Cultural Competency Revised: The California Brief Multicultural Competence Scale

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The authors describe the development of the California Brief Multicultural Competence Scale (CBMCS). The 21-item CBMCS was derived from principal component analysis, item content validated by a panel of experts, and confirmatory factor analyses. Several studies provided internal consistency, subscale intercorrelations, criterion-related validation, and assessment of possible social desirability contamination.

How adequately have training programs prepared professional psychologists to work with culturally diverse populations? This question has been a focus of multicultural competence research for 3 decades. In 1973, the American Psychological Association (APA) endorsed multicultural training recommended by the National Conference on Levels and Patterns of Professional Training (Korman, 1976). The American Counseling Association compiled guidelines for standard test usage with multicultural populations (Prediger, 1994). Early and more recent comprehensive APA guidelines on multicultural education, training, research, practice, and organizational change addressed the centrality of cultural issues for all psychologists (APA, 1993, 2003). However, implementation in professional psychology has been meager except in Counseling Psychology programs (LaFromboise & Foster, 1992; Mio & Morris, 1990), and the characteristics of multicultural competence training have remained elusive (e.g., Murphy, Wright, & Bellamy, 1995; Quintana & Bernal, 1995).

A national examination of multicultural training suggested a model for quality multicultural training (Ponterotto, 1997, 1998), although sensitivity rather than proficiency has apparently resulted from additional training. Each area of professional psychology has reported survey data suggesting limited efficacy for available training (for a review, see Ponterotto & Alexander, 1996). Psychologists in most professional programs report inadequate formal training and supervised experience to prepare them for practice with multicultural clients (Allison, Crawford, Echemendia, Robinson, & Knepp, 1994). Adequacy of self-perceived awareness and skills as reported in a more recent survey of multicultural competencies (Holcomb-McCoy & Myers, 1999). In these two surveys, differences among participants in training, ethnicity, program affiliation, and graduation year may account for differences in findings. Other studies (e.g., Pope-Davis, Reynolds, Dings, & Nielson, 1995) also found that greater self-perceived multicultural competencies among students of color and ethnic minority status per se can provide in vivo cultural knowledge and personal experience with discrimination (Lee & Richardson, 1991; Ponterotto, Casas, Suzuki, & Alexander, 2001; Robinson & Ginter, 1999).

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MULTICULTURAL COUNSELING COMPETENCY MODEL

The Cross-Cultural Counseling Competency Model (for a review, see Ponterotto, Fuertes, & Chen, 2000) contained in a Division 17 position paper (Sue et al., 1982) specified 11 competencies in three broad areas, including attitudes/beliefs, knowledge, and skills. Preserving these three superordinate areas, this model was subsequently expanded to 31 specific competencies (Sue, Arredondo, & McDavis, 1992). Operationalization of these competencies by 119 explanatory statements, within an American Counseling Association training context (Arredondo et al., 1996), led to an even more comprehensive formulation by Divisions 17 and 45 (Sue et al., 1998) with a further expansion to 34 competencies.

MULTICULTURAL COMPETENCY INSTRUMENTATION

A number of instruments have been developed to measure multicultural competencies as conceptualized in the Cross-Cultural Counseling Competency Model including the Cross-Cultural Counseling Inventory–Revised (CCCI-R; LaFromboise et al., 1991), the Multicultural Awareness, Knowledge, Skills Survey (MAKSS; D'Andrea et al., 1991), the Multicultural Counseling Awareness Scale-Form B (MCAS-B; Ponterotto & Alexander, 1996) the Multicultural Counseling Knowledge and Awareness Scale (MCKAS; Ponterotto, Gretchen, Utsey, Rieger, & Austin, 2002), the Multicultural Counseling Inventory (MCI; Sodowsky et al., 1998; Sodowsky et al., 1994), and the Multicultural Competency and Training Survey (MCCTS; Holcomb-McCoy, 2000). (The MCAS-B was used in the present study because the new version [MCKAS] was not available during the initial phases of our research.)

Several aspects of the development of these instruments and validation of scores from the instruments are relevant for purposes of comparison and for evaluating the adequacy of construct delineation. Evidence for psychometric properties (i.e., origin of items, scale development, scoring procedures, reliability, validation evidence, subscale development and clarity of subscale interpretation, and factor labels) have been examined for scores from each of the aforementioned instruments (Ponterotto & Alexander, 1996; Pope-Davis & Dings, 1995). Although the items in these instruments had a common source in the multicultural competency model, each instrument implemented somewhat different methods, and several versions of the model were used to create an item pool. Scale development procedures differed, numbers of items varied across instruments, and scoring procedures either added or averaged items. Internal consistency reliabilities were, in general, adequate. There was low to moderate subscale score consistency within instruments, but less than desirable subscale score consistency across instruments, while validation enterprises differed in kind and adequacy across instruments.

All instruments used exploratory factor analyses, although the MCI, MCAS-B, and MCKAS used confirmatory factor analyses as well. These factor analyses yielded one, three, or four factors with a variety of labels reflecting the structure coefficients obtained. The triad of original constructs was augmented by factors for Relationship in the MCI and Racial Identity Development and Multicultural Terminology in the MCCTS. The CCCI-R is uniquely a unidimensional measure, based on supervisor ratings, rather than a performance self-assessment by clinicians. Recent studies (i.e., Constantine et al., 2002; Ponterotto et al., 2002) delineated two consistent factors corresponding to self-perceived multicultural counseling skills and multicultural attitudes/beliefs.

A number of critical reviews from 1985 to 2001 provided evaluations of the multicultural competence construct (e.g., Constantine & Ladany, 2001; Ponterotto & Alexander, 1996; Ponterotto, Fuertes, et al., 2000; Ponterotto & Furlong, 1985; Ponterotto, Rieger, Barrett, & Sparks, 1994; Pope-Davis & Dings, 1995; Pope-Davis et al., 2001; Pope-Davis & Nielson, 1996). These reviews convey only limited support for the three-factor model. These instruments measure beliefs about services rather than attitudes, and caution is advised in using these instruments for the measurement of multicultural competence per se (Constantine et al., 2002).

Pope-Davis and colleagues (2001) examined consequences of omitting consumer perspectives on multicultural competency skills that included expectations and experiences. Research has been affected by inadequate empirical data and sociopolitical attitudes. Legitimate questions have been raised concerning multicultural competencies with systems larger than one individual client or with noncounseling interventions (Constantine & Ladany, 2001; Ladany, Inman, Constantine, & Hofheinz, 1997).

Research using these multicultural competency instruments provided promising correlational and regression analysis relationships to demographic and training variables; case conceptualization skills; and hypothesized, linked constructs (Ponterotto, Fuertes, et al., 2000). In summary, these authors suggested that the findings contributed to an enlarged intercultural perspective with a nonracist personal stance, enhanced worldview, awareness of oppression, and racial identity development. Statistical examination of social desirability influence has been recommended (Worthington, Mobley, Franks, & Tan, 2000). Sodowsky et al. (1998) reiterated this caveat using a new multicultural-specific social desirability scale with the MCI.

The sheer numbers and quality of thoughtful criticisms focused on these instruments suggest their perceived importance for professional training in counseling and psychology. However, there are substantive limitations to all instruments when they are used as diagnostic precursors to specific multicultural competence training objectives or as optimal pre–post measures of the effectiveness of such training. Discrepancies in historical findings may be attributed to the use of several independent instruments developed to measure the same constructs. It has been concluded that the "collective group of instruments is still only in their infancy" (Ponterotto, Fuertes, et al., 2000, p. 646), and continued factor analytic research on a larger scale with all instruments has been recommended (Ponterotto & Alexander, 1996). A single instrument, developed from available instruments, could potentially resolve some of the reported critical issues and shortcomings.

A RATIONALE FOR RESEARCH ON MULTICULTURAL COMPETENCY INSTRUMENTS

Multicultural competency instruments were constructed and evaluated primarily in the context of counseling training programs. These programs endorse the centrality of cultural issues, the coextensive nature of multicultural and clinical competencies, and the primacy of culture as a proximal variable in research. Because an acknowledged limitation of multicultural competency instruments is measurement of self-efficacy beliefs rather than skills, objective relationships between these beliefs and demonstrated ability to provide effective mental health services to culturally diverse clients are ultimately necessary (Lent, Brown, & Larkin, 1986). The research history of these instruments endorses their continued use; nonetheless, the lack of uniformity in what they measure suggests that their use to evaluate provider competencies is premature. There has been a call for more valid multicultural counseling instruments to replace the original measures (Atkinson & Israel, 2003), because their item contents were derived from committee consensus rather than empirical identification. It is also necessary to make the most responsible and efficacious use of these existing measures to ensure their continued presence as progenitors of more adequate training that can be evaluated by subsequent clinical outcomes. The potential utility of these existing measures may be simply diagnostic in the sense of legitimizing in-service training as an intervening step prior to evaluation of clinician skills with clients.

The primary objective of this research is to improve multicultural competence instrumentation as a precursor to consistent and replicable multicultural competence training for clinicians within a comprehensive system of mental health care. A secondary objective is to embed competence assessment and training within a quality-of-care model for ethnic minority populations. Ponterotto, Gretchen, and Chauhan (2000) described a number of relevant models, including the Multicultural Assessment-Intervention Process model (MAIP; see Dana, 1993, 1998, 2000) that provides a system of care context in which the present research is a major component. MAIP treats culture as a proximal variable with successive steps for adequate mental health care that include service delivery style, client acculturation or racial identity status, client–clinician matching, multicultural competence training, and use of cultural components in interventions within a format of pre–post client evaluation.

CONSTRUCTION AND DEVELOPMENT OF THE CALIFORNIA BRIEF MULTICULTURAL COMPETENCE SCALE (CBMCS)

This research was designed to create a single, brief instrument from items in several multicultural counseling competency measures predicated on responses from direct-service community mental health providers. The development of this new instrument responds to the call for continued scrutiny of the multicultural competency model itself and the operationalization of these beliefs concerning self-perceived competencies (Ponterotto et al., 2002).

This article presents the results of four studies. Study 1 examines items from subscales in the self-report instruments for social desirability. Subsequently, using these instruments, data from a relatively large sample of mental health practitioners were obtained. Thus, in Study 2 (which is subsequently trichotomized into Studies 2a, 2b, and 2c), a short form version of the CBMCS was developed from four instruments (CCCI-R, MAKSS, MCAS-B, MCCTS), factor analyzed, scrutinized by a panel of experts for content validation, and further verified by means of a confirmatory factor analysis. Study 3 provided an additional check for social desirability bias within the CBMCS subscales. Study 4 provided further support of the CBMCS with an additional confirmatory factor analysis on an independent sample. This brief instrument (the CBMCS) can be used as an empirical basis for the development of training programs that can be evaluated for efficacy in treatment settings.

STUDY 1: SOCIAL DESIRABILITY CHECK

This study related the Marlowe-Crowne Social Desirability Scale (SDS; Crowne & Marlowe, 1960) to each of the individual items in a comprehensive item pool representing four measures in order to eliminate those items correlating with the SDS from subsequent analyses.

Method

Participants. The Study 1 participants constituted a convenience sample of 54 mental health service providers at a Southern California community mental health agency. The mean age for the sample was 28.9 ($SD = 14.79$, $Mdn = 30.0$). Sixty percent of the sample was female. Sample ethnicity was as follows: White American (37%), Latino American (32%), African American (15%), Asian American (7%), Native American Indian (2%), and other (7%). Education levels for the sample were master's degree (46%), bachelor's degree (30%), high school diploma (23%), and doctoral degree (1%). Approximately 41% of the sample was bilingual, primarily bilingual Spanish. The mean years worked in the mental health field was 5.70 ($SD = 5.22$), and the mean years this sample worked with multicultural clients was 7.35 ($SD = 5.36$). The percentage of this sample trained in multicultural counseling programs was 46%, approximately 69% had received multicultural course work, and 67% had taken a multicultural workshop or seminar.

Questionnaire and procedure. Participants were given a consent form and a brief explanation of the goals of the project. The questionnaire consisted of a page of demographic items (13), followed by 157 Likert-type questions compiled from the four cultural competency scales, all on a 4-point scale (4 = *strongly agree*, 1 = *strongly disagree*). Some of the items were slightly reworked to conform to an agree–disagree response format. The 33-item (true or false) SDS (Crowne & Marlowe, 1960) was completed immediately after the 157 cultural competency items.

Results and Discussion

The SDS scores did not correlate appreciably with any of the multicultural competence subscale scores, with the exception of one moderate negative correlation. Because of the interest other researchers are likely to have in this topic, we report these correlations as follows: MCI-Skills (–.18), MCI-Awareness/Experience (.02), MCI-Relationship (.18), MCI-Knowledge (–.04), CCCI-R Skills (–.17), CCCI-R-Awareness (–.07), CCCI-R-Sensitivity (–.09), MAKSS-

Awareness (–.11), MAKSS-Knowledge (.09), MAKSS-Skills (–.13), MCAS-B-Knowledge/Skills (–.06), MCAS-B-Awareness (–.37; $p < .01$), MCAS-B-Social Desirability (.04; $p < .01$), MCCTS-Knowledge (–.06; $p < .01$), MCCTS-Awareness (–.20; $p < .01$), MCCTS-Definitions (–.22; $p < .01$), MCCTS-Racial Identity (.10; $p < .01$), and MCCTS-Skills (–.18; $p < .01$). What is impressive about these coefficients, when scrutinized as a whole, is the fairly consistent apparent lack of social desirability contamination among the scores of these subscales. These low correlations appear to contradict some earlier studies that used self-report cultural competence scales, which may be a function of the mental health practitioner sample used in Study 1.

All 157 individual Likert-type questions that composed the four self-report multicultural competency measures were correlated with the SDS. The goal was to identify questions that correlated significantly with the SDS for possible elimination from the Study 2 item pool. The SDS instrument was not used in Study 2 in order to reduce questionnaire length and possible respondent fatigue.

All correlations were evaluated at alpha = .01, even though a Bonferonni adjustment (.05/157) suggests a more stringent alpha level of $p < .0003$. Use of a less stringent alpha (i.e., a more conservative appraisal) coincides with our primary objective of item reduction. Only 13 of the 157 items (from three of the four scales) correlated significantly ($p < .01$) with the SDS. The MAKSS (D'Andrea et al., 1991) had three items that had significant correlations: Question 7, $r = .35$; Question 13, $r = -.33$; and Question 15, $r = -.28$. The MCAS-B (Ponterotto et al., 1996) produced the largest number of items (8) that correlated with the SDS: Question 2, $r = -.29$; Question 6, $r = -.30$; Question 14, $r = -.30$; Question 15, $r = -.37$; Question 17, $r = -.29$; Question 28, $r = -.27$; Question 43, $r = -.31$; and Question 44, $r = .30$. The MCCTS (Holcomb-McCoy, 2000) yielded two significant correlations: Question 3, $r = -.31$, and Question 17, $r = -.28$. The CCCI-R measure (LaFromboise et al., 1991) produced no significant correlation between its items and the SDS. Because item reduction is one of the major purposes of this investigation, the 13 items that were found to correlate with the SDS were eliminated from the item pool in Study 2, along with three MCAS-B specialized social desirability items. Hence, 16 items were identified for future elimination.

STUDY 2: SCALE DEVELOPMENT

The purpose of Study 2 was to collect self-report cultural competency data on a relatively large sample of California mental health practitioners. Toward this end, a similar questionnaire and consent form, as in Study 1, contained basic demographic and descriptive information with five self-report cultural competency instruments (i.e., the MCI, CCCI-R, MAKSS, MCAS-B, and the MCCTS). The SDS was not included in order to reduce questionnaire length. The goal of Study 2 was to create a large item pool of questions from four of the original cultural competency instruments (i.e., the CCCI-R, MAKSS, MCAS-B, and MCCTS) and, through factor analytic analyses, to create a short form, version subsequently called the CBMCS. Because we did not receive permission from the author of the MCI (Sodowsky et al., 1994) to use her individual items in our item pool, we used the MCI for validation purposes instead. Subsequent analyses compared the subscale scores of the CBMCS with the MCI scores for a criterion-related validation check. Permissions were obtained from the authors of the CCCI-R, MAKSS, MCAS-B, and MCCTS to use their items in our study.

STUDY 2: ANALYSIS STRATEGY

Because of the relatively large Study 2 sample size ($N = 1,244$), we decided to trichotomize the sample into three equal random subsamples in order to conduct two exploratory factor analyses and one confirmatory factor analysis. Thus, Study 2a ($N = 415$) consisted of an initial exploratory factor analysis with strict exclusion criteria using the entire item pool (less the 16 items identified for elimination in Study 1). Study 2b ($N = 415$) incorporated feedback on the factor solution in Study 2a from a panel of multicultural experts. A final exploratory

factor analysis was conducted based on both the initial (Study 2a) factor analysis and the expert opinions. Study 2c ($N = 414$) reports a confirmatory factor analysis to determine if the factor model developed in Study 2b can reproduce the observed item covariances.

A generic Method section follows delineating characteristics of the participants and procedures used in Studies 2a, 2b, and 2c. Separate Results and Discussion sections for each study follow the Method section

METHOD

Participants

A convenience sample of 1,244 California public mental health workers completed the questionnaire, and the sample's demographics/characteristics can be seen in Table 1. Nearly two thirds of the sample was female. The average age was 37.31 years ($SD = 16.77$). Nearly half (52%) of the sample was White/European American, followed by Latino American (14%), African American (11%), Asian American/Pacific Islander (9%), and Native American Indian (1%). The modal degree among the participants was a master's degree (45%). Bilingual abilities were found among 31% of the sample. Forty-eight percent of the sample was trained in a multicultural counseling program, and 66% indicated taking multicultural course work. Seventy-five percent participated in a multicultural workshop. The average number of years working in the mental health field was 10.51 ($SD = 8.83$) for the sample. The average number of years the sample reported working with multicultural clients was 12.07 ($SD = 9.56$). Twelve counties, representing mental health agencies across California (northern counties = 18%, southern counties = 82%), participated in this study. The sample closely resembles recent statewide demographic profiles of practitioner ethnicity and bilingual ability among the 12 targeted counties. The separate random subsamples of equal size were generated from the original sample of 1,244 mental health practitioners to provide the constituents for Studies 2a–2c. (A complete demographic assessment of mental health practitioner demographics for California does not exist. However, the California Department of Mental Health, Office of Multicultural Services, was able to provide ethnicity and bilingual ability counts for the 12 counties sampled in our study. The 12-county statewide average for ethnicity was as follows: White American [54%], African American [19%], Latino American [14%], Asian American/Pacific Islander [9%], Native American Indian [1%], and other [3%]. Bilingual ability was: English only [76%] and bilingual [24%]. These percentages align very closely with our convenience sample and demonstrate the representativeness of the sample to the target population.)

Procedure

County community mental health agencies were contacted by the fourth author for possible participation in this study. The 12 counties that made up the final sample represented more than 140 separate departments or organizations. Staff who volunteered to complete the questionnaire did so during normal working hours. The average amount of time to complete the questionnaire varied from 30 to 60 minutes. The present sample reflects our goal of developing a brief self-report instrument for measuring cultural competency in the community mental health arena.

STUDY 2A: RESULTS AND DISCUSSION

Item Analysis

For Study 2a, the 40-item MCI was eliminated from the potential item pool, thus enabling this instrument to be used in conjunction with the subsequent CBMCS for the purposes of criterion-related validity checks. On the basis of the social desirability results of Study 1, 16 of the 157 items were eliminated (13 due to possible social desirability contamination and 3 items from the MCAS-B Social Desirability subscale) from the item pool. For the remaining 141-item pool (representing the CCCI-R,

TABLE 1

Demographics/Characteristics of Study 2 Participants ($N = 1,244$)

Characteristic	Sample N	Sample %	Characteristic	Sample N	Sample %
Gender			Received multicultural course work		
Male	397	32	Yes	819	66
Female	795	64	No	289	23
Unknown	52	4	Unknown	136	11
Age group			Received multicultural counseling workshops		
65+ years	17	2	Yes	929	75
55–64	142	11	No	220	18
45–54	307	25	Unknown	95	7
35–44	293	24	Years of mental health experience		
25–34	299	24	3 years or fewer	319	26
24 and under	43	4	4–7	268	22
Unknown	143	10	8–11	209	17
Ethnicity			12–15	153	12
White/European American	642	52	16 or more	295	23
Latino American	178	14	Years working with multicultural clients		
African American	139	11	3 years or fewer	238	19
Asian American/Pacific Islanders	107	9	4–7	263	21
Native American Indian	15	1	8–11	223	18
Other	109	9	12–15	153	12
Unknown	54	4	16 or more	367	30
Highest earned degree			County		
Doctorate	145	12	Contra Costa	51	4
Master's	553	45	Los Angeles	258	21
Bachelor's	226	18	Mendocino	3	0.2
High school	82	6	Merced	12	1
Other	221	18	Riverside	36	3
Unknown	17	1	Sacramento	32	3
Language			San Bernardino	559	45
English only	846	69	San Diego	162	13
Bilingual	377	31	San Luis Obispo	1	0.1
Multicultural training (trained in multicultural counseling program)			Santa Barbara	14	1
Yes	594	48	Solano	100	8
No	484	39	Tehama	7	0.3
Unknown	166	13	Unknown	9	0.4

MAKSS, MCAS-B, and MCCTS), the following criteria were followed for eliminating items (see Ponterotto et al., 1996; Serling & Betz, 1990). The remaining Study 2a items were omitted from the pool if (a) the corrected item-total correlation was below .20 or if elimination of the item caused the alpha to increase, (b) a reduced range of responses was observed (i.e., fewer than all four Likert-type response options were used), and (c) item means were found to be extreme (e.g., over 3.34 or below 1.66).

Application of these criteria eliminated 25 items: 20 items were eliminated because of a corrected item-total correlation of less than .20, and 5 items were eliminated due to distribution skewness. This procedure resulted in a reduced item-pool of 116 items (Cronbach's α = .98), which became the ingredients for our subsequent factor analytic work.

CBMCS Factor Structure

Principal component analysis resulted in an initial 25-factor solution with eigenvalues greater than 1.0. Scree tests plus a comparison of the residual correlation matrices of a 3-, 4-, and 5-factor

of the variance and had 6 items; Factor 3, Multicultural Knowledge (eigenvalue = 2.10), accounted for 10% of the variance and had 5 items; and Factor 4, Sensitivity to Consumers (eigenvalue = 1.21), accounted for 5.8% of the variance and had 3 items.

Table 3 presents a matrix of intercorrelations of the CBMCS and the MCI with their respective subscales, key demographic items, and measures of internal consistency (Cronbach's α) for the scores of each subscale. Criterion validity was examined by comparing the CBMCS subscale scores with the MCI subscale scores.

Cronbach's coefficient alpha for the scores of the 21-item CBMCS was .89. The alphas for the scores of the four subscales were Nonethnic Ability = .90, Awareness of Cultural Barriers = .78, Multicultural Knowledge = .80, and Sensitivity to Consumers = .75. Coefficient alpha for the scores of the MCI-Total scale score was .84. The scores of the MCI subscales produced the following alphas: Skills = .78, Awareness = .80, Relationship = .27, and Knowledge = .57.

The pattern of intercorrelations showed that the CBMCS subscales all had low positive intercorrelations. (We do not report the pattern of intercorrelations among the five self-report scales [i.e., MCI, CCCI-R, MAKSS, MCAS-B, and MCCTS] because the main purpose of this article is to demonstrate the validity and reliability of the CBMCS). Low moderate correlations were observed between the CBMCS and MCI subscales (ranging from −.01 to .62, with a mean correlation of .31), with the exception of the MCI-Relationship subscale (ranging from −.01 to .08, with a mean of .02), which is difficult to interpret due to the unreliability of the scores of this subscale. Taken as a whole, these correlations provide some evidence of criterion-related validity for the scores of the CBMCS.

We also examined the correlation of the two same-named subscales in the CBMCS and the MCI (i.e., the Multicultural Knowledge and Awareness of Cultural Barriers subscales). The CBMCS and MCI Knowledge subscales yielded a low positive correlation of $r = .21$. The correlation between the CBMCS Awareness of Cultural Barriers and MCI Awareness subscales was $r = .45$, indicating a moderate positive relationship. This pattern of correlation among the same-named subscales provides some support of recent findings by Kocarek, Talbot, Batka, and Anderson (2001), who reported a "lack of consistency between same-named subscales" (p. 494), that is, low intercorrelations for the same construct. A much larger sample size in the present study than in the Kocarek et al. study provides additional credence to their concerns.

Criterion-Related Validity

Criterion-related validity was explored by examining CBMCS subscale score differences among key demographic subgroups within the Study 2b random sample. These demographic variables were selected because of their importance in previous studies (e.g., Ponterotto et al., 1996). Four one-way multivariate analyses of variance (MANOVAs) were computed on the four CBMCS dependent variables: Multicultural Knowledge, Awareness of Cultural Barriers, Sensitivity to Consumers, and Nonethnic Ability. The four independent variables were gender, age group (five levels), ethnicity (five levels), and education (five levels). To reduce the possibility of Type I error, the alpha level for all analyses was set at .01.

A one-way MANOVA compared CBMCS subscales by gender and indicated a significant multivariate effect, Wilks's lambda $F(4, 374) = 3.07, p < .01, \eta^2 = .03$. Univariate F tests yielded significant effects for the Multicultural Knowledge, $F(1, 377) = 4.60, p < .01, \eta^2 = .01$, and Awareness of Cultural Barriers subscales, $F(1, 377) = 4.44, p < .01, \eta^2 = .01$. These univariate analyses indicated that male mental health practitioners had significantly higher Multicultural Knowledge subscale scores ($M = 2.49$, $SD = .58$) than female practitioners ($M = 2.37$, $SD = .55$) had. Conversely, female practitioners had significantly higher Awareness of Cultural Barriers scores ($M = 3.11$, $SD = .45$) than male practitioners had ($M = 3.00$, $SD = .45$).

A significant multivariate practitioner education effect was also found, Wilks's lambda $F(4, 394) = 3.52, p < .01, \eta^2 = .03$. Univariate F tests indicated significant Awareness of Cultural Barriers, $F(4, 397) = 10.14, p < .01, \eta^2 = .09$, and Nonethnic Ability subscales, $F(4, 397) = 5.53$, $p < .01, \eta^2 = .05$. Least significant difference multiple comparison tests ($p < .01$) were con-

TABLE 2

Summary of Items and Structure Coefficients From Principal Component Analysis With Varimax Rotation Study 2b ($N = 415$)

Scale and Subscale	Structure Coefficients				h^2	CITC
	Factor 1	Factor 2	Factor 3	Factor 4		
MAKSS						
Skill						
1. I have an excellent ability to assess accurately the mental health needs of gay men.	**.83**	−.02	.15	−.07	.71	.55
2. I have an excellent ability to assess accurately the mental health needs of lesbians.	**.80**	−.01	−.09	.14	.67	.55
3. I have an excellent ability to assess accurately the mental health needs of persons with disabilities.	**.78**	−.02	.23	−.06	.67	.56
4. I have an excellent ability to assess accurately the mental health needs of older adults.	**.74**	.09	.09	.09	.58	.53
5. I have an excellent ability to assess accurately the mental health needs of men.	**.73**	.19	.13	.14	.60	.61
6. I have an excellent ability to assess accurately the mental health needs of persons who come from very poor socioeconomic backgrounds.	**.71**	.26	.28	.11	.66	.70
7. I have an excellent ability to assess accurately the mental health needs of women.	**.68**	.31	.06	.19	.60	.62
MCAS-B						
Knowledge/Skills						
8. I am aware that counselors frequently impose their own cultural values on minority clients.	.05	**.78**	.09	.05	.62	.41
Awareness						
9. I am aware that being born a White person in this society carries with it certain advantages.	.01	**.72**	.04	.05	.52	.33
Knowledge/Skills						
10. I am aware of institutional barriers which may inhibit minorities from using mental health services.	.15	**.69**	.15	.17	.56	.50
Awareness						
11. I am aware that being born a minority in this society brings with it certain challenges that White people do not have to face.	−.05	**.67**	.04	.26	.52	.35
MCCTS						
Awareness						
12. I am aware of how my cultural background and experiences have influenced my attitudes about psychological processes.	.26	**.57**	.09	.18	.43	.48

(Continued on next page)

solution suggested that four factors would clearly represent the data set (see Meyers, Gamst, & Guerino, in press; Ponterotto et al., 2002; Tabachnik & Fidell, 2001). A four-factor principal component analysis was run with a Varimax rotation. Because the primary purpose of this factor analysis was item-pool reduction, fairly stringent item-elimination criteria were used: An item was eliminated if it did not produce a high structure coefficient (.55 or greater) on one factor and low structure coefficient (less than .35) on all other factors or if it had a low extraction communality (less than .50).

The four-factor solution that provided the best fit for the present data set accounted for 44.2% of the total variance and yielded a 27-item scale (i.e., 91 items were eliminated for not meeting the item-inclusion criteria). The factor structure took the following form: Factor 1, Sensitivity to Consumers (eigenvalue = 35.4), had 3 items; Factor 2, Nonethnic Ability (eigenvalue = 6.8), had 7 items; Factor 3, Awareness of Cultural Barriers (eigenvalue = 5.6), had 8 items; and Factor 4, Multicultural Knowledge (eigenvalue = 8.4), had 9 items. The rationale we used for naming these four factors was guided, in part, by the recommendations of Comrey and Lee (1992) and Rummel (1970), in which sorted factor structure coefficients in excess of .65 were used to "drive" the process of labeling and interpreting each factor. The four-factor model was deemed the best solution because it addressed our overarching goal of a brief scale development and because of its conceptual clarity and ease of interpretability (see Ponterotto et al., 1996).

STUDY 2B: RESULTS AND DISCUSSION

With the basic factor structure in place from Study 2a, one final item-elimination criterion on the 27-item four-factor solution was imposed. A regional expert panel (from the California Department of Mental Health, Cultural Competence Advisory Committee, and from the California Institute for Mental Health, Center for Cultural Competence Advisory Committee) was recruited (with the assistance of the Chief Office of Multicultural Services, California Department of Mental Health) for the purpose of providing content validation from a community mental health perspective. These experts were not part of Study 1 or Study 2a. Experts were included in the panel if they had at least 5 years of experience working with community mental health multicultural populations and were currently active members of their respective advisory committees. The 20 experts from the two committees were sent a questionnaire that asked them to rate the "appropriateness" of each item (i.e., the suitability or goodness of a statement to be an indicator of multicultural competence in a mental health service delivery setting). Each of the 27 items was evaluated on a 4-point Likert-type scale (1 = *inappropriate* and 4 = *very appropriate*). Characteristics of the experts who responded yielded $M = 16.9$ years of multicultural mental health experience. Expert ethnicity was as follows: Asian American (30%), Latino American (25%), White American (25%), African American (15%), and Native American Indian (5%). An item was eliminated if more than half of the expert sample indicated some degree of ambiguity about the "appropriateness" of the item. Based on this criterion, 6 additional items were eliminated (4 from the Multicultural Knowledge subscale and 2 from the Awareness of Cultural Barriers subscale), yielding a four-factor 21-item scale.

CBMCS Final Factor Structure

A final factor structure of the remaining 21 self-report items was realized with an exploratory factor analysis using a principal component extraction method and a Varimax rotation. Using the Kaiser-Guttman retention criterion of eigenvalues greater than 1.0, a four-factor solution (similar to the solution in Study 2a) provided the clearest extraction. Table 2 presents the 21 items, the original scale and subscale they came from, their factor structure coefficients, communality estimates, and item-total correlations. Communalities were fairly high for each of the 21 items, with a range of .51 to .71. These results reinforce and refine the factor structure we originally delineated in Study 2a: Four underlying factors (that account for 59% of the total variance) depict or best fit the variability found among the 21 multicultural self-report items.

Factor 1, Nonethnic Ability (eigenvalue = 6.50), accounted for 31% of the variance and had 7 items; Factor 2, Awareness of Cultural Barriers (eigenvalue = 2.55), accounted for 12.1%

TABLE 2 *(Continued)*

Summary of Items and Structure Coefficients From Principal Component Analysis With Varimax Rotation Study 2b ($N = 415$)

Scale and Subscale	Structure Coefficients				h^2	CITC
	Factor 1	Factor 2	Factor 3	Factor 4		
MCCTS *(Continued)*						
Skills						
13. I can identify my reactions that are based on stereotypical beliefs about different ethnic groups.	.33	**.53**	.14	.07	.41	.49
14. I have an excellent ability to critique multicultural research.	.16	−.03	**.80**	.11	.68	.45
MAKSS						
Skills						
15. I have an excellent ability to identify the strengths and weaknesses of psychological tests in terms of their use with persons with different cultural/racial/ethnic backgrounds.	.17	−.03	**.71**	.12	.55	.41
Knowledge						
16. I can discuss within group differences among ethnic groups (e.g., low socioeconomic status [SES] Puerto Rican client vs. high SES Puerto Rican client).	.13	.16	**.71**	−.02	.55	.43
MCCTS						
Knowledge						
17. I can discuss research regarding mental health issues and culturally different populations.	.09	.15	**.71**	.01	.53	.41
MCAS-B						
Knowledge/Skills						
18. I am knowledgeable of acculturation models for various minority groups.	.17	.25	**.69**	−.02	.56	.49
CCCI-R						
Skill						
19. My communication is appropriate for my clients.	.27	.07	.02	**.77**	.67	.41
Cultural Sensitivity						
20. I am aware of institutional barriers that affect the client.	.09	.30	.11	**.75**	.68	.44
Socio-Political Awareness						
21. I am aware of how my own values might affect my client.	.18	.24	.03	**.72**	.61	.42
Eigenvalues	6.50	2.55	2.10	1.21		
% of variance	30.95	12.13	10.00	5.78		
Coefficient α	0.90	0.78	0.80	0.75		

Note. Factor 1 = Nonethnic Ability; Factor 2 = Awareness of Cultural Barriers; Factor 3 = Multicultural Knowledge; Factor 4 = Sensitivity to Consumers; CITC = corrected item-total correlation. MAKSS = Multicultural Awareness, Knowledge, Skills Survey; MCAS-B = Multicultural Counseling Awareness Scale-Form B; MCCTS = Multicultural Competency and Training Survey; CCCI-R = Cross-Cultural Counseling Inventory-Revised. Boldfaced values indicate highest factor loadings.

TABLE 3

Study 2b Correlation Coefficients, Means, Standard Deviations, Alpha Coefficients for California Brief Multicultural Competence Scale (CBMCS) and Multicultural Counseling Inventory (MCI) Subscales, and Demographics

Scale	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	*M*	*SD*	α
1. CBMCS-Knowledge	—	.28*	.22*	.40*	.25*	.41*	.08	.21*	−.11*	−.10*	−.05	−.12*	.07	.20*	.21*	.18*	2.43	0.58	.80
2. CBMCS-Awareness		—	.36*	.32*	.35*	.45*	−.01	.40*	−.01	.09	−.02	−.08	.29*	.26*	.33*	.28*	3.06	0.47	.78
3. CBMCS-Sensitivity			—	.37*	.62*	.50*	−.02	.46*	−.02	.02	−.04	−.01	.11*	.18*	.21*	.15*	3.25	0.50	.75
4. CBMCS-Nonethnic Ability				—	.50*	.42*	.04	.28*	.01	.01	.02	.02	.17*	.22*	.17*	.10*	2.79	0.54	.90
5. MCI-Skills					—	.57*	.03	.56*	.04	.01	.04	.06	.15*	.17*	.24*	.17*	3.06	0.35	.78
6. MCI-Awareness						—	.09	.50*	−.10	.04	−.02	.01	.14*	.26*	.30*	.30*	2.94	0.45	.80
7. MCI-Relationship							—	−.05	−.07	−.03	−.06	−.03	.10*	.03	−.03	.02	2.65	0.31	.27
8. MCI-Knowledge								—	−.07	−.03	−.06	−.03	.32*	.21*	.30*	.29*	2.92	0.32	.57
9. Age									—	−.24*	.38*	.38*	.10*	.01	.04	.06	37.5	16.0	
10. Gender										—	−.23*	−.20*	.07	.03	.14*	.01	1.65	0.48	
11. Years in mental health											—	.79*	.13*	.04	−.07	.11*	2.82	1.53	
12. Years with multicultural clients												—	.05	.06	−.05	.11*	3.15	1.50	
13. Education													—	.28*	.35*	.36*	2.91	1.32	
14. Multicultural counseling program														—	.54*	.37*	1.57	0.50	
15. Multicultural course work															—	.49*	1.73	0.45	
16. Multicultural workshops																—	1.80	0.40	

*$p < .01$.

ducted for both subscales. The comparison for the Awareness of Cultural Barriers subscale indicated that doctorate-level ($M = 3.22$, $SD = .45$) and master's-level practitioners ($M = 3.17$, $SD = .38$) scored significantly higher than all other groups: bachelor's level ($M = 3.02$, $SD = .43$), high school level ($M = 2.76$, $SD = .55$), and others ($M = 2.89$, $SD = .52$). For the Nonethnic Ability subscale, high school-level practitioners ($M = 2.39$, $SD = .55$) had significantly lower subscale scores than all others groups: doctorate level ($M = 2.84$, $SD = .45$), master's level ($M = 2.88$, $SD = .46$), bachelor's level ($M = 2.77$, $SD = .57$), and others ($M = 2.70$, $SD = .64$). Two of the four MANOVAs (age group and ethnicity) were not significant ($p > .01$), indicating comparable scores on the four dependent measures for these two independent variables.

STUDY 2C: RESULTS AND DISCUSSION

The purpose of Study 2c was to obtain empirical evidence through the use of confirmatory maximum likelihood factor analysis of the construct validity of the four-factor CBMCS elucidated in Study 2a and 2b. The sample size of $N = 414$ was deemed adequate for the purpose of conducting a confirmatory factor analysis (CFA; Quintana & Maxwell, 1999).

Construct validity was assessed through a series of CFAs. CFA is a technique that assesses the degree to which an expected or hypothesized factor model can effectively reproduce the observed or sample item covariances. CFA begins with an a priori hypothesized model and deductively ascertains its feasibility by offering more definitive empirical evidence of the underlying factor structure of a scale than an exploratory factor analysis (Meyers et al., in press; Tabachnick & Fidell, 2001). Missing data were estimated through a full information maximum likelihood imputation.

The models were tested in the following order: (a) a single-factor model in which all items were free to load on only one common factor, (b) a correlated three-factor model in which each factor was correlated with each other, (c) a correlated four-factor model in which each factor was correlated with each other, and (d) a nonorthogonal four-factor model in which one factor is a second-order hierarchical factor loading on four first-order factors. Conceptually, each item was viewed as an indicator of one of the first-order factors; then the first-order factors were considered to be indicators of the higher order factor. These models were developed to address whether the CBMCS is unitary, multidimensional, or influenced by a higher order factor.

The models were assessed by AMOS version (4.0) maximum likelihood factor analysis (Arbuckle, 1999). The models were evaluated by a variety of fit measures that are classified as absolute, relative, parsimonious, and population discrepancy. Absolute fit measures assess how well the proposed interrelationships among the variables match the interrelationships among the actual interrelationships. The chi-square test was the measure of absolute fit used in this study because AMOS does not provide other absolute measures when missing data are estimated with the full information maximum likelihood imputation procedure. Jöreskog and Sörbom (1989) and Bentler (1992), however, advised against the sole use of the chi-square value in assessing the fit of the model because of the sensitivity of the chi-square to sample size. Measures of relative fit compare the hypothesized model with the null model. The relative fit measures used in this study were the comparative fit index (Bentler, 1990) and the Tucker-Lewis index (Bentler & Bonett, 1980; Tucker & Lewis, 1973). Hu and Bentler (1999) suggested cutoff values close to .95 as acceptable for model fit. Measures of parsimonious fit determine if the overall fit of the model has been accomplished by overfitting the data (Byrne, 1999). The parsimonious fit measures in this study were the chi-square divided by the degrees of freedom and the incremental fit index. Bollen (1989) reported that there is no consensus on the value of the chi-square divided by the degrees of freedom ratio for an adequate fit because values range from 5, 3, 2, or less. The incremental fit index was developed by Bollen to address the issues of parsimony and sample size with values close to .95, which is indicative of an acceptable fit (Hu & Bentler, 1999). Finally, population discrepancy measures are estimates between the sample coefficients and the population coefficients. The population discrepancy measure in this study was the root mean square error of approximation, with suggested values of less than .05 (as indicative of a good fit) and values as high as .08 (representing reasonable errors of approximation in the population; Browne & Cudeck, 1993).

Those models achieving an acceptable fit were then compared by examining differences in values of chi-square to identify statistically significant variations among the models, the expected cross-validation index (ECVI; Browne & Cudeck, 1993), and the Akaike's information criterion (AIC; Akaike, 1987). Both the ECVI and the AIC are used in the comparison of models, with smaller values representing a better fit of the hypothesized model (Hu & Bentler, 1995).

The responses of a holdout sample of 414 participants from the initial study were subjected to a series of CFA. All three comparison indices (the chi-square difference test, the ECVI, and the AIC) indicated that the four-factor correlated model demonstrated statistically significant structure coefficients to their assigned factor. The fit indices for the four models are presented in Table 4.

The results of the chi-square test for differences, the AIC, and the ECVI reveal that the correlated four-factor model is superior to the other models. The correlated four-factor model yielded acceptably high goodness of fit indices (i.e., > .97) for both the comparative fit index and the Tucker-Lewis index. The root mean square error of approximation achieved a value of .086, indicating an acceptable fit of the model in relation to the degrees of freedom (Browne & Cudeck, 1993). The correlations among the four factors are presented in Table 5. The intercorrelations among the factors were all less than .9, indicating that the five factors demonstrated discriminant validity. Table 6 shows that all measured variables correlated significantly with their respective factors.

These results suggest that the scores of the CBMCS achieved construct validity (i.e., the items were shown to measure their respective hypothetical constructs). Furthermore, the psychometric properties of the final 21-item CBMCS indicated acceptable alpha coefficients for the four subscales, and their intercorrelations demonstrated discriminant validity. Because this is a recently developed scale, additional studies are needed to further test CBMCS scores' validity and reliability.

STUDY 3: SOCIAL DESIRABILITY CHECK REVISITED

This study reassessed the possibility of CBMCS social desirability contamination, first discussed in Study 1, by relating the SDS to the subscales of the final 21-item CBMCS with a new sample of respondents.

Participants and Procedure

Participants consisted of beginning marriage and family therapy graduate students from two Southern California universities, enrolled in introductory multicultural or research methods courses ($N = 33$ of 44 students), 79% female, with a mean age of 32.19. Student ethnicity was as follows: White American (57.6%), Latino American (24.2%), Asian American (6.1%), and other (12.1%). Education levels were bachelor's degree (78.8%), master's degree (15.2%), and other (6.0%). Student language ability yielded 63.6% English only and 36.4% bilingual ability. Students completed a consent form, the CBMCS, and the SDS, followed by a debriefing. Participation was voluntary and anonymous.

Results and Discussion

To examine the possibility of social desirability contamination of the CBMCS, we computed Pearson correlations between the SDS and the four CBMCS subscale scores. All correlations were not statistically significant ($p > .05$). The specific correlations between the CBMCS and SDS scores were as follows: Multicultural Knowledge ($r = .18$), Awareness of Cultural Barriers ($r = -.04$), Sensitivity to Consumers ($r = -.09$), and Nonethnic Ability ($r = -.03$). These results suggest that the CBMCS subscales were probably not contaminated by social desirability effects.

STUDY 4: CFA OF THE 21-ITEM CBMCS

Although the CFA of Study 2c provided support for the initial four-factor model explicated in Study 2b, a possible confound exists that needs to be addressed. This potential confound deals

TABLE 4

Fit Indices for Four Models in Study 2c ($N = 414$) and Study 4 ($N = 414$)

Model	χ^2	*df*	χ^2/df	IFI	CFI	TLI	RMSEA	90% CI	ECVI	AIC
					Study 2c					
Single-factor	1,785.09	190	9.39	.945	.945	.933	.140	.134–.146	4.48	1,909.1
Three-factor correlated	955.90	186	5.14	.974	.974	.967	.099	.092–.105	2.55	1,087.9
Four-factor correlated	757.58	183	4.14	.980	.980	.975	.086	.080–.092	2.10	895.6
Second order	774.57	185	4.18	.980	.980	.975	.086	.080–.093	2.13	908.5
					Study 4					
Single-Factor	1,361.67	190	7.16	.954	.953	.943	.130	.125–.137	4.07	1,485.6
Three-factor correlated	677.17	186	3.64	.981	.981	.976	.085	.078–.092	2.21	809.2
Four-factor correlated	665.28	183	3.63	.981	.981	.976	.085	.078–.092	2.20	803.2
Second order	758.17	185	4.10	.977	.977	.972	.092	.084–.099	2.44	892.2

Note. IFI = incremental fit index; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root-mean-square error of approximation; 90% CI = 90% confidence interval; ECVI = expected cross-validation index; AIC = Akaike's information criterion.
*$p < .05$.

with the fact that all 1,244 respondents in Studies 2a, 2b, and 2c were exposed to all the items on the five cultural competence self-report inventories, and the respondents may have been biased inadvertently through this exposure. To overcome this potential confound, an additional CFA was conducted on a new, sufficiently large sample of community mental health providers exposed to only the 21-item CBMCS.

Participants and Procedure

Participants ($N = 366$) were community mental health providers conveniently sampled from several southern California community mental health agencies. About 62.6% of the sample was female. The average age was 45.92 years ($SD = 11.17$). Over half the sample was White American (54.6%), followed by Latino American (13.7%), African American (11.5%), Asian American/Pacific Islander (11.5%), Native American Indian (1.4%), and other (7.3%). The modal degree observed among these providers was a master's degree (52.8%). Bilingual abilities were found among 30.1% of the sample. Respondents reported an average of 13.67 years ($SD = 10.00$) working in the mental health field and 16.41 years ($SD = 9.83$) working with multicultural clients.

County staff members were contacted by the fourth author for possible participation in this study. Staff who volunteered to complete the questionnaire did so during normal working hours. The average amount of time to complete the CBMCS and the demographic information sheet was about 15 minutes.

TABLE 5

Correlations Among the Four Factors

Factor	1	2	3	4
1. Nonethnic Ability	.91			
2. Sensitivity to Consumers	.426*	.72		
3. Multicutural Knowledge	.485*	.287*	.97	
4. Awareness of Cultural Barriers	.366*	.500*	.350*	.78

Note. Cronbach's alpha on the diagonal.
*$p < .05$.

TABLE 6

Factor Pattern Coefficients of the California Brief Multicutural Competence Scale (Study 2c)

Item	Nonethnic Ability	Knowledge	Awareness	Sensitivity
Q18	.81			
Q5	.79			
Q3	.78			
Q21	.75			
Q13	.72			
Q6	.71			
Q20	.67			
Q12		.74		
Q7		.68		
Q19		.66		
Q15		.63		
Q17		.63		
Q14			.71	
Q8			.71	
Q1			.61	
Q10			.60	
Q11			.56	
Q16			.50	
Q4				.76
Q2				.73
Q9				.66

Note. Knowledge = Multicultural Knowledge; Awareness = Awareness of Cultural Barriers; Sensitivity = Sensitivity to Consumers.

Results and Discussion

A new sample of mental health providers ($N = 366$), exposed only to the 21-item CBMCS, was used to see if the four-factor correlated model was the superior model. Again, all three comparison indices (the chi-square difference test, the ECVI, and the AIC) indicated that the four-factor correlated model achieved a better fit of the data than did the other three models. Additionally, all measured variables demonstrated statistically significant structure/pattern coefficients to their assigned factor. Thus, the Study 4 sample supports the construct validity of the four-factor correlated model observed in Study 2c. The fit indices for the four models are presented in Table 4.

GENERAL DISCUSSION

Results from these studies suggest that the CBMCS is an efficient and effective tool for examining self-reported mental health practitioner cultural competency. This 21-item scale, specifically developed to measure self-reported multicultural competencies of mental health practitioners, is a promising measure. The new scale has advantages in comparison with other self-report measures: (a) shorter length; (b) development from a strong theoretical foundation; and (c) utilization of a large number of practitioners from various ethnic backgrounds, educational levels, ages, and experience.

Our findings demonstrate adequate CBMCS psychometric properties. For example, reliability, as measured by Cronbach's alpha, for the scores of the CBMCS subscales ranged from .75 to .90. Social desirability effects (e.g., Crowne & Marlowe, 1960) are minimal due to careful item screening prior to final scale development. Predictable correlations of the scores of the MCI subscales and the scores of the CBMCS subscales provided criterion-related validity.

should be noted that our subscales are very short (ranging from three to seven items each) and may not adequately address all of the facets found within each of the four constructs.

IMPLICATIONS

The current scale allows for the assessment of competencies with nonethnic groups previously unexamined by existing scales. The finding of four primary factors may imply a limitation in current multicultural training because this training has focused historically on three general multicultural counseling competency domains: awareness, knowledge, and skills. Consequently, the expansion of these three domains to include nonethnic ability challenges the existing array of constructs believed to underlie multicultural competence. As a consequence of these findings, educators and trainers should address all multicultural competence domains and encourage development of courses and training experiences specifically pertaining to other cultural groups (Holcomb-McCoy & Myers, 1999) in a variety of venues in addition to mental health, including rehabilitation (Dana, 2001), geriatrics, and health care. Ethnic differences are equally salient and relevant among persons with disabilities; older adults; persons who are indigent; and in gay, lesbian, bisexual, and transgendered populations.

The use of a large sample of mental health providers rather than graduate students increases professional counselors and researchers' understanding of multicultural competencies among service providers currently employed in mental health settings. As noted by Constantine and Ladany (2001), longitudinal studies are needed to examine the effects of multicultural counseling competencies. Such studies also provide the opportunity to gather much-needed baseline data regarding these competencies and aid our understanding of how competencies are further developed and refined. The question remains, do multicultural competencies remain stable, or do they change over time? The use of longitudinal data would allow educators to examine the impact of training on multicultural competencies, particularly because multicultural competencies of graduate students and counseling and psychology interns are frequently evaluated.

The use of qualitative approaches can also contribute to an understanding of how multicultural competencies evolve (Holcomb-McCoy & Myers, 1999) as a result of increased exposure to culturally diverse clients or of postdegree training. For instance, follow-up interviews to examine outcomes of a multicultural training course reported the participants' need for additional training to develop personal and professional culture self-awareness and self-knowledge (Tomlinson-Clarke, 2000). Qualitative approaches are also useful in allowing clients to identify and describe multicultural competencies in their own language, independently of language established by the counseling profession (Pope-Davis et al., 2001). Qualitative approaches provide valuable information anchored in the subjective experience of clients, thus providing insight into other salient variables affecting the therapeutic process that are infrequently captured in quantitative research (Fuertes et al., 2001; Pope-Davis et al., 2001). Integrating clients in the research process can facilitate the development of future theories of multicultural counseling competencies. Clients may or may not concur with the counseling profession in their perceptions of these competencies.

The CBMCS was neither conceived nor constructed to be simply another multicultural competence assessment instrument. Rather, the purpose of this new instrument is to provide an empirical resource for the design of in-service staff training using the CBMCS to identify staff competencies and limitations in areas delineated by each of the 21 items (see also Manese, Wu, & Nepomuceno, 2001). A user guide contains psychometric properties, scoring directions, transformation tables, and a profile sheet (Der-Karabetian et al., 2002). The CBMCS items were then used to develop a preliminary training manual (Dana, 2002) that was subsequently operationalized into syllabi for training purposes that contain modules representative of each factor (Arellano, Huff-Musgrove, & Morrow, 2003).

Multicultural competence assessment that leads to training of service providers is one important component of a system of quality care. The present CBMCS research embedded in the MAIP model provides an example of how services for multicultural populations can be improved and ultimately evaluated. Continued collaboration and joint efforts by professional counselors and psychologists toward increased understanding of these complex and dynamic constructs are sorely

Exploratory factor analyses of the CBMCS yielded four subscales (Nonethnic Ability, Awareness of Cultural Barriers, Multicultural Knowledge, and Sensitivity to Consumers) that were subsequently supported by two CFAs. Three of these factors—Multicultural Knowledge, Awareness of Cultural Barriers, and Sensitivity to Consumers—coincide roughly with the three competencies (i.e., tools) delineated by Sue (1991)—Beliefs/Attitudes, Knowledge, and Skills. This tripartite definition of multicultural competence is emphasized in most scales (Constantine & Ladany, 2001). However, Sodowsky et al. (1994) expanded this domain to include a fourth factor, Multicultural Counseling Relationship. Holcomb-McCoy and Myers (1999) also found that multicultural competencies comprise more than three dimensions and include racial identity and multicultural terminology.

An additional factor, Nonethnic Ability, appears to tap a relatively unique dimension of competence that may require an expansion of focus and broadening of the conceptualization of "multicultural competency." Previous multicultural competence self-report measures have emphasized competence in dealing with people/clients of color (Constantine & Ladany, 2000). More recent conceptualizations required that "to sufficiently assess a broad range of multicultural issues, various approaches will need to be developed to measure counselors' abilities or competencies regarding working with other cultural groups (e.g., women, men, the impoverished, and persons with disabilities)" (Constantine & Ladany, 2001, p. 486). The Nonethnic Ability factor appears to address this need, and the facets within this subscale explore issues related to people with disabilities or low socioeconomic status, lesbians and gay men, and seniors, as well as heterosexual men and women.

The CBMCS subscale scores achieved low-to-moderate positive correlations with the MCI subscales, with one important exception: The MCI relationship subscale did not correlate with the CBMCS subscales, which is probably due to the unreliability of scores on the MCI Relationship subscale in the present study.

The present study also examined the relationship of a variety of demographic variables to the CBMCS. MANOVA analyses indicated a significant gender effect, with male providers having higher CBMCS–Multicultural Knowledge subscale scores than female providers: Women were found to self-report higher Awareness of Cultural Barriers scores than men were. Graduate-level providers achieved higher CBMCS–Awareness of Cultural Barriers subscale scores than bachelor's or high school-level providers did. Nonethnic Ability scores were lower for high school-level providers than for all other educational groupings. Multivariate effects of provider ethnicity and age were not observed.

LIMITATIONS

Several limitations are present in this study. First, although the sample is large and does not include college students or academic practitioners, it is still a convenience sample and may not generalize to all mental health service providers. Additional research with this scale is needed to demonstrate replicability of the present findings with other populations. Second, the present study is based on self-report data from practitioners. Third, the underlying three-factor conceptual framework from which the original cultural competency self-report scales were derived may be inadequate (see Constantine et al., 2002). Fourth, some investigators (Constantine & Ladany, 2001; Worthington et al., 2000) have reported weak relationships between self-reported cultural competence and observer ratings of cultural competence. Fifth, there is no consumer perspective on staff cultural competency as recommended in recent literature (Fuertes, Bartolomeo, & Nichols, 2001; Pope-Davis et al., 2001). Sixth, although efforts were made to statistically control for social desirability, the CBMCS remains vulnerable to possible self-evaluations by counselors who anticipated outcomes instead of documenting actual competency outcomes that resulted from their interventions (Constantine & Ladany, 2001; Fuertes et al., 2001; Ponterotto & Alexander, 1996; Pope-Davis & Dings, 1995; Ridley, Mendoza, Kanitz, Angermeier, & Zenk, 1994). Seventh, omission of the MCI from the item pool considered by Pope-Davis and Dings (1995) to have the best overall validity evidence was unfortunate and may have affected the CBMCS items and factors. Eighth, although the overall goal of this study was to develop a brief, self-report cultural competence instrument, it

needed as contributions to appropriate and effective care for culturally diverse clients (Constantine & Ladany, 2000, 2001). This research is consistent with a continuing emphasis on assessment of multicultural competence in professional counseling and psychology (e.g., Pope-Davis, Coleman, Liu, & Toporek, 2003) and provides an additional avenue for delineation of in-service training that can be monitored and evaluated with public agencies.

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