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Preparing for Patient-Centered Care: Assessing Nursing Student Knowledge, Comfort, and Cultural Competence Toward the Latino Population

Rachel M. Mayo, PhD, **Windsor W. Sherrill, PhD**, **Khoa D. Truong, PhD**, and **Christina M. Nichols**

Dr. Mayo is Professor, Dr. Sherrill is Professor, Dr. Truong is Associate Professor, and Ms. Nichols is an honors student, Department of Public Health Sciences, Clemson University, Clemson, South Carolina

Abstract

As the Latino population continues to grow throughout the United States, cultural competence training of nursing students at the baccalaureate level has become a priority. This study aimed to explore undergraduate nursing students' attitudes and beliefs toward Latino patients and their perceived readiness to provide care to Latino patients. A cross-sectional survey was conducted at four major nursing schools in the southeastern United States, which is the region that has seen the highest percentage of growth in the Latino population. Results from multivariable regression suggest that social interaction with Latino individuals and cultural immersion in a Spanish-speaking country predict student knowledge, cultural competence, and comfort with Latino patients. Direct influence by nursing programs, such as clinical experience, coursework, and language proficiency, are positively associated with the designed outcomes, but these relationships are not statistically significant. Our findings suggest that dosage of training matters. Implications for student recruitment, selection, and training are discussed.

The Latino[1] population in the United States is now the largest ethnic minority group and constitutes 16.3% of the total U.S. population (U.S. Census Bureau, 2011). Between 2000 and 2010, the Latino population grew four times faster than the general population. The states with the largest percentage of growth in their Latino populations during this time were primarily in the southern/southeastern United States, with South Carolina leading the nation with a 148% increase (Passel, Cohn, & Lopez, 2011; U.S. Census Bureau, 2010). Several health disparities exist for the Latino population in the United States. For instance, specific cancer mortality rates continue to be higher among the Latino population. The elimination of these disparities has been a national priority for decades, as expressed in the objectives of Healthy People 2020 (HealthyPeople.gov, 2011).

Address correspondence to Rachel M. Mayo, PhD, Professor, Department of Public Health Sciences, Clemson University, 519 Edwards Hall, Clemson, SC 29634; rmayo@clemson.edu.

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[1]*Officially, the U.S. Federal Government uses both terms* Hispanic *or* Latino *to describe identity. Many organizations, including the Pew Research Center's Hispanic Trends Project* (*Lopez, 2013*), *use the terms interchangeably in publications. The authors recognize the distinction in term, and have chosen to use* Latino *for consistency throughout this article*. Hispanic/Latino *was used in the survey, as both terms are used to self-identify in the study region.*

Several studies have examined the significant barriers that the Latino population faces as patients, which include issues related to legal status, financial concerns, and language barriers (Juckett, 2013). In addition, researchers have long asserted that these barriers for Latino patients are related to health care providers' readiness to work with multicultural populations (Bonaparte, 1979).

Despite the large and rapidly increasing size of the Latino population in the United States, it continues to be significantly underrepresented among nursing students, composing only 6% of the nursing student population (Kaufman, 2012), which is far less than the proportion of Latino individuals in the general population (16.5%). This underrepresentation of Latino individuals in nursing education programs reinforces the need for nursing students of all races to be trained to provide culturally competent care to an increasingly Latino population in the United States. An uneven representation of Latino individuals in nursing schools among regions exists. The underrepresentation in the Southeast is significant because growth of the Latino population has been largest in that region. Only 3.5% of nursing students from the southeastern schools in this study were Latino.

Kulwicki and Boloink (1996) used Bernal's and Froman's self-efficacy scale to assess baccalaureate nurses' perceived ability to provide quality care to patients of diverse ethnic backgrounds. The results of the study suggested that nursing students had low self-efficacy in their ability to provide good transcultural nursing care. Reeves and Fogg (2006) conducted a study of senior nursing students and found that students often demonstrated low levels of cultural knowledge due to lack of life experiences with cultural diversity. An integrative review by Coffman, Shellman, and Bernal (2004) reported higher levels of cultural competence for Latino patients in nursing students who lived in geographical areas with larger Latino populations. The research findings of Sargent, Sedlak, and Martsolf (2005) revealed that fourth-year baccalaureate nursing students felt more prepared than first-year students to provide care to culturally diverse patients. Their results also showed that fourth-year students who participated in study abroad, cultural immersion programs, and diverse clinical experiences were more likely to understand the health care needs of patients of various cultures. Brennan and Cotter (2008) compared freshman and senior students and found that freshmen nursing students often reported that humanities courses prepared them to provide culturally competent care. Senior students, who were found to have higher levels of cultural competence on average than freshman students, were exposed to cultural diversity didactic teaching in their nursing programs but desired further training to develop practical skills to encourage transcultural partnership in their nursing practice and communities.

According to the Institute of Medicine (2002), increasing cultural competence training of nurses and other health care professions can improve quality of care and reduce the significant health disparities between ethnic minority groups and the non-Hispanic White population. Cultural competence assessment can benefit practitioners by heightening awareness, influencing attitudes toward practice, and motivating the development of knowledge and skills (National Center for Cultural Competence, 2004). The Office of Minority Health (2013) defined cultural competence as "a set of congruent behaviors, attitudes, and policies that come together in a system, agency or among professionals that

enables effective work in cross-cultural situations" (para. 1). Culturally competent care in nursing has been defined as an understanding of unique cultural issues and implementation of provider behaviors and policies that establish effective relationships with patients of all ethnic backgrounds (Robinson, 2000). Health care workers report that confidence in cultural skills is linked to higher education levels and knowledge of the Latino culture (Jones, Cason, & Bond, 2004). Lack of cultural understanding of Latino patients is linked to negative attitudes toward this population (Joseph, 1997). Increased exposure to and knowledge of the activities of specific cultural groups has been shown to increase the willingness of health care providers to work with patients from a cultural background that is different from their own (Munoz, DoBroka, & Mohammad, 2009).

Increasing cultural competency among nurses needs to start with cultural diversity education programs at the baccalaureate nursing level (Long, 2012). The teaching of cultural competency in nursing education programs has been required since 1986, but the outcomes of cultural competence training in nursing education programs have been less than satisfactory (Long, 2012). Many institutions have emphasized cross-cultural education, but the type of curricula utilized is highly variable and not standardized, possibly due to a lack of research in this area. Further research of effective teaching strategies and patient outcomes is needed (Leonard, 2006). To ensure high standards of effective nursing to all patients, the American Association of Colleges of Nursing (2008) mandated that baccalaureate nursing education programs include five competencies for baccalaureate nursing graduates to provide culturally competent care. These essential competencies establish a broad framework for nursing education programs to prepare a safe and effective nursing workforce prepared to treat patients from all ethnic backgrounds.

Cultural competence can be taught and learned, and training can positively influence nurses' beliefs and behaviors toward Latino patients (Beach et al., 2004). McKeon, Norris, Cardell, and Britt (2009) suggested the implementation of online courses and computer-based simulation for cross-cultural training curricula, without consuming the time and funds required to maintain a traditional classroom course. Other studies reported the use of guest lecturers, educational community partnerships, and study abroad as beneficial strategies for cultural competence training (Long, 2012).

Although significant research has been previously conducted on Latino patient experiences in a variety of health care settings, few studies have examined nursing students' perceptions of treating Latino patients in the context of cancer care. As the Latino population increases and cancer disparities grow, health care providers must be trained to interact with and provide care to Latino clients. The focus of the current article is to address this gap by examining the provision of care to the Latino population in cancer care settings in the southeastern United States. Cancer care is defined as "taking care of cancer," from cancer prevention and education to screening, diagnosis, treatment and follow-up (Cancer Care, 2008).

The current study explores plausible associations among various measures of undergraduate nursing student attitudes and beliefs toward Latino patients and analyzes potential predictors of those attributes in the context of cancer care. Specifically, the pairwise correlation

between several dimensions and measures of the readiness-to-treat construct was first examined. Then, considering each of those measures as an outcome of interest, the authors explored the predictors of desired outcomes in a multivariable regression framework. Ultimately, the authors hoped to provide empirical evidence to support nursing programs' efforts in recruiting and preparing their students to effectively treat the growing number of Latino patients.

METHOD

Survey

A cross-sectional survey was designed and conducted with four nursing programs in the southeastern United States with similar institutional structure, curricula, and student populations. A survey instrument was designed based on the model by van Ryn and Fu (2003), which found that patients' race or ethnicity influences providers' beliefs and that providers' beliefs affect their clinical decision making, ultimately contributing to racial inequalities in health care for Latino patients. For the purposes of this study, a new survey—the Medical and Nursing Student Readiness to Treat Latino Patients—was developed.

The survey was conducted between September 2011 and January 2012. Nursing student participants were recruited after approval by the institutional review board and review by each partner institution was obtained. Recruitment was by e-mail invitation to all junior and senior undergraduate nursing students at each university via the associate dean's office. In the e-mail, students were provided with a link to an informational letter and an online survey. The confidential survey also included questions about student characteristics, such as demographics, year in program, language proficiency, and related previous experiences (e.g., study and living abroad). At the end of the survey, students could choose to complete a separate form to enter their name into a drawing for a $50 gift card incentive. Two hundred and sixty nursing students participated in the survey, representing a 47% response rate.

MEASUREMENT AND COMPOSITE MEASURES

During survey development, the researchers conducted a comprehensive literature review related to nursing student readiness to treat Latino patients. Student attitudes were assessed using a combination of newly developed items and adapting existing items from previously validated instruments (Benkert, Tanner, Guthrie, Oakley, & Pohl, 2005; Godkin & Savageau, 2001; Lipton et al., 1998; Mason, 1995; National Center for Cultural Competence, 2004; Spence, Fasser, McLaughlin, & Holcomb, 2010). Focus groups were held with nursing students to aid in the development of the final survey. After an expert review and a pilot survey of 65 nursing students, the final Medical and Nursing Student Readiness to Treat Latino Patients survey included 112 items, which were used to construct seven composite measures examined in this study: Latino knowledge, attitude and beliefs about the Latino population, cultural competence, comfort with Latino patients, previous Latino experience, beliefs about Latino individuals with cancer, and cancer skills with Latino patients.

Question items used a specific response format, indicating a participant's level of knowledge or agreement or disagreement on a statement. For instance, an item used to assess participants' knowledge concerning the Latino population provides respondents with the options to self-rate their knowledge by choosing from *no knowledge* to *extensive knowledge*. Another item states that Latino patients are compliant with cancer treatment follow-up compared with other racial or ethnic groups and then asks participants to choose from *Hispanics much more* to *Hispanics much less*. Each item's score ranges from 1 to 5, with a higher score indicating better knowledge, more positive attitude, or more experience. Most of the measurement items were self-rating or attitudinal in nature, but a few items were factual, and participant answers can be compared with known facts. For instance, an item asked about the proportion of the Latino population in the United States who are undocumented immigrants. The response choices to specific percentages of undocumented immigrants vary from *all* to *none*. Table 1 provides a sample of the items used to construct the seven composite variables.

STATISTICAL METHODS

The statistical methods were selected to provide empirical evidence on the following questions:

- Question 1: How are Latino knowledge, attitude and beliefs about the Latino population, cultural competence, comfort with Latino patients, previous Latino experience, beliefs about Latino individuals with cancer, and cancer skills with Latino patients related?
- Question 2: Do factors such as social interaction, study abroad, and living abroad in a Spanish-speaking country predict the outcomes of interest explored in question 1?
- Question 3: Do factors that can be more directly shaped and alternated by a nursing program, such as previous clinical experience, coursework, and language proficiency, predict the outcomes of interest?

To answer question 1, the authors first used an interactive process to select and deselect individual question items to construct the composite measures so that the internal consistency of multiple items used for a given construct is satisfied. Cronbach's alpha coefficient was computed for each composite measure. Then, a pairwise correlation matrix (Pearson correlation coefficients) was constructed between the seven composite measures.

To answer questions 2 and 3, each of the composite measures considered in question 1 (except for previous Latino experience) served as the dependent variable in a multivariate regression model. The predictor variables are participant gender (with male as the reference group), race and ethnicity (non-Hispanic White, African American, and Other, with Hispanic as the reference group), age (years), and six binary variables: social interaction with Latino individuals in the past year, visited a Spanish-speaking country, ever lived in a Spanish-speaking country (question 2), clinical experience with Latino patients, completed a population health class, and some Spanish proficiency (question 3). These six binary variables are considered as the key independent variables that can potentially elucidate how

a nursing program can be improved to help its graduates to be more prepared to treat Latino patients.

Note that each item is scaled with only five possible answers, thus not conforming to the normality requirement. However, each composite variable consists of several items and, because all items use the same scale (1 to 5), their scores can be summed. The summated scores were then treated as interval data for which ordinary least squares regression is appropriate. The regression model also includes a set of dummy variables to account for the schools' fixed effect. The sample is composed of four nursing schools, thus three dummy variables representing schools 2, 3, and 4, respectively, are included in the regression model, with school 1 serving as the reference group.

RESULTS

Table 2 presents details of the seven composite measures, each with the number of items included, Cronbach's alpha coefficient, mean score, standard deviation, and minimum and maximum scores for the analytical sample. Five of the seven composite measures had a Cronbach's alpha value of at least 0.8. For instance, the composite measure of Latino knowledge included six 5-point items, thus the lowest possible score is 6 (1 × 6) and the highest possible score is 30 (5 × 6). The average score for Latino knowledge was 14.71, the lowest score was 6, and highest score was 27. The Cronbach's alpha value for this measure was 0.8813.

Table 3 provides descriptive statistics of the analytical sample of 260 undergraduate nursing students. The four nursing programs' student population is predominantly female (92.7%). In terms of race structure, 81.5% are non-Hispanic White, 10.4% are African American, 4.2% are Hispanic, and 3.9% are Other. The average student age is 23.2 years. Table 3 also provides information on the six key independent variables: 84.9% of students had some social interaction with Latino individuals in the past year, 40.4% have visited a Spanish-speaking country, 5% have lived in a Spanish-speaking country, 70.9% have had some clinical experience with Latino patients, 56.2% have completed a population health class, and 51.6% had some Spanish proficiency.

Table 4 presents the pairwise correlation matrix between the seven composite variables. It is interesting to observe that only two pairs of measures are fairly correlated with each other. The Pearson correlation coefficient between Latino knowledge and cultural competence is 0.6611, and the correlation coefficient between comfort with Latino patients and cancer skills with Latino patients is 0.6652. No sizable correlation among the other pairs of variables is noted.

Table 5 summarizes the results of six regression models, where each composite measure (except previous Latino experience) serves as the dependent variable. After controlling for gender, race, and age, some associations are observed. Having social interaction with Latino individuals is a statistically significant predictor of better Latino knowledge ($p < 0.01$), cultural competence ($p < 0.01$), and comfort with Latino patients ($p < 0.01$). Having visited a Spanish-speaking country is positively associated with an increase in cultural competence

($p < 0.05$) and having ever lived in a Spanish-speaking country is positively associated with better Latino knowledge ($p < 0.01$) and cultural competence ($p < 0.01$).

It is also interesting that certain expected relationships are not statistically significant. Having had some clinical experience with Latino patients is not statistically significant in any of the six outcomes. Having completed a population health class is significant only for cancer skills with Latino patients ($p < 0.05$), and having some Spanish proficiency increased cultural competency only ($p < 0.05$) and not the other outcomes.

Although not statistically significant, the sign of the coefficient is as expected for almost all cases. For some variables, it was not clear what to expect regarding directionality in the relationship. For instance, it is not evident whether having some clinical experience with Latino patients leads to positive or negative beliefs about the Latino population. A possible explanation for the observed insignificant relationships is discussed in the next section.

DISCUSSION

Results of the multivariable regression model suggest that real-life experience is important and may help to prepare nurse graduates to treat patients from ethnic minorities. As might be anticipated, social interaction with Latino individuals is a statistically significant predictor of better Latino knowledge, cultural competence, and comfort with Latino patients. Visiting a Spanish-speaking country is positively associated with an increase in cultural competence, and having lived in a Spanish-speaking country is positively associated with better Latino knowledge and cultural competence. These findings provide evidence supporting previous studies and related literature cited. Reeves and Fogg (2006) found a lack of cultural knowledge in nursing students due to limited experiences with cultural diversity. Other researchers have concluded that living in diverse geographic areas is associated with a higher level of cultural competence (Coffman et al., 2004), and participating in study abroad, cultural immersion, and diverse clinical experiences were related to improved understanding of patients of various cultures (Sargent et al., 2005). In previous research, as well as in the current study, experience with the Latino population (social interaction, cultural immersion) is related to improved cultural competence.

The variables that a nursing program can directly influence (clinical experience, coursework, and language proficiency) are associated with the outcomes of interest in the expected direction, but the relationships are not statistically significant. Several possible reasons (such as sample size, effect size, noise in the data) exist for these differences in observations, but it is important to acknowledge that it is not easy to come up with a quick fix. For example, obtaining cancer skills with Latino patients requires considerable training. Some training related to the Latino population is good, but it may not be enough. The current findings suggest that dosage of training matters.

The findings of the current study, as well as in the previous literature, suggest that nursing students have low self-efficacy in their ability to provide good transcultural nursing care (Kulwicki & Boloink, 1996). Given the empirical evidence, one possible solution for educational programs to consider is assessing individuals with Latino interests and

experience during student recruitment. Educational programs can provide for such experiences, but weighting candidates with previous Latino interest and background can be a cost-effective solution. Integrating additional experiences, such as cultural immersion, may be difficult within the already extensive requirements of the nursing curricula. Therefore, it may be more feasible to consider such factors during the admission process. Programs may consider recruiting students with previous experiences, such as study abroad, language proficiency, or living in a Spanish-speaking country, rather than attempting to incorporate these initiatives only within training programs. It is difficult to assess the required dosage of such experiences. Nevertheless, a nursing program must decide how much weight to assign to a particular admission criterion based on the program's mission and focus. The empirical evidence of the current study suggests that those experiential factors can make a difference in student cultural competence.

For some composite variables, it is not necessarily evident what to expect regarding the sign of the coefficient. For instance, it is not clear whether having some clinical experience with Latino patients would lead to more positive or negative beliefs. One might theorize that more clinical experience with certain groups would lead to improved attitudes, and educational programs usually adhere to this precept. Yet, the opposite effect may sometimes occur among students and providers. This is an area that warrants further research.

Several challenges are associated with the data and findings from the survey. The sample size is a clear limitation. Significant associations may emerge with a larger sample. Also, students self-reported, and many of the items are likely to be subject to social desirability response bias. Nursing students are increasingly aware of the importance of cultural competence, so they are likely to answer questions in ways they perceive as being more acceptable to their programs, regardless of actual attitudes, beliefs, and behaviors. However, if the level of response bias is evenly distributed among students, then our estimated results would be less biased. It is not surprising to observe insignificant relationships among the key independent variables with cancer belief, knowledge, and skills because these require technical understanding. For example, it would be overly optimistic to expect that visiting a country would lead to increased cancer knowledge of that population. Finally, the respondents of the study were undergraduate junior and senior nursing students with a mean age of 23 years. Some of the constructs assessed in the survey may be skills that would develop as they become more seasoned providers and have more clinical experience. In many cases, they self-reported on factors of practice that are not yet relevant or developed. As such, they may be either over- or underconfident of their skills and ability.

CONCLUSION

Due to accreditation mandates and demographic shifts, nursing education programs increasingly emphasize cultural competence. Coursework and student selection include teaching and learning methods to address the knowledge, attitudes, and skills related to working with ethnically diverse patients. As programs move to incorporate and assess cultural competence within curricula, further assessment of social interactions and previous clinical experiences may be warranted, as they may be important predictors of readiness to treat Latino patients.

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TABLE 1

Sample Items for Composite Measures

Knowledge about the Latino population	
1	How do you rate your level of knowledge concerning Hispanic/Latino individuals? (Answer choices: 1 = *no knowledge* to 5 = *extensive knowledge*.)
2	How familiar are you with the following demographic characteristics of Hispanic/Latino individuals: health status? (Answer choices: 1 = *not at all familiar* to 5 = *extremely familiar*.)
3	How familiar are you with the following demographic characteristics of Hispanic/Latino individuals: birth and death rates? (Answer choices: 1 = *not at all familiar* to 5 = *extremely familiar*.)
Attitude toward and beliefs about the Latino population[a]	
1	To the best of your knowledge, in the United States what proportion of Hispanic/Latino population is uninsured?
2	To the best of your knowledge, in the United States what proportion of the Hispanic/Latino population is unemployed?
3	In your opinion, what proportion of undocumented immigrants should receive emergency medical care?
Cultural competence of the Latino population	
1	I am prepared to consider a Hispanic/Latino patient's culture when providing care. (Answer choices: 1 = *almost never to* 5 = *almost always*.)
2	How familiar are you with the values and belief systems for Hispanic/Latino patients related to health? (Answer choices: 1 = *not at all familiar* to 5 = *extremely familiar*.)
3	How familiar are you with common dietary choices and patterns of the Hispanic/Latino population? (Answer choices: 1 = *not at all familiar* to 5 = *extremely familiar*.)
Comfort with Latino patients	
1	I am able to explain treatment options and clinical trials to Hispanic/Latino patients. (Answer choices: 1 = *almost never* to 5 = *almost always*.)
2	I find it difficult to care for Hispanic/Latino patients. (Answer choices: 1 = *almost never* to 5 = *almost always*.)
3	I feel adequately trained to manage the needs of Hispanic/Latino patients. (Answer choices: 1 = *almost never* to 5 = *almost always*.)
Previous experience with the Latino population	
1	How much interaction do you have with Hispanic/Latino individuals? (Answer choices: 1 = *none* to 5 = *extensive*.)
2	How much clinical experience have you had with Hispanic/Latino patients? (Answer choices: 1 = *none* to 5 = *extensive*.)
3	During the past year, have you had the opportunity to interact with Hispanic/Latino individuals in a social setting? (Answer choices: 1 = *yes* 2 = *no*.)
Beliefs about Latino individuals with cancer	
1	Major barriers within health care institutions prevent providers from providing appropriate cancer care to Hispanic/Latino patients. (Answer choices: 1 = *almost never* to 5 = *almost always*.)
2	Hispanic/Latino individuals' attitudes toward end-of-life issues related to cancer are influenced by culture. (Answer choices: 1 = *almost never* to 5 = *almost always*.)
3	Hispanic/Latino patients are compliant with cancer screening recommendations, compared with other radical and ethnic groups. (Answer choices: 1 = *Hispanics much more* to 5 = *Hispanics much less*.)
Cancer skills with Latino patients	
1	In thinking about Hispanic/Latino patients, please rate your ability to perform the following responsibility: explain the importance of screening for early detection of cancer. (Answer choices: 1 = *not at all able* to 5 = *completely able*.)
2	In thinking about Hispanic/Latino patients, please rate your ability to perform the following responsibility: advise men and women regarding age-specific guidelines for cancer screening. (Answer choices: 1 = *not at all able* to 5 = *completely able*.)
3	In thinking about Hispanic/Latino patients, please rate your ability to perform the following responsibility: perform an individualized cancer risk assessment. (Answer choices: 1 = *not at all skillful* to 5 = *extremely skillful*.)

[a]Participants were provided with a choice of percentages, and their answers were assigned a score of 0 = incorrect and 1= correct.

TABLE 2

Summated Scores of Multi-Item Measures of Latino Belief, Knowledge, Experience, and Readiness-to-Treat

Multi-Item Measure[a]	Mean	*SD*	Min.	Max.
Knowledge about the Latino population (six 5-point items; Cronbach's alpha = 0.8813)	14.71	3.85	6	27
Cultural competence with the Latino population (nineteen 5-point items; Cronbach's alpha = 0.8705)	60.92	8.68	31	84
Attitudes toward and beliefs about the Latino population (six 5-point items; Cronbach's alpha = 0.8135)	17.83	3.34	10	25
Comfort with Latino patients (fifteen 5-point items; Cronbach's alpha = 0.8742)	43.59	7.12	16	62
Previous experience with the Latino population (four 5-point items; Cronbach's alpha = 0.6817)	7.21	1.16	5	11
Beliefs about Latino individuals with cancer (eight 5-point items; Cronbach's alpha = 0.6719)	32.70	4.26	18	42
Cancer skills with Latino patients (fifteen 5-point items; Cronbach's alpha = 0.9442)	46.53	10.56	15	75

[a]Each 5-point item is scaled from 1 to 5, with 5 being the highest.

TABLE 3

Sample Descriptive Statistics of Student Characteristics(*N*= 260)

Student Characteristic[a,b]	***n***	**Sample (%)**
Gender		
Female	241	92.7
Male	19	7.3
Race and ethnicity		
Non-Hispanic White	212	81.5
African American	27	10.4
Hispanic	11	4.2
Other	10	3.9
Latino exposure and experience		
Social interaction with Latinos in the past year	220	84.9
Ever visited a Spanish-speaking country?	105	40.4
Ever lived in a Spanish-speaking country?	13	5
Had some clinical experience with Latino patients	183	70.9
Completed a population health class	146	56.2
Some Spanish proficiency	131	51.6

[a] Mean (SD) age = 23.15 (4.39) years.

[b] Some data are missing, as all participants did not answer all questions.

TABLE 4

Pairwise Correlation Matrix Among Variables of Interest

	Matrix of Coefficients					
Variable	**1**	**2**	**3**	**4**	**5**	**6**
1. Latino knowledge						
2. Cultural competence	0.6611					
3. Beliefs about Latino individuals	0.1375	0.1828				
4. Comfort with Latino patients	0.4304	0.4936	0.0047			
5. Previous Latino experience	0.3393	0.3708	0.0679	0.1354		
6. Beliefs about Latino patients with cancer	0.11	0.2495	0.3058	0.0133	−0.0019	
7. Cancer skills with Latino patients	0.3227	0.3745	−0.1541	0.6652	0.0778	0.0278

TABLE 5

Summary of Regression Results

	LK		CC		BLS		CL		BLC		CSL	
Predictor Variable	**Coef.**	***P*>(t)**	**Coef.**	***P*>(t)**	**Coef.**	***P*>(t)**	**Coef.**	***P*>(t)**	**Coef.**	***P*>(t)**	**Coef.**	***P*>(t)**
Social interaction with Latino individuals in the past year	2.08	0.01	5.62	0.00	0.50	0.47	4.09	0.01	0.89	0.33	1.46	0.54
Have visited a Spanish-speaking country	0.31	0.56	2.48	0.03	0.05	0.92	0.30	0.79	0.06	0.93	−0.44	0.80
Ever lived in a Spanish-speaking country	4.74	0.00	8.87	0.00	1.76	0.15	2.43	0.41	1.46	0.37	−2.86	0.56
Had some clinical experience with Latino patients	0.47	0.46	1.62	0.23	−0.03	0.96	0.60	0.65	0.11	0.89	0.26	0.90
Completed a population health class	0.29	0.57	0.96	0.38	0.39	0.42	0.97	0.37	0.68	0.27	3.47	0.04
Some Spanish proficiency	0.94	0.07	2.23	0.04	−0.18	0.70	1.33	0.21	0.52	0.39	0.80	0.62
Female	−0.72	0.50	0.81	0.72	1.23	0.22	−3.42	0.12	0.74	0.55	−6.96	0.04
Non-Hispanic White	−1.22	0.40	−7.73	0.01	0.39	0.77	−3.50	0.29	1.97	0.25	−4.51	0.38
African American	−0.92	0.57	−6.76	0.05	−0.34	0.82	−3.59	0.32	3.61	0.06	−2.90	0.60
Other	−1.65	0.36	−4.95	0.20	0.04	0.98	−4.50	0.26	4.96	0.02	−6.64	0.30
Age	0.06	0.38	0.20	0.16	−0.10	0.08	0.11	0.42	0.01	0.93	0.10	0.60
School 2	0.79	0.36	0.61	0.73	0.71	0.37	0.38	0.83	1.96	0.07	−1.99	0.46
School 3	−0.13	0.87	−0.69	0.68	1.93	0.01	−0.79	0.63	−0.02	0.99	− 1.53	0.55
School 4	0.74	0.34	3.76	0.02	0.45	0.53	2.15	0.19	1.29	0.17	1.87	0.45
Constant	11.95	0.00	53.22	0.00	17.46	0.00	41.87	0.00	27.49	0.00	51.91	0.00

Note. LK = Latino knowledge; CC = cultural competence; BLS = beliefs about Latino individuals; CL = comfort with Latino patients; BLC = beliefs about Latino patients with cancer; CSL = cancer skills with Latino patients; Coef = coefficient.