7. Development And Initial Validation Of The Multicultural Counseling Awareness Scale

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In recent years counseling programs have devoted increasing attention to multicultural issues in the curriculum. The counseling profession’s initial interest in multicultural training (or development) was buoyed by the Division of Counseling Psychology (Division #17 of the American Psychological Association [APA]) position paper on multicultural competencies (Sue et al., 1982). This position paper delineated 11 cross-cultural counseling competencies organized

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within the categories of awareness (beliefs/attitudes), knowledge, and skills.

The *Awareness* category refers to the counselor's awareness of his or her own value biases and how these biases may translate into culturally insensitive counseling; to the need to check biases and stereotypes; and to the need to develop a positive orientation towards multiculturalism. *Knowledge* refers to the counselor's knowledge of his or her own worldview as well as the worldview of his or her clients; and to additional culture-specific information such as the impact of racism on clients, models of acculturation and racial identity development, and so forth. Finally, *Skills* refers to the counselor's ability to translate awareness and knowledge into culturally sensitive and relevant interventions (Pedersen, 1988; Sue et al., 1982; Sue, Arredondo, & McDavis, 1992).

Since the Sue et al. (1982) position paper was published, numerous professional preparation programs have added multicultural components to their curriculum. According to the Hollis and Wantz (1990, 1994) national surveys of counseling programs, 76 new multicultural courses were developed and added to existing curriculums from 1989 to 1991, and another 27 programs added a course from 1993 to 1995. In a survey of APA-accredited counseling psychology programs, Hills and Strozier (1992) found that 87% of the programs offered a multicultural course, and 59% of the programs required the course. Also surveying APA-accredited counseling psychology programs, Quintana and Bernal (1995) found that 73% of the programs offered at least one multicultural course and 42% required one course. In the most recent survey to date, of both APA-accredited and nonaccredited counseling psychology programs, Ponterotto (in press) found that 89% of responding programs have a required multicultural counseling course, and 58% of programs integrate multicultural issues into all courses.

However, despite the increasing attention to multicultural issues in counselor preparation, concern has been expressed that little attention has focused on the assessment of multicultural competence (Ponterotto & Casas, 1991). The question remains, "Is our current multicultural training effectively preparing practitioners and researchers for work in this area?" (Ponterotto, Rieger, Barrett, & Sparks, 1994; see also, D'Andrea & Daniels, 1991, 1995; Mio & Morris, 1990). In response to this and related concerns, the Ethnic Minority Affairs Committee of APA's Division 17 charged Derald Wing Sue with the task of forming a second national committee (Sue, Carter et al., 1992) to address the implementation and assessment of
multicultural competencies in counseling preparation. One major recommendation stemming from this report is that increased research be devoted to the development of reliable, valid, and practical assessment instruments.

The purpose of this chapter is to describe the development and initial validation of the Multicultural Counseling Awareness Scale (MCAS), a counselor self-assessment scale designed to measure multicultural awareness, knowledge, and skill. The MCAS is one of four multicultural competency instruments currently undergoing continuing validation research (see review by Ponterotto et al., 1994, and Pope-Davis & Dings, 1995). The available instruments, in addition to the current MCAS, are the Cross-Cultural Counseling Inventory-Revised (CCCI-R; LaFromboise, Coleman, & Hernandez, 1991), the Multicultural Counseling Inventory (MCI; Sodowsky, Taffe, Gutkin, & Wise, 1994), and the Multicultural Awareness/Knowledge/Skills Survey (MAKSS; D’Andrea, Daniels, & Heck, 1991). All of these instruments, with the exception of the CCCI-R, are self-report in format. Furthermore, each of these instruments utilize the Sue et al. (1982) report, to some degree, as a conceptual base for item development.

In this chapter we report the results of four studies designed to develop the MCAS and gather initial assessments of the scale’s reliability, validity, and utility. Study 1 describes the development of the MCAS and examines the extent to which scores from the scale demonstrate internal consistency, content validity, criterion-related validity, and factor structure. Study 2 focuses on assessing the convergent validity of the revised MCAS:B, and testing its potential social desirability contamination. Finally, Studies 3 and 4 utilize pretest-posttest designs to assess the instrument’s ability to record change in multicultural competence as a result of specific training.

STUDY 1: SCALE DEVELOPMENT AND INITIAL VALIDATION

The purpose of this study was to develop the MCAS and examine the extent to which scores from the scale demonstrate internal consistency, content validity, criterion-related validity, and construct validity, particularly with regard to factor structure.

METHOD

MCAS Development

Scales can be classified according to the source of scale variation as either Stimulus-Centered, Subject-Centered, or Response Scales (Dawis, 1987). The MCAS was developed using Subject-Centered
Scale Methods (also called individual difference scales) where scores reflect differences among respondents in terms of their standing on the scale's dimensions. Subject-centered scales are those most frequently employed in counseling research (see Dawis, 1987, for an extensive discussion on scale construction in counseling psychology research). The MCAS was developed using the rational-empirico approach. The rational component included the initial item development and selection, a card sort procedure, a content validity check, and a focus group. The empirico component incorporated item analysis and sequenced factor analytic procedures. Each of these developments is described in subsequent sections.

**Item Development**

A large number of item-statements were generated from the counseling literature focusing on multicultural competence in the areas of awareness (beliefs/attitudes), knowledge, and skills (see Atkinson, Morten, & Sue, 1989; Carney & Kahn, 1984; Pedersen, 1988; Pedersen, Draguns, Lonner, & Trimble, 1989; Ponterotto & Casas, 1991; Sabnani, Ponterotto, & Borodovsky, 1991; Sue et al., 1982; Sue & Sue, 1990). The three original authors of the MCAS (Ponterotto, Sanchez, & Magids, 1991) extracted from this body of literature a total of 135 item-statements focusing on counselor multicultural awareness, knowledge, and skill. Next, the three researchers worked together to examine the respective items, check items for clarity and wording, and eliminate redundant items. As a result of this collaboration, 70 item-statements were retained. Each of the three competency areas had adequate (defined as at least 20 items per area) item representation.

Three independent card sorts were conducted by the scale developers to see if the 70 item-statements could be classified in the respective awareness, knowledge, and skill categories as originally intended. In each card sort only two categories emerged: Knowledge/Skills combined, and Awareness. The result of this qualitative card sort procedure is not inconsistent with the validation work on the CCCI and the CCCI-R, which found only mixed support for a three-factor model through factor analysis procedures (see psychometric reviews in Ponterotto et al., 1994; Sabnani & Ponterotto, 1992).

The card sort classified this pool of 70 item-statements as 42 Knowledge/Skills items and 28 Awareness items. A 7-point Likert-type scale with responses ranging from 1 (Not at All True) to 7 (Totally True) was developed for responding to each item. The total score on the MCAS can range from 70 to 490. In developing the scale, approximately one-half of the Awareness items were recast in a
negative direction to control for some forms of response bias. Clarity checks showed that Awareness items, but not Knowledge/Skills items, could be clearly recast in this way.

Content Validity Checks

Five published researchers in multicultural counseling who were not part of the research team, and who had completed at least one advanced measurement course, rated each of the 70 items on clarity (1=ambiguous/unclear to 5=clear/concise) and domain appropriateness (1=not relevant to multicultural Awareness or Knowledge/Skills to 5=most relevant to multicultural counseling Awareness or Knowledge/Skills). Any item with a mean less than 4 on both the clarity and appropriateness scale was reworded for clarity and/or domain appropriateness. The final questionnaire included the 70-item MCAS, a demographic background sheet, and the informed consent guidelines.

Focus Group

A 2-hour focus group using nine graduate students in counseling was conducted by the senior author to assess reactions to the scale format and content. The nine students comprised the total enrollment of a multicultural counseling class taught by the senior author; these students were not part of the larger development sample described below. One immediate concern identified was the length of the scale and the time necessary to complete it. Completion times ranged from 12 to 25 minutes, with the average time being 20 minutes. Respondents noted fatigue beginning around Item 50. Notwithstanding the concern for time, the respondents liked the scale, were pleased with its format and printing, and thought the items were clear and well worded. Group members also believed that the scale items served as good stimuli for discussion on multicultural issues in counseling.

Another concern expressed by the focus group was social desirability contamination. The scale instructions clearly highlighted the anonymity and confidentiality of the responses. Further, the instructions state “Base your responses on what you really feel/think at this time; do not respond as you ‘think you are supposed to.’ This is not a test; there are no right or wrong answers.” Nonetheless, through the focus group discussion it became clear that subjects could discern socially desirable responses. Therefore, in the revised and shortened MCAS, discussed as part of the item analysis and factor analysis sections, three social desirability assessment items were added to the scale.
Participants

The total sample for Study 1 consisted of 126 counselors and counselors-in-training. No member of the previously discussed focus group or content validity assessment group was included in this sample. There were four subgroups comprising this sample: 85 graduate students representing two different counseling/counseling psychology programs in New York City; 31 full-time school counselors employed in the New York City School System (primary and secondary levels); and 10 geographically dispersed national experts (“expert” is defined in the Procedure section) in multicultural counseling. Given that the MCAS is targeted for counselors at all levels (e.g., beginning through advanced, working in a variety of counseling settings), it was important to accrue a development sample that included trainees, practicing professionals, and leaders in the field (see related discussion by Dawis, 1987).

The mean age for the full sample was 36 years (median = 34 years, \( SD = 10.6 \)), with ages ranging from 22 to 63. There were 100 female respondents and 23 male respondents (3 individuals did not indicate gender). Racial/ethnic representation was as follows: 90 White Americans, 12 Hispanic Americans, 11 African Americans, 8 Asian American/Pacific Islanders, 1 Native American (with 2 listing “other,” and 2 not reporting race/ethnicity). Highest degree held by participants included: 45 Bachelor Degrees, 43 Master’s Degrees, 25 Post Masters Diplomas (N.Y. State recognizes 30-credit post masters Professional Diploma Programs), and 11 doctorates (and 2 who did not indicate their highest degree). Of those respondents currently enrolled in counseling programs, 53 were Master’s Degree students, 18 were post Master’s Degree students, and 25 were doctoral students.

In terms of multicultural training, 25 participants had never completed a multicultural counseling course; 40 had never completed a multicultural course but had covered these issues in other courses; 35 had completed one multicultural counseling course; and 23 had completed two or more multicultural classes. Of the full sample, 67 participants had attended multicultural-focused professional workshops/seminars outside of their regular academic programs. Further, 68 participants had received direct supervision of a multicultural clientele with a mean of 10 racial/ethnic minority clients seen under direct supervision.

Procedure

The graduate student samples were from counseling programs housing APA-Accredited Ph.D. Programs in Counseling Psychology.
The graduate students were enrolled in classes that were visited by the scale developers. All students in the class were invited to participate in the study and none declined. The survey was completely anonymous and participation in the study was voluntary.

The school counselor sample completed the MCAS as part of a full-day continuing education program on multicultural issues conducted by the New York City School System. All counselors attending the workshop consented to participate and completed the scale before the start of the day’s activities.

The national expert sample was recruited by the senior author through personal mail invitation. These experts were not part of the content validation procedure described earlier. Eleven invitations (with the accompanying MCAS) were sent out, of which 10 were returned (response rate of 91%). Each member of the expert sample is nationally known, has published numerous articles on multicultural counseling, and has taught a multicultural counseling course. Further, all the members were involved in national committee work on minority issues for APA (Division 17) and/or the American Counseling Association (ACA). These individuals were also highly represented among a ranking of the most frequently referenced authors in the multicultural counseling literature (see Ponterotto & Sabnani, 1989). Our goal in recruiting a validation sample ranging from graduate students to distinguished national experts is consistent with the intended MCAS target audience, and allowed for predictive within-sample criterion-related validity checks.

**Item Analysis**

The 70-item MCAS was found to have high internal consistency (coefficient alpha = .93). The scale also produced satisfactory score variation. On this latter point, Dawis (1987) recommends that new scales achieve a coefficient of variation (standard deviation divided by the mean) in the range of 5% to 15%. The 70-item MCAS had a coefficient of variation of 11.4%.

An item analysis was conducted to empirically test the strength and relationship of the scale items to the total scale, and to identify items that were attenuating the internal consistency of the scale. It was hoped that such a procedure would identify items that could be eliminated from the scale, thus making the scale more efficient.

The following criteria were used to eliminate items:

A) Items with low corrected item-total correlations (generally defined as less than .2 for this sample/instrument, with two exceptions
discussed later), or items whose elimination would raise the scale’s internal consistency, were withdrawn.

B) Items with skewed means, either above 6.25 or below 1.75 on the 7-point Likert-type scale, were eliminated due to their failure to discriminate within the sample.

C) Items that did not receive responses on at least 6 of the 7 possible Likert-type selections were eliminated (see similar scale development strategies conducted by Serling & Betz, 1990).

D) Additional items were eliminated based on low factor loadings, or multiple high loadings, in a series of factor analyses described below.

MCAS Factor Structure

A principal components analysis using varimax rotation on all factors satisfying Kaiser’s Criteria was performed and resulted in a 20-factor solution. A Scree test (Cattell, 1965a, 1965b), however, indicated that 4 or fewer factors would represent an optimal solution. Given the expected correlations of the scale’s factors, based on the factor analytic work of LaFromboise et al. (1991) with the conceptually similar CCCI-R, we decided to use oblique rotations to examine 4-, 3-, and 2-factor extractions (as well as the 1-factor model), using the principal components method.

The four-factor extraction accounted for 37.6% of the common variance and resulted as follows: 24 Knowledge/Skills items and 3 positively worded (i.e., higher scores indicate greater awareness) Awareness items loaded highly (.35 or above) on Factor 1 (eigenvalue = 14.4). Four negatively worded (i.e., lower scores indicate greater awareness) Awareness items, 1 positively worded Awareness item, and 1 Knowledge/Skills item loaded highly on Factor 2 (eigenvalue = 5.2). One negatively worded Awareness item loaded highly on Factor 3 (eigenvalue = 3.7). Four negatively worded Awareness items and 1 Knowledge/Skills item loaded highly on Factor 4 (eigenvalue = 3.0). Importantly, the four-factor solution resulted in multiple high loadings (.35 or above on at least 2 factors) on 20 items. Further, 11 items resulted in no factor loading reaching the minimum .35 level set. It was clear that the four-factor model was not the best-fit factor solution.

The three-factor oblique solution accounted for 33.3% of the common scale variance. Thirty-one Knowledge/Skills items and 4 negatively worded Awareness items loaded highly on Factor 1 (eigenvalue = 14.4). Four negatively worded Awareness items, 1 positively worded Awareness item, and 1 Knowledge/Skill item
loaded highly on Factor 2 (eigenvalue = 5.2). One negatively worded Awareness item loaded on Factor 3 (eigenvalue = 3.7). The three-factor solution resulted in 12 items with multiple high loadings, and 16 items with no high loadings. The three-factor model, which was predicated by the Sue et al. (1982) competency conceptualization, was not substantiated with the MCAS on the current sample.

The two-factor extraction accounted for 28% of the common variance. Twenty-seven Knowledge/Skills items and 3 positively worded Awareness items loaded highly on Factor 1 (eigenvalue = 14.4). Nine negatively worded Awareness items, 4 positively worded Awareness items, and 2 Knowledge/Skills items loaded highly on Factor 2 (eigenvalue = 5.2). Finally, the single factor extraction accounted for only 20.6% of the common variance and resulted in high loadings on 41 Knowledge/Skills items and 5 Awareness items.

In selecting the best factor structure, our primary criteria was the interpretability and clarity of each resulting factor in the given solution (see Ponterotto & Wise, 1987; Tinsley & Tinsley, 1987). Using this guideline it was clear that the two-factor model best represented our data base. Factor 1 represented Knowledge/Skills, and Factor 2 represented Awareness. This extraction is consistent with the pre-analysis independent card-sorts discussed earlier.

Final MCAS Version

The final MCAS scale version resulted from an examination of the item analysis results plus the factor loadings on the two-factor oblique extraction model. Initially, 31 items were eliminated using either the three item-analysis criteria specified earlier (n = 6 items eliminated) and/or through the identification of low (less than .35; n = 16 items eliminated) or multiple high factor loadings (n = 9 items eliminated) from the two-factor extraction model. Included in the final version of the scale, however, are two items that did not meet all the inclusion criteria, but were deemed by the authors and content validity evaluators to be important to our construct (see related discussion by Dawis, 1987, and Long, 1983). These items, #2 and #28, had item-to-total correlations slightly below the .20 cutoff specified in the item analysis section, but are included in the revised MCAS. Therefore, a total of 29 of the 70 items were eliminated from the prototype MCAS.

The new MCAS version (titled the MCAS Form B: Revised Self Assessment [MCAS:B], to distinguish it from the 70-item scale) consisted of 28 Knowledge/Skills items and 13 Awareness items (9 worded in a negative direction and 4 worded in a positive direction). To this pool of 41 items we added 3 social desirability items and a new
awareness item. The awareness item was added to bolster this subscale; and the social desirability items were added as a potential within-scale screening caution given the socio-political sensitivity of the multiculturalism topic (see recent discussion in Ponterotto & Pedersen, 1993). We believed that the addition of 4 items would not significantly add to the amount of time required to complete the MCAS:B.

Therefore, the revised MCAS:B consists of 45 items: 41 resulting from the item analysis and sequenced factor analyses, and 4 new items. In total there were 28 Knowledge/Skills items, 14 Awareness items, and 3 Social Desirability test items. Table 1 presents these items along with factor loadings, communality estimates, and item-total correlations. The revised MCAS:B is the focus of Studies 2 through 4.

Table 1. Factor Loadings, Communality Estimates, and Corrected Item-Total Correlations for The MCAS.

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<tr>
<th></th>
<th>Factor 1 Knowledge/Skills</th>
<th>Factor 2 Awareness</th>
<th>Final Communality Estimate</th>
<th>Corrected Item-Total Correlation</th>
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<tbody>
<tr>
<td>1.</td>
<td>I am familiar with the research and writings of Janet E. Helms and I can discuss her work at length spontaneously.</td>
<td>.69</td>
<td>.20</td>
<td>.47</td>
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<tr>
<td>2.</td>
<td>I believe all clients should maintain direct eye contact during counseling.</td>
<td>.07</td>
<td>.50</td>
<td>.26</td>
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<tr>
<td>3.</td>
<td>I check up on my minority/cultural counseling skills by monitoring my functioning -via consultation, supervision, and continued education.</td>
<td>.48</td>
<td>.11</td>
<td>.23</td>
</tr>
<tr>
<td>4.</td>
<td>I am familiar with the research and writing of Derald Wing Sue and I can discuss his work at length spontaneously.</td>
<td>.71</td>
<td>.27</td>
<td>.51</td>
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5. I am aware some research indicates that minority clients receive “less preferred” forms of counseling treatment than majority clients.

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<td>.62</td>
<td>.32</td>
<td>.41</td>
<td>.60</td>
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6. I think that clients who do not discuss intimate aspects of their lives are being resistant and defensive.

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<td>.23</td>
<td>.53</td>
<td>.29</td>
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7. I am aware of certain counseling skills, techniques, or approaches that are more likely to transcend culture and be effective with any client.

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<td>.44</td>
<td>.07</td>
<td>.19</td>
<td>.34</td>
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8. I am aware that the use of standard English with a lower-income or bilingual client may result in misperceptions of the client’s strengths and weaknesses.

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<td>.31</td>
<td>.42</td>
<td>.22</td>
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9. I am familiar with the “culturally deficient” and “culturally deprived” depiction of minority mental health and understand how these labels serve to foster and perpetuate discrimination.

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<td>.61</td>
<td>.25</td>
<td>.38</td>
<td>.55</td>
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10. I am familiar with the research and writings of Donald R. Atkinson and I can discuss his work at length spontaneously.

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<td>.62</td>
<td>.08</td>
<td>.39</td>
<td>.60</td>
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11. I feel all the recent attention directed toward multicultural issues in counseling is overdone and not really warranted.

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<th>New Item - Awareness</th>
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<td>12.</td>
<td>I am aware of the individual differences that exist within members of a particular ethnic group based on values and beliefs, and level of acculturation.</td>
<td>.45</td>
<td>.31</td>
<td>.24</td>
</tr>
<tr>
<td>13.</td>
<td>I am aware some research indicates that minority clients are more likely to be diagnosed with mental illnesses than are majority clients.</td>
<td>.61</td>
<td>.23</td>
<td>.37</td>
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<tr>
<td>14.</td>
<td>I think that clients should perceive the nuclear family as the ideal social unit.</td>
<td>.08</td>
<td>.68</td>
<td>.48</td>
</tr>
<tr>
<td>15.</td>
<td>I believe that being highly competitive and achievement oriented are traits that all clients should work towards.</td>
<td>.10</td>
<td>.64</td>
<td>.42</td>
</tr>
<tr>
<td>16.</td>
<td>I am familiar with the research and writings of J. Manuel Casas and I can discuss his work at length spontaneously.</td>
<td>.64</td>
<td>.11</td>
<td>.42</td>
</tr>
<tr>
<td>17.</td>
<td>I am aware of my limitations in cross-cultural counseling and could specify them readily.</td>
<td>.42</td>
<td>.25</td>
<td>.20</td>
</tr>
<tr>
<td>18.</td>
<td>I am familiar with the research and writings of Paul B. Pedersen and I can discuss his work at length spontaneously.</td>
<td>.72</td>
<td>.23</td>
<td>.51</td>
</tr>
<tr>
<td>19.</td>
<td>I am aware of the differential effects of nonverbal communication (e.g. personal space, eye contact, handshakes) on different ethnic cultures.</td>
<td>.49</td>
<td>.03</td>
<td>.25</td>
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<td>Development and Validation of the MCAS</td>
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<tr>
<td>20.</td>
<td>I understand the impact and operations of oppression and the racist concepts that have permeated the mental health professions.</td>
<td>.65</td>
<td>.02</td>
<td>.45</td>
</tr>
<tr>
<td>21.</td>
<td>I realize that counselor-client incongruities in problem conceptualization and counseling goals often reduce counselor credibility.</td>
<td>.50</td>
<td>.33</td>
<td>.29</td>
</tr>
<tr>
<td>22.</td>
<td>I am familiar with the research and writings of Michael Santana-DeVio and I can discuss his work at length spontaneously.</td>
<td>New Item - Social Desirability</td>
<td></td>
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<tr>
<td>23.</td>
<td>I am aware that some minorities see psychology functioning to maintain and promote the status and power of the White Establishment.</td>
<td>.52</td>
<td>.17</td>
<td>.28</td>
</tr>
<tr>
<td>24.</td>
<td>I am knowledgeable of acculturation models for various ethnic minority groups.</td>
<td>.76</td>
<td>-.01</td>
<td>.64</td>
</tr>
<tr>
<td>25.</td>
<td>I have an understanding of the role culture and racism play in the development of identity and world views among minority groups.</td>
<td>.70</td>
<td>.12</td>
<td>.49</td>
</tr>
<tr>
<td>26.</td>
<td>I believe that it is important to emphasize objective and rational thinking in minority clients.</td>
<td>.18</td>
<td>.48</td>
<td>.23</td>
</tr>
<tr>
<td>27.</td>
<td>I am aware of culture-specific, that is culturally indigenous, models of counseling for various racial/ethnic groups.</td>
<td>.72</td>
<td>-.08</td>
<td>.61</td>
</tr>
</tbody>
</table>
28. I believe that my clients should view a patriarchal structure as the ideal. .03 .52 .29 .17

29. I am aware of both the barriers and benefits related to cross-cultural counseling. .70 .11 .50 .58

30. At this point in my professional development, I feel very competent counseling the culturally different. New Item - Social Desirability

31. I am comfortable with differences that exist between me and my clients in terms of race and beliefs. .35 .14 .12 .28

32. I am aware of institutional barriers which may inhibit minorities from using mental health services. .72 .26 .53 .66

33. I am aware that counselors frequently impose their own cultural values upon minority clients. .47 .32 .26 .45

34. I think that my clients should exhibit some degree of psychological mindedness and sophistication. .23 .56 .32 .33

35. I am familiar with the research and writings of Teresa D. LaFromboise and I can discuss her work at length spontaneously. .57 .02 .35 .53

36. I believe that minority clients will benefit most from counseling with a majority counselor who endorses White middle class values and norms. .14 .43 .19 .28
37. I am aware that being born a White person in this society carries with it certain advantages. 

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<td></td>
<td>.31</td>
<td>.54</td>
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38. At this point in my professional development, I feel I could benefit little from clinical supervision of my multicultural client caseload.

New Item - Social Desirability

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39. I feel that different socioeconomic status backgrounds of counselor and client may serve as an initial barrier to effective cross-cultural counseling.

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<td>.33</td>
<td>.40</td>
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40. I have a clear understanding of the value assumptions inherent in the major schools of counseling and know how these interact with values of the culturally diverse.

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<tbody>
<tr>
<td></td>
<td>.72</td>
<td>.08</td>
<td>.54</td>
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41. I am aware that some minorities see the counseling process as contrary to their own life experiences and inappropriate or insufficient to their needs.

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<td>.49</td>
<td>.34</td>
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42. I am aware that being born a minority in this society brings with it certain challenges that White people do not have to face.

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<td></td>
<td>.25</td>
<td>.37</td>
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43. I believe that clients all must view themselves as their number one responsibility.

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<td>.21</td>
<td>.45</td>
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</table>
44. I am sensitive to circumstances (personal biases, stage of ethnic identity) which may dictate referral of the minority client to a member of his/her own race/culture.

45. I am aware that some minorities believe counselors lead minority students into nonacademic programs regardless of student potential, preferences, or ambitions.

<table>
<thead>
<tr>
<th>Percent of Variance</th>
<th>20.6</th>
<th>7.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalue</td>
<td>14.4</td>
<td>5.2</td>
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<tr>
<td>Coefficient Alpha</td>
<td>.93</td>
<td>.78</td>
</tr>
</tbody>
</table>

Note: Items are presented to subjects on a 7-point Likert-type scale ranging from 1 (not at all true) to 7 (totally true), with 4 representing somewhat true.

a Items 2, 6, 11, 14, 15, 26, 28, 34, 36, and 43 are negatively worded and are reverse scored.

b Items 11, 22, 30, and 38 represent new scale items developed after the validation.

Internal Consistency and Subscale Intercorrelations

After selecting the 41 items through the specified elimination procedures, the data for only these 41 items were re-analyzed using the bidimensional (Knowledge/Skills, Awareness) multicultural competency construct. The coefficient alpha for the 41-item scale was .93. The Knowledge/Skills subscale had a coefficient alpha of .93; the Awareness subscale had a coefficient alpha of .78. The correlation between the Knowledge/Skills and Awareness subscales was .37, a moderate magnitude supporting the oblique nature of the two-factor model. The coefficient of variation for the 41-item MCAS:B was 17%, slightly above the 5% to 15% range deemed preferable by Dawis (1987).

Criterion-Related Validity

Using the Group-Difference approach as a measure of criterion-related validity (Walsh & Betz, 1990), we examined MCAS score differences between logical subgroups. One-way MANOVAs were
used to compare the following groups on MCAS subscale scores: "experts" (n = 10) versus student (n = 11, and n = 66) and practitioner (n = 29) groups; those who had multicultural training (n = 92) in their graduate programs versus those who had no training (n = 21); and those who had seen minority clients under direct supervision (n = 62) versus those who had not (n = 47). Furthermore, MANOVAs examined the effects of race and gender because these variables have been found to be related to multicultural competency (e.g., Pope-Davis, Dings, & Ottavi, 1995; Pope-Davis & Ottavi, 1994a). Given five MANOVAs were performed, the alpha level required for significance was adjusted using the Bonferroni formula (Hays, 1981). Dividing the traditional alpha level (.05) by the number of independent MANOVAs (5), the new alpha level was set at .01.

A one-way MANOVA was performed comparing MCAS subscale scores of national experts, practicing school counselors, and two groupings of graduate students (from two separate universities). This MANOVA was significant [Wilks’s Lambda F(6, 220) = 8.47; p < .001]. Follow-up univariate F-tests indicated a significant effect for Subscale 1: Knowledge/Skills [F(3, 112) = 15.1; p < .001] and for Subscale 2: Awareness [F(3,112) = 5.4; p < .01]. A Student-Neuman-Keuls post hoc test for Knowledge/Skills indicated that the expert group scored significantly higher (p < .05) than each of the other three groups. The expert group had a mean of 6.5 (SD = .36), whereas the other three group means were between 4.54 (SD = .67) and 4.64 (SD = .96). The post-hoc tests for Awareness found the expert group (Mean = 5.85; SD = .26) to be significantly higher (p < .05) than each of the other groups: school counselors (Mean = 4.88; SD = .84), graduate student group one (Mean = 5.33; SD = .69), and graduate student group two (Mean = 5.11; SD = .62). Furthermore, graduate student group one scored significantly higher (p < .05) than the school counselor group.

A one-way MANOVA was used to compare those subjects who had never had a multicultural counseling course with subjects who had either had one or more courses or who had multicultural issues covered in other classes. This MANOVA reached the traditional required alpha level [Hotellings F(2, 110) = 3.99; p < .05], but not our Bonferroni adjusted requirement, and therefore will be interpreted as not significant.

Subjects who had worked with minority clients under supervision scored significantly higher [Hotellings F(2, 106) = 7.4; p < .001] than subjects who had not counseled minority clients under direct supervision. Univariate follow-up tests found a significant effect only for Knowledge/Skills [F(1, 107) = 14.9; p < .001]; with the mean for
supervised subjects being 5.17 ($SD = .83$) and the mean for the comparison group 4.496 ($SD = .98$).

Given the relatively small samples of men and non-Whites in the study, a race-by-gender factorial comparison was not feasible (e.g., there were only four non-White males in the study). Therefore two separate one-way MANOVAs were conducted. With regard to the race of the respondent, minority subjects (all minority groups combined for adequate sample size, $n = 32$) did score significantly higher than did White subjects ($n = 82$) [Hotellings $F(2, 111) = 6.0; \ p < .01$]. Follow-up univariate tests showed that there was a significant difference on Knowledge/Skills scores only [$F(1, 112) = 6.5; \ p < .05$]. On this Knowledge/Skills subscale minority subjects scored a mean of 5.13 (SD = .98) whereas White respondents scored a mean of 4.62 (SD = .94).

Finally, although the mean score for women (Knowledge/Skills = 4.8 [SD = 1.01], and Awareness = 5.29 [SD = .73]) appeared slightly higher than the score for men (Knowledge/Skills = 4.6 [SD = .84], and Awareness = 5.07 [SD = .72]), the magnitude of the difference was not statistically significant.

DISCUSSION

The MCAS is a subject-centered (Dawis, 1987) self-report instrument developed using a rational-empirico approach. The instrument is designed to operationalize aspects of the "multicultural competency" construct deemed central to preparation in counseling psychology (Atkinson et al., 1989; Pedersen, 1988; Sue et al., 1982; Sue, Carter, et al., 1992). A 70-item MCAS prototype was developed and piloted on a diverse counselor sample.

Using factor-analytic and qualitative (i.e., card sorts) procedures, Study 1 found a two-factor solution to best represent "multicultural competency" as defined by the MCAS items. Specified item-analysis and factor-analysis procedures led to the elimination of 29 items from the prototype MCAS. The 41-item MCAS was conceptualized as a bi-dimensional instrument consisting of a Knowledge/Skills subscale and an Awareness subscale. Both subscales were found to have adequate internal consistency, and there was a moderate interscale correlation between the two subscales, supporting the bidimensional, oblique nature of the MCAS.

Incorporating the Walsh and Betz (1990) Group Differences Approach to criterion-related validity, we found that, as expected, the national "expert" subsample scored significantly higher than the comparison groups on both subscales. Interestingly, this series of comparisons also indicated that a graduate student subsample scored
higher on the Awareness subscale than did a full-time practicing school counselor subsample.

The fact that the "expert" group scored higher on both subscales is not surprising, given the selectivity of this subsample. However, it is interesting to consider the higher Awareness scores of one graduate student subsample over the practicing professionals. One explanation could center on the fact that many of the school counselors were trained a number of years ago when multicultural issues were not regularly integrated into counseling curricula. The graduate student sample, however, was attending a program with a multicultural emphasis, where three of the five core faculty specialize in this area, and where cultural issues are often discussed and explored. The small sample sizes of the cohorts, however, caution against more detailed interpretation of these findings at this time.

Study 1 also found that subjects who had worked with minority clients under clinical supervision scored higher on Knowledge/Skills. This finding is consistent with previous related research (e.g., Ottavi, Pope-Davis, & Dings, 1994; Pope-Davis & Ottavi, 1994a; Sodowsky, this volume).

Finally, the race and gender MANOVAs indicated only a significant effect for race, with non-Whites scoring higher than Whites on Knowledge/Skills. The race comparison is consistent with previous findings (e.g., Pope-Davis & Ottavi, 1994a; Sodowsky, this volume). The lack of a gender effect contradicts findings reported in Pope-Davis and Ottavi (1994b) and Pope-Davis et al. (1995). One of the limitations of this study, however, was the small sample of men. Clearly, more systematic research with larger and more balanced (by gender) samples is needed to tease out the mixed findings.

It is interesting to explore the root of the varied findings for the Knowledge/Skills and Awareness subscales. Knowledge/Skills differences were more readily picked up by the MCAS. Research is needed to examine whether the Awareness subscale, measuring awareness, sensitivity, and subtle racial bias, is more stable and immutable to change, and therefore less sensitive to experience (courses, supervision), or whether the MCAS Awareness subscale is not effective in measuring "real" differences. Notwithstanding the need for further research, the group-differences approach incorporated in this study lends some support to the criterion-related validity of the MCAS.

An important limitation of this study is the relatively small sample size. Although perhaps adequate for our item analysis and
factor analysis (see empirical work of Arrindell and Van der Ende, 1985 who found that smaller sample sizes, with at least 20 subjects per factor, can yield stable factor solutions), larger national samples are needed to further explore the factor structure of the MCAS. Notwithstanding the limitations of the present study, the overall results indicate that the MCAS had enough reliability and validity support to warrant additional research. Studies 2 through 4 expand the critical assessment of the MCAS using the revised (MCAS:B) 45-item version (the four new items were specified earlier and are listed in Table 1).

**STUDY 2: TESTS OF CONVERGENT VALIDITY AND SOCIAL DESIRABILITY CONTAMINATION**

The purpose of Study 2 was to examine the convergent validity and the potential social desirability of the MCAS:B and to gather additional indices of homogeneity (assessing internal consistency using the coefficient alpha). In selecting instruments to administer with the MCAS:B we considered those that would have hypothesized relationships to our theoretical construct and that were empirically reliable and valid. Three small correlational studies were conducted with separate samples and incorporating the following three instruments: the Cross-Cultural Counseling Inventory-Revised (CCCI-R; LaFromboise et al., 1991), the New Racism Scale (NRS; Jacobson, 1985); and the Marlowe-Crowne Social Desirability Scale (SDS; Crowne & Marlowe, 1960). The latter instrument was incorporated to examine the potential social desirability contamination of the MCAS:B. We were further interested in an examination of the three-item social desirability check added to the MCAS:B, as this item cluster is considered a unique aspect of the MCAS:B relative to other self-report multicultural competency assessments (see Pope-Davis & Dings, 1995).

Our hypothesis was that MCAS:B Knowledge/Skills subscale scores would correlate positively and significantly with scores on the CCCI-R (a general multicultural knowledge instrument). We further expected the MCAS:B Awareness subscale to correlate significantly with scores on the NRS, as both measure racial/ethnic awareness, sensitivity, and bias.

**Samples**

Three samples were employed in the present study. No participants in this study were involved in Study 1. Each sample was recruited from two separate graduate courses in counseling or counseling psychology (the later program is APA-Accredited) from
an urban university in the Northeast. This university was one of the two described in Study 1.

*Sample* 1 included 72 graduate students (two participants were counselor educators) who ranged in age from 22 to 61, with a mean age of 34.69 (SD = 10.2). The demographic breakdown was as follows: 20 males, 52 females; 48 White participants, 24 minority participants (12 African Americans, 9 Hispanics, plus other); 32 held the Bachelor’s Degree, 38 a Master’s Degree, and 2 a Doctorate. Twenty-one participants had received no prior academic coursework (complete course[s] or parts of a course) in multicultural counseling, and 51 had some prior coursework. Finally, 47 participants had completed no separate workshop exercises in multicultural counseling, whereas 25 had taken such workshops.

*Sample* 2 included 42 graduate students (one participant was a counselor educator) who ranged in age from 21 to 56, with a mean age of 30.71 (SD = 8.5). The demographic breakdown was as follows: 5 males, 37 females; 35 White participants, 7 minority participants (3 Asian Americans plus other); 30 participants held the Bachelor’s Degree, 11 a Master’s Degree, and 1 a doctorate. Eighteen participants had received no prior academic coursework in multicultural counseling, and 24 had some prior coursework. Finally, 34 participants had completed no separate workshop experience in multicultural counseling, whereas 8 had taken such workshops.

*Sample* 3 included 45 graduate students (two participants were counselor educators) who ranged in age from 22 to 50, with a mean age of 31.11 (SD = 8.9). The demographic breakdown was as follows: 15 males, 30 females; 36 Whites, 9 minority persons (5 African Americans, plus other); 34 participants held the Bachelor’s Degree, 9 a Master’s Degree, and 2 a doctorate. Twenty-two participants had received no prior academic coursework in multicultural counseling, and 23 had some prior coursework. Finally, 35 participants had completed no separate workshop experience in multicultural counseling, whereas 9 had taken such workshops.

**Procedure**

Instruments were distributed to full classes by one of the seven authors. In each case, arrangements were made with the course professor to allow a researcher into the classroom to administer two instruments, and then provide a debriefing period and a guest lecture/discussion on multicultural issues. The research team felt it was important that the subjects receive something tangible for their participation in the study, and because we did not pay them, we gave
them a full class lecture. In this regard we followed the stringent ethical recommendations for multicultural research set forth by Ponterotto and Casas (1991).

Sample 1 completed the MCAS:B and CCCI-R, Sample 2 completed the MCAS:B and NRS, and Sample 3 completed the MCAS:B and SDS. Each pair of instruments (the MCAS:B with each of the three instruments described below) was counterbalanced and given to two counseling classes. Classes were selected based on availability, and all were visited during the same academic year. In total, six counseling courses (of varying topics) on two of the University’s three campuses were involved. No prospective subjects declined to participate in the study.

Instruments

Cross-Cultural Counseling Inventory-Revised (CCCI-R). The CCCI-R (LaFromboise et al., 1991) is a 20-item instrument designed to measure the 11 competencies set forth in the Sue et al. (1982) Position Paper. The CCCI-R is completed by an evaluator or supervisor observing a counselor (or counselor-trainee) engaged in a cross-cultural counseling situation. Using a 6-point Likert-type response format (where 1 = Strongly Disagree and 6 = Strongly Agree), the evaluator indicates the extent to which the items describe the observed counselor. A sample CCCI-R item is “Counselor demonstrates knowledge about client’s culture.” Scores range from 20 (little multicultural knowledge/skill) to 120 (high levels of multicultural knowledge/skill).

In the present study the CCCI-R was adapted for use as a counselor self-report instrument. This was done by asking subjects to rate themselves on the items. This modification was pilot tested among the research team and found to be meaningful and understandable. It is important to note that the CCCI-R items are similar in content, focus, format, and wording to items on the MCAS Factor 1 and to items on other multicultural competence self-report instruments (see review in Ponterotto et al., 1994), and therefore, it is not surprising that this adaptation proceeded smoothly.

The CCCI-R is the longest standing, and at the time this study began, the most researched multicultural competency scale. The subject of periodic psychometric reviews (Ponterotto et al., 1994; Sabnani & Ponterotto, 1992), the CCCI-R has very good internal consistency (coefficient alpha = .95; LaFromboise et al., 1991), satisfactory interrater reliability, and adequate indices of content and criterion-related validity. Although conceptualized as a tridimensional construct (consistent with the Sue et al., 1982 report), it is recommended that the scale be used as a unidimensional (single Total Score) measure.
7. DEVELOPMENT AND VALIDATION OF THE MCAS

(T. LaFromboise, personal communication, December 3, 1990), given its mixed factor analytic results (Ponterotto et al., 1994).

The New Racism Scale (NRS). The NRS was developed by Jacobson (1985) and is a modification of the older Modern Racism Scale (McConahay & Hough, 1976). The scale is designed to measure White people's racism toward Blacks. The NRS includes seven multiple-choice items, with each item having either three or four response choices. Scale scores range from 7 to 26. In the present study the items were coded so that low scores indicate higher levels of racism. A sample stimulus question is as follows: “Would it upset you personally if Blacks moved into your neighborhood?”

The NRS has satisfactory internal consistency: Coefficient alphas across three respective studies were .70 (Jacobson, 1985), .62 (Carter, 1990), and .62 (Pope-Davis & Ottavi, 1992). Given the brevity of the NRS, these moderate coefficients support the internal consistency of the scale. Three studies provided evidence of convergent and discriminant validity for the NRS through its expected relationship with various levels of White Racial Identity Development (Carter, 1990; Pope-Davis & Ottavi, 1992; Pope-Davis & Ottavi, 1994b).

Social Desirability Scale. The Marlowe-Crowne Social Desirability Scale (SDS) consists of 33 true-false items measuring one's need to seek approval by responding in a culturally appropriate and acceptable manner. Crowne and Marlowe (1960) report the internal consistency of the SDS to be .88, and they report a one-month test-retest stability coefficient of .89. The SDS is a frequently used social desirability scale and has strong indices of validity (Crowne & Marlowe, 1964).

RESULTS

Table 2 presents coefficient alphas for the CCCI-R, NRS, SDS, and MCAS:B subscales (including the three-item social desirability cluster) across the three samples. Table 3 presents the results of Pearson correlations of MCAS:B subscale scores with the CCCI-R, NRS, and SDS. The MCAS:B Knowledge/skills subscale correlated positively and significantly ($r = .44; p < .001$) with the CCCI-R as hypothesized. The MCAS:B Awareness subscale correlated positively and significantly ($r = .49; p < .001$) with the NRS as hypothesized. These significant correlations in the expected direction provide some evidence for the convergent validity of the MCAS:B. (Note: These findings also support the construct validity of the MCAS:B using the criteria specified by Tinsley, 1992). Finally, the correlations between the Knowledge/Skills subscale and the Awareness subscale across the three samples were .45, .35, and .47, respectively.
Table 2. Coefficient Alphas for the MCAS:B Factors, CCCI-R, NRS, and SDS Across Three Samples.

<table>
<thead>
<tr>
<th></th>
<th>CCCI-R</th>
<th>NRS</th>
<th>SDS</th>
<th>MCAS:B Knowledge/ Skills Subscale</th>
<th>MCAS:B Awareness Subscale</th>
<th>MCAS:B Social Desirability Cluster</th>
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<tbody>
<tr>
<td>Sample 1 (N=72)</td>
<td>.93</td>
<td>.93</td>
<td>.93</td>
<td>.81</td>
<td>.43</td>
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<tr>
<td>Sample 2 (N=42)</td>
<td>.65</td>
<td>.91</td>
<td>.76</td>
<td>.15</td>
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<tr>
<td>Sample 3 (N=45)</td>
<td>.83</td>
<td>.93</td>
<td>.78</td>
<td>.02</td>
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Note: MCAS:B = Multicultural Counseling Awareness Scale: Form B
CCCI-R = Cross-Cultural Counseling Inventory—Revised
NRS = New Racism Scale
SDS = Social Desirability Scale

Table 3. Pearson Correlations of MCAS:B Factor Scores with the CCCI-R, NRS, and SDS Across Three Samples; and Correlations Between MCAS:B Factor Scores Across Three Samples.

<table>
<thead>
<tr>
<th></th>
<th>MCAS:B Knowledge/ Skills Subscale</th>
<th>MCAS:B Awareness Subscale</th>
<th>Correlations Between Knowledge/Skills and Awareness Subscales</th>
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<tbody>
<tr>
<td>(Sample 1: N=72)</td>
<td></td>
<td></td>
<td>.45**</td>
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<tr>
<td>CCCI-R</td>
<td>.44**</td>
<td>.15</td>
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<tr>
<td>(Sample 2: N=42)</td>
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<td>.35*</td>
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<tr>
<td>NRS</td>
<td>.16</td>
<td>.49**</td>
<td></td>
</tr>
<tr>
<td>(Sample 3: N=45)</td>
<td></td>
<td></td>
<td>.47**</td>
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<tr>
<td>SDS</td>
<td>.22</td>
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</table>

Note: MCAS:B = Multicultural Counseling Awareness Scale: Form B
CCCI-R = Cross-Cultural Counseling Inventory—Revised
NRS = New Racism Scale
SDS = Social Desirability Scale
* = p < .05
** = p < .001
DISCUSSION

The coefficients in Table 2 demonstrate that the internal consistency of the MCAS:B Knowledge/Skills and Awareness subscales were satisfactory and were similar to the results found in Study 1. Coefficient alphas for the MCAS:B three-item social desirability test cluster were lower and more variable. Given only three items, one would expect to find low internal consistency. Another possible explanation is that the three items were measuring different types of social desirability. For example Item #22, “I am familiar with the research and writings of Michael Santana-DeVio and I can discuss his work at length spontaneously,” clearly measures faking for there is no such person. However, the other two social desirability items (#30 and #38; see Table 1) may be more a measure of naivety or ignorance than purposeful faking. This possible distinction could have affected the overall homogeneity of the cluster (personal communication, Jonathan G. Dings, University of Iowa, February 24, 1993). Regardless of the explanation for lower coefficient alphas on this cluster of items, it would be wise not to use them for any interpretive purposes. This topic will be covered further in this chapter’s Integrative Discussion.

The present study found the coefficient alphas for the comparison instruments, the CCCI-R, NRS, and SDS to be quite similar to their previous use reported in the Instruments section. The magnitude of these correlations led us to conclude that these instruments were valid for use in the present study. It should be highlighted that although the NRS coefficient alpha was somewhat low (.65), the instrument includes only seven items.

The CCCI-R did not correlate significantly with the MCAS:B Awareness subscale ($r = .16$), as expected. Furthermore, the MCAS:B Knowledge/Skills subscale did not correlate significantly ($r = .16$) with the NRS, also as predicted. The pattern of correlations provides some additional evidence that although moderately correlated, the Knowledge/Skills and Awareness subscales are measuring unique aspects of multicultural competence (see discussion by Long, 1983). Finally, with regard to possible social desirability contamination of the MCAS:B, the results show minimal and nonsignificant correlations between the SDS and the MCAS:B subscales.

In summary, Study 2 indicated that the MCAS:B subscales maintained satisfactory internal consistency across new, yet smaller, samples. Furthermore, the pattern of correlations with theoretically linked instruments supports the convergent validity of the MCAS:B subscales. Finally, this study provides some evidence that the MCAS:B
subscales are not subject to social desirability contamination, at least as measured by the Social Desirability Scale (Crowne & Marlowe, 1960).

STUDIES 3 AND 4

The purpose of Studies 3 and 4 was to examine the sensitivity of the MCAS:B in recording changes as a result of multicultural training. In Study 3, the MCAS:B was used as a pre-/post-test measure in a single multicultural counseling course. Study 4 replicated Study 3 using tighter experimental controls and geographically dispersed samples. These studies were designed to further test the criterion-related and construct validity (in that multicultural competence is a construct that can be taught and developed) of the MCAS:B [see Standards for Educational and Psychological Testing (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1985), Tinsley (1992), and Walsh and Betz (1990) for guides we used to distinguish types of validity].

STUDY 3

Sample and Procedure

This sample consisted of 19 graduate students enrolled in a multicultural counseling class. Sample demographics are very similar to the samples described fully in Study 2. The MCAS:B was administered on the first and last days of the semester. Participation was voluntary and anonymous. No student declined to participate in the study.

Results

A one-way MANOVA was performed with time of test (pre or post) serving as the grouping variable, and the two MCAS:B subscale scores as the dependent variables. Post-test scores were significantly higher [Hotelling F(2, 35) = 22.1; p < .001] than pre-test scores. Univariate follow-up tests indicated a significant effect for Knowledge/Skills [F(1, 36) = 45.1; p < .001]. The mean at pre-test was 3.88 (SD = .70) and at post-test the mean was 5.39 (SD = .68). The Awareness subscale mean rose from 6.0 (SD = .54) at pre-test to 6.25 (SD = .41) at post-test, but the increase was not enough to reach significance (p = .1).

Discussion

This pilot study indicated that the MCAS:B was sensitive to measuring a post-course increase in multicultural knowledge/skills. With regard to the Awareness subscale, either the course was not
successful in raising multicultural awareness to a significant degree, or the MCAS:B was not sensitive enough to measure an increase. This pilot study had obvious limitations, the most blatant being that the study had no control group, and the course instructor was one of the MCAS developers (creating a possible course content bias). Study 4 addressed these concerns through a more sophisticated design.

STUDY 4

Given the obvious limitations of Study 3, in Study 4 we administered the MCAS:B as a pre- and post-test measure in three courses during a single semester. Course 1 was the multicultural course described in Study 3, taught again by the senior author one year later. Course 2 served as a control group; this course was a general developmental counseling course offered by the instructor of Course 1. Course 3 was a multicultural counseling course offered at a university in the state of New Mexico.

The expectations of this study were as follows. Course 1 and Course 3 would both result in significant improvement on MCAS:B scores at post-test. Assuming that multicultural competence is a definable construct (Sue et al., 1982; Sue, Carter et al., 1992) and that the MCAS:B effectively measures this construct, then score improvements should result, regardless of the professor or university where the content is taught (assuming that both professors are knowledgeable of the construct). Course 2, the control, would not show significant improvement at post-test. It is important to note, however, that at the university where Course 1 and Course 2 are taught, multicultural issues are integrated into all coursework (so the control nature of Course 2 is in reality only a partial control), and for this reason some gain in post-test scores would not be surprising even for Course 2.

Sample

Course 1 was a multicultural counseling course offered by the senior author. There were 8 students (out of 10) who were present for both the pre-test and post-test. The student demographic profile was similar to that described in Study 2.

Course 2 was a developmental psychology course (with a counseling emphasis) taken by 30 students (30 of whom completed the pre-test and 24 the post-test) in the same counseling program described above. Although multiculturalism is not the focus in this course, the topic is integrated to some degree into the curriculum. Student demographics were similar to those described fully in Study 2.
Course 3 was offered at a university in New Mexico. Twenty-nine students were enrolled, 26 completed the pre-test and 29 the post-test. The content, structure, and format of this class is similar to that of Course 1 and many multicultural courses in counseling programs (see discussion by Mio & Morris, 1990). This sample ranged in age from 21 to 61, with a mean age of 37.38 (SD = 11.3). The demographic breakdown was as follows: 10 males, and 19 females; 21 White participants, 8 minority participants (5 Hispanics plus other); 25 participants held the Bachelor’s Degree and 4 the Master’s Degree.

Procedure

The MCAS:B pre-test was group-administered the first day of class for each course. As noted previously, the first page of the MCAS:B includes informed consent guidelines and specific directions for completing the instrument. No student declined participation in the study. The MCAS:B post-test was completed during the last or next to last class of the semester (depending on the professor’s timetable). In Course 1 and Course 2, the post-test was again group administered. In Course 3, however, the professor was short on time and asked students to complete the MCAS:B at home and return it the following week. This alteration of the testing situation was unfortunate and presents a methodological limitation of the study.

Results

To examine the equivalency of MCAS:B scores across the three courses at pre-test, a one-way MANOVA was performed with the course as the grouping variable and MCAS:B subscale scores as the dependent variable. This MANOVA was not significant and suggested score equivalency across courses. Pretest and post-test means and standard deviations for all three courses are presented in Table 4.

A one-way MANOVA at post-test (again with course as the grouping variable) resulted in a significant overall effect (Wilk’s Lambda: F(4, 114) = 6.87, p < .001). Follow-up univariate F-tests found a significant effect for the Knowledge/Skills subscale (F[2, 58] = 13.92, p < .001) and for the Awareness subscale (F[2, 58] = 4.20, p < .05). Given there were three levels of the grouping variable, Neuman-Keuls post hoc tests were conducted for each subscale. For the Knowledge/Skills subscale, Course 1 (New York multicultural course) post-test scores were significantly higher than Course 2 (New York partial control course) post-test scores and Course 3 (New Mexico multicultural course) post-test scores. Furthermore, Course 3 scores were significantly higher than Course 2 scores.
Table 4. MCAS:B Pretest, Posttest, and Change Scores for Course 1, Course 2, and Course 3.

<table>
<thead>
<tr>
<th></th>
<th>Pretest K/S M (SD)</th>
<th>Pretest A M (SD)</th>
<th>Posttest K/S M (SD)</th>
<th>Posttest A M (SD)</th>
<th>Change K/S</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course 1</td>
<td>4.0 (.98) 5.8 (.66)</td>
<td>5.7 (.73) 6.3 (.70)</td>
<td>1.7</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course 2</td>
<td>3.5 (.98) 5.4 (.81)</td>
<td>4.2 (.84) 5.5 (.83)</td>
<td>0.7</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course 3</td>
<td>3.8 (.58) 5.3 (.81)</td>
<td>4.8 (.67) 5.9 (.63)</td>
<td>1.0</td>
<td>0.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: K/S = Knowledge/Skills Subscale; A = Awareness Subscale

With regard to the post hoc tests for the Awareness Factor, Course 1 post-test scores were significantly higher than Course 2 scores; and Course 3 scores were also significantly higher than Course 2 scores (see Table 4).

We were further interested in isolating the effects of the semester’s experience on the individual courses. Separate MANOVAs were conducted for each course, with the MCAS:B pre-test versus post-test serving as the grouping variable. The Bonferroni formula was used to control for inflated alpha, with a new alpha set at .017.

For Course 1 (New York multicultural) the MANOVA was significant: Hotellings $F_{(2, 13)} = 7.28, p < .01$. Follow-up univariate tests revealed that the Knowledge/Skills subscale was significantly higher at post-test than at pre-test. Subscale 2, Awareness, approached but did not reach significance ($p = .17$). Course 2, the partial control, approached but did reach the Bonferroni adjusted alpha: Hotellings $F_{[2, 51]} = 4.4, p < .05$.

Finally, for Course 3 (New Mexico multicultural) there was a significant main effect on the MANOVA: Hotellings $F_{[2, 52]} = 21.57, p < .001$. Follow-up univariate tests resulted in significant effects for both subscales. The Knowledge/Skills subscale at post-test was significantly higher ($F_{[1, 53]} = 33.73, p < .001$) than at pre-test. The Awareness subscale also reached significance ($F_{[1, 53]} = 9.7, p < .01$).

Discussion

The results of Study 4 provide further evidence that the MCAS:B is sensitive to growth in multicultural competence. An important component of this study was that MCAS:B scores rose significantly in
a multicultural counseling course taught by a professor in a distant (from New York) state. This result presents additional evidence for the content and construct validity of the MCAS:B. That is, the construct of “multicultural competence,” as envisioned by two separate instructors in the field, is being reliably measured by the MCAS:B.

Given a number of limitations, this study needs to be interpreted with caution. First, the sample size for Course 1 was quite small. Second, the developmental counseling course served only as a partial control, and not as a “true” control group. It would be valuable to incorporate a true control group where multicultural issues are not discussed or covered at all. However, at the institution where Courses 1 and 2 were offered, all courses incorporate multicultural issues, including measurement courses. Third, the professor of Course 3 modified the procedure for collecting the post-test data. The lack of procedural consistency across the three courses raises concern. Clearly, more carefully controlled pre-post course assessments are needed.

INTEGRATIVE DISCUSSION

This chapter reports the results of four studies designed to develop and psychometrically evaluate the Multicultural Counseling Awareness Scale. The rationale and need for instruments such as the MCAS stems from over a decade of conceptual work on the construct of “multicultural competence” (Pedersen, 1988; Ponterotto & Casas, 1991; Sue et al., 1982; Sue, Carter et al., 1992). Utilizing both qualitative and quantitative procedures, Study 1 found the MCAS subscales to be face- and content-valid, to possess a satisfactory level of internal consistency, and to have moderate levels of criterion-related and construct validity.

Importantly, Study 1 indicated that the MCAS items are best represented by two correlated subscales—Knowledge/Skills and Awareness. This finding is somewhat at odds with initial (Sue et al., 1982) and subsequent (Pedersen, 1988; Sue, Arredondo et al., 1992; Sue, Carter et al., 1992) conceptualizations, which define multicultural competence as a tripartite model. Two explanations for the disparate findings are that (a) multicultural competence is best conceptualized by two factors; that is, given that counselor needs knowledge to implement a skill, knowledge and skill items are indistinguishable and thus represent one subscale whereas awareness represents the second; or (b) the MCAS (self-report) items are not sensitive enough to distinguish between counselor knowledge and skills.

Study 2 examined the relationship of MCAS:B subscale scores to conceptually linked constructs measured by the validated Cross-
Cultural Counseling Inventory—Revised (CCCI-R) and the New Racism Scale (NRS). Correlations were in the predicted direction and demonstrated adequate levels of convergent validity for both the Knowledge/Skills and Awareness subscales. Low and nonsignificant correlations between the MCAS:B subscales and the Social Desirability Scale (SDS) provided evidence that social desirability contamination is not a problem with the MCAS:B.

Studies 3 and 4 demonstrated the MCAS:B’s utility as a pre-post measure in multicultural development. Theoretical models of multicultural development (e.g., Carney & Kahn, 1984; Sabnani et al., 1991) suggest that competence is attainable through programmed learning (e.g., a multicultural course). This multicultural “growth” was documented in these studies, therefore providing some support for the construct of “multicultural competence” generally, and the MCAS:B’s content and construct validity specifically.

Many of the limitations of the four studies were highlighted earlier, and therefore we would like to conclude the chapter with recommendations for needed research. First, and foremost, large sample research is needed to further examine the factor structure of the MCAS:B. It will be interesting to see whether the two-factor oblique model proposed here is replicable across additional samples. Clearly, additional exploratory as well as confirmatory analytic procedures are needed in this regard.

Immediate research is also needed to correlate the MCAS:B subscales with comparable self-report instruments, namely the Multicultural Counseling Inventory (MCI, Sodowsky et al., 1994) and the Multicultural Awareness/Knowledge/Skills Survey (MAKSS, D'Andrea et al., 1991). Initial work has begun in this area with the multitrait-multimethod (Campbell & Fiske, 1959) study by Pope-Davis and Dings (1994). Incorporating the MCAS and MCI, these authors found that the two instruments differed in their assessment of dimensions of self-reported multicultural counseling competency, with the MCI focusing on behavioral aspects of perceived competency, and the MCAS:B focusing on attitudinal aspects. The authors also conclude that both instruments are useful tools in assessing multicultural counseling competencies.

As a result of the focus group run in Study 2, we added three social desirability test items to the MCAS:B. This cluster was intended as an auxiliary measure of desirability contamination. As might be expected with three items, the cluster had a low coefficient alpha. Future research on the MCAS:B should address this cluster. One consideration might be to drop this cluster, given the MCAS:B has
little social desirability contamination, at least as measured by the Social Desirability Scale (SDS; Crowne & Marlowe, 1960). However, given that the SDS is not without limitation, another option would be to build the three-item cluster into a legitimate MCAS subscale. Some multicultural experts who have studied the MCAS (e.g., Pope-Davis & Dings, 1994; Pope-Davis & Dings, 1995) support the latter recommendation as they see the cluster adding a unique dimension to multicultural competency assessment.

It is hoped that the present study will stimulate both quantitative and qualitative research into the measurement of multicultural counseling competence. Recent authors have emphasized the need to augment quantitative, paper-and-pencil focused research in multiculturalism with more descriptive qualitative methods (Ponterotto & Casas, 1991). For example, using participant observation, unstructured interviews, and/or case studies to study acknowledged experts in multicultural counseling practice might be one promising direction for "competency" research.

Generally, counseling programs have not been vigilant in implementing and evaluating the outcomes of multicultural development, despite the position of APA generally and Division 17 specifically (see Ponterotto & Casas, 1991; Sue, Carter et al., 1992). As the clientele of counseling psychologists becomes increasingly heterogeneous along cultural lines, the need for accountability in multicultural development grows increasingly clear (see related discussions in Ponterotto, Casas, Suzuki, & Alexander, 1995). As highlighted in the separate Discussion sections of the four studies comprising this report, the MCAS:B is certainly not without limitation. The instrument, however, does appear to have promise for meaningful use in multicultural development, and it is hoped that the research on this instrument and comparable ones will continue.

REFERENCES


