

Validation of a Measure of Ethical Sensitivity and Examination of the Effects of Previous Multicultural and Ethics Courses on Ethical Sensitivity

Selcuk R. Sirin

*Psychology Department
Monclair State University*

Mary M. Brabeck

*The Steinhardt School of Education
New York University*

Anmol Satiani and Lauren Rogers-Serin

*Counseling Psychology
Boston College*

This article describes the development of a computerized version of a measure of ethical sensitivity to racial and gender intolerance, the Racial Ethical Sensitivity Test (REST; Brabeck et al., 2000). The REST was based on James Rest's (1983) 4-component model of moral development and the professional codes of ethics from school-based professions. The new version, Racial and Ethical Sensitivity Test-Compact Disk (REST-CD), consists of 5 videotaped scenarios (used in the original REST) followed by an interactive "interview" presented on compact discs. Data from a study with 58 students provides initial validation of the REST-CD. Ethical sensitivity to racial and gender intolerance in schools, as measured by the REST-CD, was moderately related to attitudes toward racial and gender equity issues in society as measured by the Quick Discrimination Index (Ponterotto et al., 1995). The results provide evidence for both interrater and internal reliability of the REST-CD scores.

This study also tests the hypothesized relationship between REST-CD scores and previous multicultural and ethics course work. Students with multicultural and ethics course experience have scored significantly higher on the REST-CD than students without course work. The paper-and-pencil tests are not significantly related to previous ethics/multicultural course work. In this article, we discuss the implications of the results and directions for future research.

Key words: ethics, ethical sensitivity, race, tolerance, multicultural education

As the demographics of the United States change rapidly, school professionals face many challenges. Children of color and students for whom English is their second language are the majority groups in many, especially urban, schools. The number of minority students increased by 16% from 1972 to 1999 (U.S. Department of Education, National Center for Education Statistics, 2001). Thirty-eight percent of public school students were considered to be the members of minority groups in 1999. However, 90% of teachers who work with these children are White and are predominately women (National Education Association, 1997).

The U.S. Department of Education's Office for Civil Rights continues to receive a high number of complaints about racial, ethnic, and gender harassment (Office for Civil Rights, 1999). Researchers (e.g., McAllister & Irvine, 2000) have suggested that to be effective with diverse students, school professionals (e.g., teachers, counselors, social workers, and other school personnel) should be aware of their own cultural and racial biases. Professional organizations (e.g., Office of Ethnic and Minority Affairs of the American Psychological Association, 1993) argue that there is a great need for professionals to be sensitive to multicultural issues. This is particularly the case when professionals work in settings with great ethnic and cultural diversity (May, Collins-Chobanian, & Wong, 1994), such as schools (Villegas & Lucas, 2002). The study reported here examines the development of a computerized measure of ethical sensitivity to racial and gender intolerance in schools. We present evidence that education in ethics and multicultural issues enhances ethical sensitivity.

RELEVANT LITERATURE

Racial and gender intolerance need not involve physical conflict or have a malicious intent to be detrimental. Disapproving attitudes toward students of color can be conveyed in overt or covert ways. However, both intentional and unintentional behaviors can adversely affect the way in which students view themselves, their peers, and their schools (Ogbu, 1982; Steele, 1992). Some professional faculty and staff, often out of ignorance, hold negative stereotypes that may prevent them from treating their students with respect or may affect their ability to teach in a culturally sensitive way. Intolerance and discrimination within educational

settings have adverse academic (Steele, 1999; Vogt, 1997) and psychological (Thompson & Neville, 1999) effects.

Educators and other professionals have an ethical responsibility to develop awareness of their biases and acquire the necessary knowledge and skills to act in accordance with the ethical codes of their profession (Goodlad, Soder, & Sirotnik, 1990). A number of professional organizations have adopted ethical codes (e.g., American Psychological Association, 2002; National Association of School Psychologists, 2000) that indicate that professionals have an obligation to respond to racist and sexist behavior displayed by others (Brabeck, 2002; Latta, 2002).

Although there have been many attempts to educate school-based professionals to increase tolerance, embrace diversity, and overcome stereotypes (e.g., D'Andrea, Daniels, & Heck, 1991; Marshall, 1999; Rudney, Marxen, & Risku, 1999), results are conflicting. Most efforts to increase tolerance and cultural competence have appealed to the changing demographics and increased diversity in the United States but have not offered a rationale based on professional ethics. We reasoned that if aspiring professionals understand that their professions expect and even require certain kinds of ethically defensible behavior, they are more likely to adopt these behaviors. There is some evidence within professional psychology that knowledge of professional ethics increases ethical behavior (Rest & Narvaez, 1994). Some efforts have been made to ensure that school-based professionals take courses in ethics that help them to deal effectively with ethical issues in classrooms (Sottile, 1994), and there is some evidence (e.g., Welfel, 1992) that courses in ethics can improve professional judgment.

Researchers also suggest that taking multicultural courses can increase a professional's cultural competence (D'Andrea, Daniels, & Heck, 1991; Holcomb-McCoy & Myers, 1999). Several organizations such as the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) and the American School Counselor Association (ASCA) have endorsed the importance of coursework in this field for future school counselors (Holcomb-McCoy, 2001). CACREP, for example, focused attention on the need for future school counselors to have courses that explore issues of diversity relevant to school counseling (Holcomb-McCoy, 2001).

One goal of this study was to examine whether courses in multicultural issues and ethics increase an individual's sensitivity toward gender and racial intolerance as measured by the Racial and Ethical Sensitivity Test—Compact Disk (REST—CD).

THEORETICAL BASIS FOR THE REST—CD

Rest (1983) coined the phrase "ethical sensitivity." Rather than viewing morality as a unitary process, Rest suggested that it is useful to view it as a multifaceted phenomenon consisting of four interrelated psychological components (Rest,

1983). *Component I*, ethical sensitivity, is the identification of the salient ethical aspects of a situation. This component involves recognizing different possible courses of action and the ways these choices will affect concerned parties. *Component II*, moral judgment, involves formulating the morally ideal course of action through reasoning. Moral motivation, *Component III*, entails having the necessary motive or will to act in an ethical manner. Finally, *Component IV* involves moral action (Rest, 1983; Rest, Narvaez, Bebeau, & Thoma, 1999). Component IV can be described as having the moral character to execute and implement what ought to be done. Rest's first component, ethical sensitivity, is the theoretical construct on which this study is based.

In contrast to paper-and-pencil measures of ethical sensitivity and multicultural competence (e.g., Modern Racism Scale; McConahay, 1986; Multicultural Awareness-Knowledge-Skills Survey; D'Andrea, Daniels, & Heck, 1991; Quick Discrimination Index; Ponterotto et al, 1995; Teacher Multicultural Attitudes Survey; Ponterotto, Baluch, Greig, & Rivera, 1998), the REST does not ask participants to choose from a set of responses offered by the assessor. Rather, participants produce responses by identifying the ethical issues in their own words. Their responses are scored for the number of identifications of ethical issues produced, as well as their ability to articulate the implications of the ethical violations.

Recognition tasks are much more common in psychological assessment because of their convenience and the fact that they can be standardized. However, production tasks have several important strengths for assessment (Rest, 1986b). First, in recognition tasks, respondents may be confused about the meaning of any given item, and so their responses may not reflect their actual knowledge. Because recognition tasks allow the respondents to express their ideas in their own words, such confusion is avoided. Second, recognition tasks may overestimate the respondent's multicultural or ethical awareness because the target information is provided in the items themselves. Production tasks, on the other hand, are more likely to reflect respondent's ability to call on their inner resources and knowledge to respond to a given situation or dilemma (Rest, 1986b; Rest et al., 1999). In this way, the REST is more appropriate for assessing the first component of Rest's model of moral reasoning, ethical sensitivity, than a recognition task would be because it allows researchers to assess whether or not respondents can produce the appropriate response by identifying the ethical violation. If it were a recognition task, respondents might recognize the ethical dilemma after it is presented in an item form even if they may not be able to produce the response without that cue.

DEVELOPMENT OF THE REST AND REST-CD

The REST-CD is a computerized version of the original REST (Brabeck et al., 2000). The original version, using an in-person interview, was designed to assess

participants' abilities to identify the ethical violations in the scenarios. After a review of the relevant research and popular press on acts of gender and racial intolerance in schools, a professional playwright developed scripts to enact scenarios. The scenarios portrayed school personnel violating the ethical principles of school based professional codes. Actors depicted acts of gender and racial intolerance and were videotaped. Participants viewed the videotapes and responded to the semistructured interview questions asked by a trained interviewer. Participants' responses to the interview questions were spoken and tape-recorded. These tapes were transcribed and scored by trained raters.

The research team developed a scoring system based on the professional codes following the system developed in previous work on ethical sensitivity (Bebeau & Rest, 1982). The scoring system (Brabeck & Rogers-Sirin, 2001) assesses the ability of school-based professionals to recognize the relevant ethical issues identified from professional codes of ethics (e.g., counseling, nursing, social work, teaching, and administration; Brabeck et al., 2002). The scoring system is described more fully below and a complete description of the REST stimulus materials and system for scoring ethical sensitivity is available in Brabeck et al. (2000).

The computerized version of the REST (REST-CD; Brabeck & Sirin, 2001) builds on the original REST but was modified in three ways. First, by digitizing the REST scenarios that originally were presented on videotapes (Brabeck, 1998), we put the stimulus materials on CD-ROM. Second, we added a videotaped introduction for each dilemma at the beginning of each scenario. Third, we added a videotaped interview that is played on the same CD immediately after the participant view the scenario. Participants are instructed to type their responses directly onto the computer using Word (Microsoft, 2000). Each participant answers the same questions in the same order.

The REST-CD has a number of advantages over the previous version. Transferring the in-person interview version into an interactive CD-ROM standardizes the interviews and eliminates the cost of hiring interviewers. Having participants type their responses eliminates the cost of transcribers. In addition, the CD version can be put on a file server or on the Web and can be made available to multiple participants including those located at a distance.

GOALS OF THE STUDY

The goals of this study were threefold. First, we attempted to establish the psychometric properties of the REST-CD. Second, we examined the relationship between the Quick Discrimination Index (QDI; Ponterotto, et al., 1995) and the REST-CD, to investigate further the validity of the REST-CD. Third, we investigated the impact of multicultural issues and ethics courses on individuals' ability to be sensitive to racial and gender intolerance. We hypothesized that participants

who had taken such courses would be more likely to recognize racial and gender intolerance in the scenarios than their counterparts who lack this foundation in ethics and multicultural issues.

METHODS

Participants

Participants were 58 students at a large metropolitan university. There were 39 female and 19 male students whose ages ranged from 18 to 46, with a mean age of 24 years and 7 months ($SD = 6.58$). Based on participant's self-identified racial/ethnic group, the racial/ethnic composition of the sample was 56.9% European-American, 13.8% Asian American, 12% bicultural/multicultural, 10.3% Hispanic/Latino, 3.4% African American, and 3.4% who identified their racial/ethnic group as "other."

Measures

Participants signed an informed consent statement and then answered three paper-and-pencil questionnaires in the following order: Demographic questionnaire, multicultural experience questionnaire, and the QDI. Next, they took the REST-CD. The demographic questionnaire designed for this study included information about the participant's age, gender, racial and ethnic background, education level, and personal as well as family income. The multicultural experience questionnaire designed for this study included open-ended questions about various experiences that the participants might have had with multicultural issues including having completed (a) a course on multicultural issues, (b) a course on ethical issues, and (c) a course with a concentration in either multicultural, ethical issues, or both.

The REST-CD consists of an introduction, the same five scenarios that were used in the original videotape version, and an interactive interview created by a computer multimedia specialist. The interview questions are the same as those used in the original REST (Brabeck et al., 2000). The program has a graphic user interface and provides standardized instructions to each of the CDs. Each scenario and interview is produced on a CD-ROM disk that can be randomly ordered. The program saves all the data entered by the participants onto a separate diskette.

Once the CD is started, the user is prompted to enter his or her unique ID number, gender, and the date of the session. Each scenario is presented twice to ensure that participants view the scenario thoroughly. The program then proceeds to the interactive interviewing step, during which questions are asked by an interviewer. Each CD is available in a male and a female version. The gender of interviewer was randomly assigned for this study; no genders of interviewer effects were

found. After the interviewer asks each question, the user is asked to type in her or his responses to that particular question in a text window. The program does not allow the user to move to the next question until he or she types in a response; there is also an option to review the question. It takes about 30 min to complete each scenario.

Based on the results of the Brabeck and colleagues (2000) study, we selected three scenarios with strong psychometric properties for this study: Faculty Lounge, Math Class, and Residence Hall. Brief descriptions of these scenarios follow:

Faculty Lounge: Two teachers are discussing a student in front of a new faculty member. The two veteran teachers discuss the student's academic and private life in stereotypical and derogatory ways. They show no concern for her privacy and a complete disregard for her rights to confidentiality. In addition, it is clear that they have no understanding of her culture. When the new faculty member tries to share her thoughts and stand up for the student, she is met with hostility and ridicule.

Math Class: A teacher who usually teaches honors math is asked to teach a basic math skills class. A second teacher is observing the class. Throughout the class, the math teacher demonstrates his cultural ignorance and his incompetence in teaching a math class of this level. He makes stereotypical remarks and in his attempt to connect with his students, allows racial and gender bias to affect his interaction with his students. He never considers that his teaching style might be the reason why his students are not engaged in the process of learning in the classroom.

Residence Hall: A meeting is being held in a residence hall. A European-American girl stands up and complains that the Latina girls speak Spanish in front of the rest of them, and she thinks that this should not be allowed. The European-American headmistress allows an unproductive fight to grow between the Spanish-speaking girls and the White girls. When the Latina girls assert that they have the right to speak their language, they are told that the school has a policy against speaking foreign languages. The European-American headmistress defends the school rule without considering the inherent racial discrimination. When a Latina faculty member tries to defend the girl, she is not listened to and is treated rudely.

The same scoring rules were used in scoring responses to the REST-CD as those used on the original REST (Brabeck et al., 2000). The Faculty Lounge scenario has 8 issues or instances of ethical violations depicted in the video; Math Class has 6 issues; and Residence Hall has 9 instances of ethical violations. Thus, the REST-CD version used in this study consisted of a total of 23 issues that participants were asked to identify. Two trained raters rated responses to each scenario separately; that is, raters did not rate the responses to the three scenarios viewed by any individual at the same time. Raters were also blind to participants' identity or characteristics. After the initial scoring, raters discussed any discrepancies between the ratings and determined a final, agreed on score for each issue.

Following the previously developed methods of scoring ethical sensitivity (Bebeau & Rest, 1982), if a participant does not identify the issue at all, he or she receives a score of 1 for that issue. A score of 2 indicates that the participant has identified the unethical behavior. A score of 3 indicates that the participant recognizes the unethical behavior and is able to elaborate on the implications of the behavior by demonstrating that he or she understands these issues within the particular context of the situation depicted in the scenario. The scores for each scenario were calculated by adding the scores for each issue and dividing by the total number of issues; thus, the possible scenario score ranged from 1 to 3. The REST-CD total score was computed by taking the average of the scenario scores.

The Quick Discrimination Index. The QDI is a 30-item paper-and-pencil test that measures racial and gender bias among late adolescents and adults. The items are placed on a 5-point Likert-type scale that ranges from 1 (*strongly disagree*) to 5 (*strongly agree*). The QDI scale has three subscales: Cognitive Attitudes Toward Racial Diversity (Subscale 1, 9 items), Affective Attitudes Toward Multiculturalism as It Influences One's Personal Life (Subscale 2, 7 items), and General Attitudes About Women's Equality Issues (Subscale 3, 7 items). Both exploratory and confirmatory factor analyses supported the three-factor structure of the QDI with coefficient alphas of .80 and .85 for Subscale 1, .83 and .83 for Subscale 2, and .76 and .65 for Subscale 3 (Ponterotto et al., 1995; Utsey & Ponterotto, 1999). Although a total instrument score can be calculated following Ponterotto et al.'s recommendation, the three subscales scoring method that uses 23 of the 30 items was used in this study (see Ponterotto et al., 1995, for further psychometric information).

Procedures

Participants were recruited to voluntarily participate in an interactive study to assess a measure of professional ethics. All were invited to a lab where they were given instructions about how to use the REST-CD version on a Windows-based personal computer. They received headphones, three randomly ordered CD-ROMs which included the three scenarios of the REST described previously, the standardized interview (see sample interview questions on Table 1), and a blank diskette for recording their entry. Each session took about 2 hr. After the completion of the session, participants were paid \$20 and were debriefed about the study.

RESULTS

The purpose of this validation study was to assess the psychometric properties of the REST-CD. The reliability of the scores was examined by assessing the

TABLE 1
Interview Protocol Used in the Math Class Scenario

-
1. Imagine you are Ms. Marisa Cruz, the teacher observing Mr. Ross, in the scene you just saw, what would your response be to Mr. Ross be (include in your answer what you might say to him)?
 2. What factors impact your response to him?
 3. Why are these factors important?
 4. How do you think Mr. Ross would interpret and react to what you said?
 5. What about the students? How would he respond to what you said?
 6. What is your reaction to the entire classroom scene you just witnessed?
 7. What in the scene influenced your reaction?
 8. What do you think are the issues raised during this scene?
 9. Can you expand on why you consider these issues important?
 10. Are there any other issues?
 11. How do you think these issues affect the way these students learn the material presented in the classroom?
 12. What arguments might be offered against the position you have taken?
 13. Is there anything else you would like to say or comment on?
 14. Thank you!
-

interrater agreement levels between the two scorers and by the internal consistency of the scores. The validity of the REST-CD was assessed by comparing the REST-CD scores with the QDI scores and by examining the relation between taking courses on multicultural and ethical issues and the REST-CD scores.

To assess the reliability of the scoring protocol, the percentage of perfect agreement between the two raters was calculated for each scenario separately. The percentage agreement levels before scores were resolved for analysis were 74.5 for Faculty Lounge, 74.7 for Math Class, and 75.14 for Residence Hall. The percentage agreement level for the total REST-CD score was 74.61. The total agreement levels, after the disagreements were resolved, were 100% for each one of the scenarios.

Internal consistency Cronbach's alphas were calculated for each scenario and for the full scale score. The alpha coefficient for Faculty lounge was .66, for Math Class, .64, and for Residence Hall, .73. Correlations among the three scenarios are presented in Table 2. The results show that the three scenarios were significantly correlated with one another and correlation coefficients were in the range of .35 to .53. The Cronbach's alpha for the REST-CD total, with 23 items, was .82.

Before we examined correlations between the subscales of the QDI and the REST-CD, we calculated the internal consistency coefficients for the QDI subscales. Cronbach's alphas for the three QDI subscales were .85 for Cognitive Attitudes Toward Racial Diversity subscale, .67 for Affective Attitudes Toward Racial Diversity subscale, and .69 for Attitudes Toward Women's Equity subscale.

The correlations between the REST-CD and the QDI are presented in Table 2. The results show that, as expected, the REST-CD and QDI scores were moderately

TABLE 2
Intercorrelations Between the Study Measures and Course Experience

	<i>Faculty Lounge</i>	<i>Math Class</i>	<i>Residence Hall</i>	<i>REST-CD</i>	<i>QDI1</i>	<i>QDI2</i>	<i>QDI3</i>	<i>QDI Total</i>
Faculty Lounge	1				.46***	.40**	.43***	.55***
Math Class	.46***	1			.19	.19	.30*	.28*
Residence Hall	.35*	.53***	1		.49***	.37**	.42**	.54***
REST-CD Total	.77***	.76***	.86***	1	.50***	.42***	.49***	.59***

Note. REST-CD = Racial and Ethical Sensitivity, Test-CD Version; QDI = Quick Discrimination Index (Ponterotto et al., 1995). QDI1 = Attitudes Toward Racial Diversity; QDI2 = Attitudes Toward Multiculturalism; QDI3 = Attitudes Toward Women’s Equality.

* $p < .05$. ** $p < .005$. *** $p < .001$.

correlated. The correlations between the three QDI subscales and the REST-CD scores for each scenario were all in the range of .19 to .49 with the three scenarios; all correlations were statistically significant except the Math Class scenario. For the Math Class scenario, the significant correlations were between the gender equity component of the QDI and the total QDI score. These results indicate that ethical sensitivity to racial and gender intolerance in schools as measured by the REST-CD is moderately related to attitudes toward racial and gender equity issues in society as measured by the QDI. The correlations are in the expected direction and provide support for the convergent validity of the REST-CD scores. At the same time, the moderate correlations indicate that the REST-CD is measuring a different construct from the QDI.

Finally, a one-way analysis of variance (ANOVA) was conducted to evaluate the impact of course experience on individuals’ ability to recognize racial and gender intolerance. The independent variable, prior course experience on multicultural/ethical issues, included three groups of students. The *One-course* group included those who had taken one course on either multicultural issues or ethical issues ($N = 15$). The *Two-course* group included those who had taken both multicultural issues and ethical issues courses ($N = 21$). The *No-course* group included those who had not taken any courses in either one of the two areas ($N = 13$). The dependent variable was the total REST-CD score. The group sizes were unequal, which required conducting a test of homogeneity of variance. The result of the Levene’s test was not significant, that is, the group variances were not significantly different from one another. The results of the ANOVA showed a significant difference between the groups, $F(2, 48) = 5.59, p \leq .007$. Further analysis using Scheffe’s post hoc test, a conservative post hoc test, indicated that participants in the two-course group scored significantly higher than participants in the no-course group ($M = 14.12$ vs. $M = 11.88, T = 3.25, p \leq .003$). The difference between the no-course group and the one-course group was in the expected direction but was not significant (12.60 vs. 11.88,

TABLE 3
Differences Among Course Groups on REST-CD Total Scores

<i>Course Experience</i>	<i>M</i>	<i>SD</i>	<i>No-Course</i>	<i>One-Course</i>
No course	11.88	1.61		
One course	12.60	1.65	NS	
Two courses	14.12	2.39	$p < .01^*$	NS

Note. *Level of significance using the Scheffe's post hoc test procedure.

$T = 1.16, ns$). The results of these tests, as well as the means and standard deviations for the three groups, are reported in Table 3. A one-way multivariate analysis of variance (MANOVA) was conducted to determine the effect of previous course experience on the three QDI components. The results showed no significant overall effect, $F(3, 49) = 1.21, ns$. Participants with previous course work in ethics and multicultural issues did not differ from those without such previous course work on the paper-and-pencil measure of tolerance.

DISCUSSION

The results of this study are important in two ways. First, the study supports the claim that the REST-CD provides a reliable and cost effective measure of ethical sensitivity to racial and gender intolerance. Second, the study indicates that ethical sensitivity toward issues of racial and gender intolerance is related to coursework in ethics and multicultural issues and attitudes toward multiculturalism, women's equality, and racial diversity.

The results of this study add information to the claim that the REST-CD is a valid measure of sensitivity to gender and racial intolerance. The semistandardized interview has been a staple of research in developmental psychology for four decades. Kohlberg (1958) used a semistructured interview, The Moral Judgement Interview (Colby et al., 1987) in his study of moral development. In the field of intellectual development, Perry (1970) and King and Kitchener (1994) both used semistructured interviews, which have been in use for at least three decades. Subsequent researchers have attempted to develop more cost-efficient methods, as typical interview studies require paying an interviewer (\$10/hr) and a typist to transcribe the interview (\$20/hr) for every 15 min of tape. For example, Rest (1986a), drawing from Kohlberg's work, developed a paper-pencil measure of moral reasoning, The Defining Issues Test (Rest, 1986a), which has now been used in more than 1,000 studies (Rest et al., 1999).

However, researchers have noted that moving from a production task (in which participants produce responses to questions) to a recognition task (choosing a

response from a specified list of alternatives) changes the way a construct is operationalized and alters the construct under study (Rest, 1986b; Rest et al., 1999). In this study, we attempted to examine the *production* of a response, which indicates that a participant has identified an ethical issue in videotaped stimuli. The REST-CD's computerized interview appears to adequately measure the respondent's ability to produce an ethically competent response while reducing the cost associated with live interviews and audiotape transcription. This should facilitate researchers' study of the complex construct, ethical sensitivity, one of Rest's (1983) four components of ethical behavior in the context of educational settings.

This study also adds to the literature (Rest & Narvaez, 1994), which indicates that courses in professional ethics enhance ethical sensitivity. In this study, the number of courses in both professional ethics and multicultural issues were significantly related to scores on the REST-CD. This is an important finding. As noted by Brabeck et al. (2000), "The REST provides a means for moving discussions of cultural competence... out of the realm of political correctness. Instead, it ties identifying and acting on intolerant behavior to professional ethics" (p. 134). In this way, the behavior of professionals, particularly in relation to multicultural issues, is separated from a concern for developing "good people," which is an ambiguous concept, and instead attaches it to the concrete requirements of professional ethical codes.

Recent reviews of ethical codes and guidelines for working with women and vulnerable populations (Brabeck, 2002; Latta, 2002) found cultural competence is a requirement for ethical practice. Therefore, it can be argued that professionals should be able to recognize the issues in the REST-CD stimulus materials, and if they do not, it is reasonable to argue that they are not living up to their professional duty. By making this a professional concern rather than a personal concern, professionals can be held accountable for their behavior, and training programs can be held accountable for training competent professionals.

In addition, this study indicates that training both in ethics and multiculturalism is important in enhancing ethical sensitivity to instances of racial and gender intolerance. If we care that professionals in our society are sensitive to issues on intolerance, these are important findings. Furthermore, previous studies (Bebeau, 1994) indicate that not only can ethical responses be increased through formal instruction, but professional practice is enhanced by improvements in ethical awareness. Thus, training in ethical sensitivity may make more competent education professionals. This possibility needs to be investigated, and the REST-CD provides an ideal instrument for doing so.

The significant correlations with a paper-pencil measure, the Quick Discrimination Index (Ponterotto et al., 1995), provide additional support for the validity of the REST-CD and indicate that ethical sensitivity increases with more positive attitudes toward multiculturalism, women's equality, and racial diversity. Additional

research needs to examine whether increasing ethical sensitivity influences these attitudes or if changing attitudes affects ethical sensitivity.

Students with prior coursework in ethics and/or multicultural issues significantly differed from students with no such coursework on the REST-CD but not on the QDI. This finding suggests that a production task may better assess the effects of such coursework on ethical development than a recognition task (e.g., multiple choice). It may be that production tasks more closely resemble the behavior that is required to be successful in ethics and multicultural classes (identifying ethical issues, producing culturally competent responses on essays, etc.) and thus may be a better way to assess the impact of related coursework on ethical development. This finding helps explain the inconsistent findings in previous literature of the impact of such courses on tolerance (see our literature review above) and adds evidence to the claim that the REST-CD and the QDI are measuring different psychological constructs.

Despite the improvements made by the computerized version, there were still time constraints that limited this investigation to 58 participants. Each scenario of the REST-CD takes $\frac{1}{2}$ hour to complete, and the scoring process required two raters to code each scenario independently and then meet to go over and adjust any disparity between their scores. Additional empirical evidence is needed to further investigate the psychometric properties of the REST-CD with a larger number of participants. Group administrations are possible if multiple computers are available. Researchers might also explore having the REST-CD available to more participants by putting the materials on the Web and providing instructions for remote access.

Future research must also identify and test the effects of different instructional interventions on ethical sensitivity and must examine the development of ethical sensitivity over the duration of a semester or year-long course. Similarly, the efficacy of using some of the scenarios as training materials to enhance the ethical sensitivity by deliberately drawing attention to the violations of ethical codes should be explored. The relationship between ethical sensitivity and other prosocial behaviors such as social justice work, helping others, or serving one's profession needs to be investigated. Likewise individual differences (gender, ethnicity, etc.) in ethical sensitivity might be examined. The REST-CD provides investigators with a relatively inexpensive, reliable, and valid measure for accomplishing these goals.

ACKNOWLEDGMENTS

We would like to thank Candice W. Gleim and David Corkum of Boston College Audiovisual Department for their technical support. We thank Rachel Latta and Larry Ludlow for reviewing an earlier draft of this article. The work described in

this article was funded in part by grants from Boston College and the Phillip Morris Companies, Inc., to Mary M. Brabeck.

REFERENCES

- American Psychological Association. (2002). Ethical principles of psychologists and code of conduct. *American Psychologist, 57*, 1060–1073.
- Bebeau, M. J. (1994). Influencing the ethical dimensions of dental practice. In J. R. Rest & D. Narvaez (Eds.), *Moral development in the professions* (pp. 121–146). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Bebeau, M. J., & Rest, J. R. (1982). *The dental ethical sensitivity test*. Center for the study of ethical development, Burton Hall, University of Minnesota.
- Brabeck, M. M. (1998). (Producer). *Racial ethical sensitivity test: REST videotapes*. (Available from producer M. M. Brabeck, Boston College, Chestnut Hill, MA).
- Brabeck, M. (2002). *Comparison of attention to cultural competence in ethical codes from selected school based professions*. Unpublished manuscript available from author, Boston College, Chestnut Hill, MA.
- Brabeck, M. M., & Rogers-Sirin, L. (2001). *Racial ethical sensitivity test: Scoring manual*. (Available from first author M. M. Brabeck, Lynch School, Boston College, Chestnut Hill, MA).
- Brabeck, M. M., Rogers, L. A., Sirin, S., Henderson, J., Benvenuto, M., Weaver, M., et al. (2000). Increasing ethical sensitivity to racial and gender intolerance in schools: Development of the racial ethical sensitivity test. *Ethics & Behavior, 10*, 119–137.
- Brabeck, M. M., & Sirin, S. R. (2001). *The racial ethical sensitivity test: Computer disk version (REST-CD)*. (Available from first author M. M. Brabeck, Lynch School, Boston College, Chestnut Hill, MA).
- Colby, A., Kohlberg, L., Speicher, B., Hewer, A., Candee, D., Gibbs, J., et al. (1987). *The measurement of moral judgement* (Vols. 1–2). New York: Cambridge University Press.
- D'Andrea, M., Daniels, J., & Heck, R. (1991). Evaluating the impact of multicultural counseling training. *Journal of Counseling and Development, 70*, 143–150.
- Goodlad, J. I., Soder, R., & Sirotnik, K. A. (Eds.). (1990). *The moral dimensions of teaching*. San Francisco: Jossey-Bass.
- Holcomb-McCoy, C. C. (2001). Exploring the self-perceived multicultural counseling competence of elementary school counselors. *Professional School Counseling, 4*(3), 195–201.
- Holcomb-McCoy, C. C., & Myers, J. E. (1999). Multicultural competence and counselor training: A national survey. *Journal of Counseling and Development, 77*, 294–302.
- King, P. M., & Kitchener, K. (1994). *Developing reflective judgment*. San Francisco: Jossey-Bass.
- Kohlberg, L. (1958). *The development of modes of moral thinking and choice in the years 10–16*. Unpublished doctoral dissertation, University of Chicago.
- Latta, R. (2002). *Comparisons of guidelines and ethical codes for working with women and vulnerable populations*. Unpublished manuscript available from the author, Boston College, Chestnut Hill, MA.
- Marshall, P. L. (1999). Teachers' racial identity and the single course in multicultural education. *Action in Teacher Education, 20*, 50–69.
- May, L., Collins-Chobanian, S., & Wong, K. (Eds.). (1994). *Applied ethics: A multicultural approach*. Englewood Cliffs, NJ: Prentice Hall.
- McAllister, G., & Irvine, J. J. (Spring, 2000). Cross cultural competency and multicultural teacher education. *Review of Educational Research, 3–24*.
- McConahay, J. B. (1986). Modern racism, ambivalence, and the modern racism scale. In J. Dovidio & S. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 91–125). New York: Academic.

- Microsoft. (2000). *Word 2000*. [Computer software]. Bothell, WA: Microsoft Corporation.
- National Association of School Psychologists. (2000). *Principles for professional ethics*. Washington, DC: Author.
- National Education Association. (1997). *Status of the American public school teacher, 1995–1996*. Washington, DC: Author.
- Office for Civil Rights. (1999). *Fiscal year 1998 annual report to Congress*. Washington, DC: U.S. Department of Education Office for Civil Rights.
- Office of Ethnic and Minority Affairs of the American Psychological Association. (1993). Guidelines for providers of psychological services to ethnic, linguistic, and culturally diverse populations. *American Psychologist*, 48(1), 45–48.
- Ogbu, J. (1982). Cultural discontinuities and schooling. *Anthropology and Education Quarterly*, 13(4), 290–307.
- Perry, W. G., Jr. (1970). *Forms of intellectual and ethical development in the college years: A scheme*. New York: Holt.
- Ponterotto, J. G., Baluch, S., Greig T., & Rivera, L. (1998). Development and initial score validation of the teacher multicultural attitude survey. *Educational and Psychological Measurement*, 58, 1002–1016.
- Ponterotto, J. G., Burkard, A. W., Reiger, B., D’Onofrio, A. A., DuBuisson, A., Heenehan, M., et al. (1995). Development and initial validation of the Quick Discrimination Index (QDI). *Educational and Psychological Measurement*, 55, 1016–1031.
- Rest, J. R. (1983). Morality. In P. H. Mussen (Series Ed.) & J. Flavell and E. Monkman (Vol. Eds.), *Handbook of child psychology: Vol. 3. Cognitive development* (pp. 556–629). New York: Wiley.
- Rest, J. R. (1986a). *Manual for the Defining Issues Test* (3rd ed.). Minneapolis: Center for the Study of Ethical Development, University of Minnesota.
- Rest, J. R. (1986b). *Moral development: Advances in research and theory*. New York: Praeger.
- Rest, J. R., & Narvaez, D. (Eds.). (1994). *Moral development in the professions*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Rest, J. R., Narvaez, D., Bebeau, M. J., & Thoma, S. J. (1999). *Postconventional moral thinking: A neo-Kohlbergian approach*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Rudney, G. L., Marxen, C. E., & Risku, M. T. (1999). Preservice teachers’ growth in multicultural understanding. *Action in Teacher Education*, 20, 32–46.
- Sottile, J. M. (1994). Teaching and ethics. (ERIC Document Production Service No. ED378174) 1–13.
- Steele, C. M. (1992, April). Race and the schooling of Black Americans. *The Atlantic Monthly*, 269(4), 67–78.
- Steele, C. M. (1999, August). Thin ice: “Stereotype threat: And Black college students.” *The Atlantic Monthly*, 284(2), 44–54.
- Thompson, C. E., & Neville, H. A. (1999). Racism, mental health, and change: Some further thoughts. *Counseling Psychologist*, 27, 256–262.
- U.S. Department of Education, National Center for Education Statistics. (2001). *The condition of education 2001* (NCES 2001–0172). Washington, DC: U.S. Government Printing Office.
- Utsey, S. O., & Ponterotto, J. G. (1999). Further factorial validity assessment of scores on the Quick Discrimination Index. *Educational and Psychological Measurement*, 59, 325–335.
- Villegas, A. J., & Lucas, T. (2002). Preparing culturally responsive teachers: Rethinking the curriculum. *Journal of Teacher Education*, 53(1), 20–32.
- Vogt, W. P. (1997). *Tolerance & education: Learning to live with diversity and difference*. Thousand Oaks, CA: Sage.
- Welfel, E. (1992). Psychologist as ethics educator: Successes, failures, and unanswered questions. *Professional Psychology: Research & Practice*, 23, 182–189.

