A Brief Mindfulness Intervention: Effects on Counselor Trainees’ Multicultural Counseling Competence and Ethnocultural Empathy

by

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ABSTRACT

Increasing counselor trainees’ self-efficacy for multicultural counseling competence (MCC) is an essential part of their professional development to serve racially and ethnically diverse clients effectively. The present study examined the impact of multicultural training and the effects of a brief mindfulness intervention, compared to a control condition, on counselor trainees’ self-reported ethnocultural empathy and MCC. Data obtained from a sample of masters (n = 63) and doctoral (n = 23) counselor trainees were analyzed through a series of linear multiple hierarchical regression analyses. Consistent with previous research, results revealed that multicultural training significantly predicted scores of self-reported multicultural counseling knowledge and empathic feeling. The mindfulness intervention significantly predicted self-reported multicultural counseling knowledge. There was a significant interaction between condition (i.e., mindfulness intervention or control) and previous multicultural training when examining ethnocultural empathy’s empathic feeling and expression subscale. Specifically, trainees with lower levels of multicultural training who received the mindfulness intervention scored higher on empathic feeling compared to those in the control condition, while at higher levels of multicultural training there were no differences across condition. Implications for future research and counselor training are discussed.
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Chapter 1

Introduction

Culturally-responsive practice is essential to meet the needs of racial and ethnic minority clients (Marsiglia & Kulis, 2009). Clinical practices that ignore racial and cultural variables may result in underutilization or inadequate services (Sue et al., 2007). Fostering empathy for clients who come from a different racial/ethnic background than the counselor, or ethnocultural empathy, is essential to the counselor training process (Wang et al., 2003). In this regard, developing one’s multicultural counseling competence (MCC), which refers to the degree to which counselors actively incorporate training and practices that integrate culture-specific awareness, knowledge, and skills when interacting with clients, is a professional responsibility of all mental health professionals (Sue, Arredondo, & McDavis, 1992; Sue & Sue, 2016). The American Psychological Association (APA; 2003) and the American Counseling Association (ACA; Ratts, Singh, Nassar-McMillan, Butler & McCullough, 2016) developed multicultural competencies for mental health professionals that include: (a) development of counselor self-awareness, (b) understanding client worldviews, (c) developing and maintaining counseling relationship, and (d) counseling and advocacy interventions.

Given the importance of MCC in clinical work, multicultural counseling courses have increasingly become an integral part of counselor training programs to ensure the development of minimum competence in culturally-relevant care. Sue et al.’s (1992) tripartite model of MCC development, which emphasizes three particular facets, has provided the foundation for such MCC training in graduate programs. These three facets
of MCC include (a) beliefs and attitudes, or a self-awareness of the impacts of one’s own heritage, beliefs and views of others; (b) knowledge, or an understanding of constructs and theories in multicultural counseling including knowledge of systematic oppression, the impact of privilege and power, and ability to attend to similarities and differences within different cultures; and (c) skills, or the ability to identify and use culturally-appropriate intervention strategies and techniques, as well as the ability to advocate for clients effectively. Multicultural counseling courses have the potential to reduce implicit bias and increase one’s cultural self-awareness (Castillo, Brossart, Reyes, Conoley, & Phoummartath, 2007).

Similar to the benefits of multicultural training, mindfulness practice has also been linked to a reduction in implicit bias and discriminatory behavior (Lueke & Gibson, 2014, 2016). Mindfulness has also been linked to a reduction in anxiety for counselor trainees when working with clients, while associated with higher levels of affective and cognitive empathy (Fulton & Cashwell, 2015; Greason & Cashwell, 2009; Leppman and Young, 2016). Key components of mindfulness are one’s nonreactivity to the inner experiences, which may include racial bias, and the ability to describe these inner experiences (Ivers et al., 2016). The use of mindfulness meditation may allow counselors to be more aware of their reactions to clients from different racial/ethnic minorities. Thus far, there has been no examination of the impact of mindfulness on ethnocultural empathy, which is essential when examining the relationship between counselors and clients from different racial/ethnic backgrounds (Wang et al., 2003). The current study seeks to test the effectiveness of a mindfulness-based intervention on the development of
counselor trainee’s MCC self-efficacy and ethnocultural empathy, while controlling for previous multicultural training.

**Mindfulness**

Derived from Buddhism and other Eastern meditation practices, mindfulness has been defined as awareness to internal and external experiences that emerges through purposeful attention to the present, without judgment of one’s unfolding experiences (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; Kabat-Zinn, 2003). Baer et al. (2006) operationalized mindfulness into five facets: (a) observing, which refers to awareness of internal experiences like emotion and cognition, as well as external experiences like smell and sound; (b) describing, or the use of words to describe internal and external experiences; (c) acting with awareness, by performing tasks with awareness rather than relying on automatic mechanical-like behavior; (d) nonjudging of inner experience, or allowing thoughts and feelings to pass without evaluation; and (e) nonreactivity to inner experience, which is the practice of allowing thoughts and feelings to pass without becoming absorbed in them. Mindfulness is an increasingly common practice in the United States that is incorporated into the medical community to aid in treating physical and mental illnesses (e.g., pain management, anxiety, and smoking cessation; Cropley, Ussher & Charitou, 2007; Kabat-Zinn, 2003).

Mindfulness has been conceptualized as a state or trait characteristic that predicts behavior over time (Brown & Ryan, 2003). Individuals with trait mindfulness show an innate awareness and acceptance of their internal and external experiences (e.g., noticing sensations of anxiety, like sweating, heart racing, and fear without giving in to these
sensations). In contrast, state mindfulness is created through momentary experiences or mindfulness practice, where an individual’s awareness becomes increased, so they are more aware and accepting of themselves and the world around them. The current study will confirm the effect of a brief 10-minute mindfulness intervention on state mindfulness when compared to a control condition.

Researchers have also begun to explore the benefits of mindfulness practice in social situations that may illicit personal bias and prejudice. Prior research demonstrated that a mindfulness intervention can facilitate a reduction in reliance on stereotypes, allowing participants to increase their performance when problem solving that requires insight (Ostafin & Kassman, 2012). Expanding on these findings, Lueke and Gibson (2014) used a brief mindfulness intervention to measure the effects on a series of implicit association tests among White college students (N = 72). Findings revealed that a brief mindfulness intervention significantly reduced implicit bias towards African Americans and older adults. Participants who received the mindfulness intervention were less likely to associate faces that were Black or old with bad labels and were less likely to limit good labels to only White or young faces. While those in the control group more often associated pictures of Black and old people with bad, while associating young and White with good. The results indicate that mindfulness could be a key factor in reducing implicit bias.

In a follow-up study, Lueke and Gibson (2016) measured the effects of the same mindfulness intervention on discriminatory behavior. The researchers used a modified trust game task (Stanley, Sokol-Hessner, Banaji, & Phelps, 2011) that assessed 87 White
college students’ abilities to interact fairly with a partner when money was at stake. Participants were presented one at a time with images of partners’ faces that were Black, or White. Participants started with $50 and were asked to decide how much money (between $0 - $10) to share with each partner, with the goal being to end up with the most money. If both partners chose to share there was an increase in participants’ reward, but if only one partner share this money went only to the receiver. The results revealed that when participants saw an image of a White face they shared 14% more money than when they saw an image of a Black face. After being exposed to a brief mindfulness intervention (Lueke & Gibson, 2014) participants showed almost equal trust in Black and White partners by sharing money equally across partners. The researchers attributed this response to the power of a brief mindfulness intervention to open an individual’s mind, allowing them to interact with strangers from different backgrounds without acting on prejudice. The development of MCC is multifaceted, and one important component is the counselors’ ability to recognize their own bias and impact of systemic racism (Sue et al., 1992). If a brief mindfulness meditation can impact the bias of participants in the above task, then it may help counselors to more easily recognize their own biases and address them as part of counselor training courses.

The potential utility of mindfulness in mental health training and practice is promising. Prior research measuring mindfulness among counselor trainees has focused on the association between mindfulness and levels of empathy. Among a sample of 129 counselor trainees, Fulton and Cashwell (2015) uncovered benefits of mindfulness for counselor trainees by exploring the association between trait mindfulness and counselor
trainees’ ability to empathize with new clients and the level of anxiety counselor trainees experience when working with clients. The researchers conducted a series of hierarchical regression analyses and found that components of mindfulness, such as awareness and compassion were related to both affective empathy (i.e., genuine feelings of concern for someone in distress) and cognitive empathy (i.e., perspective taking of another’s point of view), and negatively associated with anxiety. These results suggest that increasing mindfulness awareness and compassion may increase counselor trainees’ ability to empathize with their clients and mitigate their own anxiety (Fulton & Cashwell, 2015).

Leppman and Young (2016) used an experimental design to study the impact of a 6-week loving-kindness meditation on first-year counseling trainees’ (N = 103) empathy towards clients. Those who participated in mindfulness meditation showed an increase in cognitive empathy and a small increase in affective empathy. The benefits of increasing cognitive empathy include strengthening the relationship between counselor and client, while protecting counselors from emotional vulnerability or burnout (Leppman & Young, 2016). These benefits are due to counselor’s ability to assess the client objectively while recognizing what the client is thinking and feeling (Leppman & Young, 2016). Despite research connecting mindfulness to general measures of cognitive and affective empathy, there has yet to be an evaluation of the effects of mindfulness on ethnocultural empathy, which is vital when working with clients from different racial and ethnic backgrounds (Wang et al., 2003).
Ethnocultural Empathy

Ethnocultural empathy refers to the ability to empathize with those who are different from one’s self, specifically members from different racial and ethnic groups (Wang et al., 2003). Ethnocultural empathy is comprised of three components: (a) intellectual ethnocultural empathy, or the ability to understand the thinking of people from different racial and ethnic groups; (b) empathic emotions, or awareness of the emotional condition of racial and ethnic minorities; and (c) communicative ethnocultural empathy, the expression of empathetic words and actions towards members of racial and ethnic minority groups (Wang et al., 2003). In one study, Peifer, Lawrence, Williams, and Leyton-Armakan (2016) found that African American youth were more likely to explore their ethnic identity with their mentors, when mentors had higher levels of ethnocultural empathy. The Scale of Ethnocultural Empathy (SEE) created by Sue et al. (2003) established subscales with empathic perspective taking (perspective taking), and empathic feelings and expressions (empathic feeling) being highly correlated with general empathy. The current study will expand upon these findings by testing the relationship between mindfulness and ethnocultural empathy. In examining MCC it is essential that researchers utilize empathy scales that measure ethnocultural empathy to assess whether counselors can empathize with clients from different cultures than their own.

Multicultural Counseling Competence

The development of MCC is complex, and continues to increase over time
through education and direct contact with individuals from different cultural backgrounds than our own. Counselors can unknowingly attribute bias when assessing their clients by relying on stereotypes and misinformation (Burkard & Knox, 2004; Sue et al., 2007). It is essential to build counselor trainees’ confidence in their ability to identify these biases and work more effectively with clients from diverse racial and ethnic groups. It is vital that introductory multicultural courses prepare future clinicians with the tools they need to be culturally competent therapists.

**Self-reported MCC.** Previous research has highlighted the importance of counselors’ self-reported MCC, and clients’ perception of their counselors’ MCC. For example, Constantine (2007) found that African American clients perception of White counselors’ MCC was positively associated with the client’s perception of the counseling relationship, and negatively associated with microaggressions, or subtle, sometimes unconscious racial slights. Gushue, Constantine, and Sciarra (2008) found that higher levels of self-reported multicultural awareness were associated with more accurate assessments of Latino families when compared to White families in counseling. These findings indicate an ability to operate outside of stereotypes while working with clients from a different cultural background. Despite these results supporting self-report MCC, there have been some criticisms.

Previous research argued that self-report measures were capturing counselor self-efficacy, rather than a direct representation of a counselor’s ability to work with clients from different cultures (Constantine & Ladany, 2000). Counselor self-efficacy refers to a counselor’s belief in their ability to achieve counseling-related skills (Bandura, 1999).
Holcomb-McCoy and Myers (1999) discovered that counselor trainees often reported a lack of self-efficacy when working with clients from racial and ethnic backgrounds different from their own. Self-efficacy has been linked to higher levels of motivation, goal setting, and perseverance in meeting goals (Bandura, 1999). This suggests that increasing counselor trainees’ confidence in working with clients from diverse racial and ethnic groups requires increases in multicultural counseling self-efficacy in the process of developing multicultural knowledge, awareness, and skills. For that reason, the current study will measure self-reported MCC to understand the impact of mindfulness on counselor trainees’ confidence to work with clients from diverse racial and ethnic groups, while controlling for previous multicultural training.

**Impact of multicultural courses on counselors’ MCC.** Both CACREP and the APA require counselor trainees to gain exposure to multicultural training as part of their course curriculum. Priester et al. (2008) discovered through content analysis of syllabi from 64 master’s-level multicultural courses that multicultural knowledge was emphasized in 84% of the syllabuses, while only 41% emphasized multicultural self-awareness. Even fewer focused on skill acquisition (12%). Pieterse, Evans, Risner-Butner, Collins, and Mason (2009) reviewed 57 multicultural course syllabi from master’s and doctoral programs and found that 96% incorporated the tripartite model of multicultural counseling into their course goals with aspects of knowledge, awareness, and skills being addressed; however, the integration of the model varied greatly across course content. Researchers found that only 11% of courses addressed White identity, with a focus on minority racial and ethnic identities (Pieterse et al., 2009). Sue and Sue
(2016) posited that without understanding the impact of one’s own racial identity counselors cannot effectively empathize with clients from different racial and ethnic identities. With the majority of counselor training programs being comprised of White counselors (e.g., 61% of CACREP programs; CACREP, 2015) there is a lack of adequate training addressing counselors’ awareness of how their own racial identity can impact the counseling relationship.

Findings related to the impact of multicultural courses to foster multicultural knowledge and awareness have been variable. Previous research found that multicultural training and the development of MCC was positively associated with counselors’ multicultural knowledge, but not with multicultural awareness, when racial and ethnic identities of the client and counselor intersect (Chao, 2013; Chao, Wei, Good, & Flores, 2011). Specifically, multicultural training was effective for increasing multicultural awareness of White participants, but not for counselor trainees from racial and ethnic minorities. In contrast, Barden and Greene (2015) found that gender and ethnicity were not significant predictors of multicultural knowledge, but rather the length of time in a graduate program predicted higher levels of multicultural knowledge. These mixed results may reflect the variability in how multicultural course content is being taught. Findings indicate that courses are not able to adequately foster the develop of awareness in counselor trainees, which could be due to a lack of direct contact with people from different cultures, and a missed opportunity to foster an awareness of the impact of counselor trainees own racial or ethnic identity on the counseling relationship.
There is room for improvement in existing multicultural curriculum and research is needed to explore ways to increase empathy and self-awareness in relation to multicultural development. Currently, research is being conducted using mindfulness-based training to reduce racial bias that teachers may unknowingly have towards their students of color (Kinkade, 2018). Findings will be vital in understanding the impact mindfulness can have on reducing bias in a classroom setting. Incorporating mindfulness into the curriculum of counseling-related programs could increase counselors’ confidence when working with diverse clients and help counselors be more open to examining their own fears and biases.

**Mindfulness and MCC.** To my knowledge, only one study has examined the association between mindfulness and MCC. Using a correlational design, Ivers et al. (2016) explored the link between mindfulness and MCC among 199 counselor trainees. Participants completed self-report measures of trait mindfulness, general empathy, and MCC. A series of hierarchical regression analyses revealed that participants with higher levels of trait mindfulness, specifically nonreactivity to inner experiences (i.e., allowing thoughts and feelings to pass without judgement) predicted higher levels of self-report multicultural awareness. Results also showed that racial and ethnic minority participants scored higher than their White counterparts on self-report multicultural awareness. While participants with higher levels of describing their inner experiences (i.e., use of words to describe internal and external experiences) predicted higher levels of multicultural knowledge. The researchers suggested that counselors high in two forms of mindfulness (i.e., nonreactivity and describing of the inner self) may be better able to meet the needs
of clients from racial and ethnic minority groups. More specifically, they speculate that mindfulness might facilitate counselors’ ability to recognize the stereotypes and prejudices they have towards client from different racial and ethnic backgrounds (Ivers, et al., 2016). The researchers do caution that their use of self-report measures may be measuring MCC self-efficacy, rather than actual MCC as suggested by previous researchers (Constantine & Ladany, 2000). I will build upon Ivers et al.’s (2016) findings by using a brief mindfulness intervention to test its impact on counseling trainees’ MCC self-efficacy.

**Purpose and Rationale for the Current Investigation**

Mindfulness interventions in prior research have been successful in reducing prejudice and discrimination in White college students (Lueke & Gibson, 2014, 2016). Mindfulness has also been associated with higher levels of cognitive and affective empathy (Leppman & Young, 2016). Among counselor trainees, mindfulness is related to lower levels of anxiety, higher levels of empathy towards clients, and higher levels of self-reported MCC (Fulton & Cashwell, 2015; Ivers et al., 2016; Leppman & Young, 2016). Counselors’ MCC can begin to develop through multicultural training, but there have been variable results for whether it impacts multicultural awareness (Chao, 2013). A recent study is the first to demonstrate a significant association between mindfulness and MCC (Ivers et al., 2016); however, due to the correlational nature of this research, the directionality of these effects remains unanswered. Thus, in the present study, I used an experimental design to measure self-reported MCC, replicating Ivers et al.’s (2016) findings related to the effects of mindfulness. Ethnocultural empathy is central to MCC,
which is why I examined this construct in relation to mindfulness, extending earlier findings that there is a positive association between mindfulness and general empathy (Fulton & Cashwell, 2015; Leppman & Young, 2016). The present study examined the effects of mindfulness and multicultural training on counselor trainees’ self-reported MCC and their levels of ethnocultural empathy. This study also assessed the interaction between mindfulness and multicultural training predicting MCC and ethnocultural empathy. Three interrelated hypotheses are as follows:

Hypothesis 1: Consistent with previous research on MCC, higher levels of multicultural training will be positively associated with self-reported MCC and ethnocultural empathy.

Hypothesis 2: The mindfulness intervention, but not the control condition, will be positively associated with self-reported MCC and ethnocultural empathy.

Hypothesis 3: Condition (mindfulness versus control) will interact with previous multicultural training when examining self-reported MCC and ethnocultural empathy. Multicultural training and trait mindfulness have been associated with higher levels of MCC and general empathy (Ivers et al., 2016); however, there is no current research indicating the direction of an interaction between a mindfulness intervention and previous multicultural training when examining MCC and ethnocultural empathy. Because this analysis is exploratory, I do not speculate on direction.
Chapter 2

Methodology

Participants and Recruitment

After receiving approval from the Arizona State University Internal Review Board, I began data collection. To assess the number of participants needed in the present study I conducted an a priori power analysis using G-power ($\alpha = .05$, $1-\beta = .80$, and effect size = .06), and a minimum of 77 participants were recommended for the proposed linear hierarchical multiple regression analyses. My sample included 112 participants; however, 26 participants were removed from the sample because they did not complete any of the dependent measures. After examining the 3 manipulation check questions for trainees’ attention to the intervention, all participants were included in the sample due to correct responding. The remaining sample of 86 participants reflected APA and CACREP demographics for counselor trainees enrolled in their programs (APA, 2016; CACREP, 2015). My sample included master’s (73%) and doctoral (27%) level counselor trainees ranging from 21 to 57 years old with a mean age of 30.54 ($SD = 8.24$). Participants were primarily from CACREP accredited programs (88%), with 8% from APA accredited programs, and 4% from unaccredited programs. Most participants were women (73%), with 24% men and 2% identifying as gender fluid or transgender.

Regarding race and ethnicity, again my sample was very similar to reported APA and CACREP program demographics (APA, 2016; CACREP, 2015). Participants were predominantly White (64%), with 11% reporting being Biracial or Multiracial, and 8% reported being Black. Additionally, the sample included participants who identified as
Latina/o, 3% Eastern Asian, 2% Middle Eastern, and 1% American Indian. There were 2% that reported being East Asian international students.

Participants were recruited primarily through organizational listservs such as the American Counseling Association Student Groups (COUNSGRADS), Counselor Education and Supervision NETwork (CESNET), Society of Counseling Psychology (SCP), and Council of Counseling Psychology Training Programs. In addition, participants were recruited through various social media outlets, emails to department leaders (e.g., training directors) of CACREP programs, and face-to-face recruitment through courses. Inclusion criteria were: (a) at least 18 years of age and (b) enrolled in a counseling-focused graduate program.

**Instruments**

**Trait mindfulness.** Replicating Lueke and Gibson (2014), I used the Mindfulness Attention Awareness Scale (MAAS; Brown & Ryan, 2003; See Appendix B) to measure trait mindfulness, or individuals’ innate levels of mindfulness to assess equivalency across condition prior to primary analyses. The scale is comprised of 15 items such as, “I find it difficult to stay focused on what’s happening in the present” and “I snack without being aware that I am eating.” The scale used a Likert-type response format (1 = almost always to 6 = almost never). Scores were summed, with higher scores indicating a stronger mindfulness disposition. Additionally, lower scores have been correlated with depression, self-consciousness, and angry hostility, while higher scores have been correlated with high levels of self-esteem (Brown & Ryan, 2003). The MAAS
demonstrated adequate internal consistency in prior research ($\alpha = .83$; Brown & Ryan, 2003). The Cronbach’s alpha in the current sample is acceptable at .87.

**State mindfulness.** Replicating Lueke and Gibson (2016), I utilized the 21-item State Mindfulness Scale (SMS; Tanay & Bernstein, 2013; See Appendix D) as a measure of situational mindfulness. The SMS has two subscales: mindfulness of mind and mindfulness of body. The 15-item mind subscale measured participants’ awareness of mind while listening to the mindfulness intervention or control audio recording (see Lueke & Gibson, 2016). Using Lueke and Gibson’s (2016) adaptation participants responded to statements such as, “While listening to the audio recording I noticed pleasant emotions and unpleasant emotions” and “While listening to the audio recording I found some of my experiences interesting.” The 6-item mindfulness of body subscale measured participants’ awareness of body while listening to the audio recordings. Examples of statements are, “While listening to the audio recording, I changed my body posture and paid attention to the physical process of moving” and “While listening to the audio recording, I clearly physically felt what was going on in my body.” Participants rated statements on a Likert-type scale (1 = not at all to 5 = very well), with higher scores demonstrating higher levels of state mindfulness. There is support for internal consistency for both body ($\alpha = .95$) and mind ($\alpha = .95$) subscales (Tanay & Bernstein, 2013). Previous researchers found support for convergent, discriminant, and incremental validity when compared to other measures of state and dispositional mindfulness (Tanay & Bernstein, 2013). For the current study the Cronbach’s alphas for the total SMS was .95, and body and mind subscales were .93 and .91 respectively.
Ethnocultural empathy. I measured ethnocultural empathy using the Scale of Ethnocultural Empathy (SEE; Wang et al., 2003; See Appendix E). Two subscales were selected based on previous research linking mindfulness to affective and cognitive empathy (Fulton & Cashwell, 2015). The subscales selected were the (a) empathic feeling and expression with 15 items and statements like, “I express my concern about discrimination to people from other racial or ethnic groups,” and (b) empathic perspective taking with 7 items and statements like, “It is easy for me to understand what it would be like to be a person of another racial or ethnic background other than my own.” Items were rated on Likert-type scale ranging from 1 (strongly disagree that it describes me) to 6 (strongly agree that it describes me). Higher scores indicated greater levels of ethnocultural empathy. Wang and colleagues, and Albiero and Matricardi (2013) found support for discriminant validity with the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1984) and convergent validity was established with the Interpersonal Reactivity Index (IRI; Davis, 1983) empathic concern subscale. Divergent validity has also been established for the SEE showing a negative association with scores of prejudice (Albiero & Matricardi, 2013). There is support for internal consistency for the subscales $\alpha = .90$, and $\alpha = .79$ respectively (Wang, et al., 2003). The current study found support for internal consistency for the empathic feeling and expression, and perspective taking subscales ($\alpha = .90$ and $\alpha = .78$).

MCC self-report. I utilized the Multicultural Counseling Knowledge and Awareness Scale (MCKAS; Ponterotto et al., 2002; See Appendix F) as a measure of self-reported MCC. The MCKAS consists of multicultural counseling knowledge (20
items) and awareness (12 items) subscales. Items were rated on a Likert-type scale ranging from 1 (not at all true) to 7 (totally true). Higher scores on each subscale indicated higher perceived levels of knowledge and awareness of multicultural counseling issues. Participants rated statements such as, “I believe all clients should maintain direct eye contact during counseling,” and “I am aware that being born a White person in this society carries with it certain advantages.” I chose the MCKAS compared to other measures of MCC because it is the least vulnerable to social desirability (Constantine & Ladany, 2000). Confirmatory factor analysis revealed construct validity for MCKAS. Moderate convergent validity was found for the MCKAS knowledge subscale and MCI knowledge subscale, while the MCKAS awareness subscale was significantly correlated with the MCI counseling relationship subscale (Ponterotto et al., 2002). Prior research showed support for internal consistency for both awareness ($\alpha = .78$) and knowledge ($\alpha = .92$) subscales. The current study has Cronbach alphas of .73 and .90 respectively.

**Demographic survey.** I included general demographic items (e.g., age, race, and sexual orientation). Participants provided information about their academic programs (e.g., CACREP or APA, master’s or doctorate), and their prior clinical experiences (e.g., number of direct hours working with clients). I also asked about parents’ highest level of education (see Appendix G).

**Procedure**

**Pilot study.** I ran a pilot study with undergraduates enrolled in Psychology 101 to ensure that the mindfulness intervention would work using an online platform. Previously
the brief mindfulness intervention was conducted in a laboratory setting, whereas the current study will be administered through an online survey (Lueke & Gibson, 2014, 2016). The pilot study also tested a three-question manipulation check, as it has not been used before, to ensure that participants are attending to the mindfulness intervention audio. The results revealed that using the intervention in an online format was successful in replicating the results of Lueke and Gibson (2014, 2016). Participants who received the intervention scored higher in state mindfulness than those in the control condition. The manipulation check questions also served as an appropriate way to screen for participants attention to the intervention. Consequently, I proceeded with the online format for the present study.

**Present study.** I provided participants with a link to a Qualtrics survey where they anonymously completed the study online. The study took approximately 30 minutes to complete. Before proceeding with the survey, participants first read an informed consent form. Once participants consented they were asked, “Do you have headphones available?” “Are you enrolled in a graduate counseling program?” and “Do you have 35 minutes to complete this study, in one sitting?” These questions helped to ensure that the target population is included, that participants are able to listen to the mindfulness intervention, and that they completed the study in one session. Participants were then asked about the number of multicultural courses they had completed, and the degree to which their program emphasized MCC (see Appendix A). Next, they completed a measure of trait mindfulness, to ensure groups were even across conditions prior to receiving the intervention. Next, participants were randomly assigned to the experimental
(10-minute mindfulness intervention) or control condition (10-minute audio recording of a natural history lesson). Next, all participants completed the state mindfulness measure to determine differences between experimental and control conditions immediately after receiving the intervention. Participants also completed a manipulation check immediately after listening to the recording, described below. Next, participants completed scales for ethnocultural empathy, and MCC (Ladany et al., 1997; Neville et al., 2006; Wang et al., 2003; See Appendices E, F). Participants then completed the demographics questions (see Appendix G). Participants who completed the study and wanted to be considered for the $25 or $50 Amazon gift cards entered their email into a separate survey. These emails were used to distribute the six Amazon gift cards to those who were randomly selected.

**Mindfulness intervention condition.** I utilized a 10-minute audio mindfulness intervention used in previous research (see Appendix C; Cropley, Ussher, & Charitou, 2007; Lueke & Gibson, 2014, 2016) that guided listeners through a brief body scan and encouraged acceptance of all sensations within the body (i.e., “Just watch your body and the way your mind works. Notice your feelings and other experiences you may have”). Without restriction, resistance, or judgment participants were encouraged to become aware of their thoughts (Lueke & Gibson, 2014, 2016). A woman’s voice with a British accent narrates the recording, with a slow even cadence.

**Control condition.** I also used a 10-minute audio recording describing natural history as a control condition, replicating previous research (see Appendix C; Cropley et al., 2007; Lueke & Gibson, 2014, 2016). This recording, which discusses the English countryside, has been described as relaxing by previous participants (Cropley et al., 2007;
Lueke & Gibson, 2014, 2016). The control condition was used in previous research (Lueke & Gibson, 2014, 2016). The control audio recording has been described as relaxing, as it is read by the same narrator as the mindfulness condition, and in the same cadence. In previous research (Lueke & Gibson, 2014, 2016) the control condition was used to ensure that differences between the intervention and control conditions were not due to being in a relaxed state and was in fact due to the content of the mindfulness intervention.

Manipulation check. I created a 3-item manipulation check to confirm participants listened to the mindfulness audio recording, because the study was completed online (See Appendix C). The manipulation check was previously used in my pilot study. The statements were as follows with the correct answers in italics: “The voice heard on the audio was (a) male, (b) female, or (c) both male and female voices;” “The recording was about (a) the countryside of England, (b) how to set a table, or (c) becoming aware of sensations in the body and mind;” “The recording instructed you to focus on your (a) breath, (b) relationship with nature, or (c) knowledge of proper etiquette.”
Chapter 3

Results

Preliminary Analyses

Preliminary analyses comprised of examining missing data, descriptive statistics, histograms, and checking that assumptions were met for hierarchical regression analyses. I conducted a series of analyses of variance tests to examine the groups for equivalence, and whether the mindfulness intervention induced a state of mindfulness. Following previous research, I examined racial group differences on key study variables.

Missing data. Missing data were identified by reviewing data and frequency tables for dependent measures (i.e., self-reported MCC, and ethnocultural empathy), which revealed missing data for multicultural knowledge. Missing data ranged from 1.2% to 2.3% on specific items. I conducted Little’s MCAR test in SPSS to determine if missing data were random or nonrandom and the test revealed that all missing data were missing completely at random (MCAR). Following the recommendation of Schlomer, Bauman, and Card (2010), when missingness is below 5%, I replaced missing values using series mean in SPSS, rather than trimming the data.

Descriptive statistics and assumptions for regression analysis. Skewness and kurtosis values were $z < 3.29$, which indicates normally distributed data (Tabachnick & Fidell, 2007). Histograms were also reviewed and showed normally distributed data. I examined Pearson product moment bivariate correlations for focal variables (see Table 1). I examined that data for the assumptions of normality, linearity, and homoscedasticity, which met criteria for the hierarchical linear regression (Tabachnick & Fidell, 2007).
Data for multicollinearity were assessed by examining correlation tables, with Pearson’s correlation values between condition and multicultural training equaling $r = .24$. I also assessed VIF scores between condition and multicultural training ($VIF = 1$), which revealed no signs of multicollinearity (Tabachnick & Fidell, 2007).

**Group equivalence and effectiveness of intervention.** Drawing on previous research, I conducted a one-way MANOVA to ensure there were no differences across groups by conditions for trait mindfulness (Lueke & Gibson, 2014; 2016; See Table 2 for means and standard deviations). To ensure groups were distributed equally across mindfulness and control conditions for trait mindfulness I conducted a one-way MANOVA, and results revealed no significant difference between participants $F(1,84) = 1.80, p > .05, \eta_p^2 = .02$. I also examined significant differences of state mindfulness after receiving the intervention to ensure that those who received the intervention had higher scores of state mindfulness as found in previous research (Lueke & Gibson, 2014, 2016). For state mindfulness mind and body subscales, results revealed significant differences between groups that received the mindfulness intervention and control condition for state mindfulness measures: mind $F(1,84) = 33.37, p < .001, \eta_p^2 = .28$, and body $F(1,84) = 70.79, p < .001, \eta_p^2 = .46$. Specifically, participants who received the mindfulness intervention scored higher in state mindfulness compared to those who listened to the control recording consistent with previous research findings (Lueke & Gibson, 2014, 2016; see Table 2 for means and standard deviations).

Next, I examined differences in levels of multicultural training (low versus high) on state and trait mindfulness. The results revealed significant differences between low
levels of multicultural training (currently enrolled or completed one course multicultural course) and high levels of multicultural training (completed two or more multicultural courses). I conducted a one-way MANOVA to examine differences for low and high levels of multicultural training for trait and state mindfulness. The results revealed no significant differences across groups on trait mindfulness $F(1,84) = 3.85, p > .05, \eta^2_p = .04$. There were significant differences in state mindfulness body $F(1,84) = 4.91, p < .05, \eta^2_p = .06$, and state mindfulness mind $F(1,84) = 6.02, p < .05, \eta^2_p = .07$, with participants who have taken 2 or more multicultural courses scoring higher in state mindfulness compared to participants currently enrolled or who had completed one course (see Table 2 for means and standard deviations).

**Racial and ethnic differences.** Following previous research (Ivers et al., 2016; Chao, 2011, 2013; Wang et al., 2003), I collapsed race and ethnicity into two groups across participants who identified as White and those who identified as people of color (i.e., Black, Latina/o, Eastern Asian, Middle Eastern, American Indian, and Biracial or Multiracial). I made this decision due to the small number of participants who represented each racial and ethnic minority group. The one-way MANOVA across outcome variables revealed no significant differences for multicultural knowledge $F(1,84) = .01, p > .05, \eta^2_p = .00$, awareness $F(1,84) = .03, p > .05, \eta^2_p = .00$, or empathic feeling $F(1,84) = .15, p > .05, \eta^2_p = .00$. In contrast, results revealed a significant main effect of race and ethnicity for the ethnocultural empathy measure perspective taking $F(1,84) = 34.14, p < .001, \eta^2_p = .29$. Specifically, participants of color ($M = 4.92; SD = .72$) scored higher than White participants ($M = 3.83; SD = .89$) on perspective taking.
Thus, I included race as a covariate in subsequent analysis for empathic perspective taking.

**Primary Analyses**

I conducted a series of hierarchical linear regression analyses to examine the association between the mindfulness intervention and MCC and ethnocultural measures, while controlling for previous multicultural training. I followed research that previously used multicultural training as a covariate to determine the degree to which mindfulness is related to multicultural knowledge and awareness (Ivers et al., 2016).

**Hierarchical linear multiple regressions.** Tables 4-7 provide a summary of the hierarchical regression analyses for variables associated with self-reported multicultural knowledge, multicultural awareness, empathic feeling, and empathic perspective taking, respectively. In the first three regression analyses, I entered the main effect of multicultural training (Step 1), main effect of condition (Step 2), and interaction between condition and multicultural training (Step 3) for dependent measures of multicultural knowledge, multicultural awareness, and empathic feeling. For the fourth regression analysis examining empathic perspective taking, I entered the collapsed variable of race and ethnicity (i.e., White or racial and ethnic minority). In Step 1, I entered race and ethnicity and multicultural training as covariates. In Step 2, I entered the main effect for condition, and in Step 3 I entered interaction terms for condition x multicultural training, and condition x race and ethnicity.

**Hypothesis 1: Multicultural training.** As expected, results revealed support for my first hypothesis. Multicultural training was significantly associated with self-reported
multicultural knowledge, accounting for 21% of variance (see Table 4), multicultural awareness (see Table 5), and empathic feeling (see Table 6). Specifically, participants who had taken two or more multicultural courses reported higher scores of self-reported multicultural knowledge, multicultural awareness, and empathic feeling compared to participants who had completed one course or were currently enrolled in their first course (see Table 3 for means and standard deviations). I did not find a significant association between multicultural training and empathic perspective taking, when controlling for race and ethnicity (see Table 7).

Hypothesis 2: Condition. To test my second hypothesis, I entered condition in Step 2 in each of the four hierarchical regression analyses. Results revealed a significant association between condition and multicultural knowledge (see Table 4). Those who received the mindfulness intervention scored higher in multicultural knowledge compared to those in the control condition (see Table 3 for means and standard deviations). Condition did not significantly predict multicultural awareness (see Table 5), empathic feeling (see Table 6), or empathic perspective taking (see Table 7). Thus, I found only partial support for hypothesis 2.

Hypotheses 3: Interaction. Again, I found partial support for hypothesis 3. I added the interaction term between multicultural training and condition to the full model in Step 3. Results revealed no significant interactions for multicultural knowledge (see Table 4), multicultural awareness (see Table 5), or empathic perspective taking (see Table 7). These results were not consistent with my hypotheses.
However, results revealed a significant interaction effect for empathic feeling (see Table 6). The two-way interaction added 5% of incremental variance in predicting empathic feeling. I conducted a simple main effect analysis to investigate the interaction using Andrew Haye’s Process v3.0 in SPSS. I also plotted the two-way interaction in Excel (see Figure 1). The simple effects analysis revealed a significant relationship between empathic feeling and condition at low levels of multicultural training $b = .47$, $SE = .18$, $t(82) = 2.67$, $p < .01$, but not at high levels of multicultural training $b = -.26$, $SE = .26$, $t(82) = -.98$, $p > .05$. Results revealed that at low levels of multicultural training trainees who received the mindfulness intervention scored significantly higher in empathic feeling compared to those who received the control condition ($\Delta R^2 = .05$, $F(1,82) = 5.32$, $p < .05$).
Chapter 4

Discussion

In the present study, I used hierarchical regression analysis to examine whether a mindfulness intervention was a significant predictor of multicultural counseling competence and ethnocultural empathy, while controlling for prior multicultural training. I found partial support for my three hypotheses. Consistent with previous research the present study revealed that multicultural training was associated with higher levels of multicultural counseling knowledge, awareness, and empathic feeling and expression. Results from this study indicate that even a brief 10-minute mindfulness meditation can result in higher levels of state mindfulness, and multicultural counseling knowledge. Interestingly the present study revealed that the mindfulness intervention was positively associated with ethnocultural empathic feeling and expression for counselor trainees with low levels of multicultural training, but there was no significant effect for those with high levels of multicultural training. Inconsistent with my hypotheses, results revealed that the mindfulness intervention alone did not have a significant effect on multicultural counseling awareness, or empathic perspective taking. Empathic perspective taking was significantly associated with the race and ethnicity of participants, with participants of color scoring higher.

Multicultural Knowledge and Awareness

With respect to MC knowledge, results are consistent with findings in previous studies revealing (a) higher scores for self-reported multicultural knowledge for counselor trainees with more multicultural training and (b) the association between
mindfulness and multicultural knowledge (Ivers et al., 2016). The current study expanded previous correlational research by using a brief mindfulness intervention. Mindfulness and multicultural training significantly predicted multicultural knowledge, however only previous multicultural training was a significant predictor of multicultural awareness. Condition was not a moderator of the relationship between multicultural training and multicultural knowledge and awareness, which may be due to small effect sizes. Findings showed that trainees with more multicultural training (two or more courses) had higher scores of self-reported multicultural knowledge, and so did participants who received the mindfulness intervention. The lack of interaction may also be due to similar increases across multicultural training levels for those who received the mindfulness intervention.

Regarding multicultural awareness, results were inconsistent with previous findings. Multicultural awareness was associated with previous multicultural training, which previously was not found (Chao, 2013). Ivers et al. (2016) reported that multicultural awareness was positively associated with nonreactivity to the inner experience, but there was no significance of condition, which may indicate the nonreactivity of the inner experience is developed through sustained mindfulness practice, as a component of trait mindfulness. While the intervention used in this study is associated with higher levels of state mindfulness due to the briefness of the intervention. Differences in findings across multicultural knowledge and awareness may due to the nature of the questions on the multicultural awareness subscale that address explicit bias, with most items reverse coded. For example: “I feel all the recent attention directed toward multicultural issues in counseling is overdone and not really warranted (see
Appendix F for full scales.)” In contrast, scale items for multicultural knowledge subscale are positively framed and address the counselors’ awareness and openness to recognize racial bias. For example: “I am comfortable with differences that exist between me and my clients in terms of race and beliefs.” Previous research has shown that mindfulness is effective in reducing implicit racial bias, by interrupting the automatic associations in the brain (Lueke & Gibson, 2014). This indicates that incorporating mindfulness-based practice into entry level multicultural courses may help counselor trainees to be more open to discussions about race and be more comfortable with recognizing their own biases.

**Ethnocultural Empathy**

Mindfulness has been correlated positively with measures of general empathy (Fulton & Cashwell, 2015; Ivers, Johnson, Clarke, Newsome, and Berry, 2016), however the present study is the first to examine the effects of mindfulness on ethnocultural empathy. Ethnocultural empathy is the ability to empathize with people from different racial and ethnic groups (Wang, 2003). Ethnocultural empathy is an essential component of MCC development, and the present study revealed the importance of measuring ethnocultural empathy in future research examining the effects of mindfulness on MCC.

**Empathic feeling.** Consistent with previous research ethnocultural empathy was predicted by higher levels of multicultural training (Wang et al., 2003), however mindfulness was not a significant predictor of empathic feeling and expression. Mindfulness did significantly interact with multicultural training, such that the mindfulness intervention significantly increased empathic feeling scores for trainees with
lower levels of multicultural training, while trainees with higher levels of training did not significantly differ across conditions. The two-way interaction between mindfulness and multicultural training predicting empathic feeling revealed that mindfulness intervention is most impactful for counselor trainees with low levels of multicultural training. These results indicate that mindfulness practice incorporated in entry level multicultural courses could be more beneficial than in more advanced courses.

In prior research, Wang and colleagues (2003) found that racial and ethnic minority participants scored higher on empathic feeling and expression than White participants; however, these results were not replicated in the present study. It is possible that this is due to the presence of mindfulness, which has not been previously tested with ethnocultural empathy. It is important to note that only two subscales from the original Scale of Ethnocultural Empathy were utilized in this study. Peifer, Lawrence, Williams, and Leyton-Armakan (2016) utilized the empathic feeling and expressions subscale to measure effectiveness of mentoring relationships. They found that mentees were significantly more likely to explore their ethnic identity when their mentor scored high in empathic feeling and expression. Future research should explore the additional subscales of ethnocultural empathy to further understand the relationship with mindfulness.

**Empathic perspective taking.** My analyses of empathic perspective taking included controlling for race and ethnic identity and multicultural training. I did not find significant effects of condition, multicultural training, or the interaction term (condition x multicultural training) on perspective taking. Empathic perspective taking refers to counselor trainees’ awareness of systemic racism and the impact it has on people of
color. Notably, I found a significant main effect of race and ethnicity, such that, participants of color scored higher than White participants on perspective taking. This is consistent with prior research with college students (Wang et al., 2003). Prior research suggests empathic perspective taking is fostered through direct interaction with people from racial and ethnic backgrounds different from one’s own. Empathic feeling and expression subscale has been negatively associated with prejudice (Albiero & Matricardi, 2013). A recent study looked at the effects of an appreciating diversity workshop on empathic perspective taking and other SEE subscales (Fleming, Thomas, Burnham, Charles, & Shaw, 2015). The one-time workshop addressed social-identities such as race and ethnicity, as well as prejudices due to systemic racism using group-based learning and interactive pairs. Fleming et al. (2015) found that the workshop was effective in increasing empathic perspective taking and empathic awareness. These results indicate that multicultural training must incorporate immersion experiences for counselor trainees to allow them to experience different cultures and develop empathic perspective taking.

Limitations

This study is the first to measure the impact of a mindfulness intervention on counselor trainees MCC and ethnocultural empathy. While findings contribute to the literature, the study does have some limitations. Notably, I used only self-report measures of MCC. There is criticism about using self-report measures of MCC as predictors of MCC, and they should be interpreted with caution. Some scholars recommend treating self-reported measures of MCC as measures of multicultural counseling self-efficacy (Constantine & Ladany, 2000; Smith, et al., 2006), which is consistent with my approach.
in the current study. High self-efficacy is linked to more positive perceived outcomes, goal setting, and is a source of motivation to pursue areas of study (Holcomb-Mccoy, et al., 2008). Thus, interpretations of reported multicultural knowledge and awareness in this study are specific to counselor trainees’ perceived competence, rather than demonstrated MCC abilities.

Another limitation to this study is the small sample size. Although the sample is representative of counseling programs it is possible that with a larger sample size there would have been more significant findings. Related to this a second limitation is the examination of race and ethnicity by collapsing the variable into ethnic/racial minority and ethnic/racial majority, which assumes that all ethnic and racial minorities are similar. Due to a small representation of Asian American, Middle Eastern American, American Indian, and international students I followed procedures of previous researchers and combined all people of color into one racial and ethnic minority group (Chao, 2013; Chao, Wei, Good, & Flores, 2011; Ivers et al., 2016). Also, regarding the sample, participants in the current study comprised primarily CACREP master’s-level counselor trainees. Findings may differ with doctoral samples, who may have increased opportunities for multicultural training throughout their training program.

Furthermore, the nature of the multicultural course variable should be noted as a limitation, because it provides information about the number of courses a participant has taken, but it does not get at the content or impact of the course. Although CACREP outlines curriculum standards for courses in multicultural counseling previous research has shown that course curriculum varies greatly, with only 49% of courses even
incorporating multicultural awareness into course material (Pieterse et al., 2009; Priester et al., 2008). Variation in courses makes it difficult to accurately compare levels of training.

A final limitation pertains to the mindfulness intervention as a brief, one-time mindfulness meditation. Mindfulness interventions often consist of at least 6 weeks of continued mindfulness meditation to develop trait mindfulness, while the present study found that changes in state mindfulness can have an impact on counselor trainees’ confidence and empathy towards people from diverse cultures. Similar to MCC, mindfulness is developed over time with practice (Baer et al., 2006). The results from the 10-minute mindfulness intervention utilized in the present study shows the power of mindfulness training and provides hope for the use of mindfulness practice in future research.

**Implications for Future Research**

The present study is the first examine the effects of a mindfulness intervention on MCC and ethnocultural empathy. The brief mindful intervention was positively associated with multicultural knowledge and empathic feeling and expression. Future research should measure the full SEE to better understand the impact of mindfulness on ethnocultural empathy. Current findings should be expanded by testing the effectiveness of sustained mindfulness practice. It is likely that changes in trait mindfulness would result in continuous increases in MCC and ethnocultural empathy considering a brief 10-minute intervention had a powerful effect. Additionally, future research should utilize a
longitudinal design to measure whether the effects of the mindfulness intervention can be sustained, or if the effects are exclusive to being in a state of mindfulness.

The current study also added to literature for the effectiveness of multicultural training resulting in higher levels of MCC and ethnocultural empathy. There are concerns about the inconsistency of multicultural curriculum among counselor programs. There is a lack of empirical support for consistency of content taught across current multicultural courses (Pieterse et al., 2009; Priester et al., 2008). There is room for improvement in regulating the content of multicultural courses and we must continue to empirically test innovative ways to teach multicultural topics within counseling.

Similar to past research counselor trainees’ race and ethnicity was significantly associated with empathic perspective taking, with participants of color scoring higher than White counselor trainees. Results indicate that neither multicultural training nor a brief mindfulness intervention impacted empathic perspective taking. Future research must examine new approaches to fostering empathic perspective taking through multicultural courses. Previous research found support for workshops ability to increase empathic perspective taking when utilizing group-work and interactive pairs to address social identities and systemic racism (Fleming et al., 2015). Empirical evidence is needed to understand how this type of workshop approach could be incorporated into classroom teaching, and the possible benefits of integrating mindfulness practice.

**Implications for Counselor Training**

Fostering the development of MCC as part of counselor training is essential for providing competent services to clients. The current study was the first to use an online
mindfulness intervention to show an increase in multicultural knowledge self-efficacy and empathic feeling. This gives hope that providing counselor trainees access to mindfulness meditations through an online platform may increase their confidence in working with clients from different cultural backgrounds.

The mindfulness intervention alone did not increase multicultural awareness, however; it did result in higher levels of multicultural knowledge and empathic feeling, specifically for those with low levels of multicultural training. Past research found that mindfulness is associated with lower levels of judgment of inner experience, (Ivers et al., 2016) implicit bias, and discriminatory behavior (Lueke & Gibson, 2014, 2016). The culmination of past research and results from the present study provide support for incorporating a mindfulness meditation into multicultural courses. Providing a brief mindfulness meditation on a weekly basis at the beginning of entry level multicultural courses could produce an increase counselor trainees’ ability recognize and address biases related to their own racial and ethnic identities. While additional empirical evidence is needed, the potential benefits of incorporating mindfulness meditation into counselor training is a promising way to increase counselor trainees’ MCC.

Conclusions

Counselors increasingly serve clients from diverse racial and ethnic backgrounds, which is why it is vital to foster MCC development in counselor training programs. This study extends previous correlational research by providing a brief mindfulness intervention. The present study examined the effects of mindfulness on self-reported multicultural awareness and knowledge, as well as ethnocultural empathy. Results
suggested that mindfulness practice can increase counselor trainees self-reported MCC and empathic feeling, when controlling for multicultural training. Findings also indicated that a brief mindfulness intervention was more impactful for counselor trainees with low levels of multicultural training. Although additional research is warranted, the current study provides initial evidence supporting the benefits of mindfulness practice on multicultural training in counselor education.
References


APPENDIX A

DATA COLLECTED JANUARY-MAY 2018
PREVIOUS MULTICULTURAL TRAINING

1. Please select the number of multicultural courses you have completed:
   - 3 or more
   - 2
   - 1
   - Currently enrolled in my first course

2. Please select the number of hours of additional multicultural training you have completed:
   - No additional training
   - 1 hour
   - 2-5 hours
   - 5-10 hours
   - More than 10 hours

3. On the scale below, please indicate how much of an emphasis your program puts on multicultural values:

   Little Value 1 2 3 4 5 6 7

   Great Value
MINDFUL ATTENTION AND AWARENESS SCALE (MAAS)

Instructions: Below is a collection of statements about your everyday experience. Using the 1-6 scale, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1. I could be experiencing some emotion and not be conscious of it until sometime later.

2. I break or spill things because of carelessness, not paying attention, or thinking of something else.

3. I find it difficult to stay focused on what's happening the present.

4. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.

5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.

6. I forget a person's name almost as soon as I've been told it for the first time.

7. I rush through activities without being really attentive to them.

8. I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.

9. I do jobs or tasks automatically, without being aware of what I'm doing.

10. I find myself listening to someone with one ear, doing something else at the same time.

11. I drive places on "automatic pilot" and then wonder why I went there.
12. I find myself preoccupied with the future or the past.

13. I find myself doing things without paying attention.

14. I snack without being aware that I'm eating.

15. It seems I am "running on automatic," without much awareness of what I'm doing.

Scoring information: The scale is scored by computing the mean of the 15 items. Higher scores reflect higher levels of trait mindfulness.

MINDFULNESS AND CONTROL AUDIO FILES AND INTERVENTION CHECKS

Condition Materials

Audio file for mindfulness intervention and control condition will be submitted separately.

Intervention Checks

Instructions: Thinking about the recording you just listened to please answer each question below.

1. The voice heard on the audio was:
   a. male
   b. female
   c. both male and female voices

2. The recording was about:
   a. the countryside of England
   b. how to set a table
   c. becoming aware of sensations in body and mind

3. The recording instructed you to focus on your:
   a. breath
   b. relationship with nature
   c. knowledge of proper etiquette

Fidelity Checks

4. Which mode did you use to listen to the recording?
   a. Head phones
   b. Computer speaker
   c. Phone speaker

5. On the scale below, please rate how mindful you were able to be while listening to the recording.

<table>
<thead>
<tr>
<th>Very low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Very High</th>
</tr>
</thead>
</table>

50
APPENDIX D

DATA COLLECTED JANUARY-MAY 2018
STATE MINDFULNESS SCALE (SMS)

Instructions: Please rate the statements below; indicate how well each statement captures your experience while listening to the audio recording. Treat each item uniquely from the rest.

Not at all 1 2 3 4 Very Well 5

State mindfulness of mind

While listening to the recoding:

1. I noticed pleasant and unpleasant emotions.
2. I noticed pleasant and unpleasant thoughts.
3. I noticed emotions come and go.
4. I was aware of different emotions that arose in me.
5. I felt aware of what was happening inside of me.
6. I was aware of what was going on in my mind.
7. I felt closely connected to the present moment.
8. I had moments when I felt alert and aware.
9. I actively explored my experience in the moment.
10. I felt that I was experiencing the present moment fully.
11. I tried to pay attention to pleasant and unpleasant sensations.
12. It was interesting to see the patterns of my thinking.
13. I noticed many small details of my experience.
15. I found some of my experiences interesting.

State mindfulness of body

While listening to the recoding:

1. I noticed physical sensations come and go.
2. I noticed some pleasant and unpleasant physical sensations.
3. I noticed various sensations caused by my surroundings (e.g., heat, coolness, the wind on my face).
4. I clearly physically felt what was going on in my body.
5. I felt in contact with my body.
6. I changed my body posture and paid attention to the physical process of moving.

Scoring: High scores indicate higher levels of state mindfulness.

APPENDIX E

DATA COLLECTED JANUARY-MAY 2018
Scale of Ethnocultural Empathy (SEE)

strongly disagree that it describes me  strongly agree that it describes me

1  2  3  4  5  6

Instructions: Please rate the statements below; indicate how well each statement describes you.

Empathic feeling and expression

1. When I hear people make racist jokes, I tell them I am offended even though they are not referring to my racial or ethnic group.

2. I don’t care if people make racist statements against other racial or ethnic groups (R).

3. I rarely think about the impact of a racist or ethnic joke on the feelings of people who are targeted. (R)

4. When other people struggle with racial or ethnic oppression, I share their frustration.

5. I feel supportive of people of other racial and ethnic groups, if I think they are being taken advantage of.

6. I share the anger of those who face injustice because of their racial and ethnic backgrounds.

7. I share the anger of people who are victims of hate crimes (e.g., intentional violence because of race or ethnicity).

8. When I know my friends are treated unfairly because of their racial or ethnic backgrounds, I speak up for them.

9. I get disturbed when other people experience misfortunes due to their racial or ethnic backgrounds.

10. I am touched by movies or books about discrimination issues faced by racial or ethnic groups other than my own.
11. When I see people, who come from a different racial or ethnic background succeed in the public arena, I share their pride.

12. I am not likely to participate in events that promote equal rights for people of all racial and ethnic backgrounds. (R)

13. I seek opportunities to speak with individuals of other racial or ethnic backgrounds about their experiences.

14. When I interact with people from other racial or ethnic backgrounds, I show my appreciation of their cultural norms.

15. I express my concern about discrimination to people from other racial or ethnic groups.

Empathic Perspective Taking

1. It is easy for me to understand what it would feel like to be a person of another racial or ethnic background other than my own.

2. It is difficult for me to relate to stories in which people talk about racial or ethnic discrimination they experience in their day to day lives. (R)

3. It is difficult for me to put myself in the shoes of someone who is racially and/or ethnically different from me. (R)

4. I know what it feels like to be the only person of a certain race or ethnicity in a group of people.

5. I can relate to the frustration that some people feel about having fewer opportunities due to their racial or ethnic backgrounds.

6. I feel uncomfortable when I am around a significant number of people who are racially/ethnically different than me. (R)

7. I don’t know a lot of information about important social and political events of racial and ethnic groups other than my own. (R)

Scoring: Higher scores indicate higher levels of ethnocultural empathy through feeling and expression, and empathic perspective taking.
MULTICULTURAL COUNSELING KNOWLEDGE AND AWARENESS SCALE

(MCKAS)

Instructions: Using the following scale, rate the truth of each item as it applies to you.

<table>
<thead>
<tr>
<th>Not at All True</th>
<th>Somewhat True</th>
<th>Totally True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Knowledge

1. I check up on my minority/cultural counseling skills by monitoring my functioning – via consultation, supervision, and continuing education.

2. I am aware some research indicates that minority clients receive “less preferred” forms of counseling treatment than majority clients.

3. I am aware of certain counseling skills, techniques, or approaches that are more likely to transcend culture and be effective with any clients.

4. I am familiar with the “culturally deficient” and “culturally deprived” depictions of minority mental health and understand how these labels serve to foster and perpetuate discrimination.

5. I am aware of individual differences that exist among members within a particular ethnic group based on values, beliefs, and level of acculturation.

6. I am aware some research indicates that minority clients are more likely to be diagnosed with mental illnesses than are majority clients.

7. I am aware of the differential interpretations of nonverbal communication (e.g., personal space, eye contact, handshakes) within various racial/ethnic groups.

8. I understand the impact and operations of oppression and the racist concepts that have permeated the mental health professions.

9. I realize that counselor-client incongruities in problem conceptualization and counseling goals may reduce counselor credibility.

10. I am aware that some racial/ethnic minorities see the profession of psychology functioning to maintain and promote the status and power of the White Establishment.
11. I am knowledgeable of acculturation models for various ethnic minority groups.

12. I have an understanding of the role culture and racism play in the development of identity and worldviews among minority groups.

13. I am aware of culture-specific, that is culturally indigenous, models of counseling for various racial/ethnic groups.

14. I am aware of both the initial barriers and benefits related to the cross-cultural counseling relationship.

15. I am comfortable with differences that exist between me and my clients in terms of race and beliefs.

16. I am aware of institutional barriers which may inhibit minorities from using mental health services.

17. I am aware of the value assumptions inherent in major schools of counseling and understand how these assumptions may conflict with values of culturally diverse clients.

18. I am aware that some minorities see the counseling process as contrary to their own life experiences and inappropriate or insufficient to their needs.

19. I am sensitive to circumstances (personal biases, language dominance, stage of ethnic identity development) which may dictate referral of the minority client to a member of his/her own racial/ethnic group.

20. I am aware that some minorities believe counselors lead minority students into non-academic programs regardless of student potential, preferences, or ambitions.

Awareness

1. I believe all clients should maintain direct eye contact during counseling. (R)

2. I think that clients who do not discuss intimate aspects of their lives are being resistant and defensive. (R)

3. I feel all the recent attention directed toward multicultural issues in counseling is overdone and not really warranted. (R)
4. I think that clients should perceive the nuclear family as the ideal social unit. (R)

5. I think that being highly competitive and achievement oriented are traits that all clients should work towards. (R)

6. I believe that it is important to emphasize objective and rational thinking in minority clients. (R)

7. I believe my clients should view a patriarchal structure as the ideal. (R)

8. I think that my clients should exhibit some degree of psychological mindedness and sophistication. (R)

9. I believe that minority clients will benefit most from counseling with a majority who endorses White middle-class values and norms. (R)

10. I am aware that being born a White person in this society carries with it certain advantages.

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.

12. I believe that all clients must view themselves as their number one responsibility. (R)

Scoring: Higher scores on the awareness and knowledge subscales indicate higher levels of perceived MCC.

APPENDIX G

DATA COLLECTED JANUARY-MAY 2018
DEMOGRAPHICS

1. How old are you?

2. Is English your primary language?
   - Yes
   - No

3. Are you an international student?
   - Yes (if yes, country of citizenship ________)
   - No

4. Please select your race and ethnicity from the choices below (you may select more than one):
   - Non-Hispanic White or European-American
   - Black, Afro-Caribbean, or African American
   - Middle Eastern or Arab American
   - Latino/a/x or Hispanic American
   - American Indian or Alaska Native
   - Asian American
   - Biracial or Multiracial
   - Other (please specify) __________

5. Please select the description that best fits your religious preference from the choices below:
   - Buddhist
   - Christian
   - Hindu
   - Jewish
   - Muslim
   - Atheist
   - No Preference
   - Other (please specify) __________

6. Gender
   - Female
   - Male
   - Genderqueer, non-binary, or gender fluid
   - Trans
   - Trans woman
   - Trans man
7. What is the highest level of education your mother (or parental guardian) has received?
   • Some high school
   • High school graduate
   • Some college
   • Vocational or trade school
   • Bachelor’s degree
   • Master’s degree
   • Doctoral or Professional degree (e.g., J.D., M.D.)
   • Other (please specify) __________________

8. What is the highest level of education your father (or parental guardian) has received?
   • Some high school
   • High school graduate
   • Some college
   • Vocational or trade school
   • Bachelor’s degree
   • Master’s degree
   • Doctoral or Professional degree (e.g., J.D., M.D.)
   • Other (please specify) __________________

9. What degree will you receive at the end of your training?:

10. Is your program accredited (e.g., APA, CACREP)?
    • If yes, please specify _________
    • No

11. How many years have you completed in your program?

12. Provide the number of direct clinical hours you currently have obtained:

13. Please select the number of multicultural courses you have completed:
    • 0, or currently enrolled
    • 1
    • 2
    • 3 or more
    • Currently Enrolled

14. Please select the number of hours of additional multicultural training you have completed:
    • No additional training
    • 1 hour
• 2-5 hours
• 5-10 hours
• More than 10 hours

15. On the scale below, please indicate how much of an emphasis your program puts on multicultural training:

<table>
<thead>
<tr>
<th>Little Value</th>
<th>Great Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
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</table>

16. In the space below, please list any previous experience with mindfulness practice (e.g. meditation, yoga):
Table 1

Correlations for the Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<td>2. MC Training</td>
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<td></td>
<td></td>
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<tr>
<td>3. MC Knowledge</td>
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<td>.46*</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4. MC Awareness</td>
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<td>.28*</td>
<td>.54*</td>
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<td>5. EFE</td>
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<td>.30*</td>
<td>.60*</td>
<td>.48*</td>
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<td>6. EPT</td>
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<td>.06</td>
<td>.40*</td>
<td>.18</td>
<td>.43*</td>
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</tr>
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</table>

Note: Independent variables include: Condition (control = 0, or mindfulness = 1), and MC Training (currently enrolled or completed one course = 0, or two or more courses = 1). Dependent measures from MCKAS include MC Knowledge (multicultural counseling knowledge), and MC Awareness (multicultural counseling awareness). Additional dependent measures from SEE include EFE (empathic feeling and expression), and EPT (empathic perspective taking).

Significant at .01 level *
<table>
<thead>
<tr>
<th>Group</th>
<th>Trait Mindfulness</th>
<th>SM Body</th>
<th>SM Mind</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>3.26 (.66)</td>
<td>5.4 (.88)*</td>
<td>5.7 (.82)*</td>
</tr>
<tr>
<td>Mindfulness</td>
<td>3.04 (.79)</td>
<td>6.90 (.79)*</td>
<td>6.67 (.62)*</td>
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<tr>
<td>MC Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolled or 1</td>
<td>3.24 (.63)</td>
<td>6.00 (1.19)*</td>
<td>6.10 (.90)*</td>
</tr>
<tr>
<td>2 or more</td>
<td>2.93 (.88)</td>
<td>6.60 (.90)*</td>
<td>6.56 (.64)*</td>
</tr>
</tbody>
</table>

Note: Trait Mindfulness are results from MAAS, while State Mindfulness (SM) body and mind are results from the SMS. Significant at .05 level *
Table 3

Mean and Standard Deviations of Self-Report Multicultural Counseling Competence and SEE for Intervention and Number of MC Courses Taken

<table>
<thead>
<tr>
<th>Group</th>
<th>MC Knowledge</th>
<th>MC Awareness</th>
<th>EFE</th>
<th>EPT</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Condition</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>5.21 (.74)*</td>
<td>5.90 (.79)</td>
<td>4.81 (.83)*</td>
<td>4.03 (1.00)</td>
</tr>
<tr>
<td>Mindfulness</td>
<td>5.64 (.58)*</td>
<td>6.05 (.77)</td>
<td>5.14 (.55)*</td>
<td>4.41 (.94)</td>
</tr>
<tr>
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<tr>
<td>MC Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolled or 1</td>
<td>5.21 (.67)*</td>
<td>5.82 (.83)*</td>
<td>4.83 (.73)*</td>
<td>4.20 (1.00)</td>
</tr>
<tr>
<td>2 or more</td>
<td>5.87 (.49)*</td>
<td>6.28 (.57)*</td>
<td>5.27 (.57)*</td>
<td>4.30 (.96)</td>
</tr>
</tbody>
</table>

Note: Dependent measures from MCKAS include MC Knowledge (multicultural counseling knowledge), and MC Awareness (multicultural counseling awareness). Addiitonal dependent measures from SEE include EFE (empathic feeling and expression), and EPT (empathic perspective taking).

Significant at .05 level *
Table 4

Hierarchical Multiple Regression Analysis Predicting Self-reported MC Knowledge from Condition and Multicultural Training

\((N = 86)\)

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>(B)</th>
<th>(SE) (B)</th>
<th>(\beta)</th>
<th>(sr^2)</th>
<th>(R^2)</th>
<th>(\Delta R^2)</th>
<th>(\Delta F)</th>
<th>(df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
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<td>.66</td>
<td>.14</td>
<td>.46**</td>
<td>.46</td>
<td>.21</td>
<td>.21</td>
<td>22.06**</td>
<td>1.84</td>
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<tr>
<td>Step 2</td>
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<td>.14</td>
<td>.40**</td>
<td>.41</td>
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<td>.05</td>
<td>5.16*</td>
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<tr>
<td>Step 3</td>
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<tr>
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<td>Condition</td>
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<td>.33*</td>
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<tr>
<td>Condition x MC Training</td>
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<td>.29</td>
<td>-.30</td>
<td>.35</td>
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</table>

Note: Model one includes the results for multicultural counseling knowledge for independent variables including: Condition (mindfulness, or control), and Multicultural Training (currently enrolled or completed one course, or two or more courses).

Significant at .05 level *
Significant at .01 level **
Table 5

Hierarchical Multiple Regression Analysis Predicting Self-reported MC Awareness from Condition and Multicultural Training

(N = 86)

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>sr²</th>
<th>R²</th>
<th>ΔR²</th>
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<td>.28*</td>
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<td>Step 2</td>
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<td>Condition</td>
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<td>-.02</td>
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</table>

Note: Model two includes the results for multicultural counseling awareness for independent variables including: Condition (mindfulness, or control), and Multicultural Training (currently enrolled or completed one course, or two or more courses).

Significant at .05 level *

Significant at .01 level **
Table 6

Hierarchical Multiple Regression Analysis Predicting Self-reported Ethnocultural Empathy EFE from Condition and Multicultural Training ($N = 86$)

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$R^2$</th>
<th>$AR^2$</th>
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<td>.09</td>
<td>8.00*</td>
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<td>.30**</td>
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<td>.25*</td>
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</tbody>
</table>

Note: Model three includes the results for empathetic feeling and expression for independent variables including: Condition (mindfulness, or control), and Multicultural Training (currently enrolled or completed one course, or two or more courses).

Significant at .05 level *

Significant at .01 level **
Table 7
Hierarchical Multiple Regression Analysis Predicting Self-reported Ethnocultural Empathy EP from Condition, Race and Ethnicity and Multicultural Training (N = 86)

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>sr²</th>
<th>R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>df</th>
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Note: Model four includes the results for empathic perspective taking for independent variables including Condition (mindfulness, or control), and Multicultural Training (currently enrolled or completed one course, or two or more courses). Race and ethnicity is controlled for in model four by collapsing the variable across two groups racial/ethnic minority and racial/ethnic majority.

Note: Significant at .05 level *
Significant at .01 level **
Figure 1. Simple slopes for multicultural training and condition were plotted predicting empathic feeling and expression. $p < .05$