

# Race/Ethnicity, Color-Blind Racial Attitudes, and Multicultural Counseling Competence: The Moderating Effects of Multicultural Counseling Training

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Increasing trainees' multicultural counseling competence (MCC) has been a hot topic in counseling. Scholars have identified predictors (e.g., race/ethnicity, color-blindness) of MCC, and educators provide multicultural training for trainees. Using a sample of 370 psychology trainees, this study examined whether multicultural training (a) moderated racial/ethnic differences on MCC and (b) changed the relationship between color-blindness and MCC. Results indicated a significant interaction effect of race/ethnicity (i.e., White vs. ethnic minority) and multicultural training on multicultural awareness, but not on multicultural knowledge. Specifically, at lower levels of training, racial/ethnic minority trainees had significantly higher multicultural awareness than their White counterparts; at higher levels of training, no significant difference was found. Described differently, more training significantly enhanced Whites' multicultural awareness, but did not enhance racial/ethnic minority trainees' awareness. Additionally, there was a significant interaction effect of color-blindness and multicultural training on multicultural knowledge, but not on multicultural awareness. The association between color-blindness and multicultural knowledge was stronger at higher levels of multicultural training than at lower levels of training. Alternatively, the effect of training on enhancing knowledge was stronger for those with lower color-blindness than for those with higher color-blindness.

*Keywords:* multicultural counseling competence, multicultural training, color-blind racial attitudes, White trainees, ethnic minority trainees

It has been almost three decades since D. W. Sue et al. (1982) published their model of multicultural counseling competence (MCC). The development of the MCC model provided the blueprint and theoretical framework for multicultural training (D. W. Sue, Arredondo, & McDavis, 1992; D. W. Sue & Sue, 1990, 2008). After these landmark contributions, the American Psychological Association (APA; 1986) changed its accreditation standards to mandate multicultural training so that trainees can acquire knowledge and skills relevant to understanding and working with clients of diverse backgrounds. Today, counseling psychology programs require trainees to take multicultural training courses. In fact, 90% of 49 counseling psychology programs offered at least one multicultural course (Hills & Strozier, 1992). Several measures of MCC have been developed

based on D. W. Sue et al.'s model (e.g., D'Andrea, Daniels, & Heck, 1991), and various studies, dissertations, and theses have explored MCC. Furthermore, MCC is viewed as a cornerstone of ethical practice (Arredondo & Toporek, 2004). Despite these critical developments over the years, some scholars noted that relatively little empirical research, such as moderator analysis, has directly evaluated this conceptual model (e.g., Atkinson & Israel, 2003; Ponterotto, Gretchen, Utsey, Rieger, & Austin, 2002).

D. W. Sue and Sue's model (1990, 2008) has been widely accepted as the crucial theoretical framework of MCC in counseling psychology and related fields. According to Sue and Sue's model, MCC consists of three areas: (a) attitudes and beliefs—awareness of one's own assumptions, values, and biases; (b) knowledge—understanding the worldview of culturally diverse clients; and (c) skills—developing appropriate intervention strategies and techniques. Pope-Davis and Ottavi (1994) further conceptualized that, compared with their White counterparts, trainees of color may have higher levels of MCC due to personal experiences as racial/ethnic minorities in the United States. Understanding one's racial/ethnic background and increasing awareness of one's own assumptions and values could be a critical step in improving trainees' MCC (Pope-Davis & Ottavi, 1994; D. W. Sue & Sue, 1990, 2008). Moreover, Neville, Spanierman, and Doan (2006) articulated that color-blindness involves a failure to acknowledge that discrimination could constitute societal racism and found that color-blind attitudes are negatively associated with MCC.

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A culturally competent psychology trainee acquires MCC via multicultural training in order to effectively work with diverse groups. Although research indicates that multicultural training is related to MCC (Smith, Constantine, Dunn, Dinehart, & Montoya, 2006), this positive association alone fails to deliver critical answers about the complex interplay of factors related to MCC development. Thus, the purpose of the present study was to examine whether multicultural training moderated racial/ethnic differences on MCC and changed the relationship between color-blindness and MCC.

### Race/Ethnicity, Multicultural Training, and MCC

Empirically, studies have yielded inconsistent findings on racial/ethnic differences and MCC. On one hand, some studies have established that racial/ethnic trainees report higher scores on MCC than White trainees. Constantine (2001) found that Black and Latino graduate students demonstrated greater levels of MCC than their White counterparts. Neville et al. (2006) also found that racial/ethnic minority trainees had higher scores than White trainees on multicultural knowledge. On the other hand, other scholars have found no significant difference between White and racial/ethnic minority trainees on scores of MCC (e.g., Manese, Wu, & Nepomuceno, 2001). Manese et al. examined White and racial/ethnic minority doctoral interns' MCC by comparing their scores at pre- and postinternship and found no significant difference. Moreover, Smith et al. (2006) conducted a meta-analysis on multicultural training and found no significant differences between White and racial/ethnic minority trainees on MCC. From our observation of these previous studies, it seems that among those with limited multicultural training (e.g., one multicultural training course or its equivalent), racial/ethnic minority students reported higher MCC scores than Whites (Constantine, 2001). Conversely, among doctoral interns with higher levels of multicultural training, White and racial/ethnic minority trainees demonstrated no significant differences in MCC (e.g., Manese et al., 2001; Pope-Davis, Reynolds, Dings, & Nelson, 1995). Statistically, Frazier, Tix, and Barron (2004) indicated that if "there are inconsistent relations between a predictor and an outcome across studies," the appropriate methodology is to "introduce moderators" (p. 117). Thus, conducting moderator analyses in the present study may provide a potential interpretation for the inconsistent results of racial/ethnic differences on MCC.

Conceptually, according to D. W. Sue and Sue's (1990, 2008) MCC model, due to racial/ethnic minority trainees' personal experiences, socioeconomic status, and greater familiarity with multicultural issues, racial/ethnic minorities are expected to show greater levels of MCC than Whites (Pope-Davis & Ottavi, 1994; Sodowsky, Kuo-Jackson, Richardson, & Corey, 1998). Furthermore, some scholars (e.g., Pope-Davis & Ottavi, 1994; Sodowsky et al., 1998) also implied that the enhancement of trainees' (White vs. racial/ethnic minority) MCC might depend on different levels of training. For example, at lower levels of training, it can be anticipated that racial/ethnic minority trainees will have higher scores on MCC than White trainees. The reasoning is that the lower or minimum multicultural training may confirm racial/ethnic minority trainees' experience of tackling majority culture in conflict with their own, whereas White trainees may lack such experiences. Thus, White trainees at lower levels of training may have fewer experiences than their ethnic minority counterparts in cross-

cultural negotiation. At higher levels of multicultural training, it can be anticipated that there will be no significant difference in MCC between racial/ethnic groups (White vs. racial/ethnic minority trainees). The possible reason is that both White and ethnic minority trainees with higher multicultural training will have had a few years of multicultural training to cultivate MCC, and this training will effectively reduce the gap in MCC between racial/ethnic minority and White students.

On the basis of the above literature, our first hypothesis is that there is an interaction effect of race/ethnicity and multicultural training on MCC (i.e., multicultural knowledge and awareness). Specifically, we expect that, at lower levels of training, racial/ethnic minority trainees will have higher levels of MCC than Whites; however, at higher levels of training, these two groups will have similar MCC scores.

### Color-Blindness, Multicultural Training, and MCC

MCC goes beyond a White versus racial/ethnic minority distinction; it also involves levels of color-blindness, which anyone, regardless of racial/ethnic group affiliation, could have. *Color-blindness* refers to the denial of the social significance regarding race and the existence of racism in the United States today (Neville et al., 2006). In fact, color-blindness is a racially biased framework that individuals, groups, and systems consciously or unconsciously use to justify the racial status quo or to minimize racial inequalities in the United States (Neville, Lilly, Duran, Lee, & Browne, 2000).

Researchers have reported that color-blindness is negatively correlated with multicultural knowledge and awareness (Neville et al., 2006; Spanierman, Poteat, Wang, & Oh, 2008). In an analogue study, Gushue (2004) found that color-blind racial attitudes were positively related to the impressions of symptomatology of a Black client but not a White client. These studies demonstrated that trainees with higher levels of color-blindness not only had lower scores on self-reported multicultural knowledge (Neville et al., 2006; Spanierman et al., 2008) but also potentially distorted diagnoses of racial/ethnic minority clients (Gushue, 2004). Despite knowledge of the significant association between color-blindness and MCC, the challenge is to understand the role of training in altering the strength of this association. In this study, we focus on whether levels of training interact with color-blindness to predict MCC. Gushue and Constantine (2007) suggest that training may change the strength of the association between color-blindness and awareness of racial identity, a crucial component in MCC. Accordingly, levels of self-reflection, cultural material in curriculum, and training with diverse populations may have an impact on the association between color-blindness and MCC. Specifically, with more training, trainees may have more sensitivity about the association between their adoption of color-blind racial attitudes and MCC (i.e., this association would be stronger); yet, with limited training, trainees may have limited sensitivity to this association (i.e., this association might be weaker). Because multicultural training was negatively associated with implicit prejudice (Castillo, Brossart, Reyes, Conoley, & Phoummarath, 2007), trainees with more training may have more resources than those with limited training to be aware of how their color-blind attitudes are related to their levels of MCC.

Furthermore, three additional reasons support our expectations that multicultural training may moderate the association between color-

blindness and MCC. First, multicultural training was related to trainees' cultural empathy (Burkard & Knox, 2004) and their understanding of the racial context of clients' problems (D. W. Sue & Sue, 1990, 2008). When trainees receive more training, they may be more capable than those with limited training in demonstrating empathy in an appropriate cultural context and may be more insightful in connecting the racial context with clients' problems. A second reason could be that at high levels of training, few trainees are resistant to internalizing noncolor-blind attitudes and developing multicultural competence. Therefore, when their color-blind attitudes decrease, those with high levels of training would have higher levels of MCC than those with low levels of training. Third, perhaps those with higher levels of color-blind attitudes are relatively unable to take advantage of multicultural training compared with those with low levels of color-blind attitudes. For this reason, multicultural knowledge difference between those with high and low levels of color-blind attitudes is larger at high levels of training than at low levels of training. On the basis of our above conceptual reasoning and the empirical literature, our second hypothesis is that multicultural training will moderate the association between color-blindness and MCC (i.e., multicultural knowledge and awareness). Specifically, we expect that the association between color-blindness and MCC is stronger at the higher levels of multicultural training than at the lower levels of multicultural training.

### The Present Study

To our knowledge, the present study is the first to examine whether multicultural training (a) moderated racial/ethnic differences (White vs. racial/ethnic minority) on MCC and (b) changed the relationship between color-blindness and MCC. The aims of the present study were twofold. Our first goal was to investigate whether levels (i.e., higher vs. lower levels) of multicultural training moderated racial/ethnic group differences on MCC. Specifically, we hypothesize that racial/ethnic minority trainees will have higher levels of MCC than their White counterparts at lower levels of training, but these two groups may have no differences in MCC at higher levels of training. Our second goal was to examine whether levels of training change the strength of the relationship between color-blindness and MCC. Thus, we hypothesize that this relationship is stronger at higher levels of training, but weaker at lower levels of training. Importantly, the moderation effect of multicultural training has practical implications. If the results support our hypotheses, then this study may help us understand that the levels of White and racial/ethnic minority trainees' MCC may be varied by their multicultural training levels. Additionally, trainees at higher levels of training may have more sensitivities, resources, and insights than those at lower levels of training to have more MCC as their color-blindness levels are lower.

Many scholars caution that MCC could be confounded with other constructs and suggest that researchers control for those variables (Sodowsky et al., 1998; Worthington, Mobley, Franks, & Tan, 2000). Thus, two covariates were controlled in our study: social desirability and gender role attitudes (i.e., attitudes toward the equality of women and men). First, researchers of previous studies (Sodowsky et al., 1998) noticed that social desirability might confound the results of MCC studies when not controlled. Next, although there were no significant relationship between gender and MCC (Smith et al., 2006), both flexible gender role attitudes and MCC focus on egalitarianism. Moreover, traditional

gender role attitudes are socialized with dominant White European culture in which the norms could be used to avoid cultural (including gender) diversity (Wester, 2008). Thus, gender role attitudes might be a confounding variable for trainees' MCC level. For these reasons, we examined these two variables as covariates to control for their potential effects on MCC.

### Method

**Participants.** Three hundred seventy graduate students (303, 82% female; 62, 17% male; 5 did not identify gender) were recruited from counseling psychology programs across the United States. Our sample reflected the 79% female to 21% male trainee's ratio found in counseling psychology programs (Spanierman et al., 2008). A nonsignificant result from a chi-square analysis,  $\chi^2(1, N = 370) = 0.11, p = .90$ , indicated that the proportion of male and female trainees in our sample is comparable to the proportion of male and female trainees in counseling psychology programs nationwide. Participants ranged in age from 20 to 68 years ( $M = 30.97, SD = 9.44$ ). Most were White/European American ( $n = 255; 69%$ ), with 115 (31%) racial/ethnic minorities. Among the racial/ethnic minority participants, there were 36 Asian Americans, 42 Blacks, 34 Latino/as, two Native Americans, and one who identified as biracial. Among the participants, one was from a multiracial family, and eight participants' racial status differed from the racial status of both parents. Participants were asked to report their multicultural training levels, which followed Sodowsky et al.'s (1998) classifications. For example, a student who had participated in one MCC class and two multicultural workshops would receive a score of 3 on multicultural training. Among all trainees, 16% ( $n = 61$ ) indicated no multicultural training (i.e., no multicultural coursework, no research, and no workshop training.) Seventy-seven percent ( $n = 217$ ) of trainees had taken a multicultural course; of those, 23% had taken two or more courses. In addition, 59% had performed multicultural counseling research, of which 22% had been involved in more than one research project. Sixty-two percent had attended workshops. Among those who attended workshops, 35% had attended more than one workshop.

#### Instruments.

**Demographic questionnaire.** Participants provided information about their gender, age, and categories of race/ethnicity. In addition, following Sodowsky et al.'s (1998) suggestion, participants indicated the amount of multicultural training they had received by specifying the number of multicultural courses, multicultural research projects, and workshops in which they participated or completed in their graduate training.<sup>1</sup> Sodowsky et al.'s method was then followed to sum all courses, research projects, and workshops into a single score to represent the multicultural training levels. Thus, higher scores reflect higher levels of multicultural training.

**The Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1991).** The BIDR measures the tendency to respond and exhibit behaviors or thoughts that are viewed as socially

<sup>1</sup> We emphasized the multicultural training level rather than the educational level in Sodowsky et al.'s (1998) study. This is because multicultural training was only beginning to be required in the 1990s (Hills & Strozier, 1992). Thus, some counselors still lacked enough multicultural training, even psychologists, doctoral interns, and graduate students.

desirable yet not accurate (Paulhus & Reid, 1991). Sample items include "My first impressions of people usually turn out to be right" or "I always know why I like things." The BIDR consists of 40 items, with two subscales of 20 items each, evaluating impression management and self-deception. The scale is composed of an answer format consisting of a 7-point Likert scale ranging from 1 (*not true*) to 7 (*very true*); one point is scored for each extreme answer (6 or 7), and a total score ranges from 0 to 40. Higher scores indicate a greater tendency to respond and exhibit behaviors or thoughts that are viewed as socially desirable. The BIDR has been used successfully with various racial/ethnic and cultural groups (e.g., Heine & Lehman, 1995). Dillon and Worthington (2003) reported a coefficient alpha of .85 with a sample of graduate students in psychology and mental health professions. In the present study, a coefficient alpha of .85 was obtained for the BIDR scores. The BIDR demonstrates convergent validity by being positively associated with other social desirability scales (Paulhus, 1991).

**The Sex-Role Egalitarianism Scale (SRES; King & King, 1993).** The SRES measures gender role attitudes toward equality between women and men. The SRES contains 25 items that require judgments about both women and men who exhibit nontraditional roles in respect to their genders. Sample items include "A husband should leave the care of young babies to his wife" and "It is worse for a woman to get drunk than for a man." Items are scored on a 5-point Likert scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). Higher scores indicate higher levels of beliefs in equality of gender roles. Coefficient alphas of the SRES have been in the low .90s (Fitzpatrick, Salgado, Suvak, King, & King, 2004), ranging from .84 to .93 for Black and White samples. Our sample had a coefficient alpha of .89. The construct validity of the SRES was demonstrated by positive correlations between SRES scores with other measures that detect attitudes toward traditional/nontraditional gender roles and nonsignificant associations with social desirability measures (King & King, 1993).

**The Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000).** The 20-item CoBRAS measures the extent to which an individual denies racism and the effect of race on people's lives. Sample items were "It is important that people begin to think of themselves as American and not African American, Mexican American or Italian American" and "Social policies, such as affirmative action, discriminate unfairly against White people." The CoBRAS is rated on a 5-point Likert scale ranging from 1 (*not at all appropriate or clear*) to 5 (*very appropriate or clear*), with higher scores reflecting higher levels of color-blindness. Neville et al. (2000) reported coefficient alphas from .86 to .91 for the total score. Alphas of .85 and .88 were reported for a sample of White psychology trainees (Gushue, 2004) and a combined sample of White and racial/ethnic minority counselors and trainees (Neville et al., 2006), respectively. Our sample had a coefficient alpha of .88. CoBRAS scores were significantly related to measures of racism but not to social desirability (Neville et al., 2000).

**The Multicultural Counseling Knowledge and Awareness Scale (MCKAS; Ponterotto et al., 2002).** The MCKAS includes two subscales that assess Multicultural Awareness (12 items) and Multicultural Knowledge (20 items). Participants rate items on a 7-point Likert scale ranging from 1 (*not at all true*) to 7 (*totally true*), with a higher score indicating a higher level of multicultural awareness and knowledge, respectively. Sample items include "I

am aware that being born a minority in this society brings with it certain challenges that White people do not have to face" (MCKAS-Awareness) and "I am knowledgeable of acculturation models for various ethnic minority groups" (MCKAS-Knowledge). Higher scores indicate higher multicultural competencies in the specified area. Coefficient alphas of the MCKAS subscales ranged from .75 to .85 for the MCKAS-Awareness and from .85 to .95 for the MCKAS-Knowledge subscales with psychology trainee samples (Neville et al., 2006; Ponterotto et al., 2002). Our sample had coefficient alphas of .82 for Awareness and .91 for Knowledge. In addition, according to Ponterotto et al., MCKAS was not correlated with social desirability. Finally, MCKAS-Awareness was positively associated with a measure of counseling relationship, and MCKAS-Knowledge was positively related to a measure of multicultural knowledge, skill, and awareness (Ponterotto et al., 2002).<sup>2</sup>

**Procedure.** An e-mail describing the study as an investigation of psychology trainees' multicultural competence was distributed to graduate programs in counseling psychology across the country. Specifically, the survey invitation was e-mailed to training directors or program chairs of 35 APA-accredited counseling psychology programs. Among these programs, nine training directors or program chairs replied and agreed to forward our invitation to trainees in their respective programs. Individuals interested in participating were directed to an Internet address where they could access the online survey. Participants were first directed to a Web page containing an informed consent form, and participants indicated their agreement by clicking on text reading "Agree." Those who consented were then directed to the survey page that included a demographic questionnaire, BIDR, SRES, CoBRAS, and MCKAS. No identifying information was collected, but participants were given the option of including their e-mail address if they wished to receive a summary of the research findings and enter a lottery to win \$100.

A total of 386 completed surveys were received. A potential characteristic of Internet-based data collection is the possibility that a participant can submit data more than once. As recommended by Schmidt (1997), duplicate surveys can be identified by the date, time, and the origin of submissions; six participants submitted duplicate surveys, and only one copy of each duplicate survey was kept. Kraut et al. (2004) noted that Internet-based survey methodologies are susceptible to respondents intentionally supplying incorrect data. Two validity check items (i.e., "Leave this item blank.") in the survey served to identify inattentive or random responses. Data from 10 participants did respond to one or both of these items and were deleted from analysis. The final sample was 370 participants (i.e., 386 - 6 - 10 = 370).

<sup>2</sup> In our study, we used the MCKAS (Ponterotto et al., 2002) to measure trainees' self-reported MCC. To date, there are three major assessments based on Sue et al.'s (1982) competency model (i.e., *Multicultural Awareness/Knowledge/Skill Survey* [MAKSS; D'Andrea et al., 1991]; *Multicultural Counseling Inventory* [Sodowsky et al., 1994]; *Multicultural Counseling Awareness Scale* [MCAS; Ponterotto et al., 1996]). The MCKAS is an updated version of MCAS that includes knowledge/skills and awareness subscales. We chose the MCKAS for two reasons: (a) a strong promise for multicultural counseling research (Constantine & Ladany, 2001) and (b) reasonable length (i.e., 32 items, compared with the 60 items in MAKSS).

## Results

**Preliminary analyses.** Table 1 shows the means, standard deviations, correlations, and alphas. For both White and ethnic/racial minority trainees, the variables in this study correlated with one another, with the exception of three pairs of variables: gender role attitudes and multicultural training, social desirability and multicultural training, and social desirability and MCKAS-Knowledge. Additionally, for ethnic/racial minority trainees, gender role attitudes did not correlate with social desirability. To examine whether the dependent variables (i.e., multicultural awareness and multicultural knowledge) varied as a function of participants' age and gender, we conducted a correlational analysis for age and a *t*-test analysis for gender with the two dependent variables. Our correlational analysis showed that age was not related to multicultural awareness ( $r = .07, p = .19$ ) or knowledge ( $r = .09, p = .09$ ). The *t*-test results revealed no significant main effects for participant gender on multicultural awareness,  $t(363) = -1.45, p = .15$ , or multicultural knowledge,  $t(363) = -1.27, p = .20$ . In summary, the dependent variables (i.e., awareness and knowledge) did not differ significantly based on age or gender.

In addition, in Table 1, the mean scores on multicultural awareness and knowledge seem to be close to the ceiling (i.e., at the highest rating point of 7). However, it is important to note that the mean scores on multicultural awareness for racial/ethnic minorities ( $M = 5.86$ ) were significantly higher than the scores for Whites ( $M = 5.26$ ),  $t(368) = 5.78, p < .001$ , with a large effect size (Cohen  $d = 0.77$ ). Conversely, there was no significant mean score difference between racial/ethnic minorities ( $M = 5.78$ ) and Whites ( $M = 5.67$ ) on multicultural knowledge,  $t(368) = 1.71, p = .09$ , with a very small effect size (Cohen  $d = 0.14$ ). Therefore, even

though racial/ethnic minorities had significantly higher scores on multicultural awareness than Whites, both groups' multicultural knowledge levels were similar.

Because regression analyses can be adversely affected by normality distribution, we examined the data to ensure it met regression assumptions of normality, linearity, and homoscedasticity (Cohen, Cohen, West, & Aiken, 2003, pp. 130–141; Tabachnick & Fidell, 2007, pp. 125–127). Results indicated that, for multicultural awareness, the residual skewness and kurtosis were  $-0.42$  ( $Z = -3.27, p < .001$ ) and  $0.43$  ( $Z = 1.74, p = .08$ ), respectively. For multicultural knowledge, the residual skewness and kurtosis were  $-0.05$  ( $Z = -0.40, p = .96$ ) and  $0.37$  ( $Z = 1.46, p = .14$ ), respectively. These results indicate that the distribution of multicultural awareness departed from normality at a statistically significant degree, though multicultural knowledge was normally distributed. Thus, we used a square-root transformation for multicultural awareness only. When we used the transformed variable of multicultural awareness in the regression model, it resulted in a decrease in the residual skewness scores,  $-0.13$  ( $Z = -1.02, p = .31$ ), and a decrease in the residual kurtosis scores,  $0.05$  ( $Z = 0.40, p = .69$ ). The results of the transformed scores of multicultural awareness indicated that all the *Z* values were not significantly different from zero, which meets the regression assumption of normality. When we used the transformed scores of multicultural awareness in analyzing the data, the pattern of results for the regression analysis was identical to that found using the original scores. Hence, the original scores of multicultural awareness and knowledge were used in the present analyses because the results of regression analyses using the nontransformed MCC scores are more readily interpretable.

Table 1  
Correlations, Alphas, Means, and Standard Deviations Among Variables by Race/Ethnicity

Variable	1	2	3	4	5	6
White trainees ( $n = 255$ )						
1. SRES	—					
2. BIDR	-.13*	—				
3. CoBRAS	-.43**	.24**	—			
4. Multicultural training	.03	-.08	-.39***	—		
5. MCKAS-Awareness	.23***	-.13*	-.56***	.45***	—	
6. MCKAS-Knowledge	.24*	-.01	-.44***	.47***	.51***	—
$\alpha$	.71	.85	.89	.82	.83	.90
<i>M</i>	2.54	3.75	2.25	3.85	5.26	5.67
<i>SD</i>	0.24	0.69	0.75	2.07	0.83	0.86
Racial/ethnic minority trainees ( $n = 115$ )						
1. SRES	—					
2. BIDR	-.08	—				
3. CoBRAS	-.28**	.22**	—			
4. Multicultural training	.01	-.09	-.34***	—		
5. MCKAS-Awareness	.28***	-.12*	-.51***	-.44***	—	
6. MCKAS-Knowledge	.15*	-.06	-.44***	.49***	.41***	—
$\alpha$ (ethnic minority)	.72	.83	.90	.81	.80	.90
<i>M</i>	2.58	3.87	2.11	4.69	5.86	5.78
<i>SD</i>	0.23	0.60	0.63	2.93	0.73	0.74

Note.  $N = 370$ . Means and standard deviations are based on the item-mean level for each scale. SRES = Sex-Role Egalitarianism Scale; BIDR = Balanced Inventory of Desirable Responding; CoBRAS = Color-Blind Racial Attitudes Scale; MCKAS = Multicultural Counseling Knowledge and Awareness Scale.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

**Moderator analyses.** We first standardized the covariate, predictor, and moderator variables in order to reduce multicollinearity (Aiken & West, 1991; Frazier et al., 2004, see p. 120 for a discussion) and created interaction terms of Race/Ethnicity  $\times$  Training and Color-Blindness  $\times$  Training. We conducted two regression analyses, one with awareness as the outcome variable and the other with knowledge as the outcome variable. Within each regression, in Step 1, social desirability and gender role attitudes were entered as covariates to control for the potential confounding effects on multicultural awareness or knowledge. In Step 2, we entered participants' race/ethnicity (White = 0; Racial/Ethnic Minority = 1), color-blindness, and multicultural training. In Step 3, two interaction terms, representing Race/Ethnicity  $\times$  Multicultural Training and Color-Blindness  $\times$  Multicultural Training, were entered (see Table 2). Finally, after analyzing multicultural awareness as above, knowledge was analyzed in the same manner.

**Multicultural awareness.** Table 2 provides a summary of the hierarchical regression analysis for the variables predicting multicultural awareness. In Step 1, the two covariate variables accounted for approximately 9% of the variance in multicultural awareness,  $F(2, 367) = 19.18, p < .001$ . In Step 2, the main effect of race/ethnicity, color-blindness, and training accounted for an additional 26% of the variance in multicultural awareness,  $\Delta F(3, 364) = 47.29, p < .001$ . In Step 3, the interaction effects accounted for an additional 2% of variance in multicultural awareness,  $\Delta F(2, 362) = 6.58, p = .002$ . The increment in  $R^2$  provides the significance test for the interaction effects. Several scholars have indicated that interaction effects in the social science literature typically account for approximately 1%–3% of the variance (Champoux & Peters, 1987; Chaplin, 1991). Specifically, Race/Ethnicity  $\times$  Multicultural Training significantly contributed to the variance of multicultural awareness ( $B = -0.28, \beta = -.19, p = .001$ ).

Because of the significant interaction effect on awareness, we conducted a simple effect analysis to more clearly depict the nature of the interaction. A common strategy for clarifying the effect of a moderator is to examine its effect at two levels (i.e., lower levels of training and higher levels of training) (West, Aiken, & Krull, 1996). Thus, we conducted a simple slope regression analysis on multicultural awareness for White and racial/ethnic minority groups (i.e., dummy code = 0 and 1, respectively) at lower and higher levels of multicultural training (i.e., one standard deviation below and above the mean score of multicultural training, respectively). The simple regression slopes of the significant two-way interaction were plotted with predicted values of White or racial/ethnic minority on multicultural awareness. Figure 1 indicates that the simple slope was significant at the lower levels of training ( $b = 0.42, \beta = .23, p = .003$ ) but not at the higher levels of training ( $b = -0.22, \beta = -.16, p = .09$ ). That is, at the lower levels of training, racial/ethnic minority trainees reported significantly higher scores than White trainees on multicultural awareness. However, at the higher levels of training, trainees in both groups reported a similar level of multicultural awareness.

**Multicultural knowledge.** Table 2 summarizes our hierarchical regression analysis on variables that predict multicultural knowledge. In Step 1, two covariate variables accounted for approximately 3% of the variance in multicultural knowledge,  $F(2, 367) = 4.97, p = .007$ . In Step 2, the main effects of race/ethnicity, color-blindness, and multicultural training accounted for an addi-

tional 34% of the variance in multicultural knowledge,  $\Delta F(3, 364) = 65.06, p < .001$ . Finally, in Step 3, the interaction effects accounted for an additional 1% of the variance in multicultural knowledge,  $\Delta F(2, 362) = 3.71, p = .03$ . Table 2 shows that Color-Blindness  $\times$  Multicultural Training significantly and uniquely contributed to the variance in multicultural knowledge ( $B = -0.11, \beta = -.12, p = .007$ ).

We used the same simple effect analysis for examining the simple slopes for the lower ( $-1 SD$ ) and higher ( $+1 SD$ ) levels of color-blindness at the lower ( $-1 SD$ ) and higher ( $+1 SD$ ) levels of multicultural training. Figure 2 indicates that the association between color-blindness and multicultural knowledge was significant at lower levels of training ( $b = 0.16, \beta = .06, p = .005$ ) and at higher levels of training ( $b = 0.38, \beta = .06, p < .001$ ).<sup>3</sup> The results suggest that the association between color-blindness and multicultural knowledge was stronger at the higher levels of training than at the lower levels of training.

**Post hoc analyses for the alternative moderation models.** To our knowledge, our study is the first to examine the moderating effect among race/ethnicity, training, color-blindness, and MCC. Because the specification of which variable is the moderator in nonexperimental designs is somewhat arbitrary, we also examined the pattern of results in which (a) racial/ethnic status moderates training effects on multicultural awareness and (b) color-blindness moderates training effects on multicultural knowledge.

In order to understand the nature of how racial/ethnic status moderates training effects on multicultural awareness, we conducted a simple slope regression analysis of multicultural training on multicultural awareness for the different racial/ethnic groups (i.e., White vs. racial/ethnic minority). Figure 3 indicates that the association between multicultural training and multicultural awareness was significant for White trainees ( $b = 0.25, \beta = .09, p = .006$ ) but not for racial/ethnic minority trainees ( $b = 0.06, \beta = .07, p = .25$ ).

In addition, we conducted the simple effect analysis and plotted the nature of interaction for the lower ( $-1 SD$ ) and higher ( $+1 SD$ ) levels of multicultural training at the lower ( $-1 SD$ ) and higher ( $+1 SD$ ) levels of color-blindness. Figure 4 indicates that the association between multicultural training and multicultural knowledge was significant for trainees with lower color-blindness ( $b = 0.42, \beta = .05, p < .001$ ) and higher color-blindness ( $b = 0.20, \beta = .07, p = .002$ ). (See Footnote 3.) The results suggest that the association between training and multicultural knowledge was significantly stronger at lower levels of color-blindness than it was at higher levels of color-blindness.

## Discussion

We investigated whether multicultural training moderated racial differences on multicultural knowledge and the relationship between color-blind attitudes and multicultural awareness. Both of our hypotheses were partially supported. Race/ethnicity (first hy-

<sup>3</sup> It is important to note that, regarding levels of color-blindness, the direction of coefficients in Table 2 is opposite to that in Figure 2. For example, a higher score of color-blindness relates to a lower level of MCC. That is, in Figure 2, the low ( $1 SD$  below) color-blindness was shifted to the right side of the figure. The direction was shifted to reflect trainees' change from high to low color-blindness, due to multicultural training.

Table 2  
Summary of Hierarchical Regression Analyses for the Variables Predicting MCKAS-Knowledge and Awareness

Variable	Awareness				Variable	Knowledge			
	B	SE B	$\beta$	$\Delta R^2$		B	SE B	$\beta$	$\Delta R^2$
Step 1				.09***	Step 1				.03**
BIDR	-0.06	0.04	-.07		BIDR	0.04	0.04	.04	
SRES	0.25	0.04	.29***		SRES	0.14	0.04	.16**	
Step 2				.26***	Step 2				.34***
Race/ethnicity <sup>a</sup>	0.03	0.08	.02		Race/ethnicity <sup>a</sup>	0.23	0.19	.12	
CoBRAS	-0.35	0.04	-.42***		CoBRAS	-0.27	0.04	-.33***	
Training	0.17	0.04	.21***		Training	0.28	0.04	.34***	
Step 3				.02**	Step 3				.01*
Race/Ethnicity $\times$ Training	-0.28	0.08	-.19**		Race/Ethnicity $\times$ Training	-0.03	0.09	-.03	
CoBRAS $\times$ Training	-0.06	0.04	-.07		CoBRAS $\times$ Training	-0.11	0.04	-.12**	

Note. MCKAS = Multicultural Counseling Knowledge and Awareness Scale; BIDR = Balanced Inventory of Desirable Responding; SRES = Sex-Role Egalitarianism Scale; CoBRAS = Color-Blind/Racial Attitudes Scale.

<sup>a</sup> Dummy coding was used for White (coded as 0) and racial/ethnic minority (coded as 1).

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

pothesis) significantly interacted with multicultural training to predict trainees' multicultural awareness, but not multicultural knowledge. In contrast, color-blindness (second hypothesis) significantly interacted with multicultural training to predict trainees' multicultural knowledge, but not multicultural awareness.

Our results (see Figure 1) indicate that, at lower levels of training, racial/ethnic minority trainees showed significantly greater multicultural awareness than Whites. However, at higher levels of training, ethnic minority trainees demonstrated lower, though nonsignificant, multicultural awareness than their White counterparts ( $b = -0.22$ ). Moreover, post hoc analyses (see Figure 3) indicate that multicultural training significantly enhances multicultural awareness for White trainees but has no significant effects on multicultural awareness for racial/ethnic minority trainees. Our results do not suggest that racial/ethnic trainees benefit from additional training because they reported similar scores in multicultural awareness across different levels of training. The awareness they gained in training may or may not enhance their awareness as members of underrepresented groups, such as being

discriminated against or lacking resources. This could explain why, at limited levels of multicultural training, racial/ethnic minority trainees reported greater multicultural awareness than their White counterparts. White trainees with lower levels of training, in contrast, may have limited experiences in cross-cultural negotiation because they are not required to do so by their monocultural, visible or implicit, dominant status. That is, for White trainees, multicultural training significantly enhances multicultural awareness. However, for racial/ethnic minority trainees, multicultural awareness remains at similar levels regardless of the multicultural training levels.

Our findings indicate that White trainees who receive higher levels of training can improve their multicultural awareness. That is, when White trainees receive more training, their awareness levels are enhanced. However, when racial/ethnic minority trainees receive more training, they still have similar levels of awareness (see Figures 1 and 3). These results provide two possible interpretations: (a) For racial/ethnic minority trainees, there could be a ceiling effect and (b) for White trainees, higher levels of

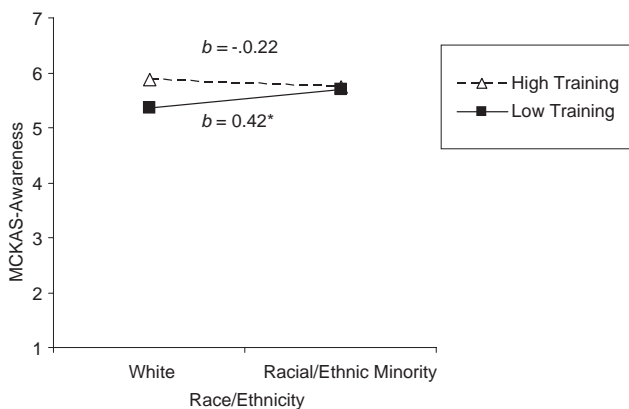


Figure 1. The interaction effects of race/ethnicity and multicultural training on MCKAS-Awareness, with multicultural training as a moderator. MCKAS = Multicultural Counseling Knowledge and Awareness Scale.

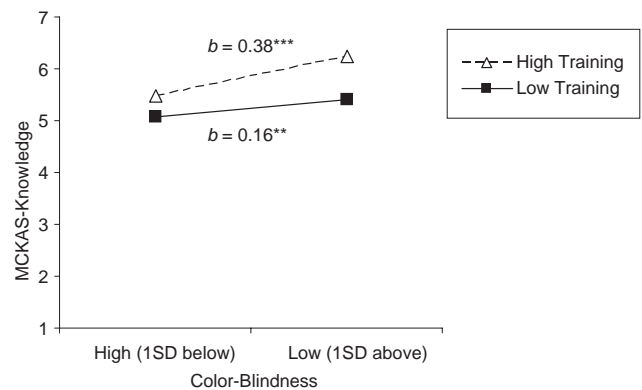


Figure 2. The interaction effects of color-clindness and multicultural training on MCKAS-Knowledge, with multicultural training as a moderator. MCKAS = Multicultural Counseling Knowledge and Awareness Scale.

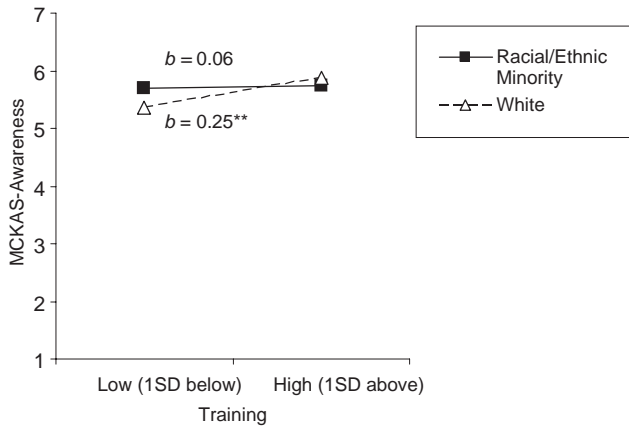


Figure 3. The interaction effects of race/ethnicity and multicultural training on MCKAS-Awareness, with race/ethnicity as a moderator. MCKAS = Multicultural Counseling Knowledge and Awareness Scale.

multicultural awareness may take more training to develop. In addition, these results imply that the deep appreciation of cultural differences may require more varied training, such as taking courses, conducting research projects, and participating in workshops. Solid multicultural awareness may come from an integration of coursework, actual and frequent interactions with people or clients of different cultures, and deep self-reflection. Taken together, it appears that higher levels of training are an effective resource for reaching higher levels of awareness for White trainees.

However, there was no significant interaction effect between racial/ethnic group and multicultural training on knowledge. As indicated in D. W. Sue and Sue's (1990, 2008) MCC model, cognitive knowledge may be reached via information. In other words, therefore, even with multicultural training, White and racial/ethnic minority trainees may have a similar level of multicultural knowledge. Indeed, present methods of multicultural training may instill knowledge of how racial/ethnic differences can influence clients' receptivity of counseling. Thus, the different levels of multicultural training did not moderate racial/ethnic differences and knowledge.

Regarding color-blindness, at lower and higher levels of multicultural training, the associations between color-blindness and multicultural knowledge were significant (see Figure 2). We have three possible interpretations of this finding. First, color-blindness is "the belief that race should not and does not matter" (Neville et al., 2000, p. 60) and assumes that all racial/ethnic groups should be equal socially and economically. Higher levels of training are more likely than lower levels of training to challenge trainees about their beliefs of equality among races and the advancement from a stance of "race does not matter" to one of "race can and does matter." Thus, multicultural knowledge may be greater at higher levels of training than at lower levels of training. Second, as we can see in Figure 2, the magnitude of slope for higher levels of training ( $b = 0.38$ ) is significantly stronger than that for lower levels of training ( $b = 0.16$ ), suggesting that higher levels of training may be more likely than lower levels of training to repeatedly challenge the association between color-blindness and multicultural knowledge. Third, our post hoc analyses (see Figure 4) provided an additional

perspective into the interpretation of the results. The results from the post hoc analyses indicated that the magnitude of slope for lower color-blindness ( $b = 0.42$ ) was significantly stronger than that for higher color-blindness ( $b = 0.20$ ). It implies that trainees with lower color-blindness may experience more beneficial effects of training on knowledge than those with higher color-blindness. Perhaps those with lower color-blindness are more receptive to training that challenges their color-blind attitudes to enhance their knowledge compared with those with high color-blindness. Therefore, they might benefit more from training to enhance their knowledge than those with higher color-blindness. Finally, it is important to note that there were 14% White and 29% racial/ethnic minority trainees who were at least one standard deviation above the mean on multicultural training. However, on color-blindness, 19% of White and 5% of racial/ethnic minority trainees were at least one standard deviation above the mean on color-blindness.

However, a significant interaction was not found between color-blindness and multicultural training for multicultural awareness. Perhaps the present training may need to shift its focus from improving multicultural knowledge to emphasizing greater acquisition of multicultural awareness as well. As we know, to intellectually understand color-blindness is one thing; to be deeply aware of its presence is quite another. Perhaps present training is able to help trainees know that color-blindness makes them ignorant of race-related oppression of clients. Still, present multicultural training needs to go beyond mere knowledge and develop awareness of the impact of color-blindness. Given the different areas of MCC, this may indicate that the present multicultural training needs to refine the content of training to strengthen trainees' awareness. Moreover, color-blindness demonstrates deep-rooted race- or racism-related issues such as ignorance of race-related topics or lack of racial consciousness (Neville et al., 2000). In D. W. Sue and Sue's model, deep-rooted issues (e.g., color-blindness) may be more challenging or difficult to acknowledge and change compared with acquiring knowledge or information. Therefore, it is not surprising that multicultural training only

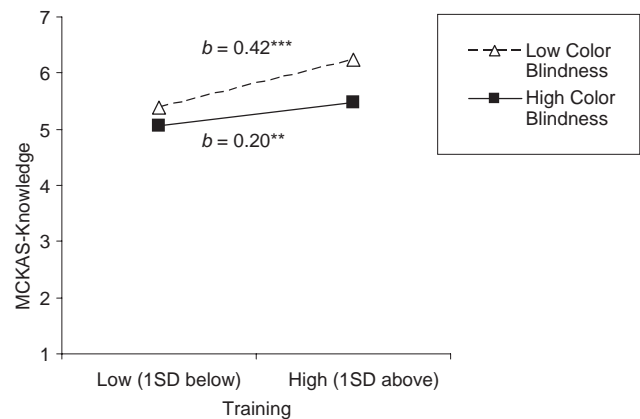


Figure 4. The interaction effects of color-blindness and multicultural training on MCKAS-Knowledge, with color-blindness as a moderator. MCKAS = Multicultural Counseling Knowledge and Awareness Scale. \*\*  $p < .01$ . \*\*\*  $p < .001$ .



moderated the association between color-blindness and multicultural knowledge, but not awareness.

**Implications and recommendations for training and practice.** Trainees who want to have more MCC need to sharpen their tools of multicultural training. Our study echoes the trend that training for multicultural competence is an important aspect of counseling psychology training (APA, 2003; Smith et al., 2006) and is consistent with APA's (2003) *Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists*. Unfortunately, present multicultural training tends to emphasize helping White trainees improve their counseling of clients of color more than aiding racial/ethnic minority trainees in improving their counseling of White clients (e.g., Rooney, Flores, & Mercier, 1998). We noticed two potential implications of our findings. Counseling psychology programs need to address the training needs of racial/ethnic trainees, who may be benefiting less than White trainees under the present training emphasis. Unbalanced training between White and racial/ethnic minority trainees may influence racial/ethnic minority trainees' therapy with clients. Because racial/ethnic minority trainees were rarely mentioned in multicultural training, they may perceive that training programs ignore their needs in training. Moreover, to date, most documents about multicultural experiences (e.g., Association of Psychology Postdoctoral and Internship Centers form) tend to assume that only counseling racial/ethnic minority clients can be counted as "experiences with multicultural clients." Furthermore, textbooks, training materials, and research articles seldom discuss how minority trainees counsel White clients.

Regarding multicultural training, we have two recommendations. First of all, we recommend that White trainees can be given a variety of training to stimulate their reflection on race and color-blindness. White trainees with higher levels of training had more multicultural awareness than those with lower levels of training. Higher levels of training include diverse training activities such as research and workshops. Trainers can add service learning (Wehling, 2008), guest lectures, film discussion, and research projects both within and outside of their courses. Increasing these varied types of training can enhance trainees' understanding of each racial/ethnic group's culture, racial identity, bias, and differences among cultural groups. White trainees with wide exposure to varied training may expand their horizons in cross-cultural counseling. For instance, having a variety of training (e.g., multicultural workshop) opportunities was found to be related to greater sensitivity to diversity in racial/ethnic issues (Toporek & Pope-Davis, 2005).

Next, we recommend a *deepening* of multicultural training for racial/ethnic minority trainees who have different training needs from those of Whites trainees. In our study, those racial/ethnic minority trainees with higher levels of training had a similar amount of multicultural awareness as those with lower levels of training (see Figure 1). It appears that, at lower levels of training, racial/ethnic minority trainees reached a higher level of multicultural awareness in comparison to their White peers. However, racial/ethnic minority trainees did not gain more awareness, even with higher levels of training. These findings challenge educators and scholars to consider (a) the appropriateness of providing similar or even uniform training to everyone in a mixed class of White and racial/ethnic minority trainees and (b) ways to tailor

training to students' respective needs and backgrounds. In accordance with the mission of multicultural counseling that helps diverse clients in specific cultural sensitivity, multicultural training needs to model itself on tailoring training to trainees' different needs.

As we know, both White and racial/ethnic minority trainees are involved in multicultural counseling where their own racial/ethnic backgrounds are crucially relevant to interactions with clients (Helms, 1995). Unfortunately, a typical master's-level multicultural course includes students from White, Black, Latino, Native American, or other backgrounds. Without tailoring training to trainees' cultural backgrounds, White's awareness of White privilege may or may not be relevant to learning for racial/ethnic minority trainees. Conversely, it is hard to transform racial/ethnic minority trainees' experiences of being members of an oppressed group into Whites' learning. If educators neglect race in multicultural training, trainees may not take race into consideration in multicultural therapy. What is the possible consequence? Trainees who minimize societal or institutional racism may take pride in "treating everybody the same." Here, treating everybody the same means providing the same training regardless of trainees' cultural backgrounds.

**Limitations and future research directions.** We recognize several limitations to this study. First, it is a limitation that MCKAS, which has only Awareness and Knowledge subscales, does not capture the full spectrum of D. W. Sue and Sue's (1990, 2008) tripartite (awareness, knowledge, and skills) model. However, Constantine and Ladany (2001) and Ponterotto et al. (2002) have proposed that the model may need conceptual revision given the results of factor analyses from most self-report MCC measures. Also, we only collected data from trainees' self-report, which has been criticized because self-report may not reflect actual levels of MCC (Constantine, 2001; Worthington et al., 2000). Furthermore, we were limited in collecting a substantial number of racial/ethnic minority participants for each different racial/ethnic group; therefore, we had to combine racial/ethnic minority participants into a single group. Consequently, the results cannot be generalized to any particular group of racial/ethnic minority trainees (e.g., Asian Americans, African Americans, Native Americans). Finally, we did not measure trainees' pretraining levels of interest in multicultural counseling; some trainees may be interested in developing their MCC more than others before they receive formal multicultural training. The pretraining levels of interest could be a confounding variable of MCC and should be controlled for in future studies. Another limitation about training was that we did not ask trainees' year of training, which could be a crucial confounding variable. In a similar vein, we did not measure in the present study racial identity attitudes, previous exposure to racial diversity, or their training environment (e.g., opportunity to seek advanced training). Future research should take these factors into consideration.

We also propose research directions for future studies. To date, the relation between social desirability and MCC has produced mixed results. Some scholars (Sodowsky et al., 1998) assert that social desirability is an important concern in MCC studies (Neville et al., 2006; Ponterotto et al., 2002), whereas others have not found this relationship. We followed Sodowsky, Taffe, Gutkin, and Wise's (1994) suggestion to enter social desirability as a covariate in our regression analysis but did not find a significant relationship

between social desirability and multicultural awareness or knowledge. Our results confirmed the findings from Poterotto et al. and Neville et al. that there is no relationship between these variables. Given the mixed results, we encourage future studies to further examine the association between social desirability and MCC. In addition, the relations between color-blindness, multicultural training, and MCC could be more complicated than we were able to capture in the present study. Future studies may consider conceptualizing these variables in the framework of racial identity theory. That is, research can explore whether levels of racial identity are related to color-blindness, training, and MCC. As we addressed earlier, there could be a ceiling effect for the racial/ethnic minority trainees regarding their scores on multicultural awareness. Therefore, future studies can go beyond self-report method from trainees to use other rating methods, such as supervisor ratings, assessments from client observations, case conceptualization, or evaluating trainees' performance in actual clinical sessions.

Future studies can also expand our present findings to real-life clinical practice. For example, future studies may examine how trainees apply their reduced color-blindness to practice or use a qualitative approach to examine critical moments that changed their level of color-blindness. Moreover, future studies could also identify the specific personal or life experiences directly associated with why trainees of color enter training with higher levels of MCC. As we addressed above, year of training in programs may be a confounding variable, so it should be examined in the future studies.

Finally, another important future direction is to investigate race/ethnicity, color-blindness, training, and MCC through mediation analysis. Because counseling psychology research focuses on individual differences, in our present study, we explored when (i.e., higher levels of training vs. lower levels of training) and who (i.e., Whites vs. racial/ethnic minority trainees; higher vs. lower color-blindness) would benefit more from advanced opportunities for multicultural training. Mediation analysis can be used in future studies to establish "how" or "why" training predicts MCC. Specifically, researchers of future studies could investigate how color-blindness explains the relationship between training and MCC.

In conclusion, after decades of deliberating, studying, and even debating the role of multicultural training in counseling psychology, scholars are moving from studying whether trainees should take a multicultural training course to examining the effectiveness of training (APA, 2003). Our findings provide a critical first step to understanding how race/ethnicity and color-blindness interact with multicultural training to change MCC. For instance, at a lower level of multicultural training, racial/ethnic minority trainees had significantly higher multicultural awareness than their White counterparts. Conversely, at a higher level of multicultural training, no significant difference was found on multicultural awareness between White and racial/ethnic minority trainees (see Figure 1). Said differently, more training significantly enhanced multicultural awareness for Whites, but not for racial/ethnic minority trainees (see Figure 3). Furthermore, the association between color-blindness and knowledge was stronger at higher levels of training than at lower levels of training (see Figure 2). Alternatively, our results also indicated that the effect of training on enhancing knowledge was stronger for those with lower color-blindness than for those with higher color-blindness (see Figure 4).

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