

**A Case for Mindfulness Practice in Fostering Multicultural Competence in
Counseling**

A DISSERTATION

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Dedication

“It is the mark of an educated mind to be able to entertain a thought without accepting it.”

-Aristotle

I dedicate this work to Aaron Smith, RN, Esq. Thank you, Aaron, for teaching me friendship. Thank you for your immeasurable support and enthusiasm. Your love and generosity are unparalleled. You are a true seeker of knowledge and wisdom. Thank you for always pushing me to exist beyond my limitations.

Abstract

Clear and alarming disparities in mental health service and utilization exist between ethnic minorities and non-minorities. Research in the field of counseling psychology has been vigilant in naming this issue, and multicultural counseling competence (MCC) has been identified as an essential, ethical component to best practice in therapy. However, despite these efforts, action has been inadequate and slow to address the needs of substantial portions of the population. A contributing factor in the delay to amend these disparities is the lack of clarity about exactly what constitutes MCC, and how it is achieved, demonstrated and/or experienced. The present study offers mindfulness meditation as a potential vehicle for cultivating multicultural competence in therapists. Research in the field that combines MCC and mindfulness is virtually non-existent. As such, this study explores the relationship between MCC and mindfulness among 123 therapists at college and university counseling centers across the country. Survey data collected included demographic information, and the completion of the Multicultural Awareness, Knowledge, and Skills Survey- Counselor Edition- Revised Outcome (MAKSS-CE-R) and Five Facet Mindfulness Questionnaire (FFMQ). Correlation and regression analyses were conducted for all participants and also for White-identified participants only. Data analysis revealed that positive relationships do exist between the MAKSS-CE-R and the FFMQ, and also between their respective subscales. Exploratory analyses revealed Gender to be a significant moderator of FFM-Observing when predicting MAKSS-CE-R-Total score among all participants and among White-identified participants. FFM-Non-judging was also moderated by Gender as a significant predictor variable among White-identified therapists. Results suggest that MCC and mindfulness are related, and that mindfulness may account for a respectable amount of the variance in MCC score as measured by the MAKSS-CE-R.

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Chapter 1: Introduction

Extensive research in the field of counseling psychology has shown psychotherapy to be effective (Wampold, 2010). In fact, medical reviews of evidenced-based practices in medicine show psychotherapy is as or more effective than various medical treatments (Wampold, 2007). Multiple studies have demonstrated that in less severe cases, recovery rates of individuals in psychotherapy alone were comparable to those combining psychotherapy and medication. In more severe cases, a combined effort was most effective (Elkin, 1994; Thase et al, 1997). Not only is it proven to work, it is also a treatment intervention with growing versatility and shrinking stigma (Olfson et al., 2002). Psychotherapy has become more popular as a viable mode of treatment and intervention, but the field must rise to the occasion of providing effective treatments across various groups and presenting issues. Though counseling helps some, it is failing certain others. With specific regard to navigating the sea of cultural complexity, there is much room for growth in therapist education, training, and intervention.

This study makes the case for mindfulness as a tool for clinicians to progress their capacity to work effectively with culturally diverse populations. First, this paper highlights the need for multicultural competence in counseling. Next, the multicultural counseling literature and some models for competence are examined with special attention paid to the training opportunities purported to facilitate multicultural competence. Mindfulness literature and its neurological bases are also reviewed. The methodology section outlines the present study's design and rationale, and results of the data are shared. A discussion interpreting the data, their implications, and their limitations ensues. Finally, future directions for counselor training and education, and potential areas for consideration conclude the paper.

Statement of the Problem

A 2001 report issued by the Surgeon General asserted that when compared to Whites, ethnic minorities have less access to, and availability of, mental health services. Furthermore, the 2001 study also reported findings that ethnic minorities are underrepresented in mental health research, and those in treatment often receive poorer quality of mental health care. The disparity in use of mental health services was posited by the Surgeon General (2001) to be the result of a lack of cultural appropriateness within modes of treatment- especially when compounded by their intersection with Socio-Economic Status (SES), (Leong et al., 1995; Simth, 2008, 2009). In response to this discrepancy, the Multicultural Guidelines set forth in 2003 by the American Psychological Association emphasize the importance of cultural awareness and skill building for all members in the field of psychology. Specifically, Guideline 1 states that psychologists must recognize that, “as cultural beings, they may hold attitudes and beliefs that can detrimentally influence their perceptions of, and interactions with, individuals who are ethnically and racially different from themselves,” (p. 382). With this in mind, the APA Multicultural Guidelines assert that psychologists should refrain from adopting a color-blind approach, and that the development of self-awareness and cognizance of the complexity of individual worldviews and identities are important capacities for psychologists and supervisors to have (APA, 2003).

This finding of the disparities in mental health and access to services is not specific to the Surgeon General’s 2001 report. They have been found time and again. López and others (2012) have shown that despite significant advancements in research on mental health disparities for Latinos since the Surgeon General’s report, Latinos/as are more likely to experience recurrent depression than Whites, and are less likely to receive standard treatments. Snowden’s (2012) review of the literature has shown that African Americans experience more chronic, disabling manifestations of Major Depressive Disorder and Posttraumatic Stress Disorder than their White counterparts, and that there are substantial systemic barriers to receiving treatment. Studies have also shown that African Americans and Latinos/as in the United States tend to have more

persistent disorders than Non-Hispanic Whites (Breslau et al., 2005), and have less access to substance abuse treatment and mental health services (Wells et al., 2001). Research has shown that Asian Americans also have significantly less access to mental health services than Whites, (Sue et al., 2012).

In 2006, the American Psychological Association developed a task-force in search of the best available, culturally sensitive practice in therapy based on evidence derived from empirically based research. The APA Presidential Task Force on Evidence-Based Practice (2006) proposed the following definition of Evidence-based Practice (EBP) in psychology “Evidence-based practice in psychology is the integration of the best available research with clinical expertise in the context of patient characteristics, *culture*, and preference” (p. 273).

Though rooted deeply in the search for best practice, as well as the protection of clients’ time, money and well-being, some argue that EBPs may not sufficiently incorporate culture into practice (D’Andrea & Heckman, 2008; Leong & Lee, 2006; Whaley & Davis, 2007). Ethnic minorities experience mental illness at rates on par with majority populations (DHHS, 1999), but some studies show that minority populations seek mental health services at a far less frequent rate (Surgeon General, 2001; Wells et al., 2001). Leong and Lee (2006) offer that as current theoretical models are based largely on Western, Eurocentric value systems, they are insufficient in their ability to understand, explain, and be applied to the mental health concerns of ethnic minorities. Furthermore, as individuals from different cultural backgrounds experience and express psychopathology differently (Atkinson, Bui, and Mori, 2001), focus must shift not only to practice with culturally diverse individuals, but to considering the measure of “multicultural competence,” and the measure of outcome and ‘success’ across varying cultural backgrounds- especially when clinicians are at the center of the evaluation process. An emphasis on culture is essential to the relationship between client and clinician.

Significance of the Problem

Sue & Sue (2008) argue that all interactions are cross-cultural interactions. This assertion has foundations at the very heart of the therapeutic practice. Despite this notion of cultural influence in relationships- especially those in therapeutic settings- current standards of practice may fail to account for various cultural nuances and factors (D'Andrea & Heckman, 2008). Without considering the culture of the client, the clinician, and the interaction of the two in the therapeutic setting, "successful outcomes" via the therapeutic relationship may be doomed to overlook essential cultural elements of the therapeutic relationship and resulting treatment (Whaley & Longoria, 2008). Furthermore, failing to acknowledge the cultural influences present in conceptualizing client cases and the therapeutic alliance is unethical (APA, 2003; Sue, 1998). As stated by Lambert (2004), "Clients are not inert objects or diagnostic categories on whom techniques are administered. They are not dependent variables on which independent variables operate...people are agentive beings who are effective forces in the complex of causal events," (p. 814).

The same can be said for clinicians. Though there is much training and practice that clinicians complete to ensure that their contribution to the therapeutic setting is thoughtful, calculated and not harmful in nature, they, too, bring a cultural understanding and influence to the relationship (Sue et al., 2007). For example, Aklin and Turner (2006) found that the diagnostic interview- a fundamental tool in diagnostic assessment- was directly influenced by clinician awareness and understanding, or lack thereof, of client culture. Consequently, clinicians often over diagnose ethnic minorities with more severe disorders, and underdiagnose ethnic minorities with less severe disorders (Aklin & Turner, 2006). Even formal diagnostic criteria established in the Diagnostic and Statistical Manual of Mental Disorders often reflects cultural notions of what is dysfunctional (Wakefield, 1992, 1999). As such, outcome measurements that rely on major theories of the field, traditional clinician training, and instruments that are derived from research

conducted predominantly on majority populations may lead to disproportionate diagnosis of pathology of individuals with cultural minority status. Clinicians are expected to exercise precise discernment, to identify subtle differences in presentation, and to suspend expectations and judgment so that a greater perspective of experience can be had. These skills are essential, but they are neither automatic nor customary.

Researcher Positionality

In the interest of full disclosure, it should be noted that I, myself, have experienced many positive effects of mindfulness practice in my personal and professional lives. It is my aim as a researcher to search for and contribute knowledge to the field that is as unbiased as possible. However, though I am approaching this subject with an ideal of objectivity, it is important to disclose that I am a beneficiary of mindfulness practice. Inevitably, the intersecting identities I possess as a person are present and influential in my experience and interpretation of data as a researcher. The approaches I take as a researcher are built on prior knowledge and experience, and I believe it important to highlight the impossibility of being completely objective despite my best efforts.

Chapter 2: Critical Review of the Literature

The purpose of this review is to examine multicultural competence in counseling, models said to define it, and the training sites where therapists are said to develop it. This review also examines the state of mindfulness research and intervention, and makes an argument for pairing the constructs of multicultural competence in counseling and mindfulness together in research efforts like the present study. This chapter will conclude with a rationale for the present study and the questions aiming to be addressed.

Becoming “Multiculturally Competent”

The importance of the therapeutic relationship between client and clinician in influencing therapeutic change is not new to the field (Norcross & Lambert, 2005). In 1985, Luborsky and others found that the therapist’s adjustment, skill, and interest in helping patients, the purity of the treatment they offered, and the quality of the therapist/patient relationship distinguished more helpful therapists from less helpful therapists. Since this assertion by Luborsky, significant strides have been made in the field to address the culture-bound components that reside within “therapist adjustment, skill, and interest,” “purity of treatment,” and “quality of relationship.” Noting that culture has tremendous influence on human perception, emotion, and behavior, it is crucial that the field of multicultural psychology is also mindful of cultural definitions of what constitutes a “helping relationship” (Fraga, Atkinson, & Wampold, 2002; D. W. Sue, 2001), and of the worldview assumptions that accompany various theoretical orientations in psychology (Katz, 1985). It is essential that counselors are aware of individual and universal biases in the mental health field, and that they strive to develop a robust understanding of the cultural lenses through which they and their clients may see the world. Failing to do so is unethical (APA, 2003), and may result in cultural oppression (Constantine, 2007; Neville, Worthington, & Spanierman, 2001; Sue, 1978), or the proliferation of racism (Ridley, 2005).

Perhaps the most widely-known model with respect to multicultural competence in counseling is the Tripartite Model (Sue et al., 1982). In this model, three competencies are described: 1) awareness of one's own assumptions, values and biases; 2) understanding the worldview of culturally diverse clients; and 3) developing appropriate intervention strategies and techniques. The third facet to Sue et al.'s model, culturally appropriate interventions, is reified in Norcross' work: "adapting or tailoring the therapy relationship to specific client needs and characteristics may enhance the effectiveness of treatment," (p. 133, 2001).

In 2001, D. W. Sue offered an augmentation to this Tripartite model called the *Multidimensional Model of Cultural Competence (MDCC)* that suggests each of the aforementioned competencies (*dimensions*) be examined across four areas of focus: individual, professional, organizational, and societal. Sue's MDCC is an excellent starting point for outlining, defining and understanding the facets to multicultural competence. Counselors unwilling or unable to develop self-awareness, to understand and take the perspective of their clients, and to use culturally appropriate interventions across these dimensions have limited chances of success. What is worse, they could enable and perpetuate the already limited effectiveness of therapy as a viable resource to ethnic minority clients.

The counseling relationship hinges upon trust and understanding from both parties. In a counseling dyad, counselors work to empathize with, and relate to clients so as to better understand their context. In the effort for understanding, Stanley Sue (1998) has highlighted the importance of *scientific mindedness* and *dynamic sizing* in therapists. Scientific mindedness is the therapist's ability to collect data and let the information tell the story. Sue believes the scientifically minded therapist is able to suspend judgment and find novel ways to test hypotheses about the client and their experience in-session. Dynamic sizing refers to a therapist's ability to refrain from using stereotypes as guides, but rather to ascertain if the client's presentation and experience is consistent with, or idiosyncratic to, their cultural group and its norms. More

importantly, it also refers to the therapist's ability to know when generalizing their own experience is appropriate. To do this effectively, counselors must first understand themselves. In so doing, they have opportunity to realize blind spots, to confront their own perceived truths and realities, and to understand the influence of cultural norms and expectations on their own world perspective. Furthermore, they learn when generalizing based on knowledge of a specific culture or group, or based on the therapists own experience is appropriate, (S. Sue, 1998). Wrenn's seminal article, "The Culturally Encapsulated Counselor" (1962), emphasizes these very notions.

Understanding one's own subjective reality and "present" is instrumental in being able to begin to understand another's "past, present" and potential "future." Wrenn (1962) holds that without careful consideration of the "cultural encapsulation" that influences perception, counselors may be "surprised or even unbelieving regarding changes in truth, may cushion themselves in academic cocoons having little relevance to the total culture, and may act on the assumption that it is safe to draw upon one's own education and experiences in counseling the client," (Wrenn, 1962, p. 444). While this article was written a half-century ago and has been revered as elemental in the field of multicultural counseling, literature that outlines *how* therapists can free themselves from "encapsulation" is limited. First, however, to understand how these harmful dynamics are perpetuated, focus must shift to how clinicians are trained.

Training Clinicians to be Effective

Training in counseling psychology occurs on several levels. In conjunction with practicum placements and clinical supervision, counselors engage in graduate coursework covering a variety of topics including: psychological disorder or pathology, lifespan development, and individual theory. In a counseling skills course, counselors-in-training are taught how to facilitate therapy with another individual or group. Therapists learn the vitality of empathy, and are taught to monitor the language (body, verbal, and otherwise) of themselves and their clients.

The development and honing of attention and empathy skills, however, are less well understood. Greason & Cashwell (2009) posit that while empathy is, indeed, essential to the art of therapy, most training literature and programs focus on developing empathic responses that are external and observable, rather than helping psychologists-in-training experience and practice correct emotional attunement. Additionally, empathic attunement is often limited to skills courses, and is not necessarily infused in other courses. So, while counselors are strongly encouraged to have both cognitive and affective empathic responses in therapeutic settings (Beitel, et al., 2004; Lambert & Barley, 2001; Orlinsky, Grawe & Parks, 1994; Wampold, 2001), little empirical research exists on the cultivation of such skills. Much to the same degree, such is the state of affairs of multicultural understanding and awareness in training programs.

Numerous scholars in the field of counseling have called for the infusion of multiculturalism into all coursework and learning of education and training programs, (Collins & Pieterse, 2007; D'Andrea & Daniels, 1991; LaFramboise & Foster, 1992; Reynolds, 1995; Ridley, Mendoza, & Kanitz, 1992, 1994). Despite the emphasis, however, infusion is less likely to happen, and most programs report addressing multicultural issues by using specific courses designed to cover multicultural issues in counseling (Abreu, 2005; Ponterotto, 1997). Research by Ancis and Rasheed (2005) concludes that no single approach to multicultural training is shown to be more efficacious than another, and that the lack of agreement in defining terms and the absence of a unifying framework are encumbering efforts toward training in multicultural competence. While directors of training programs surveyed report that graduate coursework has become increasingly sensitive to the importance of multicultural issues (Bernal & Castro, 1994; Hills & Strozier, 1992), graduate students, on the other hand, do not report the same experience (Allison, Crawford, Echemendia, Robinson, & Knepp, 1994; Mintz, Bartels, & Rideout, 1995). Some speculate that the discrepancy is due to inflated or superficially developed courses (Sue &

Sue, 2008), and others have shown that efforts toward experiential and didactic training has elicited various forms of resistance among students, (Carter, 2001; Helms et al., 2003).

When these circumstances converge, Pieterse and others (2009) submit that material in training programs may be shaped such that instructors emphasize only certain aspects of, or topics within, multicultural counseling. One result of a culturally biased training system (Mio, 2005; Utsey, Grange, & Allyne, 2006) is that graduated professionals tend to lack an understanding and awareness of their own ethnic values and worldview, have an increased belief that “ethnic minorities are inherently pathological,” and have a belief that counseling within ethnically diverse communities involves the “simple modification of traditional White models,” (Sue & Sue, 2008, p.65). Some studies have shown a lack of clear relationship between multicultural training and multicultural competence (Ponterotto, 1991), and some of the only clear data showing improvements in multicultural counseling competence in counselors comes in the form of self-report, (Holcomb-McCoy & Myers, 1999). One study even failed to demonstrate any significant correlations between multicultural competency and training variables like multicultural coursework, multicultural workshop hours, and multicultural clients supervised, (Menese, Wu, & Nepomuceno, 2001).

With a lack of understanding and a skewed perception of client identities and perspectives on the part of mental health professionals, elevated dropout rates of ethnic minorities become easier to understand. According to Cokely (2006), the services offered are frequently “antagonistic,” “inappropriate to life experiences of the culturally different,” “lack sensitivity,” and can be “oppressive and discriminating.” Training in the realm of multicultural counseling via graduate programs is but one opportunity. Supervision is another, but it may not always provide opportunity to develop such skills either.

Supervision

Supervision is a major source of training for the burgeoning counselor. Essential to the development, surveillance, and licensure of psychologists, supervision serves as an arena for evolving counselors to process thoughts, emotions, behaviors, and to accrue accurate data about themselves, their clients, and their process, (Bernard & Goodyear, 2005). Also, like therapy, supervision is a process of intercultural communication, (Brown & Landrum-Brown, 1995; Martinez & Holloway, 1997). Problems arise, however, when the cultural self-awareness and knowledge base of the supervisor is underdeveloped. Arkin (1999) contests that supervisor-supervisee relationships inevitably influence supervisee-client relationships. With this in mind, it behooves supervisors to focus specific attention on the cross-cultural nature of the supervisory relationship as well as the multicultural context of the supervisee's counseling relationships with clients. Unfortunately, however, discussion and exploration of cultural variables within the supervisor-supervisee dyad is not necessarily common, (Gatmon, Jackson, Koshkarian, Martos-Perry, Molina, Patel & Rodolfa, 2001).

Even when these discussions occur in supervision, variables remain about the training the supervisor received, and the differences in understanding and wisdom about multiculturalism in counseling that exists between supervisor and supervisee. These, Constantine (1997) protests, are serious issues in the field. Supervisors *must* have a firm grasp of their cultural selves (e.g. identities, values, attitudes, worldviews, and beliefs), *must* examine the supervisory relationship in cultural terms, and *must* continue to develop cultural competencies and understandings beyond the limits of their formal graduate training (Arkin, 1999). Supervisors that fail to pay appropriate attention to multicultural issues in supervision may implicitly or explicitly send a message to supervisees that elements of culture are unimportant, thereby encouraging supervisees and, in turn, their clients to adopt behaviors, perspectives and values consistent with mainstream, dominant culture (Arkin, 1999). Conversely, supervisors that place excessive emphasis on the unique cultural differences within the supervisor-supervisee relationship and/or the supervisee-

client relationships run the risk of reinforcing stereotypes of discrimination and disenfranchisement (Arkin, 1999). Supervisors have a responsibility to the clients of their supervisees to see that they receive the best, most ethical, and most culturally appropriate care available (APA, 2003; APA, 2006; Bernard & Goodyear, 2005). Consequently, supervisors must continue to develop their knowledge, skills and awareness within the field of multicultural counseling- which, in reality, is all of counseling.

Counseling with mastery and understanding of multicultural issues is part of best practice (APA, 2003; APA, 2006; Sue & Sue, 2008), part of being an agent for social justice (Toporek & Williams, 2006), and part of practicing within the ethical guidelines of counseling psychology (APA, 2003). But, while the importance of multicultural competencies, the need for counselor motivation, and the nuances of cultural influences are well documented, means of developing these skills are more difficult to identify. *How* are counselors supposed to become better, more multiculturally aware clinicians? According to the tripartite model (Sue, 1998) knowledge, awareness and skills are at the heart of practicing within a multicultural context. Knowledge, it seems, can be gained via experience within diverse cultures, and by procuring literature or data about cultures from members themselves or from databases. “Awareness” and “Skills” are a bit harder to come by. Herein lies the potential benefit of mindfulness as a practice for counselors.

What is Mindfulness?

Mindfulness practice has found its way in to numerous mental health interventions. For instance, mindfulness has foundations in Mindfulness-Based Stress Reduction (Kabat-Zinn, 1982) and Mindfulness-Based Cognitive Therapy (Teasdale et al., 2000), Dialectical Behavior Therapy (Linehan, 1993), and Action and Commitment Therapy (Hayes, Strosahl, & Wilson, 1999). The studies examined in this paper all incorporate mindfulness practice into treatment, but they differ in some subtle and important ways.

Mindfulness is a form of meditation that originates from early Buddhist practice of the Theravada tradition (Hanh, 1976). A formal definition of mindfulness meditation by Kabat-Zinn (2003) is a good starting place for understanding the practice: "...mindfulness is: the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment," (pp. 145-146). With this definition in mind, it is clear that mindfulness emphasizes three main elements. First and foremost is the development of awareness and insight- especially with respect to the intentional state of the practitioner. Second, the 'here and now' experience is crucial. Individuals practicing mindfulness are encouraged to adhere to the experience of the present moment and to engage fully within this temporal space. Third, mindfulness practice stresses the importance of a nonjudgmental, openness to experience. That is to say, the practitioner is encouraged to become aware of, to accept, and to experience to the fullest, the thoughts, feelings, and associations of the moment without assigning evaluative labels, and without clinging to or rejection them.

Following Kabat-Zinn's working definition, Bishop et al. (2004) proposed a two-part operational definition of mindfulness for the field of psychology. Bishop and others offer that mindfulness involves 1) "self-regulation of attention so that it is maintained on the immediate experience, thereby allowing for increased recognition of mental events in the present moment," and 2) "adopting a particular orientation toward one's experiences in the present moment, as orientation that is characterized by curiosity, openness, and acceptance," (p. 232). The definition put forth by Bishop and others (2004) highlights several areas pertinent to the competent practice of multicultural counseling. Should counselors have awareness of self and others, and practice curiosity, openness, and acceptance of their own experience and the experience of their clients, there is reason to believe that they may be more effective across culturally diverse situations.

Definition of Terms

A proposed operational definition of Mindfulness, as put forth by Bishop et al. (2004), is as follows: mindfulness involves 1) “self-regulation of attention so that it is maintained on the immediate experience, thereby allowing for increased recognition of mental events in the present moment,” and 2) “adopting a particular orientation toward one’s experiences in the present moment, an orientation that is characterized by curiosity, openness, and acceptance,” (p. 232).

Multicultural counseling competence can be defined as “the commitment to cultural awareness and knowledge of self and others,” and “the use of culturally appropriate intervention strategies,” (APA, 2003, p. 382).

Theoretical Considerations for Pairing Mindfulness and Multicultural Counseling Competence

Neurological Evidence to Support Mindfulness Practice

Interrupting top-down processes. Recent advancements in the field of neuroimaging and consequent research in the field of neuropsychology have shown that mindfulness meditation can change the structure of the brain, and thus, experience, (Hölzel et al., 2011; Hölzel et al., 2006; Lazar, 2005). Bishop and others (2004) propose that mindfulness practice can help individuals inhibit secondary elaborative processing, and allot more resources to the current experience. In so doing, it is posited that practitioners of mindfulness meditation could identify objects in unexpected contexts rather than filtering data through our beliefs, assumptions, expectations, and desires. Interestingly, this is exactly what Tse (2005) found.

In Tse’s (2005) experiment, individuals were presented with a series of images, patterns and shapes of some sort of consistency and were asked to judge how much time had passed. When an unusual shape did not match the pattern, individuals that were more practiced in mindfulness experienced time as “slowing down.” The conclusion was that individuals that regularly practiced mindfulness experienced increased density of information, and reported

significantly more time as having passed than those that did not practice mindfulness. That is to say, mindfulness practitioners experienced the moment and the “oddball” shape in a richer, more unusual, and curious way than individuals that did not practice mindfulness. Tse’s (2005) study also demonstrates the tendency for human beings to instinctively search for ‘invariant representations’ in an effort to process information more quickly and conserve mental energies. Hawkins and Blakeslee (2004) assert that this helps individuals assess the nature of their environment in a more efficient manner, but that it also lends itself to the enslavement of “top-down processing.” Given what is known about the pitfalls of stereotyping (Jones, 1997) and of failing to see the unique qualities of our clients, interrupting top-down processing seems particularly salient to becoming multiculturally competent.

Top-down processing is the term used to signify how “engrained brain states can impinge on emerging neural circuit activity,” (Siegel, 2007, p. 135) and can “‘enslave’ local processing elements,” (Engel, Fries, & Singer, 2001; p. 705). Top-down processing has been beneficial in survival, as it aids people in making quicker judgments, searching for patterns and similarities, and carrying out mental activities faster. In the counseling relationship, however, referring to existing schemas and expectations of clients based on previous experiences (personal, professional, or otherwise) and demographic or cultural signifiers can be dangerous. Siegel (2007) offers that in many ways, using invariant representations to learn “oppresses our raw sensory experience by muddying the waters of clear perception with prior expectation,” (p. 105).

This is particularly germane to Sue et al.’s (1982) tripartite model, as mere knowledge is not enough. Counselors must be aware of themselves and others, and must use the data gained in each moment with clients to test hypotheses and execute dynamic sizing (Sue, 1998). The beauty of mindfulness is that it encourages, and hones one’s ability to see various objects as if for the first time; a phenomenon called “beginner’s mind,” (Hanh, 1976; Suzuki, 1973). Siegel (2007) states that “enslavement” occurs when “higher-level representations embedded in both explicit

and implicit memory continually influence the entertainment (or activation/coordination) of the processing of new perception and new information,” (p. 136). Russell Walsh (2006) notes that the mindfulness approach to empathy itself addresses this notion of beginner’s mind. Walsh writes, “...[empathy] teaching entails deconstructing, or shaking up, the presumption of understanding, and recognizing the biases through which understanding is undertaken. In other words, the teaching of empathy might better be characterized as inviting and facilitating mindfulness,” (p. 81).

Interrupting top-down processing in the brain is a pivotal skill for counselors to possess. Should it be absent from the therapist’s repertoire, counselors may be susceptible to inaccurate assumptions about the culture and origins, values, and belief systems of the client. Counselors must work diligently to dissolve top-down processing efforts and seek means of being available to novel and variant experiences and situations.

Autobiographical narratives. Bias is a force that limits flexible movement within experience. Bias constrains the capacity of therapists on two levels: it restricts the available possibilities or experiences, and it limits movement once in a peak activation of experience. When previous experience is used to fill in the gaps of the present with assumptions of the other or the situation, it is generally done in an effort to be more efficient. In reality, however, “efficiency” is relative, and the experience gained is, in many ways, limited to the experience that was primed to be received. In this way of relating to others and to the world, individuals are susceptible to living and creating only what they can conceive.

In addition to interrupting top-down processes, mindfulness practice has shown to enhance flexibility of the individual narrative, (Hölzel, Lazar et al., 2011; Lazar, 2005). Neural connections and interpersonal processes converge in the mind to create a personal identity. Within this identity, individuals engage with the outer world in accordance with what they expect,

assume, and believe. In so doing, there is a tendency for individuals to experience dissonance between “things as they are” and the top-down, invariant representations that are expected. Daniel Siegel (2007) writes, “We shove sensation through the filter of the past to make the future predictable. In so doing, we lose the present. But because the present is all that exists, we have lost everything in the bargain,” (p. 151). Individuals that engage in mindfulness practices are shown to have more cognitive flexibility, and have a more cohesive autobiographical narrative that allows for constant revision (Siegel, 2001a; Siegel, 2001b). Neurological research has also shown a decrease in activity among “default-mode” subsystems of self-reference during mindfulness meditation, suggesting that meditation enables diminished involvement of habitual modes of self-reference, (Ott, Walter, Gebhardt, Stark, & Vaitl, 2010). Buckner and Carrol (2007) offer that this is crucial to one’s ability to project diverse forms of self onto another perspective, like remembering the past or thinking about the future, and that this autobiographical information can be used adaptively to perceive of alternative perspectives.

A therapist with a coherent, integrated, and secure narrative, it seems, would be far less likely to impose their own “reality” on their clients. Furthermore, their capacity for projecting diverse forms of self onto events, and to perceive of alternative perspectives seems likely aid counselors in making room for diverse forms of client experiences and narratives.

Empathic attunement. Empathy is also critical in the counseling relationship. Empathy implies resonance not only on a cognitive level, but also on an affective level (Beitel, et al., 2004; Lambert & Barley, 2001; Orlinsky, Grawe & Parks, 1994; Greason & Cashwell, 2009; Wampold, 2001). New discoveries in the field of neuroscience have substantiated the perceived influence of mindfulness on empathic attunement with physical evidence. In 1996, Italian researchers discovered a system within the brain that is responsible for making mental representations of the intentions believed to be occurring in the minds of others (Gallese, 2003; Gallese, Fadiga, Fogassi, & Rizzolatti, 1996; Iacoboni, 2009; Iacoboni, Koski et al., 2001; Rizzolatti, Fogassi, &

Gallese, 2001). But even beyond the perceived states of others, researchers have taken these ideas further to the arena of empathy. Carr, Iacoboni and others (2003) demonstrated that the mirror-neuron system located in the cortical regions of the frontal and parietal lobes go beyond the mere representation of intentional states of others- it “mediates the basic mechanisms of emotional resonance between individuals,” (Siegel, 2007, p. 167). This is the foundation of empathy.

The insula is a region of the brain that connects and shares information within various regions of the right and left hemispheres, and the corpus callosum allows for the sharing of information across the hemispheres. Both the insula and the corpus callosum are essential in empathic attunement. Though the hemispheres carry out differential and distinctly asymmetrical functions, coordination between them may be an important dimension of how mindful awareness alters our affective style (Davidson et al., 2003). As individuals perceive another’s actions or emotional states, the mirror neuron system engages the limbic system by way of the insula to match these same states in ourselves. “The insula links mirror neuron activation in perception to the alteration in bodily and emotional states that we call emotional contagion in science,” (Siegel, 2007, pp.167). With the relationship between the hemispheres and the insula in mind, Lazar et al’s (2005) study that demonstrated a thickened and more developed insula in long-term meditators has particular relevance. Increased thickness in the middle prefrontal area, bilaterally, and in the right insula cortex was seen and was positively correlated with the length of time spent practicing mindfulness meditation (Lazar et al., 2005). This research suggests that physiological change was induced by the way in which individuals practiced and paid attention. This notion of neuroplasticity is not new, but the directionality is revolutionary. Siegel (2007) defines the “mind” as the “process that regulates the flow of energy and information,” (p. 24), and promotes that paradoxically, it seems the brain creates the mind *and* the mind creates the brain.

Approach and withdrawal: Being available. Mindfulness practice can alter our ability for empathy beyond accurate attunement and resonance, too. Mindfulness can offer counselors the

availability to others' experience. In both psychological and neurobiological literature, approach and withdrawal are major constructs. The distinction between these two states and the corresponding effect it has on our understanding of, and behavior within, the environment is important to consider in the counseling relationship. Counselors may be confronted with pieces of a client's story that are difficult to accept and understand, (Wrenn 1962). However, counselors must be willing to "be" with clients in these spaces to be successful. Herein lay the beauty of mindfulness practice and the components of the brain that are involved in approach and withdrawal.

Asymmetric activation in the prefrontal cortex associated with approach and withdrawal motivation and emotion, was demonstrated by Urry and others in their 2004 study. Urry et al. (2004) showed that the prefrontal regions of the brain distinguish between stable approach-oriented (left hemisphere) or withdrawal-oriented (right hemisphere) behavioral tendencies with respect to "appropriate sources of stimulation," (p. 368). In addition to differentiation of approach and withdrawal, Urry and colleagues also went on to distinguish the difference between eudemonic and hedonic forms of well-being within approach and withdrawal. According to the authors, eudemonia embraces the psychological qualities of autonomy, environmental mastery, personal growth, self-acceptance, and positive relationships, and focuses on a sense of equanimity. Hedonia, on the other hand, focuses on sensory pleasure. Urry and others hypothesize that individuals with higher activation of left dominance (approach behaviors) in the prefrontal regions would be associated with eudemonia, and that they would also be able to navigate distressful events with poise and grace.

This importance of the left hemisphere may indicate that left hemisphere activation is to be prioritized. This is not necessarily the case. In fact, it is the *integration* and *collaboration* of both hemispheres that enables individuals to be proficient in self-awareness, to develop interpersonal relationships, and to respond with empathic attunement to the environment. The left

hemisphere is proficient in more in-depth, analytic, problem-focused, detail-monitoring, and fact accumulating processes, while the right hemisphere is better at seeing context and whole picture.

Decety and Chaminade (2003) affirm, “our ability to represent one’s own thoughts and represent another’s thoughts are intimately tied together and have similar origins within the brain. Thus, it makes sense that self-awareness, empathy, identification with others, and, more generally, intersubjective processes, are largely dependent on the right hemisphere resources, which are the first to develop,” (p.591). Bilateral integration is fundamental. Individuals that participate regularly in mindfulness meditation practice are adept at integrating right and left hemispherical processes, and have established thicker and more robust neural connection across the hemispheres (Lazar et al., 2005). Horizontal integration allows for the “linking of logical, linguistic, linear and literal output of the left side with the visuospatial imagery, nonverbal, holistic, emotional/visceral representations of the right,” (Siegel, 2007, p. 303). In addition, coordination between the left and right hemispheres plays an important role in shaping our overall emotional tone, and may be an important facet of how mindful awareness changes our affective style (Davidson, 2000).

It is reasonable to postulate that counselors that are open to new experiences, that approach rather than withdraw from uncomfortable dynamics, and that handle perceived failures in therapy with equanimity would provide better treatment than therapists that do not or cannot. Moreover, it is reasonable to assert that these skills are needed in competent cross-cultural work.

Stereotyping and Amygdalae Activation. The categorization of other individuals on the basis of social distinctions like race, gender, and age, often occurs automatically (Fiske, 1998), and can heavily influence human thought and behavior, (Bargh & Chartrand, 1999; Jacoby, Lindsey, & Toth, 1992; Schacter, 1992). In an effort for efficiency in social cognition, the human brain filters and fills-in gaps of information based on what data are available (Fiske, 2004) to enable a

framework for timely and fluid social interaction, (Wheeler & Fiske, 2005). These responses are category-based, operate on generalized (and potentially inaccurate) information, and omit the detail-oriented, and effortful processes necessary for intimate understanding of uniqueness. These category-based responses are often termed “prejudice,” and are carried out by a complex network of neural systems in the brain that rely heavily on the amygdalae.

The amygdalae are groups of nuclei located medially in the temporal lobes. The amygdalae are part of the limbic system, and play a primary role in processing memory, decision-making, and emotional reaction. The amygdalae are activated by real, imagined, or anticipated potential threats signified by sensory, social and emotional stimuli (Murphy, Nimmo-Smith, & Lawrence, 2003; Phan, Wagner, Taylor, & Liberzon, 2002), and can even be cued through verbal communication, (Phelps et al., 2001). Activation of the amygdalae can occur without awareness of the evoking stimulus (Bechara et al., 1995; Cunningham et al., 2004; Morris et al., 1998; Whalen et al., 1998), and can indicate automatic social evaluation without intent, (Cunningham, et al., 2003; Cunningham et al., 2004). Research has shown that the amygdalae are highly activated in stereotyping, and that its activation can severely limit an individual’s appraisal of another person or situation, (Lazar et al., 2006; Wheeler & Fiske, 2005). More importantly, stereotyping of a racial out-group is not inevitable. Instead, it depends on the current social-cognitive goal of the perceiver and can occur in majority and minority groups, (Fiske, 1998; Hart et al., 2000; Wheeler & Fiske, 2005). Hölzel, et al. (2010) have shown that among meditators, amygdala activation is reduced in the face of stress. Not only are their amygdalae less active, but mindfulness meditators also show decreased gray matter density in the amygdalae, and report experiencing less stress in correspondence to amygdalae shrinkage. Considering the highly active role the amygdalae play in stereotyping and prejudicial thoughts, beliefs, and actions, therapists that practice mindfulness meditation may be likely to also see benefits in their cross-cultural work.

The neurobiological findings on how mindfulness meditation alters the structural components and processes of the brain are striking. They offer insight to the physiological changes occurring on a neurological level in the practice of mindfulness. In addition to physiological changes, it is important to examine how changes in perception and behavior occur, as well.

Empirical Evidence for Mindfulness as a Mental Health Intervention

Mindfulness-Based Stress Reduction

Mindfulness-Based Stress Reduction (MBSR) is a program developed by Jon Kabat-Zinn (1982, 1990). Initially called the Stress Reduction and Relaxation Program (SR&RP) the MBSR program was developed in a behavioral medicine setting for the treatment of a wide array of chronic pain and stress-related disorders. MBSR is an 8-10 week course in which participants (up to 30 at a time) meet for 2-2.5 hours per week to learn mindfulness meditation techniques, to practice mindfulness meditation, and to discuss coping and stress homework assignments. In the sixth week of the program, a 7-8 hour intensive mindfulness session is held. Mindfulness meditation skills that are taught include: 45 minute body scan, sitting meditation, Hatha yoga mindfulness meditation, and walking meditation. Participants also practice mindfulness during ordinary tasks like, eating and standing.

Participants are instructed to practice these activities outside of group meetings for 45 minutes per day, six days per week. In the beginning stages of the MBSR intervention, audiotapes are given to participants to aid them in the practice. As the treatment continues, however, participants are encouraged to practice mindfulness activities (walking, breathing, meditation, eating, yoga, etc.) without audiotapes. For all mindfulness activities, participants are encouraged to focus attention, in a nonjudgmental manner, on the target of observation (e.g. breathing, walking, etc.). As perceptions, cognitions, emotions and sensations arise; participants are

encouraged to acknowledge the observation, and to maintain a nonjudgmental stance. In so doing, participants develop awareness of the nature or content of such observations, and also refrain from attaching themselves to the content itself. Consequentially, participants learn that most thoughts, sensations, and feelings are transient.

Several studies have studied the effectiveness of MBSR on disorders ranging from chronic pain (Kabat-Zinn, 1982, Kabat-Zinn et al., 1985; Kabat-Zinn, et al., 1987), to anxiety (Kabat-Zinn et al., 1992), to binge eating (Kristeller & Hallett, 1999), to clinical depression (Teasdale, et al., 2000) to stress (Williams, et al., 2000), and even to mood and stress of cancer patients, (Kabat-Zinn et al., 1998; Speca et al., 2000). The following section details the methods, results, and follow-up data for MBSR and its variations in empirical research studies.

Kabat-Zinn first began his research on the effectiveness of MBSR in 1982 when he published: *An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results*. In this study, Kabat-Zinn recruited 51 subjects (18 male and 33 female) ranging from age 22 to 75. All participants were referred to the study by their outpatient physicians. Duration of the primary pain complaint at the time of referral ranged from 48 hours to 6 months, and ranged from those due to gross somatic pathology to those with no physical findings or diagnosis. “In all cases, subjects had verified medical histories corroborating extended suffering,” (Kabat-Zinn, 1982, pp. 38).

Upon agreeing to participate in the study, participants were assigned to one of three 10-week cycles of what was called the Stress Reduction & Relaxation Program (SR&RP). Cycle I had 11 subjects, cycle II had 16 subjects, and cycle III had 24 subjects. The McGill-Melzack Pain Rating Index (PRI; Melzack, 1975), Body Parts Problem Assessment scale (BPPA; Kabat-Zinn, 1983), the Dermatome Pain Map (DPM) and the Table of Levels of Interference (TLI; Carron, 1975) were used as measures of pain assessment. Non-pain measures included the medical symptoms checklist (MSCL; Travis, 1977), the Profile of Mood States inventory (POMS; McNair, Lorr &

Doppleman, 1971) to check emotional affect and mood change, the Symptoms Checklist-90-Revised (SCL-90-R; Derogatis, Lioman, Rickels, Uhlenhuth, & Covi, 1974) for psychological symptomatology, the Multidimensional Health Locus of Control (MHLC) for change in patient's health-related beliefs, and a 10-item questionnaire was used in the post-treatment battery. Data were gathered using the afore mentioned measures at pre-treatment and post-treatment. PRI data were not collected in cycle I, and TLI data were not collected in cycles I and II. Subjects were also mailed follow-up questionnaires at approximately 2.5, 7, and 11 months after completion of the SR&RP. 11 month follow-up data were not included because they were "rudimentary and qualitative," (Kabat-Zinn, 1982, pp. 39). Results indicate that Kabat-Zinn's SR&RP was significant in the treatment of chronic pain. The effect size for post-treatment was $d = .70$, and was $d = .35$ for follow-up.

Limitations to Kabat-Zinn's (1982) exploratory study to examine the treatment of chronic pain using mindfulness meditation are apparent. For one, subjects were not randomly assigned to cycle groups. Furthermore, it is unclear what criteria were used to assign subjects to cycle groups. Additionally, no control group was used, and so it becomes more difficult to ascertain exactly what was caused, or contributed, to the decrease in pain report on pain measures and overall improvement on non-pain (symptom and affect) outcome. As Kabat-Zinn (1982) admitted himself, "the lack of matched comparison control groups makes rigorous interpretation of the role of the meditation impossible at this time," (pp.45). Additionally, the data sets are based on subject self-report and are subject to some degree of performance bias, motivation to please, denial, and/or exaggeration. It is also important to note that participants in the study continued to use pain medication while enrolled. This may confound the results, but it also offers additional data, as the author reports a reduction in use of prescribed pain medication for most patients. This alone could potentially indicate that subjects were accurate in their self-reporting of pain.

In 1992, Kabat-Zinn and others attempted to see if the MBSR was an effective intervention for the treatment of anxiety disorders. 192 individuals were screened to be included in the study by making sure they met the DSM-III-R criteria for generalized anxiety disorder or panic disorder without agoraphobia. Potential subjects were selected from among all patients referred to the stress reduction and relaxation program in the spring and fall of 1988.

Individuals were given the Symptom Checklist-90-Revised (SCL-90-R) and the Medical Symptom Checklist. Those that scored above the 70th percentile were invited to participate in a formal screening interview to gauge their appropriateness for inclusion in the study. For the individuals that reported a desire to participate in the study and that met inclusion criteria, a formal diagnostic interview with a licensed psychologist or psychiatrist was conducted to establish clear diagnosis. Following the formal diagnosis phase, 22 individuals received diagnoses and were deemed fit for participation in the study. A repeated measures design was used so that participants could serve as their own controls.

Pre-treatment and post-treatment measures included self-rating scales and ratings from trained interviewers, and were gathered via telephone at weekly intervals at the time of recruitment through the end of treatment and at monthly intervals for 3 months after treatment. Assessment measures included the Beck Anxiety Inventory (BAI; Beck & Steer, 1987), the Beck Depression Inventory (BDI; Beck, Mendelson, Mock, & Earbaugh, 1961), and ratings of frequency and severity of panic attacks. In addition to the aforementioned assessment measures, an extensive assessment battery that included the Hamilton Rating Scale for Anxiety (Hamilton, 1959), the Hamilton Rating Scale for Depression (Williams, 1988), the Fear Survey Schedule (Arrindell & van der Ende, 1986), and the Mobility Inventory for Agoraphobia (Chambless, Caputo, Gracely & Williams, 1985) was administered four times throughout the study (recruitment, pre-treatment, post-treatment, and 3-month follow-up).

To analyze the results of participation in the MBSR study, Kabat-Zinn and others used a repeated measures analysis of variance (ANOVA) to compare recruitment, pre-treatment, post-treatment, and 3 month follow-up scores. Results showed that 20 of 22 subjects demonstrated statistically significant improvement in both anxiety and depression after the intervention. This improvement was maintained at the 3-month follow-up. Improvement was evident in both participant self-ratings (BAI, BDI) and interviewees' ratings (Hamilton anxiety and depression scales). A follow-up with 18 of the 22 participants also found that after 3 years, reported 3-month follow-up levels of anxiety and depression had been maintained (Miller, et al., 1995).

Kabat-Zinn and others did an excellent job of screening participants for their study, and also provided a diagnostic interview to establish clear and potentially competing diagnoses. As this was an exploratory study, small sample size is to be expected. However, the small group size should be noted as limiting in the authors' ability to make generalizations about the findings.

A glaring limitation to Kabat-Zinn et al.'s study is the lack of a randomly selected comparison group. In addition, the study lacked a control for concurrent treatment. As some participants were also taking psychiatric medications during their participation, the improvement specific to the intervention is difficult to establish separate from the medication. However, it should also be noted that subjects that were not taking medications during participation showed no difference in improvement from those participants that were. This may suggest that MBSR may help reduce symptoms of anxiety and depression regardless of medication regimen, or it could also be a result of the small size of the group.

Following up on Kabat-Zinn's MBSR treatment, Kristeller and Hallett (1999) attempted to see if MBSR could be tailored to individuals with binge eating disorder (BED) as an effective treatment. Kristeller and Hallett (1999) hypothesized that while, previous interventions for BED like cognitive-behavioral therapy and interpersonal therapy had shown some success, one

potential limitation of the treatments is that they “lack attention and acceptance of bodily cues that maintain bingeing behavior, in particular the sensations of hunger and satiety,” (pp. 359). This notion is particularly relevant to both binge eating and mindfulness as both specifically address, directly or indirectly, the aspect of self-awareness, (Kabat-Zinn, 1994; Siegel, 2007; Hetherington & Baumeister, 1991). To address these cues, Kristeller and Hallett slightly modified Kabat-Zinn’s (1982, 1990) Meditation Based Stress Reduction training program to focus specifically on eating meditations, and the behaviors, beliefs, and emotions associated with food intake.

Kristeller and Hallett received 50 responses to an advertisement offering treatment study for women that were overweight and had problems with binge eating. From these responses, 18 obese women were accepted to the study after they met the criteria for BED, were not concurrently participating in a weight loss program, and did not have a comorbid disorder. Women taking medication related to weight loss were requested to either discontinue use or to maintain the dose during the study. The design of the study was a single-group design with an extended baseline and follow-up of three weeks. Participants were initially screened using the Questionnaire of Eating and Weight Patterns- Revised (QEWP-R). In addition, participants completed the Symptom Checklist 90-R to screen for psychiatric comorbidity. Body Mass Index (BMI) was also calculated (a BMI of 27 or higher was required for participation), and a formal interview was conducted to ensure that diagnostic and inclusion criteria were met.

At the initial screening, on the first day of group, on the fourth day of group, on the last day of group, and at the 3-week follow-up subjects were given the Binge Eating Scale (BES; Gormally et al., 1982), the Beck Depression Inventory (BDI; Beck, Mendelson, Mock, & Earbaugh, 1961), and the Beck Anxiety Inventory (BAI; Beck & Steer, 1987). Participants were also asked to record and report the number of binge eating episodes they experienced on a weekly basis and to qualify these episodes as ‘large’ or ‘small.’ Also, participants were asked to give

ratings of sense of control and sense of mindfulness during eating, and awareness of satiety and hunger cues.

Results from Kristeller and Hallett's (1999) study indicate that number of reported binges dropped significantly. In addition, BDI and BAI scores fell significantly, and while there was no overall change in weight, perceived levels of eating control, sense of mindfulness, and awareness of hunger and satiety cues all increased significantly.

Kristeller and Hallett's (1999) study demonstrates that mindfulness meditation can be an effective treatment for binge eating on par with other forms of treatment, (cognitive-behavioral; Agras et al., 1994; and interpersonal therapy, Agras et al., 1995), and that mindfulness and awareness of satiety cues can be significant mediating variables in the reduction of binge eating episodes and the perception of sense of control over eating habits. However, despite promising results (an effect size of $d = 1.65$), there are several limitations to the study. For one, Kristeller and Hallett used a small sample size of only 18 women. Furthermore, women were not randomly assigned to groups, and no control group existed. While this was a preliminary and exploratory study, a design that could incorporate randomized design and could include a longer term follow-up to see if abstinence from binge eating- the best predictor of long-term improvement (Kristeller and Hallett, 1999)- is maintained. It is also important to note that binge eating episodes were all self-reported and that in so doing, the authors have potentially introduced biased reporting, exaggeration/ denial, and/or the desire to please.

Mindfulness-Based Cognitive Therapy

With growing efficacy being demonstrated for the use of mindfulness meditation, in particular, MBSR, as a treatment intervention, Teasdale and others (1995) examined Mindfulness Based Cognitive Therapy (MBCT) as a preventative intervention for depression. Recognizing the relapse and recurrence following the successful treatment of major depressive disorder (MDD) as

being common and detrimental (Mintz, Mintz, Arruda, & Hwang, 1992), Teasdale and others (2000) sought a preventative effort that could aid in the disengagement of “depressogenic thinking” thought to mediate the onset of recurrent depressive episodes. Teasdale et al. (1995) originally designed and manualized MBCT in hopes of helping individuals in recovery to become more aware of negative thoughts and feelings at times of potential relapse/recurrence, and to respond in ways to said thoughts and feelings that facilitate disengagement from ruminative depressive processing. In this way, individuals are able to engage in changing awareness of and relationship to thoughts and feelings; allowing for the decentralized and detached relationship with cognitive and affective states. Teaching awareness and more evolved relationships to thoughts, feelings and sensations was hoped to help individuals forestall, mitigate and, ideally, prevent relapse/recurrence of major depressive disorder (Teasdale et al., 1995; Teasdale et al., 2000). The MBCT treatment program is, simply put, the integration of Kabat-Zinn’s (1982, 1992) MBSR and aspects of CBT (Beck et al., 1979). The MBCT program consists of 8 weeks of 2 hr group training sessions involving up to 12 recovered recurrently depressed patients. The program also asks that patients complete homework assignments involving guided (audiotaped) and unguided awareness exercises daily.

Teasdale and others recruited patients from community health care facilities at three different treatment sites: Bangor, North Wales; Cambridge, England; Toronto, Canada. Patients were invited to be screened for participation on the basis of currently being in remission or recovery from major depression at the time. On the basis of two baseline variables (recency of recovery, and number of previous episodes), subjects were stratified into two groups per variable (within 0-12 months prior to randomization vs. within 13-24 months prior to randomization, and two vs. more than two) and were randomized to either treatment as usual (TAU) or treatment as usual augmented with MBCT. According to Teasdale and others, the sample size of 145 patients was chosen “on the basis that 120 patients (60 per group), would have 80% power to detect $p <$

.5 a reduction in relapse/recurrence rates from 50% in the TAU group to 28% in the MBCT group on a directional hypothesis,” (Teasdale, et al., 2000). Inclusion criteria for the study held that participants must be 18-65 years of age, meet DSM-III-R criteria for a history of recurrent major depression (with at least 2 episodes occurring in the last 5 years), and have a history of treatment by a recognized antidepressant medication, but be off of antidepressant medication and in recovery/remission, at the time of baseline assessment.

Two main measures were used by Teasdale and others to establish baseline ratings and assess participants for depression prior to, and following, the study. Teasdale et al. used the Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960), the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and the DSM-III-R to qualify participants’ depression, and used a structural clinical interview (SCID; Spitzer, Williams, Gibbon, & First, 1992) to determine relapse/recurrence criteria. As it was the main outcome variable, assessments of relapse/recurrence were administered bimonthly through the follow-up period (52 weeks) by doctoral-level psychologists and an experienced psychiatric social worker. Assessors were blind to the group membership of participants.

Results from Teasdale and others’ study were positive. Comparison of the TAU groups to the MBCT condition indicated that time to onset of relapse/recurrence was significantly greater (rates were nearly halved) for individuals in the MBCT condition that endorsed 3 or more previous episodes of depression (77% of the sample). For individuals that endorsed having had two or fewer previous episodes of depression, MBCT did not reduce relapse/recurrence.

Teasdale and others did an excellent job of designing their study so that most variables were controlled for. Large sample size (calculated according to power analysis requirements), rigorous inclusion and exclusion criteria, and the randomization of subjects to conditions, and the length of the follow-up period (52 weeks) were major strengths of the study. The study also has a

few limitations, however. While relapse/recurrence rates are clinically useful to examine, it would also be nice to see if MBCT can be useful for treating individuals currently experiencing a depressive episode. Teasdale and others addressed this concern in stating that they did not include currently depressed individuals, as it was assumed that “depression-related difficulties in concentration would interfere with the implementation of MBCT,” (Teasdale, et al., 2000, pp. 621). Also, MBCT was examined as a prophylactic effect in a combined treatment modality. Though psychological treatment in conjunction with psychiatric treatment has been demonstrated to both capitalize on cost-efficiency of medication and therapy, and to avoid the need for patients to stay indefinitely on maintenance medication (Fava, Grandi, Zieleny, Canestrari, 1996), it makes drawing conclusions about the use of mindfulness and MBCT as a treatment intervention less generalizable. It should be noted here, however, that the aim of the study was to examine the contribution of dysphoria-linked thinking to the relapse/recurrence rates of depression, and to the elements of vulnerability when recovering from depression. But, the problem is that the current study is limited in its ability to attribute the benefits of MBCT to the specific skills taught by the program versus nonspecific factors like group membership/participation and therapeutic attention.

In addition to reducing relapse of depression, another MBCT study was shown by Teasdale and colleagues (2000) to reduce overgeneral autobiographical memory in formerly depressed patients. Williams (1996) noted that depressed individuals have difficulty moving fluidly through memory, and that they tend to reflect on events in summary, rather than retrieving specific events that happened at a particular place and time. The overgeneral autobiographical memory typical of depressed patients is also shown to be associated with greater frequency of intrusions of memories of unpleasant events such as sexual and physical abuse, as well as with a higher number of suicide attempts and depressive episodes (Kuyken & Brewin, 1995). This phenomenon is hypothesized to be adaptive in the short-term, as it affords individuals an opportunity to regulate affect. It is unclear if the overgeneral narrative characteristic of depressed

individuals is strategically adopted to avoid dealing emotionally charged events, or if the suppression of unpleasant memories “disrupts the memory search at the point where it moves from general descriptions to specific events,” (Williams et al., 2000, p. 150). However, Williams, Teasdale, Segal and Soulsby (2000) noted that regardless of the reason for overgeneral autobiographical memory, it has numerous maladaptive effects.

To examine the effects of MBCT on overgeneral autobiographical memory, Williams et al. recruited 45 patients from the clinical services of the Community Mental Health Service in Bangor, North Wales, as well as via advertising in the local press for volunteers. Participants were screened on the basis that they had had at least two episodes of unipolar depression consistent with diagnostic criteria for major depressive disorder in the DSM-III-R. The participants' depression had to be in remission with the most recent episode occurring within the previous two years. All participants were given a structured clinical interview for the DSM-III-R (SCID) to assess remission for at least 8 weeks prior to the study. Participants were also given the Hamilton Rating Scale for Depression (HRS-D) to measure severity of depression at trial and at follow-up. To qualify for participation in the study, individuals had to have a HRS-D score of 9 or less. To measure autobiographical memory prior to MBCT, participants were given the Autobiographical Memory Test (AMT; Williams & Broadbent, 1986), in which they received 18 word cues (6 neutral, 6 positive, 6 negative).

Following qualification for participation, participants were randomly assigned to receive MBCT or Treatment As Usual (TAU). For the individuals that were assigned to the TAU group, they were encouraged to continue with whatever treatment or service they would use in the prevention of relapse of depression. Individuals in the MBCT group received MBCT in addition to their preferred treatment or services for the prevention of relapse. According to the authors, there were no differences in pre-treatment variables between treatment and control groups. Autobiographical memory and HRS-D rating were tested on two occasions for all groups, once

before assignment to MBCT or TAU, and again during the 12-month follow-up period. The mean test-retest interval was approximately 6 months, and did not differ between groups. The authors report that three participants failed to complete the memory measure at the second testing, and that another participant was inadvertently given the same memory cues on both occasions. All four of these scores were not included in the study.

The authors used an independent rater unaware of participant treatment group and time of material being rated, and also included a reliability check on degree of specificity of responses. The memory responses were coded into three categories: specific (a memory for a particular event lasting 1 day or less), categoric (a memory response that summarized a number or category of events), and extended (a memory of a particular time period lasting longer than a day). A mixed analysis of covariance (ANCOVA) showed main effects of time on specific and categoric memories for both Time 1 and Time 2. The authors proposed that this was due to the tendency for both groups to recall a greater proportion of specific memories at Time 2 than at Time 1, and a tendency for both groups to recall fewer categoric memories at Time 2 than at Time 1. However, despite this consistency between groups, the difference in the degree to which the types of memories changed between groups was statistically significant. The proportion of specific memories in the MBCT at Time 2 increased 72% to 85% versus only from 70% to 74% for the TAU group. The proportion of categoric memories in MBCT at Time 2 was significantly lower (10% from 23%) than the TAU group (19% from 21%). The authors also examined latency to respond to the cue words. A mixed ANCOVA found that no significant main effect existed between group and time to respond.

Results from the study show that the cognitive tendency to be overgeneral in autobiographical memory in previously depressed individuals is, indeed, alterable. Williams et al. reported that individuals who received MBCT demonstrated marked improvements in ability to recall events with specificity. Furthermore, the authors controlled for mood, and demonstrated

that, consistent with previous literature showing that memory is not mood dependent, that the MBCT group had improved autobiographical memory recall regardless of change (or lack thereof) in mood.

Despite encouraging results, Williams et al.'s study is not without its limitations. Though mood change could not explain the difference in autobiographical memory, there are other potential explanations for the change. It is possible that participants in the MBCT group gave more specific memories because of the experience of engaging in a treatment where they were became used to receiving and enacting instructions. It is also possible that individuals in the MBCT group could have experienced an excess number of events between the Times 1 and 2, and could have sampled events from a more recent time frame following treatment.

Methodologically, the authors failed to include a placebo group in their study, so changes in memory cannot be attributed solely to MBCT. Additionally, the authors did not include an independent measure of mindfulness throughout the study to see if individuals in the MBCT group actually had a shift in cognitive style.

Arguably the most methodologically rigorous study of MBSR comes from Speca et al.'s (2000) randomized controlled trial of MBSR on the mood and stress symptoms of cancer patients (Bishop, 2002). In this study, Speca and others speculated that developing mindful awareness could help cancer patients monitor and regulate their own arousal by having a "greater emotional equilibrium" and by offering opportunity to have "an active role in pursuing personal health objectives," (pp.614).

Ninety patients completed the study (any patient who had a diagnosis of cancer at any time was eligible). Of the 53 patients that participated MBSR condition of the study, 37 had early stage cancer (stages I and II) and 16 had late stage cancer (stages III and IV). Of the 37 control group members, 14 had early stage cancer, 22 had late stage cancer, and 1 had a stage of cancer

that was undetermined. A *t* test comparing mean cancer stage between groups was not significant, ensuring that the groups could be appropriately compared. Two instruments were used by the authors to measure patient mood and stress. The Profile of Mood States (POMS; McNair, Lorr & Dopperman, 1971) was used to assess fluctuating affective states. The POMS has high concurrent validity with related scales, and has normative data available for cancer populations. The Symptoms of Stress Inventory (SOSI; Leckie & Thompson, 1979) was also used by Speca et al. to measure psychological, physical, and behavioral responses to stressful situations, and has predictive and concurrent validity. POMS and SOSI instruments were administered at pre-intervention and post-intervention (7 weeks later).

Results from the study showed that participants that underwent the MBSR intervention had significantly improved rates of anxiety, depression, anger, vigor, confusion, total mood disturbance (65% reduction from pre-intervention in the treatment group), and total stress score (30.7% reduction from pre-intervention in the treatment group) versus the wait-listed control group. A regression equation demonstrated that the best predictor of improvements in stress symptoms was number of sessions attended, accounting for 13.2% of the variance in total change scores. It is also important to note that the authors found that when time spent meditating was entered into the regression equation, the result was significant and accounted for 15.5% of the variance in Total Mood Disturbance. These are compelling results in favor of the usefulness of mindfulness meditation as a positive instrument in reducing stress and managing mood in the face of a highly adverse circumstance like cancer diagnosis.

Though Speca et al.'s work was methodologically rigorous and offers tremendous opportunity to speculate about the effectiveness of mindfulness in treating stress and mood symptoms, unequivocal conclusions about a cause-and-effect relationship cannot be drawn. Two limitations must first be highlighted. Firstly, factors like expectancy effects and trust in the instructors may have influenced treatment group responses. Secondly, like other MBSR

intervention efforts, instruction and training occurred in a group setting. Certainly, participation in a group milieu, receiving and giving social support, and the opportunity to participate in self-care may have all influenced the positive results of mindfulness meditation practice. In addition, a follow-up assessment of both groups would be appropriate to examine if the effects of mindfulness meditation are maintained. Thus, isolating mindfulness meditation as the single, contributing factor cannot be concluded. However, given the large sample size, randomization, and the wait-list control group aspects of the study, it seems that MBSR has clear potential to help individuals with a cancer diagnosis reduce total mood disturbance, and total stress scores.

Such positive results for the use of mindfulness as an intervention for the clinical populations inevitably led to the empirical exploration of mindfulness as tool for the reduction of stress and anxiety for individuals on the other side of the helping relationship. In 2004, Beddoe and Murphy conducted a pilot study that examined the effects of mindfulness on stress and empathy among nursing students. Similar to counselors, burnout and compassion fatigue in the nursing profession are important phenomena to monitor and to prevent. Certainly, in both nursing and counseling, stress can diminish one's ability to concentrate and communicate (Askenasy & Lewin, 1996), to be interpersonally effective (Pastore, Gambert, Plutchik, & Plutchik, 1995), and to convey accurate and appropriate empathy (Motowidlo, Packard, & Manning, 1986; Skovholt, Grier, & Hanson, 2001). Should mindfulness prove helpful in forestalling or mitigating the effects of burnout, it could be a useful intervention for helpers.

Mindfulness as an Intervention for Those in the Helping Professions

Beddoe and Murphy (2004) recruited nursing students for an 8-week MBSR course. Of the 23 students that volunteered for the course, 16 completed the course and the pre-test-post-test measurements. The aim of the study was to examine if volunteers would demonstrate decreased anxiety, as measured by the Derogatis Stress Profile (DSP; Derogatis, 1987), increased empathy,

as measured by the Interpersonal Reactivity Index (IRI; Davis, 1980), and to examine if the MBSR intervention would correlate positively with attitude and behavior change with regular meditation.

All of the participants in the study were women ranging in age from 20 to 39, with a mean age of 25. Participants in the study showed a significant decrease on the Derogatis Stress Profile (DSP)- especially on the anxiety scale, time pressure score, attitude posture score, and total stress value. Participant scores on the Fantasy Scale and the Personal Distress Scale of the Interpersonal Reactivity Index (IRI) strongly trended downward on posttest scores, but were not significantly different from pretest scores.

The authors speculate that the fact that the participants were nurses- individuals that have sought out a career in a helping profession and scored 40-50% higher than the means of female college students of the same age- may have limited the amount to which they could change their empathy score in an 8-week period. Also, the authors note that scores on the other two IRI dimensions (Perspective Taking Scale and Empathic Concern Scale) remained high and trended upward without statistically significant change at the $p > .05$ level.

The results of Beddoe and Murphy's (2004) study, though not statistically significant in all areas, are positive. The participants expressed diminished levels of anxiety and increased perceived control over coping with stress. Additionally, 75% reported increased self-confidence, and 88% indicated that they were more hopeful. However, while the results of the study are positive in nature, there are glaring methodological limitations. First and foremost, the authors use a small, self-selected sample. This introduces the potential for tremendous bias into the study. Additionally, the authors did not include a control group, which significantly inhibits the ability to draw conclusions about the direct influence of MBSR on stress, anxiety and empathy levels. Furthermore, the authors indicated an attrition rate of 22% and 8% without pretest-posttest scores.

It is possible that participants that perceived themselves to be struggling with the course withdrew, or that individuals that were already attracted to such mindfulness and meditation techniques were drawn to the study and were highly motivated to succeed and/or to score well.

A more thoroughly designed study was introduced one year later by Shapiro, Astin, Bishop, and Cordova (2005). Interested in how MBSR can be useful to health care professionals, Shapiro et al. sought to close the gap in literature by examining the effects of MBSR on clinicians actively engaged in clinical work. Rather than examining the effects of MBSR on “clinicians in training,” the authors recruited health care professionals (physicians, nurses, social workers, physical therapists, and psychologists) from the Palo Alto and Menlo Park Divisions of the Veterans Affairs Palo Alto Health Care System by posting flyers within the hospital and sending emails to health care professionals. Fifty-one participants responded to the flyers and emails, and 38 were enrolled in the study on the basis that they were a current health care professional, were 18 years of age, were not currently suicidal, and spoke English. A randomized control study design was used that implemented a 2 (experimental vs. wait-list) X 2 (baseline, post-treatment) study design in order to yield between-groups comparisons. Participants in the experimental group participated in the 8-week MBSR course, while wait-list group members were offered an opportunity to participate in the MBSR course following the study’s completion. Shapiro and others used the Brief Symptom Inventory (BSI; Derogatis, 1993) to measure psychological distress, including anxiety, depression, and total mood disturbance. The authors used the Malasch Burnout Inventory (MBI; Malasch, & Jacson, 1986) to measure three facets of job related burnout including: emotional exhaustion, depersonalization, and reduced personal accomplishment. Finally, the authors measured stress using the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). All participants completed the pre-test and post-test measures, but only those that were enrolled in the experimental group completed the post-test measures following the MBSR course. The authors also measured life satisfaction using the Satisfaction with Life Scale

(SWLS; Diener, Emmons, Larsen, & Griffin, 1985) and self-compassion using the Self-Compassion Scale (Neff, 2003). Though wait-list participants were given the post-test measures at the end of the study, they were not given a second post-test following their completion of the MBSR course.

Results of Shapiro et al.'s (2005) study show that the MBSR course had significant reductive effects on the experiment groups' psychological distress, burnout, and perceived stress scores (88%). The experiment group also showed improved satisfaction with life and self-compassion scores (90%). Additionally, compared to the control group, the MBSR group demonstrated significant reduction in perceived stress (27% vs. 7%), increase in self-compassion (22% vs. 3%), greater job satisfaction (19% vs. 0%), decreased job burnout (10% vs. 4%) and decreased overall distress (23% vs. 11%). It should also be noted that while baseline analyses revealed that those assigned to the treatment group reported greater distress than the control group members, the authors carried out regression analyses for the five primary outcome measures to control for potential regression toward the mean.

Shapiro et al.'s study shows substantial potential benefits to the implementation of MBSR as an intervention for health care professionals. The randomized-control design of the study and its rigorous statistical analysis make the findings compelling. However, there are still some limitations to the study that cannot go unmentioned. For one, there was significant attrition in the experiment group. Of the 18 participants that were randomly assigned to the MBSR group, 8 did not complete the intervention. The authors cite health problems, family problems, job resignation, insufficient time, and "other" as the reasons for dropout. Note: these are all potential contributors to an individual's experience of stress, burnout, and psychological distress. Also, two individuals from the control group failed to complete the end-of-study assessments. It may be entirely possible that the reasons given for attrition were true, but with a dropout rate of 44% in the treatment group, interpreting the results without the missing original members should be done

cautiously. Also, Shapiro and others fail to specifically state the professions of the participants of each group. All the reader is able to ascertain is that they are health care professionals. Certainly, each profession attracts individuals with different dispositions and capabilities. This would be important to consider when interpreting the results.

Shapiro et al.'s study examined the effects of MBSR for health care professionals. Healthy and vital counselors are essential to effective therapeutic practice (Skovholt, Grier, & Hanson, 2001). This is important to consider, but it is also vital that the effects on the clients of these professionals are considered, as well. Such a study to examine these effects was published by Grempair et al. in 2007. Grempair and others recruited psychotherapists-in-training (PiTs) from the Inntalklinik, Simbach am Inn, a licensed training institution for depth-based psychotherapy in Germany. As trainees, PiTs at the Inntalklinik, Simbach am Inn are taught theory, self-experience and practical therapeutic work, and are evaluated on the basis of their therapeutic results. Grempair and others used Structured Clinical Interviews (SCID I and II), the Session Questionnaire for General and Differential Individual Psychotherapy (STEP; Krampen, 2002), the Questionnaire of Changes in Experience and Behavior (VEV; Zielke, & Kopf-Mehnert, 1978), and the Symptom Checklist (SCL-90-R) to monitor client feedback following therapy sessions. 18 PiTs qualified for the study on the basis that they volunteered and were not currently engaging in any sort of mindfulness practice. 9 PiTs were randomly assigned to each group (Zen mindfulness practice and control group). Clients of the PiTs were also randomly assigned. Both the patients and the PiTs were blind to group membership (PiTs in the control group were not informed that they were in the control group until after the study, and were invited to participate in Zen mindfulness practice following the completion of the study). Zen mindfulness practice took place every workday (Monday-Friday) from 7:00am-8:00am for 9 weeks. A Zen master domiciled in Germany led the mindfulness sessions and was also blind to the reasons for training the PiTs in mindfulness practice.

Grempair et al.'s results show significant differences in client post-treatment assessments according to the group membership (Zen mindfulness or control) of their PiT. The control group's clients did not significantly differ from the Zen group's clients on SCL-90-R subscales measuring perception of distrust, and the feeling of being used (paranoid thinking), nor did their scores differ on scale one of the STEP measurement (relationship perspective). However, clients that were seen by PiTs enrolled in the Zen mindfulness group endorsed significantly better scores on the other two STEP scales (clarification and problem-solving perspectives). Additionally, clients of the Zen mindfulness group had significantly reduced SCL-90-R scores (especially on the Global Severity Index, a subscale of the SCL-90-R that measures basic psychological distress), and significantly improved results of the entire inpatient treatment experience (VEV). It is clear from the results of Grempair et al.'s study that the implementation of mindfulness practice may be a positive force in helping trainees be better, more effective therapists.

While well-designed and well-executed, Grempair and others' study does have some limitations. Most importantly, the authors did an excellent job of precluding the introduction of bias in their methodological design. Yet, without a placebo intervention, direct interpretations of the effects of mindfulness practice on client outcomes are more difficult to come by. Additionally, it is hard to say if the results of the study could be extrapolated to licensed or veteran therapists, or to individuals already participating in a mindfulness meditation routine.

Several studies examined thus far have shown mindfulness to be a potentially potent tool for the reduction of stress and anxiety in clients and clinicians, the forestalling of depressive episodes, and improvement in client outcomes. Yet, with the proposed operational definition put forth by Bishop et al. (2004) and their hypothesized results of mindfulness practice in clinicians, few studies have examined what effects mindfulness can have on counselor attention and empathy. Greason and Cashwell's (2009) study examines exactly those elements.

Greason and Cashwell (2009) proposed that mindfulness practice could improve counselor self-efficacy, and that attention and empathy would have mediating effects. To examine this relationship, the authors recruited 179 Master's level counseling interns ($n = 129$) and doctoral counseling students ($n = 50$) from 10 different schools (5 of which offered both master's and doctoral degrees in counseling). Instead of participants being enrolled in a mindfulness course, the authors gauged their mindfulness by having them complete the Five Factor Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). The FFMQ is reported by Baer et al. to have an internal consistency factor coefficient range from .75 to .91, and a reported estimate of reliability of .96 for the total instrument. In Greason and Cashwell's study, the authors reported a reliability of .88 for the FFMQ. To assess for attention, the Counselor Attention Scale (CAS; Greason, 2006) was administered. The CAS was developed by one of the authors in response to the lack of a paper-and-pencil instrument for the measurement of a counselor's ability to strategically control their attention during session. The CAS purports to measure attention capacity (divided vs. sustained attention) of the counselor, and is said by the author to have a test-retest reliability of .88. To assess for empathy as a multidimensional process, participants completed the Interpersonal Reactivity Index (IRI; Davis, 1980, 1996). This instrument was chosen for its ability to assess both cognitive and affective aspects of empathy. Also, participants completed the Counselor Activity Self-Efficacy Scales (CASES; Lent, Hill, & Hoffman, 2003). The CASES assesses counselor self-efficacy in three general areas: general helping skills (Exploration Skills), managing the counseling process (Session Management), and handling challenging counseling situations (Client Distress).

The authors found that relationships existed between FFMQ scores and the CAS, IRI, and CASES, with Pearson product-moment correlations between pairwise mean scores all significant at $p = .01$. The authors also examined attention and empathy as mediators in their model. As predicted by the authors, mindfulness scores on the FFMQ were significant predictors of

counselor self-efficacy in master's-level and doctoral-level counseling students. Attention was found to be a mediator of the relationship between mindfulness and self-efficacy, while empathy was not. According to the authors, 34% of the variation in counseling self-efficacy can be explained by a counselor's ability to be mindful, to be empathic, and to strategically control attention within the counseling session.

Greason and Cashwell's (2009) study was informative and helped to move the empirical research on mindfulness as a potential practice for counselors along in a major way. The results must be examined within the context of the study's limitations, however, especially as the study was based entirely on survey research. Readers and scholars must be mindful of the fact that survey data are specific to those that chose to participate and do not include information about the individuals that declined to respond to the survey. Also, there are limitations to self-report instruments (e.g. social desirability, distorted perception of abilities, measurement of self-efficacy, not capability). In addition, there was no measure of the degree to which participants had already received mindfulness training, or instruction in empathic attunement, and strategic attention control in their classes. Also, generalizability of the results is restricted, as the entire sample was taken from CACREP accredited schools in the southeastern part of the United States. Cultural differences are often highly related to regional location and data from a single area or group should be interpreted cautiously.

Conclusion

The studies examined in this paper show a general trend of mindfulness as being beneficial in a variety of contexts and for a diverse group of practitioners. Decreased psychological morbidity in clinical populations (Kabat-Zinn, 1980, 1998; Kabat-Zinn et al., 1982, 1985, 1987, 1992; Speca et al., 2000; Teasdale, et al., 2000; Williams et al., 2000), improved client outcomes (Grempair et al., 2007), and the mitigation of stress and enhanced empathy and

well-being in mental health professional populations (Beddoe & Murphy, 2004; Greason & Cashwell, 2009; Shapiro et al., 2005; Williams et al., 2001) all seem to be very real benefits of mindfulness practice on both sides of the mental health relationship. It is time to consider these results in the context of multicultural counseling. Emphasis in the literature of multicultural counseling is placed on self-awareness, counselor availability to the diversity of clients and their experiences, and empathy that is based in accurate attunement to the unique context of the client and their worldview. Mindfulness studies appear to show benefits in these same areas- the overlap should not go overlooked. Furthermore, data clearly show that ethnic minorities are in dire need for the development of multicultural skills among counselors. Despite the calls to the field for counselor improvement in these realms (S. Sue, 2006), answers to the question of ‘how’ are harder to find. Mindfulness practice on the part of the counselor appears to be a viable, cost-effective, ethical, and effective approach to honing multicultural skills and developing a culturally sensitive approach to working with diverse clientele.

Present Study

The purpose of this study is to explore the relationship between mindfulness and multicultural counseling competence. Mindfulness can increase an individual’s awareness of self and others (Siegel, 2007), can help an individual identify subtle and nuanced information (Siegel, 2007; Tso, 2005), and can increase non-reactivity (Baer et al., 2006) while helping slow down and interrupt the processes that are central to judgment (Bishop et al., 2004; Cozolino, 2002; Siegel, 2007). It can also increase gray matter density in the regions and networks of regions of the brain that are associated with awareness of self and others, perspective taking, cognitive control, and empathy and compassion, (Critchley et al., 2004; Farb, 2007; Hölzel, Lazar et al., 2011; Singer et al., 2004; van Veen & Carter, 2002). Perhaps developing these skills can prove elemental in developing multicultural competence, as awareness is “not just a factor influencing our knowledge: Awareness alters the direction of our future activations,” (Siegel, 2007, p. 142).

Little research exists on the relationship between mindfulness practice and multicultural counseling competence. As this study is exploratory in nature, questions to be addressed include:

1) What, if any, is the relationship between mindfulness and multicultural competence in counseling? More specifically, what is the relationship between facets of mindfulness like observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience, and facets of multicultural competence like awareness (of self and others), skills, and knowledge?

2) Additionally, if there is a relationship, what is the effect of race on multicultural competence? What is the effect of gender on multicultural competence? Are there any two- or three-way interactions between race, gender, and mindfulness score when predicting multicultural competence in counseling?

3) How do demographic identifiers like age, gender, race/ ethnicity, and household annual income relate to multicultural competence in counseling?

4) How do training and number of years of experience relate to multicultural competence in counseling?

5) How do demographic identifiers like age, gender, race/ ethnicity, and household annual income relate to mindfulness?

6) How do training and number of years of experience relate to mindfulness?

Chapter 3: Methodology

Design

This study's main analysis sought to explore if any relationship exists between mindfulness and multicultural competence in counseling. Secondary analyses used regression analysis to examine interaction effects, and also used backward elimination to find the best, most efficient model using the variables available to predict self-reported multicultural competence in counseling. Exploratory analyses also used backward elimination to examine the relationship between mindfulness and multicultural competence in counseling among White-identified participants. This design is appropriate for the current study for two primary reasons: 1) the research hypotheses seek an understanding of the relationships (if any such relationships do, in fact, exist) between variables; and 2) the principal construct of interest, therapist multicultural competence in counseling, cannot be experimentally manipulated.

Participants

Participants included in the analysis of this study were 123 pre-doctoral interns, post-doctoral fellows, psychologists, psychiatrists, and social workers at university/ college counseling sites across the United States. Degree credentials of the participants included M.A, M.S., M.F.T., M.D., Psy.D., Ph.D., and L.C.S.W. Participants were asked to complete a short demographic survey that also included several questions about training and experience, a multicultural counseling competence survey (MAKSS-CE-R; Kim et al., 2003) and a mindfulness survey (FFMQ; Baer et al., 2006). Data collection was entirely self-reported. Of the 123 participants, 54 (43.90%) indicated being 25-34 years of age, 37 (30.08%) reported being 35-44 years of age, 18 (14.63%) reported being 45-54 years of age, 10 (8.13%) reported being 55-64 years of age, two (1.6%) participants reported being 18-24 years of age, two (1.62%) reported being between the ages of 65 and 74, and no (0%) participants reported being 75 years or older.

Eighty-two (66.67%), participants identified as female, 40 (32.52%) identified as male, and one (.81%) identified as transgender.

Eighty-seven (70.73%) participants identified as White/ Caucasian/ European American, 4 (3.25%) participants identified as Hispanic/ Latino/a, 8 (6.5%) identified as African American/ Black, 14 (11.38%) participants identified as Asian/ Asian American, one (.81%) identified as “Other,” and no (0%) participants identified as American Indian or Alaska Native. Some therapists identified as bi- or multiracial. Five (4.07%) therapists identified as Hispanic/ Latino/a and White, 3 (2.44%) identified as Asian/ Asian American and White, and one (.81%) identified as Asian/ Asian American, Native Hawaiian or other Pacific Islander, and White.

Participants varied in the number of multicultural courses they reported having completed, ranging from 0 to 6 courses (*mean* = 1.69, *SD* = 1.313). Forty-three (38.7%) reported having taken one multicultural counseling course, 31 (27.9%) reported having taken two multicultural counseling courses, 15 (13.5%) reported not having taken any multicultural counseling courses, 14 (12.7%) reported having taken three multicultural counseling courses, three (2.7%) reported having taken 5 multicultural counseling courses, three (2.7%) reported having taken 6 multicultural counseling courses, and two (1.8%) of the participants reported having taken 4 multicultural counseling courses. With regards to the question about number of multicultural courses taken, 12 of the participants’ responses were not included in the data analysis either because they did not answer the question, or because their answers were not numerically based and could not be interpreted in statistical analysis (e.g. “too many to count,” “on going,” “several workshops,” or “2 as a student, 2 as a teacher, and 1 as a group member”).

Eighty-two (66.67%) of the participants had completed their doctoral degree at the time of taking the survey, and 41 (33.33%) had completed their Master’s Degree.

With respect to years of experience in the field, 94 (76.42%) reported having 5 or more years of experience, 20 (16.26%) reported having 3-4 years of experience, 8 (6.5%) reported having 1-2 years of experience, and one (0.81%) participant reported having less than one year of experience.

Eighty-eight (71.54%) of the participants reported a household family income of \$50,001 or more, 13 (10.57%) reported a household income between \$35,001 and \$50,000, 10 (8.13%) participants reported a household income between \$25,001 and \$35,000, 8 (6.5%) reported a household income of \$15,001-\$25,000, one (0.81%) reported a household income of \$7,501-\$15,000, one (0.81%) reported an annual household income of \$7,500 or less, and two (1.63%) did not report their annual household income.

Data regarding sexual orientation, ability/ disability, or nationality were not gathered. For numerical listings of data frequency and descriptive statistics of demographic data, see Tables 1-1a-b, Table 1-2, and Tables 1-3a through 1-7b.

Original data collection included 135 responses. Of these responses, 12 participant submissions were omitted from data analysis because they were incomplete. The 12 omitted surveys to lacked answers to some, most, or nearly all of the MAKSS-CE-R and/or FFMQ, and also were devoid of substantial portions of the demographic data portion of the survey.

Procedures

Data was collected electronically using Survey Monkey, an online tool for creating surveys and collecting responses. Participants were solicited and introduced to the current study via email. Participants were informed that the aim of the research was to examine the relationship between multicultural competence in counseling and mindfulness. Participants were informed that they were free to discontinue participation at any time during the surveys, and that they could contact the author or the author's advisor, Michael Goh, PhD, if they had any questions or

concerns. Participants were also informed that the research study had been approved by the University of Minnesota's Institutional Review Board for research with Human Subjects (IRB Code Number: 1212P25926), and were encouraged to contact the University of Minnesota's IRB if they had any concerns (See Appendix A). Participants provided demographic data (see Appendix B) and completed the Multicultural Awareness, Knowledge and Skills Survey-Counselor Edition- Revised (MAKSS-CE-R; Kim et al., 2003) and the Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, and Toney, 2006).

Instruments:

In addition to demographic survey data regarding age, gender, race/ethnicity, annual household income, and number of multicultural counseling courses taken, two instruments were used in the current study. Participants were asked to complete the Multicultural Awareness-Knowledge-Skills Survey- Counselor Edition- Revised (MAKSS-CE-R; Kim et al., 2003), and the Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, and Toney, 2006).

MAKSS-CE-R

The Multicultural Awareness-Knowledge and Skills Survey Counselor Edition Revised (MAKSS-CE-R) was designed and developed by Kim, Cartwright, Asay and D'Andrea in 2003 (See Appendices C and D). The MAKSS-CE-R is an adapted version of the MAKSS, originally developed by D'Andrea and Heckman in 1991, and is based on Sue et al.'s (1982) Awareness, Knowledge and Skills Tripartite model of cross-cultural competence. The 33 items on the MAKSS-CE-R are divided into 3 subscales (10-item Awareness; 13-item Knowledge; 10-item Skills) and are specifically worded for counselors. The subscales include: a) awareness of one's attitude toward ethnic minorities, b) knowledge about minority populations, and c) cross-cultural awareness skills. The MAKSS-CE-R items are measured on three different four-point Likert-type

scales (ranging from 1 = very limited, 4 = very aware; 1 = very limited, 4 = very good; 1 = strongly agree, 4 = strongly disagree) respective of subscale. The MAKSS-CE-R has six reverse scored items (items 1-4, 6, and 9), all of which are within the Awareness subscale. Possible scores on the MAKSS-CE-R range from 33 to 132, with 132 representing the highest level of multicultural competence in counseling.

Kim et al. (2003) reported an overall internal reliability for the MAKSS-CE-R of .81, with coefficient alphas for Awareness, Knowledge and Skills of .80, .87, .85, respectively. Construct validity for the MAKSS-CE-R was established by Kim et al. (2003) by correlating scores of the MAKSS-CE-R with other measures of multicultural counseling competence. The MAKSS-CE-R showed a positive correlation ($r = .51, p < .001$) with the Multicultural Counseling Inventory (Sodowsky, Taffe, Gutkin, & Wise, 1994). Additionally, the MAKSS-CE-R showed positive correlation coefficients on the Awareness and Knowledge subscales (.67 and .48, respectively) with the Multicultural Counseling Knowledge and Awareness Scale (MCKAS; Ponterotta, Gretchen, Utsey, Rieger, & Austin, 2002). It should also be noted that support for the discriminant validity of the MAKSS-CE-R was shown via a lack of significant correlations between the MAKSS-CE-R and a measure of social desirability, (Kim et al., 2003).

FFMQ

The Five Facet Mindfulness Questionnaire (FFMQ) was developed by Baer, Smith, Hopkins, Kreitmeyer, and Toney (2006). The FFMQ (See Appendices E and F) contains 39 survey questions and was developed by Baer and colleagues by examining the Freiburg Mindfulness Inventory (FMI; Buchheld, Grossman, & Walach, 2001), the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003), the Kentucky Inventory of Mindfulness Skills (KIMS; Baer et al., 2004), the Cognitive and Affective Mindfulness Scale (CAMS; Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007), and the Mindfulness Questionnaire (MQ;

Chadwick, Hember, Mead, Lilley, & Dagnan, 2005), in hopes that a new instrument might be able to clearly identify the facets that comprise mindfulness.

In Baer and others' (2006) work, the facets of *observing* (noticing or attending to a variety of stimuli), *describing* (applying words to observed phenomena), *acting with awareness* (engaging attention fully on the current activity), *non-judging of inner experience* (refraining from evaluative labels about observed phenomena), and *non-reactivity to inner experience* (noticing phenomena without having a reaction to it) were identified as primary elements to mindfulness. The 39 items are divided across five subscales (8-item Mindful Observing; 8-item Mindful Describing; 8-item Mindful Acting with Awareness; 8-item Mindful Non-judging; and 7-item Mindful Non-reacting). FFMQ items are measured on a five-point Likert-type scale ranging from 1 = never or very rarely true, to 2 = rarely true, to 3 = sometimes true, to 4 = often true, and to 5 = very often or always true. The FFMQ has 19 reverse-scored items (See appendix F) three of which exist within the mindfulness describing scale, and 8 of which exist in both the mindfulness acting with awareness scale and mindful non-judging scale, respectively. Possible scores on the FFMQ range from 39-195, with 195 representing the highest level of mindfulness.

Factor analyses by Baer and colleagues (2006) showed that five facets clearly emerged from the pre-existing instruments as being elemental to mindfulness. Hierarchical factor analyses showed that four of the five facets (all but "observing") "are components of an overall mindfulness construct and that the factor structure of mindfulness may vary with meditation experience," (Baer et al., 2006, p.27). Baer and others proposed that this is because the sample used was not comprised of experienced meditators and that "observing" is a facet that is significantly moderated by meditation experience. Alpha coefficients for the FFMQ range from .75 to .91.

Baer and others (2008) examined the construct validity of the FFMQ by comparing scores among meditating and non-meditating samples. Results showed that, as predicted, most facets of mindfulness were significantly related to meditation experience. Additionally, construct validity for the FFMQ was supported in samples previously unexamined. Adjusted R-squared values ranging from .24 to .41 suggest that “although the facets are intercorrelated elements of a general mindfulness construct, a substantial portion of the variance in each facet is distinct from the other four,” (Baer et al., 2008, p. 336).

Independent Variables

Several independent variables were used in the current study. For the principal analysis of correlation relating to therapist multicultural competence in counseling, self-reported mindfulness score, as measured by the FFMQ total score and its subscales (FFM- Observing, FFM- Describing, FFM- Acting with Awareness, FFM- Non-Judging, and FFM- Non-Reacting), and demographic information such as age, gender, race/ethnicity, number of multicultural counseling courses completed, annual household income, and degree obtained were used as independent variables.

Following the presence of a statistically significant relationship between mindfulness and multicultural competence in counseling, multiple regression analyses were performed to establish a model that best predicts multicultural competence in counseling as predicted by the afore mentioned independent variables.

In the secondary analyses, FFMQ total score and FFMQ subscales measuring mindful observing, mindful describing, mindful acting with awareness, mindful non-reacting, and mindful non-judging were independent variables. Also, demographic data such as age, gender, race, number of multicultural counseling courses completed, years of experience, annual household income, and degree obtained were used as independent variables.

Dependent Variables

The dependent variable for the main analysis of the present study was self-reported multicultural competence in counseling as measured by MAKSS-CE-R total score. Additionally, self-reported mindfulness as measured by the FFMQ total score and FFMQ subscale scores were dependent variables for correlational analyses.

Data Analysis

Descriptive statistics (and some frequencies) were calculated for all variables used in the analysis (Table 1-1a through Table 1-7b). First, correlational analyses were used to test the strength of the linear relationships between participant demographic variables and their reported multicultural competence in counseling, as outlined in null hypotheses *a* through *r*.

Correlation and Regression

No literature currently exists regarding the relationship between the constructs of multicultural competence in counseling and mindfulness. As such, the main analysis plan in this study was exploratory in nature and sought first to establish if any statistically significant relationship exists between multicultural competence in counseling and mindfulness. Next, regression analysis was used to see which of the available predictor variables best accounted for the variance in reported multicultural competence in counseling. Additionally, regression analyses were run for White-identified participants only to see if there was any difference in type, direction, or strength of the available predictor variables and the outcome variable of MAKSS-CE-R total score. Regression analyses examined predictor variables of FFM-Total score, race, gender, and various combinations of their interactions to account for the variance in counselor perceived multicultural competence, as measured by MAKSS-CE-R-Total score.

Exploratory Analyses

Exploratory regression analyses were conducted to see which of the demographic information, training statistics, and five facets of the FFMQ best account for the variance in multicultural counseling competence scores as indicated by the MAKSS-CE-R. A backward elimination procedure with the exclusion criterion set to 0.2 (Bursac, Gauss, Williams, & Hosmer, 2008) was used to arrive at the final regression model. Backwards elimination was prudent in this instance because of the modest number of predictor variables available, and because of its ability to account for as much variance as possible while still remaining parsimonious. Backward elimination regression begins with an initial model of prediction and eliminates the highest p -value candidate on the grounds that its elimination improves the model. The regression is run again without the eliminated predictor, and the stepwise process continues until a model is arrived at in which the adjusted- R^2 value is maximized to best predict the outcome variable; in this case, total score on the MAKSS-CE-R.

Another set of analyses were conducted following the initial regression model to examine how cultural differences, particularly with respect to race/ethnicity, relate to multicultural competence in counseling among therapists. Differences between individuals that identified as people of color and those that identified as White / Caucasian / European American were considered with respect to multicultural competence in counseling and mindfulness. Of the 123 participants included in the data analysis after excluding 12 participants based on incomplete data, 87 identified as White only. Of the remaining 36 participants, responses to race ranged from Black /African American, to Asian, Hispanic / Latino/a, to Pacific Islander /Native Hawaiian, and Other. Also, 9 of the 36 participants that responded as identifying as people of color identified as bi- or multi-racial.

Comparing individuals based on race was decided inappropriate, as too few participants represented each of the groups other than “White” to make generalizable statements from the data analyses. Additionally, comparing White-identified participants and “People of Color”

participants is also flawed, as categorizing all individuals of ethnic minority status as a monolithic group fails to recognize the substantial diversity between and within groups. Furthermore, treating individuals of multiethnic backgrounds as having a single ethnic identity is imprudent, as it does not adequately address their experience of intersecting identity, and the numbers were insufficient to categorize into more specific groups. As such, exploratory regression analyses were performed on the submissions from participants that identified as White-only to see what relationship mindfulness has with multicultural competence in counseling among therapists that identified as White.

In the statistical analyses, numerical coding was used to indicate groups (Race, Gender, Age, Degree Obtained, Annual Household Income, and Years of Experience) to which participants belonged. For some variables like Gender and Degree Obtained, only two groups were clearly identified (Men and Women, and Master's and Doctorate). For Age, participants were reasonably distributed across various potential groupings. For the other variables of Race, Annual Household Income, and Years of Experience, a large majority of participants indicated belonging to a single group. For Race, 70.7% identified as White, for Annual Household Income, 71% indicated earning \$50,001 or more, and for Years of Experience, 76.4% indicated having 5 years or more of experience. As such, binary indicator numbers were used to group participants into two groups: majority and minority. This decision was made in the interest of conserving some statistical interpretive ability between differences in majority and minority membership of a specific variable. This effort runs the risk of failing to see the contributions or influence of less represented groups. Also, this may minimize the nuanced differences between groups that were coded as "minority." However, because the membership in several groups was as small as 0.81% (1 member) and were no larger than 16%, attempting to interpret the meaning of relationships in these groups would have offered a modicum of generalizability, if any at all.

Chapter 4: Results

The first section of this chapter presents descriptive statistics for relevant demographics and means, standard deviations, and correlations among study variables. The second section of this chapter presents the results of the analyses of the research hypotheses in the form of correlations, and the results of the exploratory analyses in the form of multiple regression. Lastly, a summary of the results is presented.

I. Descriptive Analyses

Means, standard deviations, minimum and maximum values for each variable are reported in Table 1-1. Participant mean MAKSS-CE-R-Total score was 96.89, $SD = 9.700$, ranging from 66 to 120. Participant mean FFM-Total score was 145.5, $SD = 14.819$, and ranged from 115 to 186. Descriptive statistics are also calculated for subscales of both the MAKSS-CE-R and the FFMQ and are reported in Table 1-1. Correlational analyses are significant at the $p < .05$ and $p < .01$ levels, and are indicated as such.

II. Research Hypotheses Results

Hypothesis H_{0a}: No significant correlation between reported mindfulness score and reported multicultural competence in counseling score will be revealed.

Correlational analyses revealed a significant positive relationship between MAKSS-CE-R-Total score and FFM-Total score, $r(121) = .271, p < .01$. Additionally, MAKSS-CE-R-Total score was revealed to be significant with FFM-Observing, $r(121) = .279, p < .01$, FFM-Describing $r(121) = .228, p < .05$, and FFM-Non-reacting, $r(121) = .183, p < .05$. Thus, counselors that scored higher on mindfulness tended to score higher on multicultural competence. This hypothesis is not supported. See Table 2-1.

Hypothesis Hob: No significant correlation between gender and self-reported multicultural competence in counseling will be revealed.

Correlational analyses revealed a non-significant correlation between gender and therapists' MAKSS-CE-R-Total score, $r(121) = -.125, p > .1$. There was a significant negative correlation for MAKSS-CE-R-Skills, $r(121) = -.188, p < .05$, meaning that women tended to score better on the Skills subscale. MAKSS-CE-R-Awareness, and MAKSS-CE-R-Knowledge subscales of the MAKSS-CE-R showed no significant correlation with therapist gender. This hypothesis is partially supported. See Table 2-2.

Hypothesis Hoc: No significant correlation between age and reported multicultural competence in counseling will be revealed.

Correlational analyses revealed a non-significant correlation between age and therapists' reported MAKSS-CE-R-Total score, $r(121) = .071, p > .5$. Additionally, MAKSS-CE-R-Awareness, MAKSS-CE-R- Knowledge, and MAKSS-CE-R- Skills showed no significant correlation with therapist age. This hypothesis is supported. See Table 2-2.

Hypothesis Hod: No significant correlation between ethnicity and reported multicultural competence in counseling will be revealed.

Correlational analyses revealed a non-significant correlation between therapist race and MAKSS-CE-R-Total score, $r(121) = -.04, p > .5$. However, there was a negative correlation between race and MAKSS-CE-R- Awareness, $r(121) = -.192, p < .05$. White participants had lower multicultural awareness scores than non-White participants. This hypothesis is partially supported. See Table 2-2.

Hypothesis Hoe: No significant correlation between annual household income and reported multicultural competence in counseling will be revealed.

Correlational analyses revealed a small but statistically significant positive correlation between reported annual household income of \$50,001 or more and therapists' MAKSS-CE-R-Total score $r(121) = .187, p < .05$, indicating that participants who lived in a household that made more than \$50,001 per year also tended to score higher on multicultural competence. No significant correlation was revealed between annual household income and MAKSS- Awareness, MAKSS- Knowledge, and MAKSS- Skills scores. This hypothesis is partially supported. See Table 2-2.

Hypothesis H_f: No significant correlation between number of multicultural counseling courses and reported multicultural competence in counseling will be revealed.

There was a significant positive correlation between the number of multicultural courses taken and MAKSS-CE-R-Total score, $r(121) = .272, p < .01$, indicating that greater multicultural competence was associated with having taken more multicultural courses. Also, a positive statistically significant correlation was found between MAKSS-CE-R Knowledge and number of multicultural counseling courses completed $r(121) = .364, p < .01$. It is also interesting to note that no significant relationship was found between multicultural counseling courses completed and degree obtained, $r(121) = .131, p > .10$. This hypothesis is not supported. See Table 2-3.

Hypothesis H_g: No significant correlation between degree obtained and reported multicultural competence in counseling will be revealed.

Correlational analyses demonstrated a significant positive relationship between the indication of a doctoral degree and MAKSS-CE-R-Total score, $r(121) = .239, p < .01$, indicating that participants that had a doctorate were more likely to score higher on multicultural counseling competence. Additionally, the indication of a doctorate degree was shown to have a significant positive correlation with MAKSS-CE-R subscales of Knowledge and Skills, $r(121) = .188, p < .05$; $r(121) = .287, p < .01$, respectively. This hypothesis is not supported. See Table 2-3.

Hypothesis H_{0h}: No significant correlation between number of years of experience and reported multicultural competence in counseling will be revealed.

Correlational analyses demonstrated a non-significant correlation between number of years of experience and MAKSS-CE-R-Total score, $r(121) = .174, p > .05$. However, there was a significant relationship revealed between MAKSS-CE-R-Skills and number of years of experience, $r(121) = .214, p < .05$. This hypothesis is partially supported. See Table 2-3.

Hypothesis H_{0i}: No significant correlation between age and reported mindfulness will be revealed.

Correlational analyses revealed a non-significant correlation between age and reported FFM-Total score $r(121) = .058, p > .5$. Also, there was no significant relationship revealed between any of the subscales of the FFMQ and age. This hypothesis is supported. See Table 2-4.

Hypothesis H_{0j}: No significant correlation between gender and reported mindfulness will be revealed.

Correlational analyses revealed significant negative relationships between FFM- Total score $r(120) = -.239, p < .01$, indicating that men tended to score lower in overall mindfulness than women. In addition, negative correlations of statistical significance were also demonstrated for subscales of the FFMQ including, FFM-Describing $r(120) = -.192, p < .05$, FFM- Acting with Awareness $r(120) = -.183, p < .05$, and FFM- Non-reacting $r(120) = -.256, p < .01$. This hypothesis is not supported. See Table 2-4.

Hypothesis H_{0k}: No significant correlation between race and reported mindfulness will be revealed.

Correlational analyses demonstrated a non-significant correlation between race and FFM- Total score, $r(121) = .162, p > .05$. However, a positive correlation between race and FFMQ

subscale FFM-Non-judging $r(121) = .193, p < .05$. As individuals that identified as White were coded as 1, and individuals that identified as persons of color as 0, a positive correlation in this instance indicates that White participants tended to score higher on the non-judging of inner experience subscale than non-White participants. This hypothesis is partially supported. See Table 2-4.

Hypothesis H_{0l}: No significant correlation between annual household income and reported mindfulness will be revealed.

Correlational analyses demonstrated a non-significant correlation between reported FFM-Total score, $r(121) = .06, p > .5$. Additionally, non-significant correlations were demonstrated between annual household income and each of the FFMQ subscales. This hypothesis is supported. See Table 2-4.

Hypothesis H_{0m}: No significant correlation between degree obtained and reported mindfulness will be revealed.

Correlational analyses revealed a non-significant correlation between degree obtained and FFM-Total score, $r(121) = .136, p > .1$. However, a significant relationship was shown to exist between degree obtained and FFM-Non-judging, $r(121) = .216, p < .05$. No other subscales of the FFMQ were shown to have significant relationships with degree obtained. This hypothesis is partially supported. See Table 2-5.

Hypothesis H_{0n}: No significant correlation between number of multicultural counseling courses completed and reported mindfulness will be revealed.

Correlational analyses revealed a non-significant correlation between number of multicultural courses completed and FFM-Total score, $r(121) = -.04, p > .5$. Additionally, non-

significant correlations were demonstrated between number of multicultural counseling courses completed and each of the FFMQ subscales. This hypothesis is supported. See Table 2-5.

Hypothesis H₀₀: No significant correlation between years of experience and reported mindfulness will be revealed.

Correlational analyses revealed a non-significant correlation between number of years of experience and FFM-Total score, $r(121) = .167, p > .5$. Additionally, non-significant correlations were demonstrated between number of years of experience and each of the FFMQ subscales.

This hypothesis is supported. See Table 2-5.

Hypotheses p-r and Exploratory Analyses

In order to evaluate hypotheses *p* through *r*, a series of multiple regression analyses were run. These regression analyses examine how overall multicultural competence in counseling score, as measured by the MAKSS-CE-R-Total score, is predicted by participant race, gender, and overall mindfulness score, as measured by the FFM-Total score.

Hypothesis H_{0p}: No interaction between participant race and FFM-Total score in the prediction of multicultural competence in counseling will be revealed.

A multiple regression analysis was conducted to test how counselor race, total mindfulness score, and the interaction between the two predicted overall multicultural competence. The model as a whole accounted for approximately 10% of the variance in multicultural competence ($R^2 = .098$), $F(3, 119) = 4.299, p < .01$. However, the interaction between counselor race and mindfulness score did not reach significance, $b = 0.216, t(119) = 1.472, p = .14$. This hypothesis is supported. See Tables 3-1, 3-2, and 3-3.

Hypothesis H_{0q}: No interaction between participant gender and FFM-Total score in the prediction of multicultural competence in counseling will be revealed.

A multiple regression analysis was conducted to test how counselor gender, total mindfulness score, and the interaction between the two predicted overall multicultural competence. The model as a whole accounted for approximately 8% of the variance in multicultural competence ($R^2 = .08$), $F(3, 118) = 3.411$, $p < .05$. However, the interaction between counselor gender and mindfulness score was not significant, $b = -0.14$, $t(118) = -1.136$, $p = .26$. This hypothesis is supported. See Tables 4-1, 4-2, and 4-3.

Hypothesis H_{0r}: No two- or three-way interaction between participant gender, race and FFM-Total score in the prediction of multicultural competence in counseling will be revealed.

A multiple regression analysis was conducted to test how counselors' gender, race, and total mindfulness score, as well as the two- and three-way interactions among these variables predicted overall multicultural competence. The model as a whole accounted for approximately 12% of the variance in multicultural competence ($R^2 = .121$), $F(7, 118) = 2.241$, $p = .04$. However, neither the three-way interaction, $b = -.53$, $t(118) = -1.236$, $p = .22$, nor any of the two-way interactions ($ps \geq .13$) approached significance. This hypothesis is supported. See Tables 5-1, 5-2, and 5-3.

Exploratory Analyses

The aim of the exploratory analyses was to establish predictive models for perceived overall multicultural competence in counseling given the available predictor variables. Whereas the previous analyses examined perceived overall mindfulness score, gender, race, and their interactions as predictor variables of perceived overall multicultural competence in counseling, the exploratory analyses additionally consider the subscales of the FFMQ and demographic variables like age, annual household income, and degree obtained to predict perceived overall multicultural competence in counseling. An effort in the interest of parsimony used backward elimination regression in the exploratory analyses to arrive at the best, most efficient model.

In the first backward regression analysis model, all 123 participants from the reduced sample were included, and predictor variable reports were not modified. In the second backward regression analysis model data provided by the 87 participants that identified as White only were included in the prediction of overall multicultural competence in counseling. Individuals that identified as Black / African American, Hispanic / Latino/a, Asian, Pacific Islander / Native Hawaiian, Other, and who identified as multiethnic were not included in exploratory regression analyses. This decision was made so as to not assume homogeneity across ethnic groups and to respect within group differences. Additionally, insufficient representation of ethnic minority groups precluded analysis of each group independently. Descriptive statistics were re-calculated for the group identifying as White only (see Table 1-2). Also, correlations between MAKSS-CE-R (Total score and subscales), and the FFMQ (Total score and subscales) for therapists identifying as White only were recalculated (See Table 2-2).

The dependent variable for both the entire sample model and the White-only model was MAKSS-CE-R Total score. Predictor variables in both models included, gender, age, level of degree, number of multicultural courses completed, annual household income, FFM- Total score, and FFM subscales of Observing, Describing, Acting with Awareness, Non-judging, and Non-reacting.

Model 1: All Participants:

The model as a whole accounted for approximately 14% of the variance in multicultural competence in counseling ($R^2 = .137$), $F(5, 116) = 4.855$, $p < .20$. Predictor variables comprising the model included FFM-Observing ($\beta = .471$, $p = .003$), degree obtained ($\beta = .200$, $p = .025$), FFM-Describing ($\beta = .129$, $p = .163$), gender ($\beta = 1.267$, $p = .048$), and the interaction between gender and FFM-Observing ($\beta = -1.329$, $p = .041$). For a scatterplot of the interaction between FFM-Observing and Gender, see Plot 1-1. This model indicates that gender has a moderating

effect on FFM-Observing, such that FFM-Observing is shown to be a more significant predictor for men than for women. See Tables 7-1, 7-2, and 7-3.

Model 2: White-Identified Participants Only:

The model as a whole accounted for approximately 24% of the variance in multicultural competence in counseling ($R^2 = .237$), $F(5, 81) = 6.345$, $p < .20$. Predictor variables comprising the model include annual household income of \$50,001 or more ($\beta = .132$, $p = .191$), FFM-Observing ($\beta = .483$, $p = .000$), degree obtained ($\beta = 1.36$, $p = .195$), the interaction between FFM-Observing and gender ($\beta = -1.062$, $p = .005$), and the interaction between FFM-Non-judging and gender ($\beta = .998$, $p = .009$). For scatterplots of the interactions between FFM-Observing and Gender, and between FFM-Non-judging and Gender, see Plots 2-1 and 2-2. This model indicates that gender has a moderating effect on FFM-Observing and FFM-Non-judging, such that FFM-Observing was shown to be a more significant predictor for men, but FFM-Non-judging was shown to be a more significant predictor for women. See Tables 8-1, 8-2, and 8-3.

III. Summary of Results

1. Overall mindfulness, as measured by the FFM-Total score, significantly correlated with overall multicultural competence in counseling, as measured by the MAKSS-CE-R-Total score, $r(121) = .271$, $p < .01$. Moreover, subscales of the FFMQ also significantly correlated with MAKSS-CE-R-Total score and subscales of the MAKSS-CE-R (See Table 1). Additionally, among White identified participants in the current study, FFM-Total score was significantly correlated with MAKSS-CE-R-Total score, $r(85) = .340$, $p < .01$. This demonstrates that according to the instruments used, there exist significant relationships between mindfulness and multicultural competence in counseling, and some of their subscales.

2. Therapist age, gender, and race did not significantly correlate with overall multicultural competence score. White participants did demonstrate a significant negative correlation with MAKSS-CE-R-Knowledge, $r(121) = -.192, p < .01$, meaning that White participants tended to score lower on the MAKSS-CE-R-Knowledge subscale than did non-White participants.
3. Annual household income of \$50,001 significantly correlated with overall multicultural competence in counseling score, such that therapists that made \$50,001 or more tended to score higher on multicultural competence in counseling, $r(121) = .187, p < .05$.
4. Training, as measured by number of multicultural courses completed and degree obtained, significantly correlated with multicultural competence in counseling, $r(121) = .272, p < .01$; $r(121) = .239, p < .01$, respectively. Additionally, therapists that had 5 years of experience or more tended to score higher on the MAKSS-CE-R-Skills subscale, $r(121) = .214, p < .05$.
5. Therapist demographic markers varied in their degree and direction of significance of correlation to mindfulness. Therapist age did not significantly correlate with mindfulness score. However, therapist gender did significantly correlate with overall mindfulness, such that men tended to score lower in overall mindfulness than women, $r(120) = -.239, p < .01$. Additionally, therapist gender significantly negatively correlated with FFMQ subscales (see Table 1). Also, participant race did not significantly correlate with overall mindfulness score, but did show positive correlation between White therapists and FFM-Non-judging, $r(121) = .193, p < .05$.
6. Therapist annual household income, degree obtained, number of multicultural courses completed and years of experience did not significantly correlate with overall mindfulness score. Therapists that indicated having a doctorate degree tended to score higher on FFM-Non-judging, $r(121) = .216, p < .05$. Also, therapists that

reported having more years of experience were more likely to score higher on FFM-Non-judging, $r(121) = .230, p < .05$, and on FFM-Non-reacting, $r(121) = .201, p < .05$.

7. Regression analyses reveal that neither therapist race nor gender moderate the effects of overall mindfulness score on multicultural competence in counseling score. Additionally, there is no two- or three-way interaction between therapist race, gender, and total mindfulness score when predicting multicultural competence in counseling.
8. Backward elimination regression analyses reveal a model for predicting overall multicultural competence in counseling score given the available predictor variables of all the participant data. This model includes FFM-Observing, degree obtained, FFM-Describing, gender, and the interaction between gender and FFM-Observing. This model accounts for nearly 14% of the variance in MAKSS-CE-R-Total score, ($R^2 = .137$), $F(5, 116) = 4.855, p < .20$.
9. Backward elimination regression analyses also reveal a model for predicting overall multicultural competence in counseling score given the available predictor variables of the participants that identified as White only. For White therapists, predictors in this model include an annual household income of \$50,001 or more, FFM-Observing, degree obtained, the interaction between gender and FFM-Observing, and the interaction between gender and FFM-Non-judging. This model for accounts for nearly 24% of the variance in MAKSS-CE-R-Total score among White-identified therapists, ($R^2 = .237$), $F(5, 81) = 6.345, p < .20$.

Chapter 5: Discussion and Recommendations

The purposes of this study were two-fold. First and foremost, there exists a dearth of literature in the field regarding the relationship between mindfulness and multicultural competence in counseling. This study investigates if any such relationship exists, and to what extent and direction mindfulness is correlated to therapist multicultural competence in counseling. Second, this study explores overall mindfulness and its contributing subparts, and how these, in conjunction with other therapist variables, predict overall multicultural competence in counseling.

Multicultural competence in counseling is well-established as an integral, ethical component to best practice, and as a necessity in all counseling relationships, (APA, 2003, S. Sue, 2006). Yet, much like the unsystematic and ineffable qualities of empathy (Greason & Cashwell, 2009), multicultural competence in counseling is hard to assess, and is generally taught as an act demonstrated by external responses and markers, rather than occurring within, facilitated by accurate internal states of experience and understanding. More often than not, therapists are told it is important to show multicultural competence through lexicon and gesture without being taught how to cultivate it as a sincere and authentic skill or experience.

Mindfulness meditation is shown to help cultivate some such states of awareness and experience (Critchley et al., 2011; Gard et al., 2010; Hölzel, et al., 2011; Hölzel, et al., 2006). Mindfulness can stimulate neuronal growth and can increase neurodensity in specific regions of the brain, (Hölzel, et al., 2011; Lazar, 2005). In addition, cross-sectional studies show increased regional gray matter density as being associated with improvements in performance abilities (Mechelli et al., 2004; Milad et al., 2005), “suggesting that the increased gray matter corresponds with improved functioning in the relevant area,” (Hölzel, et al., 2011, p. 37). Practitioners of mindfulness also report increased accurate empathic attunement and resonance of the internal states and experiences of others (Hölzel, Ott, Hempel, & Stark, 2006; Singer et al., 2004). Given

this data, it is clear that multicultural competence in counseling and mindfulness are germane to one another. More importantly, the services received by many ethnic minority clients, and the training received by the therapists that serve them are wholly inadequate (Constantine, 1997; Gatmon, Martos-Perry, Molina, Patel, & Rodolfa, 2001; Surgeon General, 2001). The mental health field has reached a critical situation that requires new approaches for learning and engaging in multiculturally competent therapy.

This study is the first examination of the relationship between mindfulness and multicultural competence in counseling. The present study submits evidence that among therapists, mindfulness may be a quality that enhances one's ability to work competently across multiculturally complex situations in counseling. This chapter will offer a discussion of the findings and their implications for the field. This chapter will also present limitations to internal and external validity, and will propose implications and suggestions for future training and research.

Demographic Identifiers and Multicultural Competence in Counseling

Of the demographic identifiers of therapist age, gender, and race, none significantly correlated with MAKSS-CE-R-Total score. Some previous research has suggested that ethnicity is a significant moderating variable of multicultural competence score, such that people of color tend to score higher than Whites, (Ponterotto, Rieger, Barrett, & Sparks, 1994; Pope-Davis & Ottavi, 1994; Pope-Davis et al., 1994; Pope-Davis, et al., 1995). To a small degree, this was reflected in the present study, in that White participants demonstrated a significant negative correlation with MAKSS-CE-R-Knowledge, $r(121) = -.192, p < .05$. More specifically, this finding is partially consistent with previous research that shows ethnic minority counselors tend to score higher on the awareness and knowledge facets of multicultural competence in counseling, (Pope-Davis & Ottavi, 1994).

Another important consideration when discussing race and multicultural competence in counseling is power. ‘Power’ can be defined as the capacity to influence other people via control over valuable resources, and the ability to administer rewards and punishments (French & Raven, 1959; Keltner et al., 2003). The power and privilege generally associated with identifying as ‘White’ suggests that White therapists would likely have more power than therapists of ethnic minority status. Keltner & Robinson (1997) have shown that those in positions of power are less accurate than individuals with less power in estimating the interests and positions of other people. Galinsky, Magee, Inesi, & Gruenfeld (2006) have demonstrated that power is associated with a “reduced tendency to comprehend how other individuals see the world, think about the world, and feel about the world,” (p.1072). Moreover, those with less power are shown to be better at perspective taking (Galinsky, Ku, & Wang, 2005), more accurately perceive the interests of others (Eisenberg, Murphy, & Shepard, 1997), and are more other-serving in their attributions (Regan and Totten, 1975). Given this research, it seems likely that participants identifying as ‘White,’ might score lower on MAKSS-CE-R-Total score than their ethnic minority counterparts.

Statistically significant divergence between White therapists and therapists of color specific to the MAKSS-CE-R-Awareness subscale was expected (Pope-Davis & Ottavi, 1994) but was not demonstrated. With limited racial variance in the sample, however, one explanation for the lack of relationship between therapist race and perceived multicultural awareness is not necessarily that it does not exist, but simply that it did not exist or was not detected *in this sample*. A strong majority of the participants in this study identified as White (70.9 %), and among the remaining participants that identified as people of color, no more than 11.38% identified within a single racial group. Also, some racial groups were not represented at all (“American Indian or Alaska Native”). Sadly, this is a somewhat representative of the current state of ethnic diversity in the field of counseling psychology (APA, “Division 17: 2011,” 2011). However, despite the accuracy of ethnic representation in the sample with respect to current

trends in the field, a larger, more ethnically-diverse sample could have shone light on potential relationships between perceived multicultural awareness and racial identity.

Little research currently exists in the field that examines the relationship between annual household income and multicultural competence in counseling. In the present study, a small but significant positive relationship was shown to exist between therapists that reported an annual household income of \$50,001 or more and overall multicultural competence in counseling score, $r(121) = .187, p < .05$. This finding must be considered and interpreted with caution, however, as 88 (71.5%) of the 123 participants indicated living in a household that made \$50,001 or more last year. Such little variance in the income variable, allows for limited interpretation of its relationship with multicultural competence in counseling, and vice-versa. In future research efforts, it would be interesting to see if annual income (household and/or individual) has a significant relationship with facets of multicultural competence. Additionally, as Liu and others (2004) have commented, measuring subjective social class in addition to common measures of SES (like annual household income) can give greater understanding to the influence of culture and financial access when considering identity. Demonstrated relationships or lack thereof could be useful in understanding the economic privilege, resources, and costs (un)associated with development of multicultural competence in counseling.

Demographic Identifiers and Mindfulness

Research in the field of mindfulness is scant with respect to demographic variables. Most studies examine the effects of mindfulness-based interventions on specific ailments, presenting concerns, or overall experience, but virtually none of the research examines rates of mindfulness practice or mindfulness proficiency among demographically specific groups. As such, results in this study offer information regarding correlations (or lack thereof) between mindfulness and age, race, gender, and annual household income among the therapists of this study only.

Generalizability to therapists writ large is inappropriate due to limited variance within sample across multiple categories, and the absence of certain groups.

In the present study, mindfulness score was not significantly correlated with therapist age, therapist race, or therapist annual household income. Mindfulness, as a practice, is free of cost, and is not limited to certain identities. Essentially, if one has basic brain functioning and a desire to engage, they can practice mindfulness. In a sample of practicing therapists with advanced degrees, it can be assumed that basic brain functioning is common to all subjects. Thus, it seems reasonable that therapist age, race, and annual household income were not significantly correlated with overall mindfulness score.

With respect to therapist gender, however, women tended to score higher on overall mindfulness score than men, $r(120) = -.239, p < .01$, and on subscales of the FFMQ, including FFM-Describing, FFM-Acting with Awareness, and FFM-Non-reacting. In fact, as a side note, women consistently scored higher on every subscale and overall score of both the MAKSS-CE-R and FFMQ, sometimes to a statistically significant degree. It is imprudent to interpret correlational results without clear evidence that the results are not by chance, but a trend seems to emerge around gender and the instruments used, whereby women tended to score higher than men on every measure of this study. Interpreting the differences in gender on the FFMQ and its subscales is difficult. It could simply be the results of a measurement effect, whereby women just score higher on these instruments because of the way the surveys are constructed. Or, it could be possible that there is something about identifying as female that also has something to do with self-perceptions of mindfulness and multicultural competence. The difference in scores could also have to do with social desirability, in that women may be more sensitive to the desirable qualities of these constructs, or tend to perceive these measures as more desirable than men.

Training and Multicultural Competence in Counseling

The influence of training and its relationship with multicultural competence in counseling showed results of varying consistency with the literature. As would be expected, participants that reported taking more multicultural counseling courses tended to score higher on the MAKSS-CE-R-Knowledge subscale, $r(121) = .364, p < .01$, and MAKSS-CE-R-Total score, $r(121) = .272, p < .01$. Though the literature suggests knowledge, skills, and overall multicultural competence score to be positively correlated with number of multicultural counseling courses taken (Menese, Wu, & Nepomuceno, 2001; Holcomb-McCoy & Myers, 1999), no relationship was demonstrated with number of multicultural courses taken and MAKSS-CE-R-Skills in the present study.

Data from this study also show positive correlations between degree obtained and MAKSS-CE-R-Total score, MAKSS-CE-R-Knowledge, and MAKSS-CE-R-Skills. These results are to be expected, as literature from the field has shown educational level to be positively correlated with multicultural competence (Sabani, et al., 1991), and because individuals that have obtained a doctorate have likely taken more multicultural counseling courses.

Finally, years of experience was positively correlated with MAKSS-CE-R-Skills score, a relationship that Menese, Wu, and Nepomuceno (2001) have demonstrated previously.

Therapist's perceived multicultural awareness, knowledge and overall competence were not significantly correlated to their years of experience in the field. Previous research has identified age and contact with culturally different persons as two variables that tend to correlate positively with higher levels of self-reported multicultural competence (Sodowsky et al., 1991), but this relationship was not found in the current data. Though it is expected that more years of experience would yield more contact with culturally different persons, it is not necessarily the case and cannot be inferred from the data. Another explanation for the lack of relationship could also reside in the limited variance in this variable of the sample. Seventy-six percent of the participating therapists reported having five years of experience or more, and this offers little

insight to the differences that gradations in experience may have on perceived multicultural competence.

As counselor education programs have introduced multiculturalism in counseling, focus has centered on the accrual of knowledge rather than the honing of skills- a phenomenon that Johnson (1987) distinguished as “knowing that” cultural differences exist, rather than “knowing how” to conduct effective counseling with culturally diverse clients. Historically, multicultural competence in counseling education has tended to be centered on knowledge (Holcomb-McCoy & Myers, 1999; Menese, Wu, & Nepomuceno, 2001; Ponterotto, 1991), and at the birth of the multicultural movement in counseling, knowledge was regarded as a vital component in understanding the diverse “other,” and the “psychological and social issues pertaining to living in a multicultural society,” (Constantine & Ladany, 2001, p.491). Unfortunately, while the theory hoped to guide counselors toward the wisdom of “etic” and “emic” knowledge, training sites tended to steer toward knowledge of specific group norms and behaviors in a generalized fashion. The findings in this study regarding training and multicultural competence are partly consistent with other studies put forth that have shown that knowledge/skills tend to be most conveniently and readily focused on in training programs, and are thus, the most consistent correlate with number of multicultural counseling courses taken.

Of note in examining the data regarding training and multicultural competence in counseling is the lack of relationship between MAKSS-CE-R-Awareness and any of the aforementioned training variables (number of multicultural counseling courses completed, degree obtained, and years of experience). It is concerning to see that training variables and years of experience do not significantly correlate with therapist reported awareness of own values, assumptions and biases. Yet, despite the disquieting nature of this missing relationship, it is consistent with some literature that suggests multicultural training programs have not evolved in-step with the research and conceptualization of multicultural counseling competence in the field,

(Sue & Sue, 2008). Unfortunately, some literature highlights a failure of many training programs to do justice to multiculturalism as a fundamental component to being an 'aware' therapist and intervening with clients, (Sue & Sue, 2008; Mio, 2005; Utsey, Grange, & Allyne, 2006). Then again, it may also be the case that clinicians with more experience recognize their biases, and are less likely to report mastery of them. Perhaps the therapists in this sample that endorsed having more years in the field also had more humility.

The absence of relationship between the number of multicultural courses taken by participants and MAKSS-CE-R-Awareness or MAKSS-CE-R-Skills may also be an issue of integration in professional training. Despite advocacy for an integrated, holistic approach by numerous voices in the field (Copeland, 1982; Collins & Pieterse, 2007; D'Andrea & Daniels, 1991; LaFramboise & Foster, 1992; Reynolds, 1995; Ridley, Mendoza, & Kanitz, 1992, 1994), integration of multiculturalism into every counseling course has been met with some resistance, as it requires collaboration and contribution from all parties involved, (Abreu et al. 2000). Some counseling education programs have begun including multiculturalism in their training models in the form of traditional programs, workshops designs, separate courses, interdisciplinary cognates, sub-specialty cognates (Brown, 2004), integrated programs (Valentin, 2006; Eifler, Potthoff, & Dinsmore, 2004; Ridley, Mendoza, and Kanitz, 1992, 1994), and experiential activities (Kim and Lyons, 2003). But, while efforts in the field have sought to teach therapists to fish rather than give them food, as it were, the lack of relationship between MAKSS-CE-R-Awareness and Skills, and number of multicultural courses taken is not entirely unexpected. Research has shown that multicultural awareness and skills are not necessarily commensurate with multicultural coursework in training programs (Menese, Wu, & Nepomuceno, 2001; Holcomb-McCoy and Myers, 1999). Furthermore, when considering the training models likely used in the programs of participants that indicated having 5 or more years of experience in the field, it is reasonable to

expect little more than a relationship between years of experience and MAKSS-CE-R-Knowledge for these particular participants.

Training and Mindfulness

Similar to the research regarding relationships between mindfulness and demographic markers, virtually no empirical research exists regarding the relationship between mindfulness in the field of psychotherapy, and counselor education and training. Speculatively, it is not unreasonable to think significant positive relationships might exist between facets of training like years of experience or degree obtained and mindfulness, as training in the art of counseling encourages therapists to be non-judgmental, non-reactive, aware, and observant. In the present study, such results were found to a small, but significant, degree. Participants that indicated having a doctorate, and thus more coursework and more academic training than those with a Master's degree, were more likely to score higher on FFM-Non-judging, $r(121) = .216, p < .05$. Additionally, therapists with 5 years of experience or more tended to score higher on the FFM-Non-judging and FFM-Non-reacting subscales, $r(121) = .230, p < .05$, and $r(121) = .201, p < .05$, respectively. One possible explanation for this positive relationship is that greater immersion in the field results in more practice and learning with respect to being non-reactive and non-judgmental. Handelsman, Gottlieb, and Knapp (2005) submit that becoming an ethical psychologist happens through a process of acculturation; perhaps it is the case that greater time spent learning and practicing helps therapists acculturate to the practices of non-judgment and non-reactivity.

No relationships were shown to exist between FFM-Total score and the number multicultural courses completed, degree obtained, or years of experience. The lack of significant relationships across these training variables is interesting to note. Exploratory as this study is, and with no other research with which to make comparisons, it is worth noting that more multicultural

courses, spending more time training in a formal program, and spending more time practicing in the field do not correlate with overall mindfulness score, or other subscales within the FFMQ. This study did not measure counselor competency, and did not ask for client perspective of therapist ability. It may be the case that mindfulness and its correlate scores on the FFMQ are peripheral or nonessential to therapy, but expecting some significant relationship, however small, between the facets of mindfulness as measured by the FFMQ, and clinician training and experience seems reasonable.

Multicultural Competence in Counseling and Mindfulness

For all participants, correlational analyses revealed a positive linear relationship of medium size between reported mindfulness and reported multicultural competence in counseling, $r(121) = .271, p < .01$, (Cohen, 1998; Hemphill, 2003). This finding indicates that higher scores on the FFMQ tend to correlate positively with higher scores on the MAKSS-CE-R, meaning that therapists that perceived themselves as more mindful also tended to perceive themselves as more multiculturally competent. As outlined in null hypothesis *H_{0a}*, subscales of the FFMQ also correlated positively with overall multicultural competence in counseling, like FFM-Observing, FFM-Describing, and FFM-Non-reacting. Furthermore, FFM-Total score was positively correlated with MAKSS-CE-R-Awareness, MAKSS-CE-R-Knowledge, and MAKSS-CE-R-Skills.

Among only the White-identified therapists, positive correlations were also demonstrated between MAKSS-CE-R-Total and FFM-Total scores, and also between MAKSS-CE-R-Total score and FFM-Observing, FFM-Describing, FFM-Non-judging, and FFM-Non-reacting. Also similar to the entire sample, correlational analyses among therapists that identified as White revealed positive relationships between FFM-Total score and subscales of the MAKSS-CE-R (MAKSS-CE-R-Awareness, MAKSS-CE-R-Knowledge, and MAKSS-CE-R-Skills).

Though the correlations are modest in this study, they show, at least within this sample, some positive relationships to exist. Directionality of the relationship cannot be established using only the correlations, but extant relationships may shed some light on the processes or skills shared by both mindfulness and multicultural competence in counseling. Comparisons of the strength of the relationships between the measures and their subscales across the two groups cannot be made. White-identified therapists had membership in both groups and, as such, contributed to the relationships in both sets of correlational analyses. Independent examination of the correlations between mindfulness and multicultural competence among all therapists, and among White-identified therapists, however, is permissible.

Predicting Multicultural Competence in Counseling

Initial regression analyses examined the potential effects of demographic markers like race and gender on the relationship between FFM-Total score and MASK-CE-R-Total score. Results in the present study do not show significant interactions between participant race and FFM-Total score, or between participant gender and FFM-Total score when predicting multicultural competence in counseling using MAKSS-CE-R-Total. Nor was there any significant finding in the current study of a two- or three-way interaction between participant race, gender, and FFM-Total score. Given the literature's clear and unyielding emphasis on facets of identity, power and privilege, and their relationship with the therapeutic process (Fraga, Atkinson, & Wampold, 2002; Norcross & Lambert, 2005; Ridley, 2005; D. W. Sue, 2001; Sue & Sue, 2008), it seemed likely that therapist race, gender, or both could moderate the effects of mindfulness in predicting multicultural competence in counseling. The current study suggests, however, that among the participant data included in analysis, neither race, nor gender, nor any interaction of the two moderate the effect of FFM-Total score in predicting MAKSS-CE-R-Total. Furthermore, the current study suggests that no three-way interaction exists between race, gender and FFM-Total score when predicting MAKSS-CE-R-Total score. Of the regression analyses that were

conducted, the model that included participant race, gender, FFM-Total score, and two- and three-way interactions among these variables as predictor variables accounted for the greatest amount of variance (12.1%) in MAKSS-CE-R-Total score ($R^2 = .121$), $F(7, 118) = 2.241$, $p = .04$.

Subsequent to multiple regression analyses based on the theory and research, exploratory analyses used backward elimination to find the “best fit” model within the available data. Being the first study to examine the relationship between mindfulness and multicultural competence in counseling, all subscales of the FFMQ were included in addition to demographic variables in the backward elimination analysis. As a whole, the final model accounts for approximately 14% of the variance in multicultural competence in counseling. Predictor variables comprising the model include, FFM-Observing, degree obtained, FFM-Describing, gender, and the interaction between gender and FFM-Observing such that FFM-Observing is a more significant predictor for participants that identified as male versus those that identified as female.

This model appears to indicate the influence of gender on mindful observing in predicting multicultural competence in counseling for the participating therapists. Among the female participants in this study, the degree to which they perceived themselves as mindfully observant gave virtually no indication of the degree to which they perceived themselves as multiculturally competent. FFM-Observing was nearly inconsequential as a predictor variable for the female participants, accounting for approximately 2% of the variance in overall multicultural competence score, whereas for the men it accounted for over 24% of the variance in MAKSS-CE-R-Total score. These results suggest that being mindfully observant is an especially important quality in predicting perceived multicultural counseling competence for male therapists.

One possible explanation of this finding can be offered by returning to the construct of power. Galinsky, Magee, Inesi, & Gruenfeld (2006) define perspective taking as “stepping

outside one's own experience and imagining the emotions, perceptions, and motivations of another individual" (p. 1068), and have shown that power tends to lead to a psychological state that makes perspective taking less likely. Power is a property of social relationships, such that individuals in power do not need to rely on accurate, comprehensive understanding of others (Galinsky et al., 2006). When high-power individuals do attempt to focus on the experiences of others, they tend to be unaware that others do not possess the same privileged knowledge as them, rely too heavily on their own vantage point, and are less accurate in detecting the emotional states of others, (Galinsky, et al., 2006). Power is associated with increased goal pursuit and objectification of others (Gruenfeld, Inesi, Magee, & Galinsky, 2005), and high-power individuals are more likely to view others in terms of qualities that serve their own personal agenda and interests. Fiske (1993) also submits that power is associated with increased demands on attention, and that it becomes difficult for individuals in power to take the various perspectives and experiences of others into account. Consequently, adaptive responses typically involve reduced perspective taking, (Fiske, 1993).

As FFM-Observing measures an individual's noticing or attendance to a variety of stimuli, perhaps the data suggest that the male therapist's capacity to be mindfully observant may distinguish him in his ability to counter the influence of power, and contribute significantly to his multicultural competence in counseling. In terms of gender identity only, the female therapists in the study are likely to have less power than male therapists, and are also likely to show less rigidity in their self-concept (Galinsky, Ku, & Wang, 2005), are less likely to rely on stereotyping (Galinsky & Moskowitz, 2000; Fiske, 1993), and are likely to have a greater capacity to focus on, and attend to, the meaningful psychological experiences of others, (Galinsky, Magee, Inesi, & Gruenfeld, 2006). Thus, it may be reasonable that score on the mindful observing scale accounts for far less of the variance in MAKSS-CE-R-Total score for women.

Though mindful observing (FFM-Observing) is a significant predictor variable on its own, interpreting the main effect of FFM-Observing, or Gender, for that matter, is difficult and should be done cautiously. Given the interaction that exists between these two variables, attempting to interpret with clarity the main effects of FFM-Observing or Gender as predictors of MAKSS-CE-R-Total score would not be wise at this time. However, while interpretation of mindful observing as an independent significant predictor of the variance in MAKSS-CE-R-Total score is withheld in this study, neurological research in mindfulness appears to support the possibility of a significant relationship (Dekeyser, et al., 2008; Shapiro, Schwartz, & Bonner, 1998; Singer et al., 2004).

The individual's aptitude for self-awareness, their ability to execute perspective taking, and the demonstration of empathy and compassion reside in the temporo-parietal junction of the brain. Hölzel, Lazar, Gard, Schuman-Olivier, Vago, and Ott (2011) have shown that mindfulness meditation practice increases gray matter density in the temporo-parietal junction, a neurological finding consistent with decades of reported experiential change by first-time and long-time mindfulness practitioners, alike. Additionally, increased gray matter density among mindfulness meditators was found in the cingulate cortex- an area involved in communication across various brain networks and strongly implicated as a key component of several intrinsic control networks- and in the hippocampus- an area involved in emotion regulation and memory, and essential to the authoring of episodic and autobiographical events, (Hölzel, Lazar, et al., 2011). Additionally, these areas work in conjunction with one another to enable a "theory of mind" (Saxe & Kanwisher, 2003), that allows one to conceive the viewpoint of others. Given that higher levels of mindful observation, as assessed by the Observe scale of the Kentucky Inventory of Mindfulness Skills (Baer, Smith, & Allen, 2004), is found to be associated with more engagement in empathy toward others (Dekeyser, Raes, Leijssen, Leysen, & Dewulf, 2008), FFM-Observing being a significant predictor variable of multicultural competence in counseling is plausible.

Mindfulness observation is shown to enhance cognitive flexibility and attentional functions (Moore & Malinowski, 2009), and may aid the practitioner in experiencing multiple perspectives with equal validity. Decety and Jackson (2004) submit that accurate observations of the self are required for the appropriate understanding of others. As Wallace (2001) puts it, "...I view my body and mind from what I imagine to be your perspective, so that I begin to sense my own presence not only 'from within' but 'from without.' Such a practice leads to the insight that the second-person perspective on one's own being is just as 'real' as the first-person perspective; and neither exists independently of the other," (p. 5). Research shows that many of the same subset of regions in the brain (namely, the insula and the temporo-parietal junction) required for self-awareness and observation of experience are also engaged in social cognition and empathic attunement (Singer et al., 2004). Individuals in this study with higher levels of mindful observance may also engage more in empathy, have greater density in the areas required for both observation of bodily states and diverse perspectives, and could have a greater capacity to connect with the experience of another across cultural gaps.

Lastly, research also shows that mindfulness meditation can contribute to increased interoceptive (Critchley, Wiens, Rotchtein, Ohman, & Dolan, 2004) and exteroceptive awareness (Farb, et al., 2007), and is associated with increased neurodensity in regions of the brain (e.g. the fronto-insular cortex and the anterior cingulate cortex) that contribute to maintenance of attention and resolution of conflicts in information processing (van Veen & Carter, 2002). Interoception is an individual's sensitivity to stimuli originating inside the body (pain, movement of the body and its parts, thoughts, feelings, reactions, assumptions, etc.) and exteroception is an individual's sensitivity to stimuli originating outside of the body (sound, sight, taste, touch, smell, etc.). As an individual encounters distracting or unpleasant internal or external stimuli, coordination of the insula, the anterior cingulate cortex, and the secondary somatosensory cortex works to regulate emotion, switching between activations of different brain networks, thereby facilitating cognitive

control, (Sridharan, Levitin, & Menon, 2008; Hölzel et al., 2007). Some research shows that mindfulness meditation can enhance activation and control of the secondary somatosensory area, and has been suggested to increase bottom-up processing of a stimulus, (Gard et al., 2010). Hawkins and Blakeslee (2004) submit that the mind instinctively searches for invariant representations to save mental energy. In so doing, gaps in information are filled, and biases color the nature of our assumptions. Siegel (2010) promotes that a mindful brain is capable of “disarming the predominance of top-down flow so that we can sense the primacy of bottom-up with more clarity,” (p. 105). Hölzel and others (2011) offer that increased neuronal density in the insula and the cingulate cortex (anterior and posterior) may be associated with the mindful observation aspect of mindfulness meditation. In light of this possibility, a link between mindful observing and an individual’s ability to engage in multiculturally competent therapy is entirely conceivable.

Predicting Multicultural Competence Among White-identified Participants

A second exploratory analysis was conducted in this study that sought a predictive model for multicultural competence in counseling among therapists that identified as White. Among White-identified therapists in the present study, 24% of the variance in MAKSS-CE-R-Total score is accounted for by a model that includes annual household income of \$50,001 or more, FFM-Observing, degree obtained, the interaction between gender and FFM-Observing, and the interaction between gender and FFM-Non-judging as predictor variables. Conclusions about the difference in variance accounted for, or predictor variables included between the two exploratory models cannot be made, as White-identified therapist data are part of both models. However, it is interesting to note the recurring presence of gender’s moderating effect on FFM-Observing in predicting MAKSS-CE-R-Total score.

Score on the FFMQ mindful observing scale among self-identified White, male therapists in the present study accounts for over 31% of the variance in perceived multicultural competence in counseling as measured by the MAKSS-CE-R. This is a powerful predictor in social sciences and psychology research. As previously mentioned, a few possible explanations include privilege and power, changes in brain structure, neurodensity, and neuroplasticity associated with mindful observing, and greater awareness of self and others. The only true assertion from the data that can be made at this time, is that men (who participated in the study, of course) who perceive themselves as more mindfully observant, also perceive themselves as more multiculturally competent. Though it is unclear what exactly this relationship means at present, it appears that there is something about mindful observing, particularly in men, which warrants further exploration.

It is also interesting to note that among White participants, FFM-Observing is a significant predictor exclusive to men, but FFM-Non-judging is a significant predictor exclusive to women. Nearly 10% of the variance in MAKSS-CE-R-Total score is accounted for by FFM-Non-judging score for White, female therapists. For White men in the present study, perceived mindful non-judging score accounts for less than 1% of the variance in perceived multicultural competence. Baer and others (2006) submit that the Non-judging subscale of the FFMQ measures an individual's ability to refrain from assigning evaluative labels to observed phenomena. In the context of the current study, it appears that among White therapist participants, women that perceive themselves as more mindfully non-judging also tend to perceive themselves as more multiculturally competent. Ten percent of the variance in perceived multicultural competence is not much, however, and it is difficult to assert much in the way of interpretation of such results. Certainly, a therapist's capacity for mindful non-judgment would seem to aid them in an effort to understand the perspective and experience of another.

Suspension of judgment, and the enablement of bottom-up processing could help facilitate multicultural competence in counseling. Becoming adept at refraining from assigning evaluative labels could facilitate less biased scientific mindedness and hypothesis testing. Additionally, greater control of the networks that switch between top-down and bottom-up processing could increase therapist agility and prudence in dynamic sizing (S. Sue, 2006) when working with culturally and experientially diverse clients. Stanley Sue argues that knowing when generalize and when not to is essential, and non-judgment could be a quality that helps therapists let the data tell the story. Ascertaining why this is a significant predictor for White women and not White men, however, remains a mystery at this time. Future research efforts that consider the mindful experience of White, female therapists might do well to consider the importance of mindful non-judging, and the perception of self as such, within the context of perceived multicultural competence in counseling.

Limitations

There are several limitations to this study that should be acknowledged. Threats to internal and external validity are noted, and important considerations about the interpretation of data are offered.

Firstly, this study used self-report data. In using self-report data, especially with regards to multicultural competence, considerable attention must be paid to the influence of social desirability (Constantine & Ladany, 2000), and discrepancies between client and therapist perceptions of multicultural competence (Owen, Leach, Wampold, & Rodolfa, 2011). As social justice and competency working with diverse clientele are highly desired in the profession, participating therapist's scores on the MAKSS-CE-R in conjunction with a lack of corroboration from their clients are subject to exaggeration. Furthermore, Constantine and others (2002) argue that self-report instrumentation might actually measure multicultural counseling self-efficacy, not

respondents' demonstrated ability to counsel diverse populations. In actuality, this notion was corroborated in a study by Cartwright, Daniels, and Zhang (2008) that showed this phenomenon to occur with the MAKSS-CE-R. In their study, the authors found that self-report measures on the MAKSS-CE-R were significantly higher than observer ratings across each of the subscales, and cautioned against using self-report measures as a primary means of assessing counselor multicultural competence. However, it should be noted that self-report measures can have some use in helping individuals understand current multicultural competencies, and in identifying areas for improvement in training programs, (D'Andrea, 2005).

Secondly, readers and scholars must be mindful of the fact that survey data are specific to those that chose to participate and do not include information about the individuals that declined to respond to the survey. It is possible the individuals that consented to participation were also individuals that believed themselves to be multiculturally competent in the counseling arena, or that had experience or familiarity with mindfulness. Were this the case, the results would likely be inflated in the positive direction, as therapists would probably experience a sunk-cost phenomenon upon beginning the survey. Also, in acknowledging that there are participants that chose not to participate, it must also be acknowledged that mindfulness and multicultural competence in counseling among this group was not included in the data.

A third threat to internal validity is the current study's lack of data from the perspective of the client. Participants completed surveys that asked about their demographic background, their perceived multicultural competence in counseling and their perceived mindfulness on a day-to-day basis. The present study did not examine the degree to which therapists perceive themselves as mindful in-session, nor did it solicit data regarding therapist use of mindfulness techniques in their clinical work. Without data from clients about the multicultural competence or mindfulness of the counselor, interpretation of how this translates in-session is less than complete. This concern about lack of multiple perspectives is one that previous researchers have

highlighted, (Griner & Smith, 2006; Worthington & Dillon, 2011). The primary objective and design of this study was merely to explore and establish if perceived mindfulness traits or qualities are associated with perceived multicultural competence. Thus, data about clinical interventions and outcomes were not collected, and declarations about treatment modalities are not made. Secondary to exploration, though, the hope in this study is that it might help therapists learn about best practice in the field of counseling psychology, and offer ways of cultivating competence across diversity in all of its forms.

Fourthly, with respect to the demographic data collected, little variance is offered in the categories of therapist training, years of experience and number of multicultural courses completed. Data were solicited using pre-determined ordinal scales (e.g. 0 years, 1-2 years, 3-4 years, 5 years or more). As such, little can be gleaned about the moderation of these variables on the relationship between mindfulness and multicultural competence in counseling. For example, no interpretation is available for the potential difference in moderating effect of experience between therapist participants that may have been practicing for decades versus those that have practiced for 5 years. Data was organized in this fashion to make statistical analysis easier, but in so doing, may have limited detection of the nuanced effects of time, experience, and/or degree obtained. Additionally, data was not collected on the degree to which participants had already received mindfulness training, or instruction in empathic attunement, and/or strategic attention control. Training in these areas could have significantly influenced responses to various subscales of the FFMQ. Also, without these data, conclusions cannot be drawn regarding the teach-ability of mindfulness as a skill, nor can conclusions be made about engaging in mindfulness training or discipline as having a relationships with multicultural competence in counseling.

Generalizability is an important threat to external validity, and caution must be exercised when inferring relationships about therapists in diverse settings based on data from those practicing in college counseling centers. The data reveal the existence of a relationship between

mindfulness and multicultural competence in counseling on the basis of two self-report instruments. The present study does not purport to show the relationship between mindfulness and therapeutic outcomes. As such, restraint is paramount in considering implications for research, training and practice. While it can be deduced from the literature that increased multicultural competence would be unlikely to hinder, and would probably advance, positive outcomes in therapy, and, as this paper suggests, mindfulness would do the same, one would be remiss to interpret this positive correlation among college counseling center therapists' self-reports as a statement about therapists in other settings. Besides, Dunn, Smith, & Montoya (2006) have clearly outlined, sufficient research has been conducted within college student populations, and expanding the sampling pool is crucial in expanding an understanding of this relationship.

Implications for Training

Training therapists to be multiculturally competent in clinical settings is a critical issue in the field. Like the literature presented in this study shows, concerted efforts need to be made among training programs in educating and training therapists to provide culturally aware and individually informed treatment to clients. The data in this study suggest that mindful observing may be an important variable to consider when examining multicultural competence in counseling- especially for male therapists. The caveat remains that all data were self-reported valuations of perceived abilities or competence, but helping practitioners become more mindful (especially mindfully observant) has not shown to have any harmful effects, and may translate to increased multicultural competence.

Supervisors and the supervisory relationship are vital to this equation, too. Literature has stressed the importance of addressing and discussing cultural variables during supervision (Brown & Landrum-Brown, 1995; Constantine, 1997), yet research shows that these conversations are happening with very low frequency, and often have to be initiated by

supervisees (Gatmon, et al., 2001). Perhaps one reason why these conversations are happening with such infrequency is because supervisors are unaware of their own cultural encapsulation (Fukuyama, 1994), view them as unimportant (Arkin, 1999), or have had experiences of being unable to resonate with supervisees and have resolved to just avoid the topic(s) altogether, (Toporek, Ortega-Villalobos, Pope-Davis, 2004). Supervision is the premier arena for experiential learning and clinical growth, and must be a space for safe exploration of multicultural issues in counseling. Future efforts that teach mindfulness to supervisors, supervisees, and both at the same time may yield improved frequency and proficiency in discussing multicultural topics in supervision. Mindfulness could improve awareness of self and others, and could facilitate better communication between both parties in supervision. Most importantly, it may result in better care for culturally diverse clients.

Lastly, with respect to both training and supervision, it should be noted that mindfulness meditation is shown to reduce the shrinkage of the cortex naturally associated with aging, (Lazar et al., 2005; Pagnoni & Cekic, 2007). As therapists age, reduced surface area of the cortex can translate to reduced ability to empathically attune to others, limited capacity for compassion, and decreased accuracy in perspective taking. Training supervisors to practice mindfulness could mitigate the effects of aging that decrease the number and diversity of neural connections in the cortex. Thus, trainees and supervisors of all ages could benefit from the practice of mindfulness and its neuroprotective effects.

Implications for Future Research

Future research efforts can continue the search for understanding multicultural competence in the counseling setting and its relationship to mindfulness in several ways. Truly measuring a construct like multicultural competence is a major difficulty inherent in any research effort. The dance that happens across time and culture in a relationship is, put simply, complex

and overdetermined. When this dance occurs between counselor and client, new dynamics of power and role are introduced, and issues of social justice and mental health make the stakes high. A major limitation to the present study was this measurement of multicultural competence. The MAKSS-CE-R has, of late, been criticized for its limited validities of content and construct (Constantine et al., 2002), and some research also reveals statistically significant inconsistency when comparing self-report scores and independent observer ratings, (Cartwright, Daniels, & Zhang, 2008). Though the MAKSS-CE-R was designed in the spirit of early multicultural counseling theory, and demonstrates adequate goodness of fit to D. W. Sue et al.'s (1992, 1982) tripartite model (Dunn, Smith, & Montoya, 2006), new research has suggested that true multicultural competence may be far more complex than awareness, skills, and knowledge.

Leung, Ang, and Tan (2014) have identified more than 300 concepts related to multicultural competency. From these 300 concepts, the authors identified three major areas of research examining intercultural traits, intercultural attitudes and worldviews, and intercultural capabilities. The assertion put forth by the authors is that intercultural capabilities are the 'most proximal predictors' to true multicultural performance, as they mediate intercultural traits, and intercultural attitudes and worldviews. That is to say, Leung, Ang, and Tan (2014) promote that addressing intercultural capabilities is most likely to result in measured differences in multicultural competence and outcome behaviors. Similar to empathy, multicultural competence is a quality of attunement and understanding, not just a quantity of knowledge. It cannot simply be taught with static principles and scripted responses. It should not be measured only by external, observable behaviors. In this way, new research is shedding light on the dynamic gradations of multicultural competence, capability, and the blend of art and science that is required of therapists that may not have been measured by the instruments used in this study.

A recent review of the available measures of cross-cultural competence by Matsumoto and Hwang (2013) has endeavored to thoroughly assess the content, construct, and ecological

validities of ten major instruments designed to measure cross-cultural competence. The authors concluded that among the instruments included in their critique, CQ (Cultural Intelligence; Ang, Van Dyne, Koh, Ng, Templer, Tay, & Chandrasekar, 2007), the Intercultural Adjustment Potential Scale (ICAPS; Matsumoto et al., 2001), and the Multicultural Personality Inventory (MPQ; van der Zee & van Oudenhoven, 2000) had “the most promising evidence for assessing cross-cultural competence,” (p. 867). Each of the instruments measure different qualities or constructs of cross-cultural competency based on the “knowledge, skills, awareness and others” (KSAOs) that were theoretically hypothesized or empirically demonstrated to underlie each test. As such, some of the instruments measure predicted psychological adjustment (ICAPS) and international vocational interests (MPQ). With regards to the present study, CQ predicts cognitive decision making processes and measures an individual’s capability for dealing effectively in situations characterized by cultural diversity. As such, it would appear to be the best instrument of those reviewed by Matsumoto and Hwang (2013) for use with therapists in the future.

Future research that examines the processes of mindfulness and their influence or relationship across the four domains of CQ (Metacognitive, Cognitive, Motivational, and Behavioral) might offer better conceptualization and validity in measuring multicultural competence than the MAKSS-CE-R, and could also identify new relationships to explore. Essentially, CQ may get at something the MAKSS-CE-R cannot or does not address. Mindfulness is both a philosophy and a behavior. Truly, it is the practice, development, and honing of an intention that enables for richer, more accurate experience individually and within relationships. Examining mindfulness across all domains of CQ could offer more accurate information about multicultural competence and the potential relationship they share because CQ is a capability model; and as Leung and others (2014) have suggested, intercultural capabilities are more likely to show differences in outcome. To go one step further, it could also give to a greater

understanding of how the cultivation of internal and external states of compassion and awareness actuate the behaviors said to define outcomes of multicultural competence in counseling.

Qualitative data gathering and therapist clinical outcomes are also important directions for future research. Efforts to compile both quantitative and qualitative data can help in understanding the vast quality of mindfulness in therapeutic settings. Research clearly shows that mindfulness practice affects neurophysiology and that these changes often result in positive outcomes for clients across a broad spectrum of presenting issues and concerns (Lazar, 2005). However, little research has examined the impact of mindfulness practice on therapists and the outcomes that follow in their clinical work. Furthermore, research has yet to examine the impact of mindfulness as a communal practice between client and clinician. Future research that takes a mixed-methods approach to exploring the effects of mindfulness practice on clinicians, preferably in culturally diverse settings, and its ensuing effects on client experience and outcome is needed. If positive relationships do exist between clinician mindfulness and client outcome, future research efforts should also consider how mindfulness is most effectively taught to therapists.

Research in the fields of multiculturalism and mindfulness in therapy must also investigate the constructs named in this paper in live settings. Stanley Sue (2003) has, quite poignantly, asked, “What is the evidence for the effectiveness of cultural competence? How is culture competency defined? How can culturally competent providers be identified?” (p. 966). Answers to these questions must come from real-world settings. After all, theory and research divested of application to practice is hollow and meaningless. Future efforts toward this end should use neuroimaging research to explore specific regions of gray matter density in therapists identified (by peers and clients, alike) as multiculturally competent practitioners. Research could also see what effects, if any, mindfulness meditation has on therapist brain region neurodensity and neuroplasticity, and multiculturally relevant client experiences and/or outcomes.

Finally, one special consideration in measuring increased empathy in mindfulness meditators could be to consider empathy across cultural definitions. Empathy is essential in both multicultural therapy and mindfulness, and is often singularly defined as if beyond the coloring of a cultural lens. The inclusion of ‘cultural empathy’ (Pederson, Crethar, & Carlson, 2008) as a measured construct in this research could help broaden understandings of empathy and how it manifests across diverse settings. Client and clinician data on the four categories of cultural empathy (mistakes and recoveries, articulating the problem from the client’s perspective, recognizing client resistance, and overcoming defensiveness: Pederson, Crethar, & Carlson, 2008) could help clarify the influence of mindfulness in its application across culturally diverse settings, and could clarify the role of empathy common to mindfulness and multicultural competence in counseling.

Conclusion

Research clearly shows that multicultural competence is vital to the health and well-being of innumerable individuals in this country. Without the ability to increase therapist competence across culturally complex situations in counseling, countless people may never experience the salutary effects of therapy. They may even be harmed and oppressed. The field must continue to cultivate awareness of its values, assumptions, and biases, and must continue to make efforts toward a greater, more inclusive understanding of what works, and for whom, in therapy. The present study identifies a positive relationship between perceived mindfulness and perceived multicultural competence in counseling. To continue to evolve, the field must be open to new experiences, and new sources of multicultural wisdom. This study asserts that such wisdom for therapists manifests in the paying attention on purpose- moment by moment, nonjudgmentally, with an orientation characterized by openness, curiosity, and acceptance.

Tables

Descriptive Statistics and Frequencies

Table 1-1a: Descriptive Statistics for All Participants

	N	Minimum	Maximum	Mean	Standard Deviation
Gender	122	0.00	1.00	.672	.471
Age	123	0.00	5.00	1.886	1.099
Race	123	0.00	1.00	.780	.416
Doctorate Indicator	123	0.00	1.00	.667	.473
Multicultural Counseling Courses Completed	111	0	6.00	1.69	1.313
Years of experience		0.00	5.00		
Annual Household Income	123	0.00	1.00	.715	.453
MAKSS-Awareness	123	12	37	28.32	4.080
MAKSS-Knowledge	123	26	52	38.60	5.417
MAKSS-Skills	123	16	39	29.98	3.620
MAKSS-Total	123	66	120	96.89	9.700
FFM-Observing	123	18	40	29.15	3.985
FFM-Describing	123	20	40	31.24	4.929
FFM-Acting with Awareness	123	17	36	27.47	4.132
FFM-Non-judging	123	20	40	32.80	4.865
FFM-Non-reacting	123	16	35	24.84	3.766
FFM-Total	123	115	186	145.50	14.819

Table 1-1b: Descriptive Statistics for White-identified Participants

	N	Minimum	Maximum	Mean	Standard Deviation
Gender	87	0.00	1.00	.609	.491
Age	87	0.00	5.00	1.954	1.099
Doctorate Indicator	87	0.00	1.00	.678	.470
Multicultural Counseling Courses Completed	87	0	6.00	1.59	1.387
Years of Experience		0.00	5.00		
Annual Household Income	87	0.00	1.00	.793	.407
MAKSS-Awareness	87	12	37	28.26	4.241
MAKSS-Knowledge	87	26	49	37.90	5.131
MAKSS-Skills	87	21	38	30.22	3.435
MAKSS-Total	87	66	117	96.38	9.470
FFM-Observing	87	21	40	29.05	3.729
FFM-Describing	87	20	40	31.46	4.162
FFM-Acting with Awareness	87	18	36	27.40	3.937
FFM-Non-judging	87	22	40	33.10	4.671
FFM-Non-reacting	87	16	35	24.92	3.871
FFM-Total	87	116	184	145.93	14.007

Table 1-2: Race Frequency for All Participants

Race (Indicator)	Frequency	Percent	Valid Percent	Cumulative Percent
White/ Caucasian/ European American (1)	87	70.7	71.3	71.3
African American/ Black (0)	8	6.5	6.6	77.9
Asian/ Asian American	14	11.4	11.5	89.4
Hispanic/ Latino/a (0)	4	3.3	3.2	92.6
American Indian or Alaska Native (0)	0	0	0	92.6
Native Hawaiian/ Other Pacific Islander (0)	0	0	0	92.6
Multiracial (0)	9	7.3	7.4	100.0
Other	1	.8		
Total	123	100.0	100.0	

*Multiracial participants that identified as White, and Hispanic/ Latino/a, or as White, Asian/ Asian American, and Native Hawaiian or Other Pacific Islander were indicated as “0.” Rationale for this coding in the statistical analyses is given in “Chapter 3: Methods.”

Table 1-3a: Gender Frequency for All Participants

Reported Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Men (0)	40	32.5	32.8	32.8
Women (1)	82	66.7	67.2	100.0
Other	1	.8	0	
Total	123	100.0	100.0	

Table 1-3b: Gender Frequency for White-identified Participants

Reported Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Men (0)	34	39.1	39.1	39.1
Women (1)	53	60.9	60.9	100.0
Total	87	100.0	100.0	

Table 1-4a: Age Frequency for All Participants

Age (Indicator)	Frequency	Percent	Valid Percent	Cumulative Percent
18-24 (0)	2	1.6	1.6	1.6
25-34 (1)	54	43.9	43.9	45.5
35-44 (2)	37	30.1	30.1	75.6
45-54 (3)	18	14.6	14.6	90.2
55-64 (4)	10	8.1	8.1	98.4
65-74 (5)	2	1.6	1.6	100.0
75+ (6)	0	0	0	
Total	123	100.0	100.0	

Table 1-4b: Age Frequency for White-Identified Participants

Age (Indicator)	Frequency	Percent	Valid Percent	Cumulative Percent
18-24 (0)	1	1.1	1.1	1.1
25-34 (1)	37	42.6	42.6	43.7
35-44 (2)	26	29.9	29.9	73.6
45-54 (3)	13	14.9	14.9	88.5
55-64 (4)	8	9.2	9.2	97.7
65-74 (5)	2	2.3	2.3	100.0
75+ (6)	0	0	0	
Total	87	100.0	100.0	

Table 1-5a: Doctorate Frequency for All Participants

Degree Obtained (Indicator)	Frequency	Percent	Valid Percent	Cumulative Percent
Master's (0)	41	33.3	33.3	33.3
Doctorate (1)	82	66.7	66.7	100.0
Total	123	100.0	100.0	

Table 1-5b: Doctorate Frequency for White-identified Participants

Degree Obtained (Indicator)	Frequency	Percent	Valid Percent	Cumulative Percent
Master's (0)	28	32.2	32.2	32.2
Doctorate (1)	59	67.8	67.8	100.0
Total	87	100.0	100.0	

Table 1-6a: Annual Household Income Frequency for All Participants

Annual Household Income (Indicator)	Frequency	Percent	Valid Percent	Cumulative Percent
\$0-7,500 (0)	1	0.8	0.8	0.8
\$7,501-15,000 (0)	1	0.8	0.8	1.6
\$15,001-25,000 (0)	8	6.6	6.6	8.2
\$25,001-35,000 (0)	10	8.2	8.3	16.5
\$35,001-50,000 (0)	13	10.6	10.7	27.2
\$50,001+ (1)	88	71.5	72.8	100.0
No Annual Income Reported	2	1.6	0	
Total	123	100.0	100.0	

Table 1-6b: Annual Household Income Frequency for White-identified Participants

Annual Household Income (Indicator)	Frequency	Percent	Valid Percent	Cumulative Percent
\$0-7,500 (0)	0	0	0	0
\$7,501-15,000 (0)	1	1.1	1.1	1.1
\$15,001-25,000 (0)	3	3.4	3.5	4.6
\$25,001-35,000 (0)	4	4.6	4.7	9.3
\$35,001-50,000 (0)	8	9.3	9.5	18.8
\$50,001+ (1)	69	79.3	81.2	100.0
No Annual Income Reported	2	2.3	0	
Total	87	100.0	100.0	

Table 1-7a: Number of Years of Experience Frequency for All Participants

Years of Experience (Indicator)	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 1 year (0)	1	.8	.8	.8
1-2 Years (0)	8	6.6	6.6	7.4
3-4 Years (0)	20	16.2	16.2	23.6
5 Years or more (1)	94	76.4	76.4	100.0
Total	123	100.0	100.0	

Table 1-7b: Number of Years of Experience Frequency for White-identified Participants

Years of Experience (Indicator)	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 1 year (0)	1	1.1	1.1	1.1
1-2 Years (0)	6	6.9	6.9	7.0
3-4 Years (0)	12	13.8	13.8	21.8
5 Years or more (1)	68	78.2	78.2	100.0
Total	87	100.0	100.0	

Correlations

Table 2-1a: MAKSS-CE-R and FFMQ Correlations for All Participants

	MAKSS- A	MAKSS- K	MAKSS- S	MAKSS- Total	FFM-O	FFM-D	FFM-AA	FFM-NJ	FFM-NR	FFM- Total
MAKSS- Awareness	1	.274**	.130	.622**	.133	.181*	.050	.228*	.112	.205*
MAKSS- Knowledge		1	.486**	.855**	.291**	.105	.138	.012	.148	.189*
MAKSS- Skills			1	.699**	.162	.250**	.113	.091	.142	.214*
MAKSS- Total				1	.279**	.228*	.140	.132	.183*	.271**
FFM- Observing					1	.335**	.334**	.214*	.337**	.615**
FFM- Describing						1	.521**	.343**	.390**	.737**
FFM-Acting with Awareness							1	.300**	.404**	.721**
FFM- Non- judging								1	.527**	.703**
FFM- Non- reacting									1	.744**
FFM- Total										1
N	123	123	123	123	123	123	123	123	123	123

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 2-1b: MAKSS-CE-R and FFMQ Correlations for White-identified Participants

	MAKSS- A	MAKSS- K	MAKSS- S	MAKSS- Total	FFM-O	FFM-D	FFM-AA	FFM-NJ	FFM-NR	FFM- Total
MAKSS- Awareness	1	.266*	.147	.645**	.157	.154	.082	.278**	.165	.249*
MAKSS- Knowledge		1	.503**	.843**	.404*	.105	.120	.104	.234*	.272*
MAKSS- Skills			1	.701**	.190	.241*	.137	.117	.088	.224*
MAKSS- Total				1	.358**	.214*	.151	.224*	.233*	.340**
FFM- Observing					1	.303**	.363**	.121	.329**	.590**
FFM- Describing						1	.507**	.315**	.350**	.722**
FFM-Acting with Awareness							1	.238*	.406**	.720**
FFM- Non- judging								1	.489**	.661**
FFM- Non- reacting									1	.745**
FFM- Total										1
N	87	87	87	87	87	87	87	87	87	87

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 3-1a: MAKSS-CE-R and Demographic Identifier Correlations for All Participants

	MAKSS- A	MAKSS- K	MAKSS- S	MAKSS- Total	Gender Indicator	Age	Race	Annual Income
MAKSS- Awareness	1	.274**	.130	.622**	-.053	-.028	.032	.094
MAKSS- Knowledge		1	.486**	.855**	-.057	.064	-.192*	.100
MAKSS- Skills			1	.699**	-.188*	.126	.138	.246**
MAKSS- Total				1	-.125	.071	-.042	.187*
Gender Indicator (Male = 1; Female = 0)					1	-.357**	-.162	-.211*
Age						1	.129	.325**
Race (White = 1; Non- majority = 0)							1	.275**
Annual Income (\$50,000 ≥ = 1; >\$49,999 = 0)								1
N	123	123	123	123	122	123	123	123

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 3-1b: MAKSS-CE-R and Demographic Identifier Correlations for White-identified Participants

	MAKSS- A	MAKSS- K	MAKSS- S	MAKSS- Total	Gender Indicator	Age	Annual Income
MAKSS- Awareness	1	.273**	.132	.646**	-.055	-.031	.131
MAKSS- Knowledge		1	.519**	.850**	-.171	.086	.154
MAKSS- Skills			1	.698**	-.244*	.077	.262**
MAKSS- Total				1	-.207*	.060	.236*
Gender Indicator (Male = 1; Female = 0)					1	-.332**	-.144*
Age						1	.213**
Annual Income (\$50,000 ≥ 1; >\$49,999 = 0)							1
N	87	87	87	87	87	87	87

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 3-2a: MAKSS-CE-R and Training Correlations for All Participants

	MAKSS- A	MAKSS- K	MAKSS- S	MAKSS- Total	MC Courses Completed	Doctorate Indicator	Years of Experience Indicator
MAKSS- Awareness	1	.274**	.130	.622**	.138	.064	-.004
MAKSS- Knowledge		1	.486**	.855**	.364**	.188*	.172
MAKSS- Skills			1	.699**	.024	.287**	.214*
MAKSS- Total				1	.272**	.239**	.174
MC Courses Completed					1	.131	.174
Doctorate Indicator (PhD = 1; MA = 0)						1	.664**
Years of Experience Indicator (5 Years or more = 1; ≥ 4 Years = 0)							1
N	123	123	123	123	123	123	123

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 3-2b: MAKSS-CE-R and Training Correlations for White-identified Participants

	MAKSS- A	MAK SS- K	MAKSS- S	MAKSS- Total	MC Courses Completed	Doctorate Indicator	Year of Experience Indicator
MAKSS- Awareness	1	.273**	.130	.646**	.141	.103	.030
MAKSS- Knowledge		1	.519**	.850**	.355**	.258*	.208*
MAKSS- Skills			1	.698**	.072	.288**	.172
MAKSS- Total				1	.287**	.289**	.188
MC Courses Completed					1	.147	.167
Doctorate Indicator (PhD = 1; MA = 0)						1	.676**
Years of Experience Indicator (5 Years or more = 1; \geq 4 Years = 0)							1
N	87	87	87	87	87	87	87

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 3-3a: FFMQ and Demographic Identifier Correlations for All Participants

	FFM- O	FFM- D	FFM- AA	FFM- NJ	FFM- NR	FFM- Total	Gender Indicator	Age	Race	Annual Income
FFM- Observing	1	.335**	.334**	.214*	.337**	.615**	-.041	.066	.069	-.063
FFM- Describing		1	.521**	.343**	.390**	.737**	-.192*	.064	.168	.162
FFM- Acting with Awareness			1	.300**	.404**	.721**	-.183*	-.093	.018	-.020
FFM- Non-judging				1	.527**	.703**	-.171	.088	.193*	.089
FFM- Non-reacting					1	.744**	-.256**	.074	.103	.026
FFM- Total						1	-.239**	.058	.162	.060
Gender Indicator (Male = 1; Female = 0)							1	-.357**	-.162	-.211*
Age								1	.129	.325**
Race (White = 1; Non-majority = 0)									1	.275**
Annual Income (\$50,000 ≥ = 1; >\$49,999 = 0)										1
N	123	123	123	123	123	123	122	123	123	123

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 3-3b: FFMQ and Demographic Identifier Correlations for White-identified Participants

	FFM- O	FFM- D	FFM- AA	FFM- NJ	FFM- NR	FFM- Total	Gender Indicator	Age	Annual Income
FFM- Observing	1	.317**	.381**	.123	.345**	.590**	-.116	.104	-.032
FFM- Describing		1	.532**	.360**	.408**	.751**	-.170	.054	.198
FFM- Acting with Awareness			1	.284**	.428**	.747**	-.174	-.119	.004
FFM- Non-judging				1	.496**	.670**	-.124	.045	.101
FFM- Non-reacting					1	.753**	-.304**	.063	.025
FFM- Total						1	-.250*	.039	.090
Gender Indicator (Male = 1; Female = 0)							1	-.332**	-.144
Age								1	.213*
Annual Income (\$50,000 ≥ = 1; >\$49,999 = 0)									1
N	87	87	87	87	87	87	87	87	87

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 3-4a: FFMQ and Training Correlations for All Participants

	FFM- O	FFM- D	FFM- AA	FFM- NJ	FFM- NR	FFM- Total	MC Courses Completed	Doctorate Indicator	Years of Experience
FFM- Observing	1	.335**	.334**	.214*	.337**	.615**	.064	.043	.069
FFM- Describing		1	.521**	.343**	.390**	.737**	-.114	.040	.036
FFM- Acting with Awareness			1	.300**	.404**	.721**	-.059	.064	.040
FFM- Non-judging				1	.527**	.703**	-.004	.216*	.230*
FFM- Non-reacting					1	.744**	-.020	.093	.201*
FFM- Total						1	-.040	.136	.167
MC Courses Completed							1	.131	.174
Doctorate Indicator (PhD = 1; MA = 0)								1	.664**
Years of Experience Indicator (5 Years or more = 1; ≥ 4 years = 0)									1
N	123	123	123	123	123	123	122	123	123

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 3-4b: FFMQ and Training Correlations for White-identified Participants

	FFM- O	FFM- D	FFM- AA	FFM- NJ	FFM- NR	FFM- Tctal	MC Courses Completed	Doctorate Indicator	Year \$ of Experience
FFM- Observing	1	.317**	.381**	.123	.345**	.590**	.079	.099	.074
FFM- Describing		1	.532**	.360 *	.408**	.751**	-.123	.061	.012
FFM- Acting with Awareness			1	.284**	.428**	.747**	-.074	.106	.016
FFM- Non-judging				1	.496**	.670**	.082	.211*	.239*
FFM- Non-reacting					1	.753**	.012	.083	.155
FFM- Total						1	-.009	.164	.145
MC Courses Completed							1	.147	.167
Doctorate Indicator (PhD = 1; MA = 0)								1	.676**
Years of Experience Indicator (5 Years or more = 1; \geq 4 years = 0)									1
N	87	87	87	87	87	87	87	87	87

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Model Summaries

Table 4-1: Model 1 Summary

Model	R	R-Squared	Adjusted R-Squared	Std. Error of the Estimate
1	.313 ^a	.098	.075	9.329

a. Predictors: (Constant), White, FFM-Total score, White_X_FFM-Total score

Table 4-2: Model 1 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1122.552	3	374.184	4.299	.006 ^b
	Residual	10357.074	119	87.034		
	Total	11479.626	122			

a. Dependent Variable: MAKSS-CE-R-Total score

b. Predictors: (Constant), White, FFM-Total score, White_X_FFM-Total score

Table 4-3: Model 1 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	β			Zero-Order	Partial	Part
1	(Constant)	95.817	18.630		5.143	.000			
	White	-32.696	20.905	-1.401	-1.564	.120	-.042	-.142	-.136
	FFM-Total	.013	.132	.020	.100	.921	.271	.009	.009
	White_X_FFM-Total	.216	.146	1.386	1.472	.144	.024	.134	.128

a. Dependent Variable: MAKSS-CE-R-Total score

Table 5-1: Model 2 Summary

Model	R	R-Squared	Adjusted R-Squared	Std. Error of the Estimate
2	.282 ^a	.080	.056	9.237

a. Predictors: (Constant), Gender, FFM-Total score, Gender_X_FFM-Total score

Table 5-2: Model 2 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	873.108	3	291.036	3.411	.020 ^b
	Residual	10068.269	118	85.324		
	Total	10941.377	121			

a. Dependent Variable: MAKSS-CE-R-Total score

b. Predictors: (Constant), Gender, FFM-Total score, Gender_X_FFM-Total score

Table 5-3: Model 2 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	β			Zero-Order	Partial	Part
2	(Constant)	61.477	15.040		4.088	.000			
	Gender	19.286	18.269	.956	1.056	.293	-.125	.097	.093
	FFM-Total	.245	.100	.382	2.467	.015	.256	.221	.218
	Gender_X_FFM-Total	-.140	.123	-1.004	-1.136	.258	-.101	-.104	-.100

a. Dependent Variable: MAKSS-CE-R-Total score

Table 6-1: Model 3 Summary

Model	R	R-Squared	Adjusted R-Squared	Std. Error of the Estimate
3	.348 ^a	.121	.067	9.185

a. Predictors: (Constant), White, Gender, FFM-Total score, White_X_FFM-Total score, Gender_X_FFM-Total score, White_X_FFM-Total score_X_Gender

Table 7-1: Model 4 Summary

Model	R	R-Squared	Adjusted R-Squared	Std. Error of the Estimate
4	.416 ^a	.173	.137	8.832

a. Predictors: (Constant), FFM-Observing, degree obtained, FFM-Describing, gender, gender_X_FFM-Observing

Table 7-2: Model 4 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
4	Regression	1893.108	5	378.697	5.855	.000 ^b
	Residual	9047.893	116	77.999		
	Total	10941.377	121			

a. Dependent Variable: MAKSS-CE-R-Total score

b. Predictors: (Constant), FFM-Observing, degree obtained, FFM-Describing, gender, gender_X_FFM-Observing

Table 7-3: Model 4 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	β		
	(Constant)	52.761	11.173		4.722	.000
	Gender	25.552	12.802	1.267	1.996	.048
	Degree obtained	4.019	1.764	.200	2.279	.025
4	FFM-Observing	1.125	.372	.471	3.020	.003
	FFM-Describing	.284	.202	.129	1.404	.163
	Gender_X_FFM-Observing	-.899	.435	-1.329	-2.064	.041

a. Dependent Variable: MAKSS-CE-R-Total score

Table 8-1: Model 5 Summary

Model	R	R-Squared	Adjusted R-Squared	Std. Error of the Estimate
5	.531 ^a	.281	.237	8.272

a. Predictors: (Constant), degree obtained, FFM-Observing, annual household income, gender_X_FFM-Observing, gender_X_FFM-Non-judging

Table 8-2: Model 5 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
5	Regression	2170.639	5	434.128	6.345	.000 ^b
	Residual	5541.843	81	68.418		
	Total	7712.483	86			

a. Dependent Variable: MAKSS-CE-R-Total score

b. Predictors: (Constant), degree obtained, FFM-Observing, annual household income, gender_X_FFM-Observing, gender_X_FFM-Non-judging

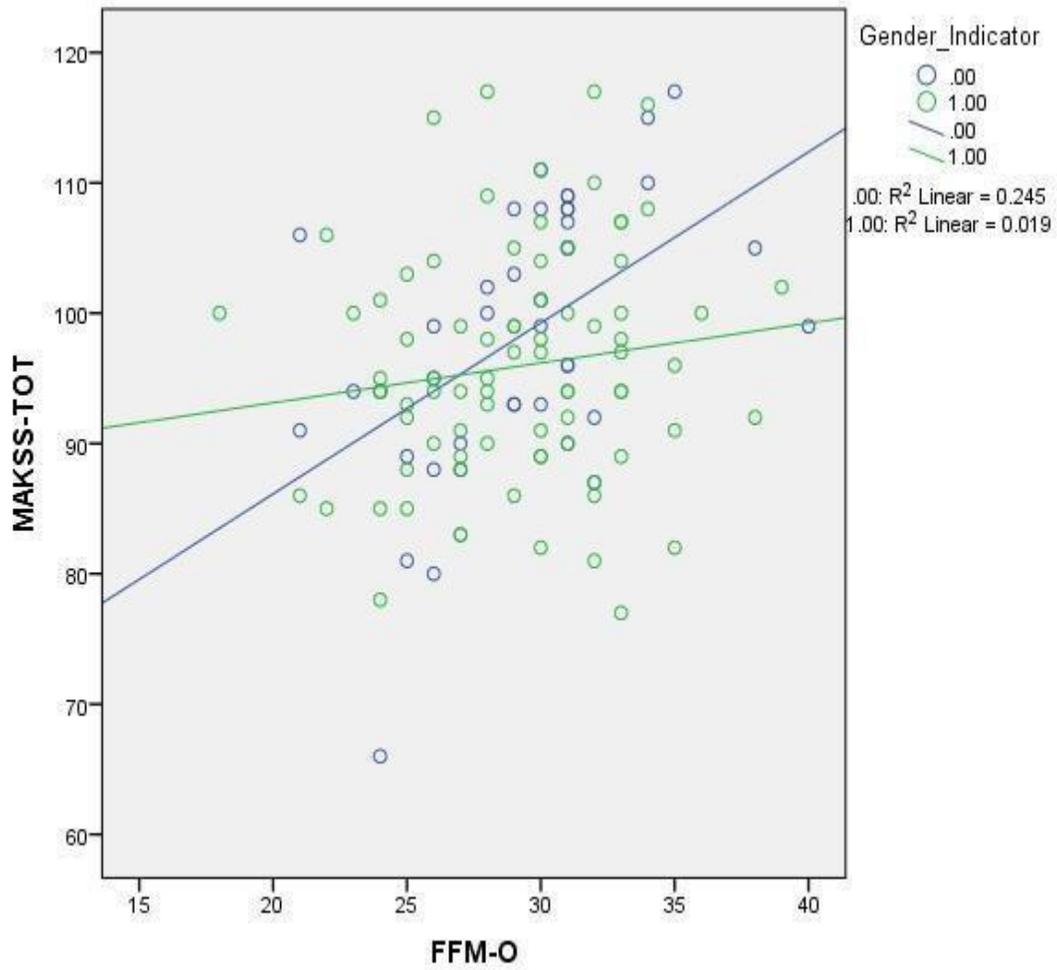
Table 8-3: Model 5 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	β		
	(Constant)	52.248	8.324		6.877	.000
	Degree obtained	2.737	2.094	1.36	1.307	.195
5	Gender_X_FFM-Observing	-.704	.245	-1.062	-2.876	.005
	Gender_X_FFM-Non-judging	.576	.214	.998	2.696	.009
	FFM-Observing	1.228	.280	.483	4.379	.000
	Annual household income	3.063	2.322	.132	1.319	.191

a. Dependent Variable: MAKSS-CE-R-Total score

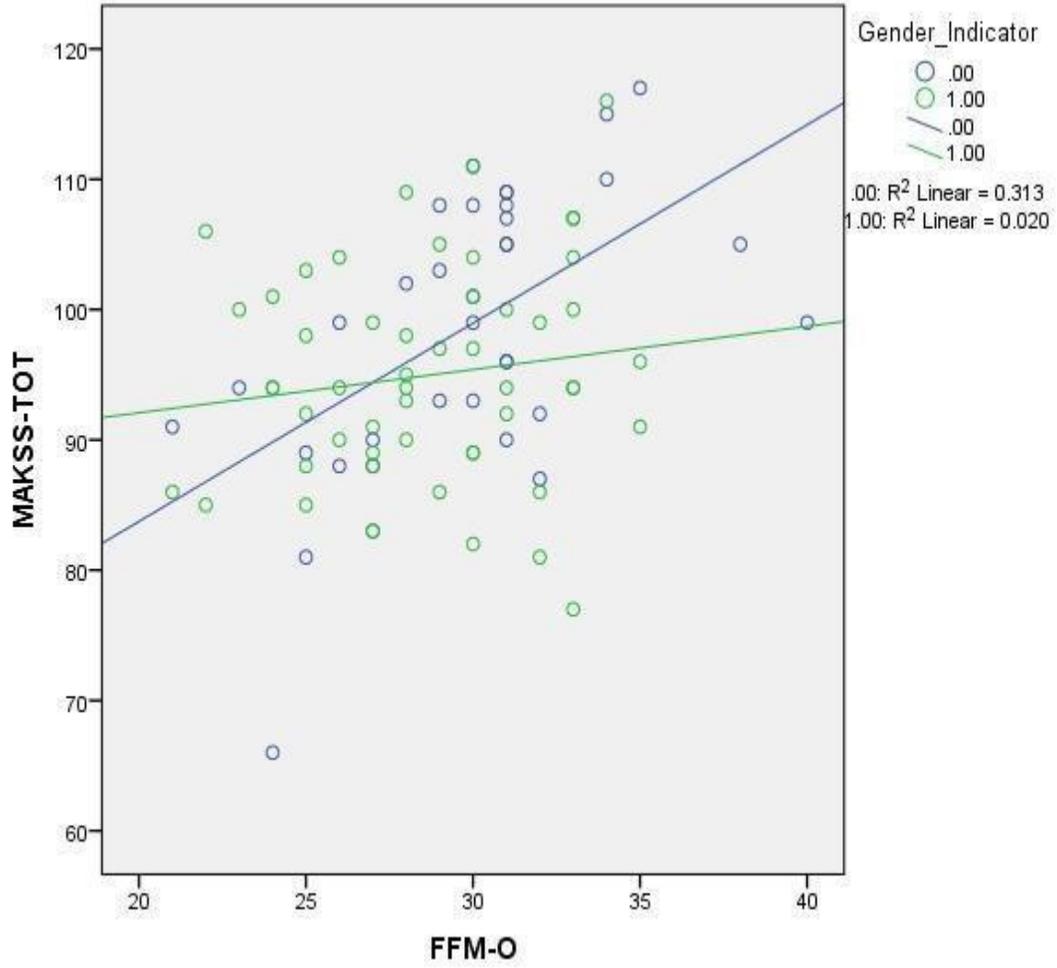
Scatterplots

Plot 1-1: Interaction Between FFM-Observing and Gender for All Participants



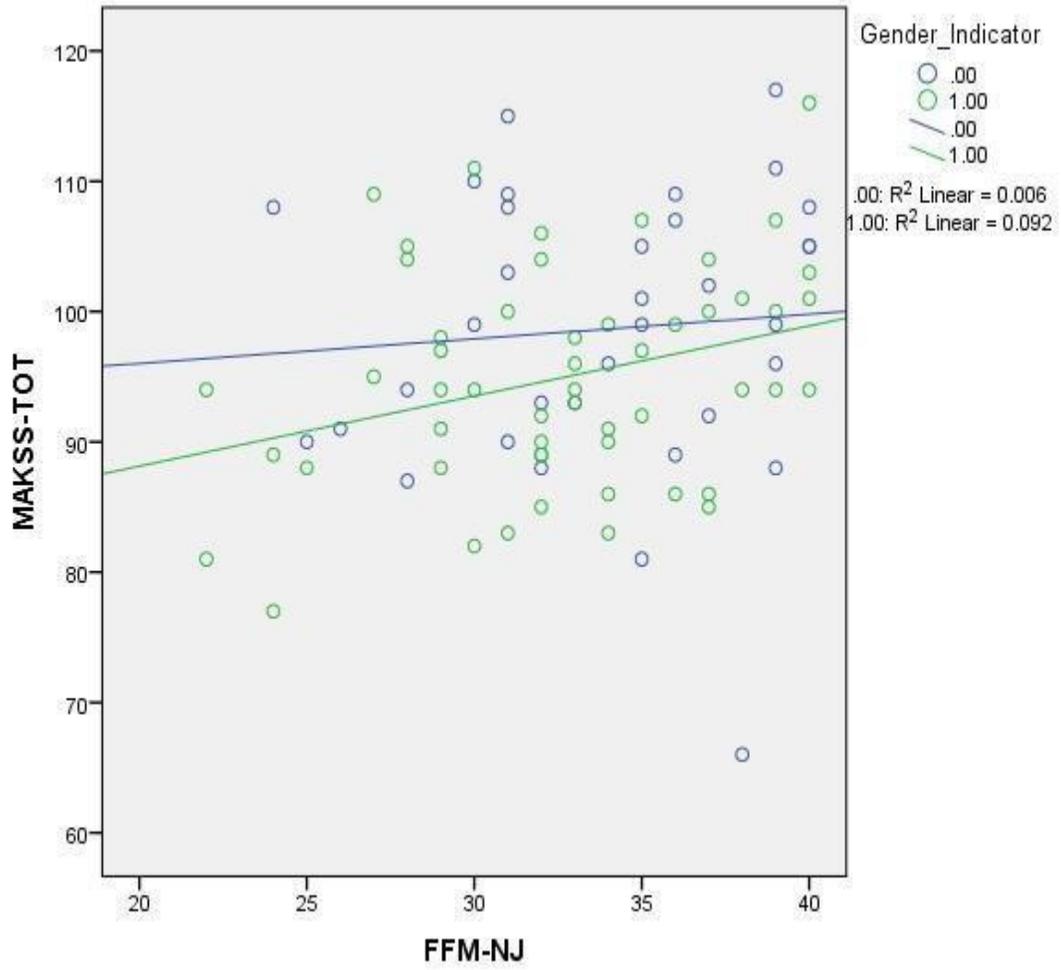
* "0" = Men; "1" = Women

Plot 2-1: Interaction Between FFM-Observing and Gender for White-identified Participants



* "0" = Men; "1" = Women

Plot 2-2: Interaction Between FFM-Non-judging and Gender for White-identified Participants



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Appendices

Appendix A: Informed Consent

This page is intended to introduce you to the purpose of this research effort and to the elements of confidentiality in this survey. Please note: After reading the informed consent information, you will have the opportunity to participate. Your signature is not required. Completing the survey constitutes your agreement to participate in the study.

You are invited to participate in a study that is examining the relationship between mindfulness and multicultural counseling competence in counselors. You have been asked to participate in this study because you are currently facilitating therapy to a diverse population. **WE ASK THAT YOU READ THIS FORM AND ASK ANY QUESTIONS YOU MAY HAVE BEFORE AGREEING TO BE IN THE STUDY.**

This study is being conducted by: Sam Tourek, MA, and Michael Goh, Ph.D., Department of Educational Psychology, University of Minnesota (IRB Code Number: 1212P25926).

Background Information

The purpose of this study is to examine the potential relationship between mindfulness and multicultural counseling competence. We hope to learn something about the how those that differ in facets of mindfulness may also differ in facets of multicultural counseling competence. We hope to use this information to improve the degree to which counselors are multiculturally competent and are able to facilitate therapy to diverse populations.

Procedures

If you agree to be in this study, we would ask you to answer basic questions about yourself, such as your age, gender, ethnicity, country of origin, length of time living in the United States, and the program in which you are currently enrolled. This should take you less than 5 minutes to complete. Next, we would ask you to complete two instruments. The first is the Multicultural Awareness, Knowledge, and Skills Survey- Counselor Edition- Revised (MAKSS-CE-R). The MAKSS-CE-R should take you 5-10 minutes. The other survey is the Five Facet Mindfulness Questionnaire (FFMQ). The FFMQ should take you 5-10 minutes.

Risks and Benefits of being in the Study

This study has no known risks and no direct benefits.

Compensation

You will not receive any compensation for participating.

Confidentiality

The records of this study will be kept private. Any and all data gathered will remain in the possession of Sam Tourek, MA and/or Michael Goh, PhD. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the

records.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota, with your internship supervisor, or his/her organization. If you decide to participate, you are free to not answer any question or stop participating at any time without affecting those relationships.

Contacts and Questions

The researchers conducting this study are: Sam Tourek, M.A. and Michael Goh, Ph.D. You may ask any questions you have now. If you have questions later, you are encouraged to contact them at by phone at 612-624-2590, or at gohxx001@umn.edu or toure011@umn.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

If you would like a copy of this information, please contact Sam Tourek, M.A. at toure011@umn.edu.

Statement of Consent

Please consent by beginning the survey. You may do this by clicking the 'Next' button below:

I have read the above information. I have asked questions and have received answers. I consent to participate in the study. I am demonstrating my consent by completing the following survey.

Appendix B: Demographic Survey Information

1. What is your gender?

Female

Male

Other

2. What is your age?

18 to 24

25 to 34

35 to 44

45 to 54

55 to 64

65 to 74

75 or older

3. What is your race? Please choose one or more.

Hispanic or Latino/a

Black or African-American

Asian

Native Hawaiian or other Pacific Islander

American Indian or Alaska Native

White

Other

4. What is your ethnic/cultural background?

What is your ethnic/cultural background?

5. What is your state of residence?

What is your state of residence?

6. What is the highest level of education you have completed?

- Graduated from high school
- 1 year of college
- 2 years of college
- 3 years of college
- Graduated from college
- Some graduate school
- Completed Master's Degree
- Completed Doctorate

7. In what specialty area is the highest degree you have received?

- College Student Personnel Counseling
- Community Counseling
- Counselor Education
- Counseling Psychology
- Rehabilitation Counseling
- School Counseling
- Clinical Psychology

Other (please specify)

8. If you are a current student, what is the current educational degree you are seeking?

- Bachelor of Arts
- Bachelor of Sciences
- Master's Degree
- Psy. D
- Ph.D.
- N/A

9. If you are currently a student, in what specialty area are you seeking a degree?

- College Student Personnel Counseling
- Community Counseling
- Counselor Education
- Counseling Psychology
- Rehabilitation Counseling
- School Counseling

- School Psychology
- Clinical Psychology
- N/A

Other (please specify)

10. Are you CURRENTLY enrolled in a course on multicultural counseling?

- Yes
- No

11. Number of COMPLETED courses on multicultural counseling:

12. Years of experience working with clients who were racially/ethnically different from you:

- Less than one year
- 1-2 years
- 3-4 years
- 5 years or more

13. Number of past and current clients who were racially/ethnically different than you:

14. Current occupation (if not a full-time student):

15. Annual Family Income (Check one):

- \$7,500 or less
- \$7,501-15,000
- \$15,001-25,000
- \$25,001-35,000
- \$35,001-50,000
- \$50,001 or more

*Appendix C: Multicultural Awareness, Knowledge, and Skills Survey- Counselor Edition-
Revised (MAKSS-CE-R)*

Kim et al., 2003

Multicultural Awareness, Knowledge, and Skills Survey – Counselor Edition - Revised (MAKSS-CE-R)

Bryan S. K. Kim
University of California, Santa Barbara

Brenda Y. Cartwright
University of Hawaii at Manoa

Penelope A. Asay
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Michael J. D'Andrea
University of Hawaii at Manoa

Kim, B. S. K., Cartwright, B. Y., Asay, P. A., & D'Andrea, M. J. (2003).
A revision of the Multicultural Awareness, Knowledge, and Skills Survey –
Counselor Edition. *Measurement and Evaluation in Counseling and
Development*, 36, 161-180.

Before the MAKSS-CE-R is copied or distributed, permission must be obtained
from one of these authors:

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**Multicultural Awareness, Knowledge, and Skills Survey – Counselor Edition –
REVISED
(MAKSS-CE-R)**

This survey is designed to obtain information on the educational needs of counselor trainees. It is not a test. No grade will be given as a result of completing this survey.

1. Promoting a client's sense of psychological independence is usually a safe goal to strive for in most counseling situations.

Strongly Disagree Disagree Agree Strongly Agree

2. Even in multicultural counseling situations, basic implicit concepts such as "fairness" and "health", are not difficult to understand.

Strongly Disagree Disagree Agree Strongly Agree

3. How would you react to the following statement? In general, counseling services should be directed toward assisting clients to adjust to stressful environmental situations.

Strongly Disagree Disagree Agree Strongly Agree

4. While a person's natural support system (i.e., family, friends, etc.) plays an important role during a period of personal crisis, formal counseling services tend to result in more constructive outcomes.

Strongly Disagree Disagree Agree Strongly Agree

5. The human service professions, especially counseling and clinical psychology, have failed to meet the mental health needs of ethnic minorities.

Strongly Disagree Disagree Agree Strongly Agree

6. The effectiveness and legitimacy of the counseling profession would be enhanced if counselors consciously supported universal definitions of normality.

Strongly Disagree Disagree Agree Strongly Agree

7. Racial and ethnic persons are under-represented in clinical and counseling psychology.

Strongly Disagree Disagree Agree Strongly Agree

8. In counseling, clients from different ethnic/cultural backgrounds should be given the same treatment that White mainstream clients receive.

Strongly Disagree Disagree Agree Strongly Agree

9. The criteria of self-awareness, self-fulfillment, and self-discovery are important measures in most counseling sessions.

Strongly Disagree Disagree Agree Strongly Agree

10. The difficulty with the concept of "integration" is its implicit bias in favor of the dominant culture.

Strongly Disagree Disagree Agree Strongly Agree

At the present time, how would you rate your understanding of the following terms:

11. "Ethnicity"

Very Limited Limited Good Very Good

12. "Culture"

Very Limited Limited Good Very Good

13. "Multicultural"

Very Limited Limited Good Very Good

14. "Prejudice"

Very Limited Limited Good Very Good

15. "Racism"

Very Limited Limited Good Very Good

16. "Transcultural"

Very Limited Limited Good Very Good

17. "Pluralism"

Very Limited Limited Good Very Good

18. "Mainstreaming"

Very Limited Limited Good Very Good

19. "Cultural Encapsulation"

Very Limited Limited Good Very Good

20. "Contact Hypothesis"

Very Limited Limited Good Very Good

21. At this point in your life, how would you rate your understanding of the impact of the way you think and act when interacting with persons of different cultural backgrounds?

Very Limited Limited Fairly Aware Very Aware

22. At this time in your life, how would you rate yourself in terms of understanding how your cultural background has influenced the way you think and act?

Very Limited Limited Fairly Aware Very Aware

23. How well do you think you could distinguish "intentional" from "accidental" communication signals in a multicultural counseling situation?

Very Limited Limited Good Very Good

24. How would you rate your ability to effectively consult with another mental health professional concerning the mental health needs of a client whose cultural background is significantly different from your own?

Very Limited Limited Good Very Good

25. How well would you rate your ability to accurately assess the mental health needs of lesbian women?

Very Limited Limited Good Very Good

26. How well would you rate your ability to accurately assess the mental health needs of older adults?

Very Limited Limited Good Very Good

27. How well would you rate your ability to accurately assess the mental health needs of gay men?

Very Limited Limited Good Very Good

28. How well would you rate your ability to accurately assess the mental health needs of persons who come from very poor socioeconomic backgrounds?

Very Limited Limited Good Very Good

29. How would you rate your ability to identify the strengths and weaknesses of psychological tests in terms of their use with persons from different cultural/racial/ethnic backgrounds?

Very Limited Limited Good Very Good

30. How would you rate your ability to accurately assess the mental health needs of men?

Very Limited Limited Good Very Good

31. How well would you rate your ability to accurately assess the mental health needs of individuals with disabilities?

Very Limited Limited Good Very Good

32. How would you rate your ability to effectively secure information and resources to better serve culturally different clients?

Very Limited Limited Good Very Good

33. How would you rate your ability to accurately assess the mental health needs of women?

Very Limited Limited Good Very Good

Appendix D: Scoring the MAKSS-CE-R

Kim et al., 2003

SCORING INSTRUCTIONS

For the Awareness Scale: Reverse score items 1, 2, 3, 4, 6, 8, and 9. Then, sum the scores from these items plus the scores from items 5, 7, and 10.

For the Knowledge Scale: Sum the scores for items 11 to 23.

For the Skills Scale: Sum the scores for items 24 to 33

For the Total Scale: Sum all of the reverse scored items and the rest of the items.

Appendix E: Five Facet Mindfulness Questionnaire (FFMQ)

Baer et al., 2006

5-FACET MINDFULNESS QUESTIONNAIRE

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
never or very rarely true	rarely true	sometimes true	often true	very often or always true

- _____ 1. When I'm walking, I deliberately notice the sensations of my body moving.
- _____ 2. I'm good at finding words to describe my feelings.
- _____ 3. I criticize myself for having irrational or inappropriate emotions.
- _____ 4. I perceive my feelings and emotions without having to react to them.
- _____ 5. When I do things, my mind wanders off and I'm easily distracted.
- _____ 6. When I take a shower or bath, I stay alert to the sensations of water on my body.
- _____ 7. I can easily put my beliefs, opinions, and expectations into words.
- _____ 8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.
- _____ 9. I watch my feelings without getting lost in them.
- _____ 10. I tell myself I shouldn't be feeling the way I'm feeling.
- _____ 11. I notice how foods and drinks affect my thoughts, bodily sensations, and

emotions.

- _ 12. It's hard for me to find the words to describe what I'm thinking.
- _____ 13. I am easily distracted.
- _ 14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.
- _____ 15. I pay attention to sensations, such as the wind in my hair or sun on my face.
- _____ 16. I have trouble thinking of the right words to express how I feel about things
- _____ 17. I make judgments about whether my thoughts are good or bad.
- _ 18. I find it difficult to stay focused on what's happening in the present.
- _____ 19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.
- _____ 20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
- _____ 21. In difficult situations, I can pause without immediately reacting.
- _ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't
 find the right words.

PLEASE TURN OVER □

1	2	3	4	5
never or very rarely true	rarely true	sometimes true	often true	very often or always true

_ 23. It seems I am “running on automatic” without much awareness of what I’m doing.

_____ 24. When I have distressing thoughts or images, I feel calm soon after.

_ 25. I tell myself that I shouldn’t be thinking the way I’m thinking.

_____ 26. I notice the smells and aromas of things.

_ 27. Even when I’m feeling terribly upset, I can find a way to put it into words.

_____ 28. I rush through activities without being really attentive to them.

_____ 29. When I have distressing thoughts or images I am able just to notice them without

reacting.

_ 30. I think some of my emotions are bad or inappropriate and I shouldn’t feel them.

_____ 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of

light and shadow.

_____ 32. My natural tendency is to put my experiences into words.

_____ 33. When I have distressing thoughts or images, I just notice them and let them go.

_ 34. I do jobs or tasks automatically without being aware of what I’m doing.

_____ 35. When I have distressing thoughts or images, I judge myself as good or bad, depending

what the thought/image is about.

_____36. I pay attention to how my emotions affect my thoughts and behavior.

_____37. I can usually describe how I feel at the moment in considerable detail.

_____38. I find myself doing things without paying attention.

_____39. I disapprove of myself when I have irrational ideas.

Appendix F: Scoring the FFMQ

Baer et al., 2006

Scoring the Five Facet Mindfulness Questionnaire (Baer et al., 2006)

Ruth Baer, University of Kentucky

October 2005

Observe items:

1, 6, 11, 15, 20, 26, 31, 36

Describe items:

2, 7, 12R, 16R, 22R, 27, 32, 37

Act with Awareness items:

5R, 8R, 13R, 18R, 23R, 28R, 34R, 38R

Nonjudge items:

3R, 10R, 14R, 17R, 25R, 30R, 35R, 39R

Nonreact items:

4, 9, 19, 21, 24, 29, 33