dr. Rew et al. [14]. The CAS tool is located in the public domain and written permission to use the tool was not required. The CAS was intended to evaluate cultural awareness and determine an institute's methods and techniques of addressing cultural diversity. The CAS tool included 36 questions with a Likert answer design. The CAS scores range from strongly agree (7) to strongly disagree (1) to measure the following five subscales: "general educational familiarity, intellectual understanding, research interests, conduct/demeanor with communications and patient care/clinical topics" [14]. There is no correct or incorrect answer to the survey as cultural capability is an ongoing learning dynamic. This tool was determined to be the best tool to use for this study [14]. The CAS is comprised of five subscales. The General Education subscale has 14 questions representing the integrated cultural curriculum. The Patient Care, Behavior Comfort, Research Issues and Cognitive Awareness subscales include 22 questions representing different elements of cultural awareness in nursing practice [2].

A coefficient of 1.00 represents perfect reliability, with most investigators considering a coefficient of 0.80 as the lowest acceptable measure for established research instruments, while new tools are considered reliable when Cronbach's  $\alpha \geq 0.70$  (Riley, 2012). The CAS was created in 2003 and used in three studies to measure the cultural awareness level of faculty and students [14].

### Reliability

Krainovich-Miller et al. [15] reported a Cronbach's alpha for the CAS total instrument of 0.869, with subscale scores ranging from 0.687 to 0.902. These results indicated the questions correlated appropriately within each subscale and were consistent with the findings of Rew et al. [14]. This data contributed to the dependability and supported the reliability of the CAS [15]. The statistical data from the previous research and the CAS total instrument reliability of  $\geq 0.70$ , led to the conclusion the instrument was suitable for this study.

### Validity-internal

The construct validity is the congruence between the study's results and the theoretical foundation [2,16]. The CAS went through a content validity study whereby educators and other experts in the teaching of cultural diversity were asked to review each item to assess if it measured the construct [2,14].

The CAS had a content validity index of 0.88 [14]. The total number of items for the scale was then condensed from 37 to 36. This 36-item CAS was administered to 118 nursing students. The Cronbach's alpha score of 0.82 was achieved from the phase 1 (37-item scale) and 2 (36-item scale) data, which is consistent with the reported construct validity [2].

### Validity-external

The CAS tool is strong enough to gauge a nursing student's level of cultural awareness; the weakness is its inability to show how specific program components led to outcomes [14]. A higher mean score denotes a higher level of cultural awareness, however no distinct acceptable level exists [2]. The discoveries from Rew et al.'s analysis were not generalizable to all student nurses as a result of the small quantity of participants from one geographical area, a small sample used for the factor investigation and all participants attended the same university. Despite the limitation of the CAS, the tool does deliver valid and reliable scores regarding the cultural awareness in nursing students [14].

Demographic data was obtained through a study code process. The participants were instructed to write the following on a 3 × 5 card: name initials, gender, age and ethnicity. The study codes were created from the letters of the college, cultural class initial, gender, age and ethnicity.

### Data Analysis

A Pearson's r correlation coefficient was used to determine a relationship between two variables. The Pearson's r correlation can be used when both variables are expressed in terms of quantitative scores [16]. The ANOVA test was used to compare the sample variances with one another to see if they were statistically different from one another based on demographic data (age, gender and ethnicity) [17].

### Results

This is the 1st associate degree-nursing program to be tested using this research tool [2]. The total score on the CAS was a minimum of 171.00, a maximum of 237.00 and a mean of 200.6667 (SD=16.00208) [2]. In comparison to other programs, these participants obtained higher mean scores than participants in bachelors, masters, or doctoral programs. The higher mean scores denote a higher level of cultural awareness and lower mean scores denote a lower level of cultural awareness [2,14].

The General Education subscale represented the integrated cultural curricula [2]. The General Education subscale described the integrated cultural curricula element, which included the institute's methods and techniques of addressing cultural diversity [2,14]. The General Education subscale (questions 1-4, 14, 16, 18-22, 24-27) asks the participants to reply about the nursing program in relation to cultural content obtained during the courses [2,14]. This is important because it represents the significance and importance of having nursing faculty who model behaviors and conduct that are insightful and sensitive to multicultural issues [2].

The Cognitive Awareness subscale (questions 5-7, 11, 15, 17 and 20) represented the self-analysis and consideration of one's own philosophy and its impact on their way of discerning and acting [2,14]. The Research Issues subscale (questions 28-31) asked the participants to reflect on the level of exposure to research concerns related to the cultural awareness [2,14].

The Behavior Comfort subscale (questions 8-10, 12-13, 36) explores the level of comfort experienced when providing CLAS to cultural diverse individuals [2,14].

The Patient Care subscale (questions 23, 32-35) explores the level of skill used when providing CLAS to cultural diverse individuals [2,14].

### Answers to Research Question-1

RQ1-What relationship exists between the integrated cultural curriculum and the level of cultural awareness as measured by the CAS results of graduating associate degree nursing students in a large metropolitan area, such as in Los Angeles?

Answer the RQ1---The Pearson r correlation coefficient revealed statistically significant relationships exist between the integrated cultural curricula and the level of cultural awareness among graduating associate degree nursing students. The result revealed the integrated cultural curricula might influence the level of cultural awareness.

### Statistically significant correlations

The General Education subscale influenced the behavior/comfort subscale, resulting in a positive relationship [2]. The General Education subscale influenced the Patient Care subscale, resulting in a positive relationship [2]. The General Education subscale influenced the Research Issues subscale, resulting in a positive relationship [2]. As the Cognitive Awareness subscale increased the Behavior Comfort subscale decreased, resulting in a negative relationship [2]. As the Cognitive Awareness subscale increased Patient Care subscale decreased, resulting in a negative relationship [2] (Table 1).

Subscale	C.A.	R.I.	B.C.	P.C.
G.E.	-0.119	0.456**	0.517**	0.435**
C.A.	-	0.014	-0.326*	-0.318*
R.I.	-	-	0.174	0.303
B.C.	-	-	-	0.235

**Table 1:** Intercorrelations among CAS subscales, G.E.: General Education; C.A.: Cognitive Awareness; R.I.: Research Issues; B.C.: Behavior Comfort; P.C.: Patient Care, \*\* Correlation is significant at the 0.01 level (2-tailed), \*Correlation is significant at the 0.05 at the 0.05 level (2-tailed).

When the General Education and Behavior Comfort subscales were compared using the Pearson r correlation the result was  $r=0.517$ ,  $n=44$ ,  $p=0.01$  [2]. The General Education subscale influenced the behavior/comfort subscale, resulting in a positive relationship [2]. The Pearson r correlation results for the General Education subscale and Patient Care subscale scores was  $r=0.435$ ,  $n=46$ ,  $p=0.01$  [2]. The significance was established with a p-value of 0.01 two-tailed. The General Education subscale influenced the Patient Care subscale, resulting in a positive relationship [2]. The General Education subscale influenced the Research Issues subscale, resulting in a positive relationship [2]. The Pearson r correlation results for the General Education subscale and the Research Issues subscale scores was  $r=0.456$ ,  $n=39$ ,  $p=0.01$  [2]. The significance was established with a p-value of 0.01 two-tailed. The Pearson r correlation result for the Cognitive Awareness and the Behavior Comfort subscale was  $r=-0.326$ ,  $n=46$ ,  $p=0.05$  [2]. The significance was established with a p-value of 0.05 two-tailed. As the Cognitive Awareness subscale increased the Behavior Comfort subscale decreased, resulting in a negative relationship [2]. The Cognitive Awareness subscale and the Patient Care subscale scores were  $r=-0.318$ ,  $n=48$ ,  $p=0.05$  [2]. The significance was established with a p-value of 0.05 two-tailed. As the Cognitive Awareness subscale

increased Patient Care subscale decreased, resulting in a negative relationship [2]. Based on relationships revealed, sufficient evidence exists to reject the null hypothesis in favor of the alternative hypothesis [2].

## Answers to Research Question-2

The one-way ANOVA was run to test for differences between the mean scores of the ethnic groups on the CAS score.

Ten participants identified themselves as Asian, two participants were African American and two participants were multiracial. Four participants identified themselves as Caucasian. One participant was Russian/Armenian, one participant was Cambodian, one participant was Pacific Islander and one participant identified as being other. The race categories Pacific Islander,

Cambodian, Russian/Armenian and Multi-racial were combined to create more meaningful results. The one-way ANOVA was run on the 5-ethnicity categories. The one-way ANOVA on the ethnicity category yielded no statistically significant differences between groups on the CAS score,  $F(4, 46)=0.933$ , ns. [2].

## ANOVA on CAS level and age

“Twenty of the participants were 18-28 years old, 23 of the participants were 29-39 years old and 8 participants were in the 40-50 years old category” [2]. “The one-way ANOVA on the age category yielded no statistically significant differences on the CAS Level,  $F(1, 49)=0.007$ ” [2].

## ANOVA on CAS level and gender

There were 13 males and 38 females, who participated in this study [2]. The one-way ANOVA on the gender category yielded no statistically significant differences between groups on the CAS score,  $F(1, 49)=0.002$ , ns [2].

## Discussion and Conclusion

### Integrated Cultural Curricula

The integrated cultural curricula at the study site may have contributed to the statistically significant relationships revealed by the Pearson  $r$  correlation coefficient [2]. “However, other factors may have contributed such as the student’s learning style, student’s perception of faculty, student’s personal experiences and cultural encounters. Therefore, additional study is warranted to determine if the cause and effect relationship between the integrated cultural curricula and the cultural awareness levels” [2].

### Program evaluation

There are several challenges experienced by nursing program administrators and nursing educators. The nursing school method used to measure the level of cultural awareness among nursing students is ineffective [1,2]. Nursing program administrators must determine the impact of curricula used to educate current and future nurses [3]. Nurse administrators and educators must select an effective

assessment tool to measure the level of cultural awareness among nursing students [2,18]. The associate degree-nursing program philosophy at the study site was founded on the following two statements: (a) Learning experiences are most effective when content is arranged in a simple to a complex manner. (b) Education is a continual process of developing a body of knowledge, skills and attitudes. The associate degree-nursing program’s conceptual framework was intended to meet the necessities of non-native English speaking students. The CAS mean total score of 200.6667 ( $SD=16.00208$ ), for the study participants in this correlational study substantiated the college has successfully implemented an integrated cultural curriculum [2].

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