

Human Relations: Assessing the Affect of Cultural Awareness Curriculum on Preservice Teachers

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Human relations training is intended to prepare teachers to be culturally sensitive to an increasingly diverse population. There is a growing trend in teacher education to train preservice teachers more effectively to meet the demands of multicultural society. However, limited research is available to guide the future design of human relations training courses. This research was conducted to address the gap in the literature by investigating the effectiveness of human relations training course on preservice teachers. Results indicate that the course made a significant difference on improving knowledge and skills categories for participants, but there was no significant improvement regarding a cultural awareness category among participants in the training. Results also indicated that specific multicultural concepts, such as White privilege and White Racial Identity, are unfamiliar concepts to participants in this course as evidenced by low pretest scoring. This article will address suggestions for future human relations courses.

Human relations training is intended to prepare teachers to be culturally sensitive to an increasingly diverse population. With a growing demand for teachers to be more effective at meeting the needs of multicultural society, the issue of providing adequate multicultural training is paramount. However, limited research is available to guide the future design of human relations training courses. This research was conducted to address the gap in the literature by investigating the effectiveness of human relations training course on preservice teachers, as well as providing the reader with suggestions to strengthen multicultural training for teachers.

Multicultural Trends

To those in education it comes as no surprise that teachers today must be prepared to teach a student population that is more racially and ethnically diverse than at any other time in the history of the United States. According to Olson (2000), 35 percent of the school age children in the U.S. today are members of minority groups while one in five students are from immigrant households. These numbers are expected to increase dramatically according to current projections. In the next few decades, it will be virtually impossible to find a public school

setting, or even a private one, in which students are not racially, culturally, or linguistically diverse (Garcia, 2001).

Diversity has been a concern in U.S. education since the early 1800's when decisions were placed in the hands of White administrators, which often resulted in the loss of ethnic materials. African American scholars strongly voiced opposition to the exclusion of ethnic materials and, in doing so, set in motion the educational movement known as multiculturalism (Banks, 1995). By the 1960's, groups had become more vocal in demanding equality in schools and other institutions (Banks, 1995). This brought about a renewed interest in ethnic studies with a greater emphasis on ethnic attachment, pride, and empowerment. According to Gollnick and Chinn (2006), the ethnic studies courses provided students with the histories, cultures, and contributions of specific groups for the purpose of providing accurate information to promote understanding and eliminate stereotypes. In reality, though, ethnic studies courses did little to promote cultural diversity as attendance for the courses was mostly limited to members of the group being studied (Gollnick & Chinn, 2006). Educators soon realized that for any real change to occur, students from the majority group needed to be included in the courses. This marked the ascendancy of the current multicultural education movement.

The multicultural education movement continued to grow in the 1970's as professional organizations, including the American Association of Colleges for Teacher Education (AACTE), recommended that all teacher education programs include a human relations course. By 1977, the National Council for the Accreditation of Teacher Education (NCATE) issued multicultural education standards that teacher education programs had to meet in order to earn national accreditation (Banks, 1995). Since these standards have been in place, teacher education programs have varied in their approaches to meeting the new multicultural requirements. State education departments also vary in their approaches to ensure that all certified teachers receive the knowledge and experience needed to work with ethnically and culturally diverse students. This article will provide a brief overview of one approach to meeting multicultural requirements in teacher education.

Human Relations Course and Objectives

The human relations approach, as described by Sleeter and Grant (1994), is one perspective that educators may use to address multicultural education. In this approach, a strong emphasis is placed on teaching students to recognize both cultural universalism and cultural relativism. The human relations approach focuses on challenging stereotypes, providing accurate multicultural content, and promoting positive relations by incorporating cooperative learning strategies while eliminating competitive practices. More specifically, the approach incorporates objectives that focus on 1) developing an awareness and understanding of the values, lifestyles, contributions, and history of a pluralistic society; 2) improving one's ability to recognize and deal with biases, prejudices, and discrimination personally and socially; 3) translating knowledge of human relations into attitudes, skills, and techniques which result in favorable experiences in the classroom; 4) ability to note institutional articles of biases, such as racism and sexism; 5) improving respect for human diversity; and 6) improving the ability to relate to individuals and groups that are different. With these concepts at the forefront, participants in human relation courses are encouraged to create lessons that incorporate pluralistic perspectives; include works by authors of color, women, and other marginalized groups; and encourage personal growth in the area of diversity understanding.

While versions of human relations approaches have been around for many years, limited outcome research is available for those wishing to implement more effective human relations training. Next, this article will highlight some of the outcome research regarding human relations training.

Past Research on Human Relations Courses

Surprisingly, few studies currently exist that attempt to measure the impact of cultural sensitivity training on students in teacher education programs. Earlier studies (Hartzell, Anthony, & Wain, 1973; Robinson & Hyman, 1984; and Deering & Stanutz, 1995) addressed the effectiveness of human relations training. These studies suggested that human relations training should occur prior to student teaching experiences, 20 to 30 hours of training is more effective than shorter or longer periods of training; and evidence that cultural sensitivity cannot be remedied by teacher education students simply having direct contact with diverse cultures. With

limited information available on outcome data from human relations training, this article sought to investigate the impact of human relations courses.

Purpose of the Research

Based on mixed research results in the past 30 years and an apparent absence in the literature focusing on human relations training's impact on preservice teaching students, this study's intention was to provide a more current perspective on the usefulness of human relations training courses for students that are training to be teachers. More specifically, this research investigated the cultural awareness of undergraduate and graduate students who participated in a human relations training course. For this study, the human relations course utilized the six course objectives noted by Sleeter and Grant (1994), as well as incorporating the suggestions of earlier studies noted above.

Method

The research question that guided this study considered how a human relations course would influence the cultural awareness of students. More specifically, does a course in human relations improve the cultural awareness of students in the course? This study was designed to investigate the differences in mean scores between tests administered to students in a human relations course at the beginning and end of the course.

Participants. The sample for this study included undergraduate and graduate students from a Midwestern university who were currently enrolled in a human relations course. The human relations course is a required course of all undergraduate and graduate students interested in working directly with K-12 grade level students within a Midwestern state school system. Students were enrolled in five-week course (approximately 30 hours of class time) volunteered to participate in this study by responding to a cultural awareness questionnaire. A total of 68 students from three sections of the human relations course responded to the questionnaire. It should be noted that 12 students completed only one of the two assessment opportunities (pre/post administrations of the questionnaire) and, subsequently, were removed from the final analysis and report of the results. As a result, a total of 56 students responded to both the pre- and post-applications of the questionnaire.

Ages ranged from 21 to 47 years old ($M = 24.68$, $SD = 5.22$, $N = 56$). Of those, 39 were female and 17 were male. Most students, 48, were seniors; 6 were graduate students and 2 were not classified. Nine students declared majors other than Education. These included two school counseling majors; one community counseling major; four speech pathology majors; and two questionnaires did not indicate a major. One student was Hispanic while all others were Caucasian.

Human Relations Culture Scale (HRCS)

The HRCS is a 28-item questionnaire that asks respondents to assess how they characterize themselves in relation to culture, diversity, and other multicultural themes. The characterizations were based on five categories with corresponding Likert-values: (1) extremely uncharacteristic, (2) somewhat uncharacteristic, (3) uncertain, (4) somewhat characteristic, and (5) extremely characteristic. The HRCS questionnaire was based on the Multicultural Awareness-Knowledge-Skills Survey (MAKSS), which was developed by D'Andrea, Daniels, and Heck (1991). The MAKSS was developed to assess the cultural awareness of counselors. More statistical information regarding the MAKSS can be found in the results section of this article. For this study, most of the MAKSS content was maintained. However, due to a different target audience (students in training to become teachers and school personnel instead of counselors-in-training) the presentation of the content was altered to refer directly to teachers in training. Respondents also provided age, ethnic group, gender, and year in school.

Scale Development. The MAKSS authors (D'Andrea, Daniels, & Heck, 1991) suggested a 3-factor model consisting of cultural knowledge (information about cultural groups and historical/current evidence for discrimination, racism, etc.), skill (strategies to improve ability to connect to people who are from different cultural groups) and awareness (personal exploration of the self as a racial being and personal development regarding cultural competence). Given the time since the survey's development and our adaptation (1991 to 2007), we again sought to determine if a 3-factor model was still sufficient. A principal components analysis with Promax rotation with the pretest data suggested that a 3-factor model (Awareness, Knowledge, and Skills), as described by D'Andrea and colleagues, fit these data. (See Table 1 for factor loadings.) However, five items failed to load on any factor and five items loaded on 2 factors.

These ten items were eliminated in scale construction. Correlations among factors across both time periods are presented in Table 2.

The three scales (cultural knowledge, skills and awareness) accounted for 65.11% of the variance. Eigen values for each were 8.82, 2.47, and 1.99 respectively. Cronbach's alphas for each scale were .85 for cultural knowledge, .86 for skills, and .31 for awareness. Given these values, we opted not to use the awareness scale in inferential analyses

It should be noted that the factor analysis used to review the data is not definitive due to the small sample size. With 28 items and only 56 subjects, it should be used only for the purposes of this paper and should not be taken as psychometric evidence about the internal consistency of the survey for future research.

Procedures

The HRCS was administered to undergraduate and graduate students enrolled in a human relations course at a Midwestern university. The first step in this study was to administer the HRCS during the first class meeting for the three sections of the human relations course. Students were informed of the study's rationale, that participation in this study was voluntary and confidential, and that participation was not related to grading in the course. In addition, students were informed that the HRCS would be administered at the end of the course. The second step was to administer the HRCS again at the end of the four-week course. Students were, again, informed of the study's purpose, that it was voluntary, and that it was not related to grading. The primary investigator of this study proctored the administration of the pre- and post-tests for all three sections and maintained the confidentiality of completed questionnaires.

Human Relations Course Process

The general course objectives were noted earlier in this article, but a more detailed description of how those course objectives are met follows. Students were informed at the beginning of the course that the course is introductory in nature and that students would develop knowledge of minority groups in the U.S., strategies to improve connections to children in the classroom, and improve their cultural competence through personal explorations of bias, prejudice, and discrimination. The students were informed that they would achieve these three

areas through case studies, reading, class activities, and personal exploration regarding the subject matter. In addition, students were strongly encouraged to share their experiences and voices in class; and they were informed that they would not be evaluated on those experiences or the opinions shared.

During the first three class meetings, students engaged in a variety of activities designed to elicit personal reflection on their experiences with cultural groups, their ethnic heritage, their views about oppression, and their family views about cultural groups. During the course, students explore the lives of culturally different individuals through written and video case examples.

The next 10 class meetings focused on specific multicultural topics such as race, class, gender, and others. During this time, students gained knowledge of those specific areas and learned strategies to improve connections with diverse populations. To achieve this end, students engaged in watching a variety of case studies, reflecting on them, and at times, making decisions about how to connect or how to connect more effectively to the cases presented.

The remaining three class meetings focused on processing the learning that occurred during the course. All students are strongly encouraged to describe what has changed for them, what skills and strategies they would use in their classrooms, and how they would look at cultural issues differently. A vital conversation that takes place during this time is reflection on their cultural competence. They are asked in what ways they improved their competence, what are they more aware of personally regarding cultural groups, and how they would influence others to make positive changes regarding cultural competence.

Design and Analysis

Design. This study employed a time series experimental design that utilized a survey to gather data through pre- and post-testing related to the research question posed. A time series design was appropriate as this study investigated intact groups (students in the human relations course) over a period of time with pre- and post-test observations. In addition, a control group was not available at the time of this study and, subsequently, a time series design was chosen.

Analysis. In order to investigate whether the human relations course experience improved cultural awareness of the students, a *t* test was used to compare sample means. By comparing the

sample means, a *t* test determines if there is sufficient evidence to infer that the means of the population studied differed (Hays, 1994). More specifically, a paired-samples *t* test was used as the intact groups were experiencing the same conditions of the variable of interest (human relations course). A paired-samples *t* test is frequently used when comparing the scores on one test (in this case a pre-test) to the scores on another test (in this case a post-test) for a group of individuals.

Results

The purpose of this research was to investigate the cultural awareness of undergraduate and graduate students who participated in a multicultural sensitivity training course titled Development of Human Relations Skills in Education. This course was a study of cultural issues--including prejudice, bias, and sexism--and how to overcome the negative aspects of these issues in school settings. Students developed their human relation skills to deal with difficulties encountered between individuals. The course was designed to fulfill a requirement for all students planning on working within the South Dakota school systems. More specifically, the purpose of this research was to investigate the impact of the Human Relations course on student cultural awareness.

Pre-test – Post-test Analysis

Scales. The first concern was to determine if change in multicultural awareness changed from the beginning to the end of the semester. Dependent *t* tests were used to determine significance in mean difference between pre-test and post-test and are presented in Table 3. In all cases, means were higher at the end of the course than at the beginning. The effect size, Cohen's *d*, was larger for skills than for knowledge, indicating that students exhibited a larger increase in skills. According to Cohen's (1988) conventions, values of *d* around .20 are considered small, around .50 are considered medium, and around .80 are considered large.

Items. Because the awareness scale did not demonstrate internal reliability, we chose to examine the change across time in responses to each item individually. To enrich the description of all the data, the item analyses were conducted for knowledge and skill scales, as well, see Table 1. Items 8, 19, 24, 26, and 27 showed the largest effects, followed by items 13, 20, and 21.

The change from pre- to post-test for each of these 8 items met Cohen's (1988) criteria for large effects. The differences for items 22, 23, and 28 are considered medium to large effects and, as might be expected, most of these items pertain to the acquisition of skills. As the number of tests increases, the probability of at least one Type I error increases (Toothaker, 1991). To control for alpha across this family of 28 tests, a Bonferroni correction was used resulting in $\alpha = .002$.

The smallest effect was seen for item 7 concerning the family's perspective regarding acceptable and unacceptable thoughts and behaviors toward other races. This is the only item that addressed one's family. Differences between pre- and post-test for items 4 and 5 were also small. These items addressed how one is able to recognize their cultural beliefs interfering with others and communicate acceptance to different cultural groups. Knowledge items 11 and 12 (defining discrimination and stereotyping) and awareness items 14 and 15 (identifying emotional reactions to people of different cultural groups, both positive and negative) produced small to medium effects.

Predictors. We next sought to determine if the change from pre-test to post-test could be predicted by the participant's age and gender in regression models. Gender was dummy coded with 0 = female and 1 = male. Results are presented in Table 4. The model of age and gender significantly predicted knowledge, as well as, items 24 and 26, accounting for at least 11% of the variance in the change. In all cases, except for question 26, age was more important in predicting the change from pre- to post-test. The regression coefficients for age were significant for knowledge and skills, as well as, items 9, 10, 21, 24, and 26. These items all represent skills related to understanding multiculturalism in the community. In each case, younger students demonstrated greater change. Gender only significantly predicted question 26, where males showed greater change ($M = 1.47, SD = .80$) than females ($M = .92, SD = .96$).

Discussion

Given the research question, "Does a course in human relations improve the cultural awareness of students in the course?" this study found the answer to be positive. As a reminder, students responding to the HRCS were instructed to evaluate whether an item on the HRCS was a characteristic continuum based on five categories with corresponding Likert-values: (1) extremely uncharacteristic, (2) somewhat uncharacteristic, (3) uncertain, (4) somewhat

characteristic, and (5) extremely characteristic. In general the three categories that comprised the HRCS (Knowledge, Skill and Awareness) showed improvement between pre- and post-test as indicated by the mean scores for each of those categories (Table 1). In addition, all 28 items of the HRCS showed similar improvements in mean scores between pre- and post-test assessments (Table 1). While improvements in mean scores indicated a general description that the human relations course was impactful for participants, the discussion of the results focuses more on specific items and categories that showed significant improvements.

Specific Findings

Knowledge Category. As noted earlier, the 3-factor model is the three overarching categories (knowledge, skill, and awareness) that comprise the HRCS. Knowledge, as defined by increasing knowledge about disadvantaged and minority populations, showed a significant improvement between pre- and post-test (mean scores from 4.07 to 4.39; $p < .002$). The human relations course in this study has a variety of objectives that attempt to enhance the student's knowledge base including challenging students to draw upon past knowledge and reflect upon how new information from this course can be assimilated into their knowledge base and to recognize evidence for racism, sexism, prejudices, and discrimination. It seemed that with the considerable focus of the course on students' developing knowledge of discriminating and oppressing events and factors at play historically and currently within society, the students were able to show significant improvement in their perceptions of their knowledge base.

Skill Category. Skill, as defined by the acquisition of cross-cultural communication skills and abilities, showed a significant improvement between pre- and post-test (mean scores from 3.31 to 4.22; $p < .002$). The human relations course in this study has a variety of objectives that attempt to enhance the student's skills, including developing the ability to deal with dehumanizing biases; translating knowledge of human relations into attitudes, skills, and techniques which result in a favorable experience for course participants; recognizing the ways in which dehumanizing biases may be reflected in instructional materials; and relating effectively to other individuals and to groups in a pluralistic society other than the teacher's own. It is important to note that the significant difference generated for this category was the highest of the three. This result seemed to confirm the course's strong emphasis on transferring knowledge into

practice, as evidenced by the majority of course objectives being skill oriented. This result also confirmed the remarks made by Deering and Stanutz (1995) regarding the need for teachers to engage in more than just knowledge based training.

Awareness Category. An interesting result was found regarding the “awareness” category. Because the scale demonstrated very low internal reliability, scale analyses were not included. However, each item was examined individually. The human relations course in this study has only one objective that attempts to enhance the student’s awareness. This objective seeks to improve the awareness of values, lifestyles, contributions, and history of a pluralistic society. With this result it appeared that students in these courses were not able to improve their awareness of cultural dynamics in significant ways as intended by the course objective. This finding is likely due to the limited focus of awareness in the course.

Specific Questionnaire Items. As noted in the results section of this article, there were five items that showed the largest significance between pre- and post-test applications. Item 8 (I can discuss the White identity development model), item 19 (I am aware of what White Privilege means), item 24 (I can explain how factors such as poverty and powerlessness have influenced the current conditions of at least two ethnic groups), item 26 (I can list at least three barriers that prevent ethnic minorities from succeeding academically), and item 27 (I can anticipate when my teaching style is appropriate for culturally different students) all fall under the categories of Knowledge and Skills, which match the main focus of the human relations course as indicated by the course objectives. It is important to note that there were specific course activities and assignments designed to improve these areas of knowledge and skills. For example, the course presented the concepts of the White racial identity development model and students were asked to apply the model’s phases to various video cases; students engaged in an activity designed to learn how being White in this society comes with certain unearned privileges; video and text book cases illustrated how cultural and economic conditions impact people’s lives; and there were multiple reading assignments and classroom discussions focused on helping students identify barriers for their students’ academic success and develop teaching strategies to address culturally different students.

It seemed that the course’s intentions were met in these areas above the other items. However, it is interesting to note that item 8 was not emphasized specifically by either the

course objectives. Given that item 8 had the lowest mean score for the pre-test and one of the highest significant differences that occurred between pre- and post-test applications, students participating in this course had limited knowledge of that item entering the course but were able to make significant improvements in understanding that toward the end of the course.

Demographic Findings. When reviewing how demographics factors impacted the changes between pre- and post-test applications, it is interesting to note that age and gender significantly predicted knowledge; and more specifically, that age was more important in predicting the change from pre- to post-test overall, as younger students demonstrated greater change. Even though gender only significantly predicted one item on the HRCS, males showed greater change than females overall.

Limitations

Limitations of this study include the use of self-report data, history, and purposive sampling issues. The instrument used, HRCS, relied on self-reporting data. The results of these surveys were based on the participants' willingness to approach the survey in a straightforward and honest manner. To minimize this threat, the questionnaires were anonymous and participants were able to drop out of the study at any time. Reviews of the self-report literature (Babor, Stephens, & Marlatt, 1987) suggested that self-report validity might be quite high when participants are assured that their responses are anonymous. Thus, the questionnaires were coded and the names of participants were not requested.

Future Considerations

It seemed clear from this study that the human relations course made a significant difference in its intention to improve the knowledge and skill bases for teachers in training. The findings of this study show that the course objectives for knowledge and skills are being met and should continue to be a focal point for future human relations courses.

While awareness did have mean score improvement, there was no significant difference found indicating that future courses' objectives in human relations courses should increase the emphasis on developing the student's personal growth in how they relate to people different from them. One suggestion is to encourage more personal growth through class activities and personal

reflection assignments so that students are exploring the self as a racial being and noticing how their worldviews impact their relationship with diverse groups. In addition, students can focus on understanding one's ethnic heritage beyond that of American and developing students' understanding of their family's perspectives regarding acceptable and unacceptable thoughts and behaviors toward other cultural groups.

Other areas for improvement in the human relations course is to make sure there is specific emphasis on helping students explore White privilege concepts and their relation to it, as well as, learn to think of themselves as racial beings. Specifically, the White Identity Development model is a concept that will not be covered in this article, as there is considerable information to note when discussing its principles. However, it might be beneficial to investigate this concept more thoroughly regarding preservice teachers, as it may have positive impacts on improving cultural competence.

Future research should also consider replication with a control group that does not receive the human relations training in order to compare results. It is expected that multicultural awareness is not likely to change without intervention. In addition, it is important to understand how long the positive changes to knowledge, skills, and awareness last after the conclusion of interventions such as the human relations course. Finally, future research should consider whether the gains made during the course were as high as they could be and which segments of the course are perceived to be most beneficial by student teachers. A suggestion might be to offer a follow-up focus group aimed at identifying gains made and segments that were perceived to be beneficial by students.

Conclusion

As our society becomes more diverse, there will be growing pressure on teachers to be able to address the variety of issues that accompany a more diverse student population. Human relations courses appear to be a positive first step in training teachers to address diversity issues in their classrooms. However, it is the authors' point of view that more investigation is needed in understanding what types of preparation is more useful than others. The authors hope that those entrusted with preparing teachers for the changing landscape of student populations are able to use the findings of this article in designing more effective multicultural training courses.

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Table 1. Factor Structure

	Factor1 Basic Knowledge	Factor2 Skills	Factor3 Awareness
q1	0.43		
q2			
q3	0.50		
q4			
q5			
q6	0.56	0.52	0.54
q7			0.53
q8			-0.61
q9	0.45	0.87	
q10		0.91	
q11		0.91	
q12		0.92	
q13		0.45	
q14		0.49	0.57
q15		0.40	0.66
q16			0.76
q17			0.67
q18	0.58		0.60
q19	0.65		
q20	0.51	0.57	0.43
q21	0.77	0.48	
q22	0.75	0.52	
q23	0.73		0.41
q24	0.74	0.46	
q25	0.56	0.55	
q26	0.77		
q27	0.68		
q28	0.78		0.42

Note: Loadings (correlations between items and factors) greater than .40 are shown.

Table 2. Correlations among factors.

		Pre Test			Post Test	
		Awareness	Knowledge	Skills	Awareness	Knowledge
Pre Test	Knowledge	.34**				
	Skills	.59***	.41**			
Post Test	Awareness	.30*	.30*	.37**		
	Knowledge	.16	.26*	.28*	.50***	
	Skills	.29*	.12	.48***	.63***	.60***

Note: * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3.

Means (standard deviations) and test for difference between pre and post test for factors.

Item	Pre test		Post test		<i>t</i> difference	Cohen's <i>d</i>
Awareness	3.57	(0.47)	4.12	(0.47)		
Knowledge	4.07	(0.64)	4.39	(0.50)	4.98***	0.45
Skills	3.31	(0.72)	4.22	(0.38)	10.79***	1.42
q1 aware of own ethnicity	3.75	(0.79)	4.18	(0.39)	4.10***	0.55
q2 own attitudes influenced by ethnicity	2.20	(1.05)	2.77	(1.31)	3.80***	0.51
q3 culture influenced thinking of other cultures	3.27 ^a	(0.97)	3.96	(0.85)	4.26***	0.57
q4 recognize own attitudes, beliefs, values interfering	3.96	(0.79)	4.14	(0.55)	1.53	0.20
q5 verbally communicate acceptance of differences	3.43	(1.13)	3.77	(0.97)	2.07*	0.28
q6 nonverbally communicate acceptance of differences	3.55	(0.95)	3.95	(0.84)	3.89***	0.52
q7 discuss family's acceptance of other races	3.88	(0.85)	3.96	(0.85)	0.55	0.07
q8 discuss White identity development model	2.29	(1.11)	3.79	(0.87)	8.68***	1.16
q9 can define racism	3.96	(0.74)	4.38	(0.59)	3.72***	0.50
q10 can define prejudice	3.98	(0.73)	4.38	(0.56)	3.89***	0.52
q11 can define discrimination	4.16	(0.63)	4.41	(0.56)	2.60*	0.35
q12can define stereotype	4.18	(0.66)	4.45	(0.57)	2.59*	0.35
q13can identify cultural biases in United States	3.45	(0.93)	4.34	(0.58)	6.13***	0.82
q14 can identify negative & positive emotional reactions toward racial/ethnic groups	3.82	(0.77)	4.13	(0.66)	2.74**	0.37

q15 can identify negative emotional reactions toward racial/ethnic groups	3.69 ^a	(0.92)	4.07	(0.78)	2.54*	0.34
q16 can identify stereotypical beliefs about ethnic groups	3.84	(0.78)	4.36	(0.59)	3.91***	0.52
q17 can identify stereotypical beliefs of other people	3.93	(0.81)	4.41	(0.56)	4.03***	0.54
q18 give examples of stereotypical beliefs about different persons	3.66	(0.86)	4.32	(0.69)	4.56***	0.61
q19 aware of what White Privilege means	3.20	(1.17)	4.45	(0.66)	9.23***	1.23
q20 can discuss how culture affects individual choices	3.59	(0.87)	4.39	(0.49)	6.02***	0.80
q21 can discuss how culture affects academic achievement	3.48	(1.01)	4.34	(0.58)	6.20***	0.83
q22 can discuss how culture affects school curriculum	3.54	(0.95)	4.25	(0.72)	5.06***	0.68
q23 can describe degree of teacher biases affects child's academic achievement	3.50	(1.06)	4.25	(0.61)	4.89***	0.65
q24 can explain how poverty/powerlessness influence diverse groups	3.21	(1.11)	4.32	(0.64)	7.27***	0.97
q25 can discuss how teaching may conflict with cultural values of groups	3.63	(0.84)	4.20	(0.75)	4.25***	0.57
q26 identify 3 barriers preventing minorities from academic success	3.23	(0.97)	4.32	(0.66)	8.68***	1.16
q27 can anticipate own teaching style appropriateness for the culturally different	3.13	(0.85)	3.98	(0.77)	6.95***	0.93
q28 can help students determine whether racism might be involved in a particular situation	3.43	(0.93)	4.09	(0.69)	5.62***	0.75

Note: $N = 56$, except ^a $N = 55$; * $p < .05$, ** $p < .01$, *** $p < .002$.

Table Results of Regression Analysis

DV	Parameter Estimates		DV	Parameter Estimates	
	Model R^2	Variable β		Model R^2	Variable β
Knowledge	0.09 [†]	age	Q21	0.09 [†]	age
		gender			gender
Skills	0.12 [†]	age	Q24	0.15*	age
		gender			gender
Q9	0.09 [†]	age	Q26	0.13*	age
		gender			gender
Q10	0.09 [†]	age			
		gender			

Note: Only models with significant R-squared values and/or standardized parameter estimates (β) are reported in the interest of space. The dependent variables were differences between pre test and post test scores, calculated as post test – pre test. $N = 54$ due to missing data; [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.