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This study explored the relationships between two aspect of mindfulness, awareness and compassion, and empathy and anxiety in counselor trainees. Empathy and anxiety are two training variables that have strong associations with counseling performance. Empathy is widely regarded as important for the effective development of a therapeutic relationship and positive counseling outcomes while a higher level of anxiety in trainees can impede the cultivation of empathy and the development of counselor self-efficacy. Currently, there is little to guide educators in how to cultivate genuine empathy and also mitigate unproductive levels of anxiety in trainees. Mindfulness has been proposed as a potential method for addressing both empathy and anxiety, however, empirical evidence for these associations with counselors is limited. Additionally, the relative contribution of the compassion wing of mindfulness has been relatively unstudied.

In this study, the relationships between mindful awareness and compassion and empathy and anxiety were examined. A total of 131 master's level counseling interns were surveyed to determine their levels of mindful awareness, mindful compassion, empathy, and anxiety using the *Five-Factor Mindfulness Questionnaire*, the *Self Other Four Immeasurables*, the *Interpersonal Reactivity Index*, and the *Trimodal Anxiety Questionnaire*.

Pearson Product Moment Coefficients revealed significant pairwise relationships between mindful awareness and compassion and anxiety in the expected directions.

Mindful awareness and compassion for others had a significant relationship with cognitive empathy in the expected directions. Compassion for others had a significant relationship with affective empathy in the expected direction.

In a linear regression model, awareness and compassion explained a modest amount of variance in affective empathy with compassion for others contributing significantly. Linear regression also revealed that awareness and compassion explained a moderate amount of variance in cognitive empathy with nonjudge, nonreact, and compassion for others emerging as significant predictors. A substantial amount of the variance in anxiety was explained by awareness, with describe, act with awareness, and nonjudge facets emerging as significant predictors. A hierarchical regression indicated that mindful compassion increased the variance explained in affective empathy, cognitive empathy, and anxiety, beyond that explained by mindful awareness alone, and offered the greatest increase for affective empathy.

MINDFUL AWARENESS AND COMPASSION, AND EMPATHY
AND ANXIETY IN COUNSELOR TRAINEES

by

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Approved by

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APPROVAL PAGE

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CHAPTER I

INTRODUCTION

There is a growing demand for well trained counselors to address the unmitigated mental health needs of Americans. Approximately 46% of Americans will have a diagnosable mental disorder at some point during their life and mental health and substance abuse problems cause significant suffering and are a factor in more than 90% of suicidal deaths (National Institute of Mental Health [NIMH], 2011). In fact, suicide was the tenth leading cause of death in the U.S. in 2007, and there are an estimated eleven suicide attempts per suicidal death (NIMH, 2011). Beyond the devastating human cost, there are also significant economic consequences of poor mental health. Serious mental illness costs society an estimated \$317 billion annually excluding costs associated with comorbid conditions, incarceration, homelessness, and early mortality (Insel, 2008). This figure includes direct health care costs (\$100b), lost earnings (\$193b), and disability benefits (\$24b). Further, direct health care costs for mental health and substance abuse alone grew more than \$50 billion from 1993 (\$70b) to 2003 (\$121b) (Mark et al., 2007) and are estimated to reach \$239 billion by 2014 (Levit et al., 2008). These costs don't include children with mental health problems, subclinical conditions, nor hidden or intangible costs such as lost wages and suffering of impacted significant others.

Consequently, the growing mental health needs of Americans have increased the demand for counselors who are prominently positioned in mental health agencies and

schools, often the frontline service providers in addressing mental health needs in the community. There are nearly three quarters of a million counselors employed in the U.S. and this number is expected to grow by as much as 24% between 2008 and 2018, faster than average for all occupations (U.S. Department of Labor, n. d.). Counselor educators are tasked with preparing the increasing number of individuals entering the counseling profession to enter the workforce and meet the growing mental health needs in their communities. Because of the significant human and financial costs associated with poor mental health, it is critical that counselor training be effective in preparing counselors to meet these needs.

Currently, there are more than 600 accredited counselor preparation programs in the U.S. (Council for Accreditation of Counseling and Related Educational Programs [CACREP], 2009). Students in these programs learn to develop as counselors through a wide variety of didactic and experiential opportunities such as classroom lectures and discussions, process groups, simulated counseling situations, and supervised counseling experience. For the past four decades, however, counseling programs have relied markedly on “microskills training” (e.g., teaching reflective listening skills) as a core means for teaching counselors the specific behaviors needed to “perform” counseling (Ridley, Kelly, & Mollen, 2011). Although this has proven effective in teaching discrete, observable counseling skills (Hill & Lent, 2006), some researchers have argued that counselor training should place greater emphasis on developing the counselor as “an instrument” (Bien, 2008; Greason & Cashwell, 2009; Grepmaier, Mitterlehner, Loew, Backler, et al., 2007; O’Driscoll, 2009). In part, this argument stems from the finding

that, despite the myriad of treatment approaches and techniques utilized by counselors, it is “common factors” (e.g., therapist qualities, therapeutic relationship) across theoretical orientations that contribute the most to positive client outcomes (Lambert & Barley, 2001). The therapeutic relationship is one common factor central to counseling, and empathy is core to the therapeutic relationship (Rogers, 1957; Shapiro & Izett, 2008; Trusty, Ng, & Watts, 2005). Therefore, empathy skills are an important learning outcome in counseling programs. Observable empathy skills, such as reflective listening, however, are not necessarily equivalent to authentic empathy, and tend to erode over the course of training (Lesh, 1970; Shapiro, Morrison, & Boker, 2004). Because counselor training emphasizes knowledge and skill, methods for cultivating the kind of attitude that promotes the therapeutic relationship and positive client outcome have not been well developed within counselor education (Hick, 2008).

Further, there are counselor attributes, such as anxiety, that commonly occur during the training experience and impede the cultivation of empathy (Hiebert, Uhlemann, Marshall, & Lee, 1998). Anxiety not only hinders the cultivation of empathy but also negatively predicts counselor self-efficacy (CSE), which is a counselor’s belief in his or her ability to effectively counsel a client in the near future; CSE is an important predictor of counseling performance and client outcome (Larson & Daniels, 1998).

Therefore, it seems vital for counselor preparation programs to develop methods that not only teach observable behavioral skills but also cultivate the internal attributes needed to negotiate the emotional challenge of counselor training and establish sound

therapeutic relationships with clients. Specifically, methods are needed to cultivate authentic empathy while mitigating unproductive levels of anxiety.

Empathy

Empathy is considered fundamental to the counseling process and an essential aspect of the therapeutic relationship (Rogers, 1957; Shapiro & Izett, 2008; Trusty et al., 2005), with researchers finding counselor empathy accounting for up to 30% of the variance in client outcome (Lambert & Barley, 2001). Further, the therapeutic relationship is central to effective counseling regardless of theoretical orientation (Hick, 2008; Lambert & Barley, 2001). There is considerable evidence that empathy itself significantly impacts client outcome (Block-Lerner, Adair, Plumb, Rhatigan, & Orsillo, 2007; Bruce, Manber, Shapiro, & Constantino, 2010) and the counselor-client working alliance (Trusty et al., 2005). In fact, researchers have conducted meta-analytic studies and found that therapist empathy is equal to or greater than specific interventions in impacting client outcome variance (Elliott, Bohart, Watson, & Greenberg, 2011). Although counselor preparation programs may successfully teach observable empathy skills such as reflective listening, the ability to cultivate an empathic quality in the counselor presents a greater challenge (Bodenhorn & Starkey, 2005; Bruce et al., 2010; Greason & Cashwell, 2009). In fact, there is some evidence that empathy tends either to maintain or decrease over the course of training for counselors (Lesh, 1970). Similar decreases over the course of training have been found for other health professionals (Shapiro et al., 2004). In addition, research on microskills training, the often used method for teaching empathy skills such as reflective listening, has been plagued with numerous

flaws such as small sample sizes, poor external validity, and lack of a control group, making it uncertain as to its effectiveness in producing genuine empathy in a real counseling environment (Ridley et al., 2011). Bodenhorn and Starkey (2005) suggested that counselor development extend beyond teaching observable empathy skills to also include the cultivation of a genuinely empathic disposition.

Anxiety

Higher levels of anxiety in trainees is a hindrance to counselor training and performance (Bowman, Roberts, & Giesen, 1978; Duncan & Brown, 1996; Friedlander, Keller, Peca-Baker, & Olk, 1986; Hale & Stoltenberg, 1988; Hiebert et al., 1998). Anxiety is an expected and difficult part of learning to become a counselor and common in beginning counselors (Borders & Brown, 2005; Ridley et al., 2011; Trusty et al., 2005). Many common counselor trainee situations, such as negative feedback in supervision (Daniels & Larson, 2001), audio-taped performance (Hale & Stoltenberg, 1988), and initial counseling interviews (Bowman et al., 1978), have been associated with producing trainee anxiety. Both trait and state anxiety, however, are negatively associated with counseling self-efficacy (Daniels & Larson, 2001; Friedlander et al., 1986; Levitt, 2001), which is considered an important factor in the confident delivery of counseling (Friedlander et al., 1986; Kozina, Grabovari, DeStefano, & Drapeau, 2010). Also, counselor anxiety has been linked to poor attending skills, decreased likelihood of sharing about counseling experiences in supervision (Levitt, 2001), diminished cognitive complexity and inability to differentiate important versus irrelevant information (Duncan & Brown, 1996), and difficulty coping with angry clients (Sharkin, 1989). Also, anxiety

is associated with lower empathy in counselors (Hiebert et al., 1998) and can increase from the stress of being a helping professional (Shapiro, Brown, & Biegel, 2007). Although researchers have determined that some types of circumstances (e.g., role playing, supervision) and transient cognitive activities (e.g., negative self talk) increase counselor trainee anxiety, there is little research on how counselor educators can successfully address anxiety to increase the performance of new counselors (Hiebert et al., 1998).

Because there are a lack of proven training methods for effectively cultivating important counselor training outcomes such as authentic empathy while also mitigating unproductive states such as high anxiety, and many of the typical means for training students and cultivating empathy (e.g., role playing and supervision) are also the very same situations that elevate anxiety (Freeman, 1993), exploration of new methods to address these factors is needed. Based on recent research findings, mindfulness holds promise as one mechanism to address both counselor anxiety and empathy.

Mindfulness

Mindfulness training may provide a useful method to aid counselor educators in both the promotion of empathy and the management of anxiety among counseling students. Although there is ongoing debate regarding the precise definition of mindfulness, most working definitions in the literature reflect the work of Jon Kabat-Zinn, noted as the first to utilize mindfulness in Western healthcare (Baer, 2003), who defined mindfulness as “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (Kabat-Zinn, 1994, p. 4). Mindfulness training, which

addresses cognitive skills and attitudinal qualities, is generating interest as a means for impacting how a counselor *is* in sessions (as opposed to what he or she *does*) and the therapeutic benefit this may have for clients (Bruce et al., 2010; McCollum & Gehart, 2010; O'Driscoll, 2009). Although mindfulness in Western psychology was originally intended as an intervention for cultivating client mindfulness, more recently researchers have begun to demonstrate how counselor mindfulness is an important aspect of counselor development and performance (Gehart & McCollum, 2008; Greason & Cashwell, 2009; Hick, 2008; O'Driscoll, 2009) and client outcome (Grepmaier, Mitterlehner, Loew, Bachler, et al., 2007; Grepmaier, Mitterlehner, Loew, & Nickel, 2007).

Some scholars propose that mindfulness is a core therapeutic process and is associated with common factors across theoretical orientations (Tannen & Daniels, 2010). Mindfulness cultivates an empathic attitude (Kristeller & Johnson, 2005) and has been associated with counselor empathy theoretically and empirically in a number of studies (Bruce et al., 2010; Greason & Cashwell, 2009; Johanson, 2006; Kristeller & Johnson, 2005; Neff, 2003b; O'Driscoll, 2009; Rothaupt & Morgan, 2007). Similarly, there is substantial research indicating that mindfulness training can be used to reduce anxiety in both clinical and non-clinical populations (Baer, 2003, Carmody, Baer, Lykins, & Olendski, 2009; Shapiro, Astin, Bishop, & Cordova, 2005), suggesting it might also be useful to the management of counselor trainee anxiety. Additionally, mindfulness has been associated with therapeutic presence (Gehart & McCollum, 2008; Geller, Greenberg, & Watson, 2010), engaged listening and non-judgmental understanding

(Tannen & Daniels, 2010), attunement (Bruce et al., 2010; Gambrel & Keeling, 2010), counselor self-efficacy (Greason & Cashwell, 2009), attentional abilities (Baer, 2003; Martin, 1997; Greason & Cashwell, 2009; O'Driscoll, 2009; Tannen & Daniels, 2010), affect tolerance or decreased experiential avoidance (Baer, Fischer, & Huss, 2005; Childs, 2007; O'Driscoll, 2009), and compassion (Kristeller & Johnson, 2005; Neff, 2003b).

Although there is strong theoretical support for using mindfulness to positively impact counselors and their work with clients, empirical research and support is in its nascent stage. Additionally, a review of the mindfulness literature indicates that compassion, a critical component of this complex construct, has been significantly marginalized within Western psychology. Mindfulness is made up of two wings, awareness and compassion, sometimes respectively referred to as the mind and heart qualities of mindfulness. Although the wings are interrelated, each wing represents different qualities and intentions within mindfulness practice. Generally, the awareness wing fosters the intention to gain mental clarity or insight, while the compassion wing fosters the intention to approach self and others with love and compassion (Schmidt, 2004). Therefore, insight meditation primarily cultivates awareness, or attention, while loving-kindness and compassion meditations primarily cultivate qualities such as loving-kindness, compassion, joy, and equanimity (Kraus & Sears, 2009; Schmidt, 2004). Both wings are central to Buddhist teaching and mindfulness practice which aim to alleviate suffering through acquiring insight and cultivating compassion for one's self and all sentient beings (Brantley, 2010; Kraus & Sears, 2009; Schmidt, 2004). Proponents of

mindfulness state that kindness and compassion are two qualities that support the welcoming and allowing attitude needed to pay attention, on purpose, nonjudgmentally (Brantley, 2010). Kindness is described as friendliness or open heartedness, while compassion is the concern for and desire to alleviate suffering. The importance of the compassion wing is best described by Germer (2006): “Take away loving-kindness [compassion] and mindfulness is like being forced to watch a frightening scene, close up, under a bright light” (para. 4). Although compassion is central to Buddhist psychology in which mindfulness is rooted (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006), most mindfulness research has been focused exclusively on the awareness wing, leading some researchers to propose that the compassion wing has been erroneously omitted from mindfulness in Western psychology (Kraus & Sears, 2009; Shapiro, Carlson, Astin, & Freedman, 2006). A review of the literature suggests this is true, as there are few studies that account for both wings of mindfulness. Further, Kabat-Zinn described mindfulness as including a *quality of attending* characterized by an attitude of acceptance, kindness, compassion, openness, patience, nonstriving, equanimity, curiosity, and nonevaluation (Carmody et al., 2009). Most definitions and measures of mindfulness, however, only capture awareness and attention, and, in some cases, one or two *qualities of attending* that are more readily associated with the awareness wing of mindfulness (e.g., non-reactivity or non-judging). The preponderance of mindfulness studies and available mindfulness instruments omit the compassion wing of mindfulness altogether. In fact, a review of 8 commonly used mindfulness instruments, including the *Five Facet Mindfulness Questionnaire* (FFMQ; Baer et al., 2006), the *Mindful Attention Awareness Scale*

(MAAS; Brown & Ryan, 2003), the *Freiburg Mindfulness Inventory* (FMI; Buchheld, Grossman, & Walach, 2001), the *Kentucky Inventory of Mindfulness Skills* (KIMS; Baer, Smith, & Allen, 2004), the *Cognitive and Affective Mindfulness Scale–Revised* (CAMS-R; Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007), the *Philadelphia Mindfulness Scale* (PHLMS; Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008), the *Mindfulness Questionnaire* (MQ; Chadwick, Hember, Mead, Lilley, & Dagnan, 2005), and the *Toronto Mindfulness Scale* (TMS; Lau et al., 2006), revealed an exclusive focus on the awareness wing of mindfulness. Because the compassion wing is central to mindfulness, research that includes both wings is warranted, particularly as it relates to counselor development.

The compassion wing of mindfulness is potentially important to a strong therapeutic relationship and the cultivation of empathy and anxiety management in counselor trainees. Like authentic empathy, compassion is another counselor quality that is difficult to transmit via traditional counselor training; however, it is associated with many factors relevant to counselors. Compassion is negatively correlated with harsh self-judgment, anxiety, thought suppression, and emotional exhaustion and positively associated with emotional intelligence, social connection, and empathy (Birnie, Speca, & Carlson, 2010; Neff, 2003b). Loving-kindness, compassion, and sympathetic joy affect the ability to connect with others in a manner that seeks their unconditional happiness (Schmidt, 2004). Neuroscientists have demonstrated that meditations designed specifically to develop the compassion wing of mindfulness (e.g., loving-kindness and compassion meditations), can positively impact parts of the brain associated with

empathy and can enhance empathic responses to social stimuli (Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008). That is, meditation has been associated with increasing a counselor's self-compassion, which in turn impacts their ability to have compassion and empathy for their clients (Kristeller & Johnson, 2005; Neff, 2003b). Further, self-compassion, the starting point to cultivating compassion towards others in compassion meditation, mitigates self-evaluative anxiety (Neff, 2003b), which is commonly a part of counselor trainees' experience. Both compassion and another aspect of the compassion wing, loving-kindness, have been positively associated with self-efficacy (Iskender, 2009; Neff, 2003b). It seems apparent, then, that the compassion wing of mindfulness holds promise in counselor development as it may influence the cultivation of empathy and reduce self-evaluative anxiety. Because of the bias toward the awareness wing of mindfulness in the scholarly literature, however, these questions have not been addressed.

In summary, there is a growing need for counselors and an improved means for cultivating the counselor as an instrument of successful counseling. Because there are limited training technologies available to address empathy and anxiety within counselor education and there is limited extant literature on how mindfulness training may impact them, research into the relationships between the awareness and compassion wings of mindfulness and empathy and anxiety is warranted. Such research will inform subsequent intervention studies assessing the utility of various types of mindfulness training in cultivating the counselor trainee capabilities of empathy and anxiety management needed for effective counselor development.

Statement of the Problem

A review of the counseling literature suggests various attributes, such as empathy, facilitate the counselor development process and others, such as anxiety, hinder counselor development. Empathy is fundamental to the counseling process and essential to the development of the therapeutic relationship (Rogers, 1957; Shapiro & Izett, 2008; Trusty et al., 2005). Although counselor preparation programs teach observable empathy skills, the ability to cultivate an empathic *quality* in the counselor presents a greater challenge (Bodenhorn & Starkey, 2005; Bruce et al., 2010; Greason & Cashwell, 2009) that is only recently being addressed in the counseling literature.

In contrast, higher levels of anxiety in trainees hinder counselor training and performance (Bowman et al., 1978; Duncan & Brown, 1996; Friedlander et al., 1986; Hale & Stoltenberg, 1988; Hiebert et al., 1998). Both trait and state anxiety have been found to be negatively associated with counseling self-efficacy (Daniels & Larson, 2001; Friedlander et al., 1986; Levitt, 2001). Further, counselor anxiety has been negatively associated with important counseling skills such as empathy (Hiebert et al., 1998) and attention (Levitt, 2001). Presently, there is little research on how counselor educators can successfully address anxiety to increase the performance of new counselors (Hiebert et al., 1998).

Mindfulness training may be a useful means for the cultivation of empathy and the reduction of anxiety among counseling students. There are few empirical studies examining mindfulness in counselor training, however, and the vast majority have marginalized or omitted the compassion wing of mindfulness. Because there are limited

training technologies available to address empathy and anxiety within counselor education and there is a dearth of literature on how mindfulness may impact them, research into the relationships between the awareness and compassion wings of mindfulness and counselor empathy and anxiety is warranted. Such research will provide direction for intervention studies assessing the utility of various types of mindfulness training in cultivating empathy and anxiety management among counselor trainees.

Purpose of the Study

The purpose of this study is to address an important gap in the counselor education literature by examining the relationships between the awareness and compassion wings of mindfulness and anxiety and empathy among counselor trainees. In addition, the incremental contribution of the compassion wing of mindfulness will be explored, as the preponderance of mindfulness researchers have focused primarily, if not solely, on the awareness wing. Multivariate regression techniques will be used to elucidate the relationships between these variables. Understanding how the two wings of mindfulness relate to key factors in counselor development not only will provide needed support for the potential utility of mindfulness training for counselor development, but also valuable insight as to which aspects of mindfulness are most salient for mindfulness-based counselor training.

Research Questions

This study will investigate the relationship between the two wings of mindfulness, awareness and compassion, and key factors and outcomes in counselor training – empathy and anxiety. The following research questions (RQ) will be addressed:

RQ1: Will the addition of mindful compassion increase the proportion of variance explained in affective empathy, cognitive empathy, and anxiety beyond what is accounted for by mindful awareness alone?

RQ2: What is the relationship between mindful awareness and compassion and affective empathy, cognitive empathy, and anxiety?

RQ3: What is the relationship between the five facets of mindful awareness (observe, describe, act with awareness, non-judge, non-react) and two facets of mindful compassion (positive qualities toward self and others) and affective empathy, cognitive empathy, and anxiety?

Need for the Study

Counselor educators are charged with the task of training a growing number of counselor trainees to be effective counselors. For decades, educators have focused on teaching observable empathy skills, such as reflective listening, to help counselors foster the strong therapeutic relationships needed for positive client outcomes. There is a risk, however, that this model is teaching students to *act* empathic rather than *be* empathic. That is, the microskills approach may not impact internal attributes related to empathy (Bodenhorn & Starkey, 2005). Cultivating authentic counselor empathy while mitigating the negative effects of counselor trainee anxiety remains a challenge for counselor educators.

Because counselor empathy positively impacts counselor development and counseling outcome while higher counselor anxiety negatively impacts cultivation of empathy and counselor self-efficacy, it is imperative that counselor education programs

include learning experiences that facilitate the development of authentic empathy and decrease self-evaluative anxiety. An examination of the relationships among the awareness and compassion wings of mindfulness and counselor empathy and anxiety will provide important information about the potential utility of mindfulness in facilitating counselor development.

Definition of Key Terms

To clarify the meaning of various concepts used throughout this study, the following definitions are provided:

Counselor trainee is a master's-level student in a counselor preparation program.

Empathy is defined as one's disposition for both taking the perspective of and having feelings of concern for another person as measured by the Interpersonal Reactivity Index (Davis, 1980, 1983). It is a multidimensional construct comprised of both cognitive and emotional facets. The cognitive component, *perspective taking*, is the adoption of another's point of view (Davis, 1983). The emotional component, *empathic concern*, is defined as having genuine feelings of concern for another person and is distinct from personal distress, or concern for one's own emotional reaction to an uncomfortable interpersonal situation (Davis, 1983).

Anxiety is defined as experiencing worry, social avoidance, and autonomic responses such as increased heart rate or perspiration (Lehrer & Woolfolk, 1982). It is a multidimensional construct consisting of somatic (bodily), cognitive (worry and rumination), and behavioral components (avoidance of social situations), as measured by

The *Trimodal Anxiety Questionnaire* (TAQ; Lehrer & Woolfolk, 1982; Scholing & Emmelkamp, 1992).

Mindfulness is broadly defined by Jon Kabat-Zinn as

arising from the simultaneous cultivation of three components: (a) clear intention as to why one is practicing, such as for self-regulation, self-exploration, or self-liberation; (b) an attention characterized by the observation of one's moment-to-moment experience without interpretation, elaboration, or analysis; and (c) a quality of attending characterized by an attitude of acceptance, kindness, compassion, openness, patience, nonstriving, equanimity, curiosity, and nonevaluation. (as cited in Carmody et al., 2009, p. 614)

This definition reflects the multidimensional nature of mindfulness and the interrelatedness of both the awareness and compassion wings.

Mindful awareness is defined as “paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 145) and is characterized by five factors, including non-reactivity, observing, acting with awareness, describing, and non-judging as measured by the *Five Facet Mindfulness Questionnaire* (FFMQ; Baer et al., 2006). Although this and other mindfulness definitions in the literature appear to include some qualities of attending (e.g., nonreactivity, nonjudgement), their respective measures do not explicitly include items which address compassion (Carmody et al., 2009), a critical quality of attending central to the compassion wing of mindfulness.

The compassion wing of mindfulness, *mindful compassion*, is defined as having positive qualities toward one's self and others as measured by the Self-Other Four Immeasurables (SOFI; Kraus & Sears, 2009). For ease of reading, the term *awareness*

will be used to represent mindful awareness and the term *compassion* will be used to represent mindful compassion.

Organization of the Study

This study is organized into five chapters. In Chapter I, an introduction to the study has been provided as well as a definition of key terms including mindfulness, empathy, and anxiety. Chapter I also includes an explanation of the purpose and significance of the study and a statement of the problem and research questions to be addressed by the study. In Chapter II, a critical review of the literature relevant to the study questions is presented. Chapter III contains an overview of the research methodology, procedures, and data analysis, as well as the research questions and hypotheses for the study, a description of the participants, instrumentation, potential limitations, and the results of the pilot study. In Chapter IV, results of the study will be presented. Finally, in Chapter V a discussion will be offered, including the limitations of the study, implications for counseling, and suggestions for future research.

CHAPTER II

REVIEW OF THE LITERATURE

In Chapter I, the rationale for a study of the relationship between the two wings of mindfulness, awareness and compassion, and two counselor training variables, empathy and anxiety, was discussed. In this chapter, the literature relevant to this study is presented and organized into the following three sections: (a) empathy, (b) anxiety, and (c) mindfulness.

Empathy

Empathy has long been the subject of scientific inquiry across many disciplines and is widely recognized as an important and fundamental aspect of human interaction (Barrett-Lennard, 1981; de Waal, 2008; Duan & Hill, 1996; Elliott et al., 2011; Hogan, 1969; Kohut, 1959; Orlinsky, Grawe, & Parks, 1994; Lesh, 1970; Rogers, 1957, 1975; Wampold, 2001). Since Rogers (1951, 1957) proposed empathy as a necessary and sufficient condition for therapeutic change, empathy has been similarly embraced as a central component of effective counseling (Bohart & Greenberg, 1997; Duan & Hill, 1996; Elliott et al., 2011; Lambert & Bergin, 1971; Orlinsky et al., 1994; Wampold, 2001) and, accordingly, an important outcome of counselor training. Despite broad recognition that empathy is a core aspect of interpersonal process, the exact nature, measurement, and development of empathy has been debated in the scholarly literature (e.g. Bodenhorn & Starkey, 2005; Davis, 1980, 1983; Duan & Hill, 1996; Gladstein,

1977, 1983; Markin, 2010; Mehrabian & Epstein, 1972; Preston & de Waal, 2002; Spreng, McKinnon, Mar, & Levine, 2009; Trusty et al., 2005). Central to these debates are questions regarding how empathy should be conceptualized (e.g. trait, situation-specific experience, interpersonal process, value, or communication skill), what dimensions it encompasses (e.g. emotional, cognitive, or both) (Bodenhorn & Starkey, 2005), and how it should be taught to counselor trainees (Ivey, 1971; Ridley et al., 2011; Truax & Carkhuff, 1967). Some researchers (Wang et al., 2003) have broadened the debate further to include questions concerning the ethnocultural nature of empathy. In addition, recent advances in neuropsychology and related sciences have enriched our understanding of empathy as a neurological event, but also added to the complexity of its definition and measurement (Lamm, Meltzoff, & Decety, 2009; Lang, Yu, Markl, Müller, & Kotchoube, 2011; Leslie, Friedman, & German, 2004; Preston & de Waal, 2002). According to Duan and Hill (1996), the inability to clearly define and measure empathy may have dampened empathy research. They pointed out, however, that this diversity of thought “needs to be understood but not discouraged” (p. 261).

Despite the elusive nature of empathy, there is ample literature affirming its importance to the counseling process (Barrett-Lennard, 1981; Kohut, 1959; Rogers, 1957; Shapiro & Izett, 2008; Trusty et al., 2005), including evidence that empathy positively impacts client outcome (Block-Lerner et al., 2007; Bruce et al., 2010; Lambert & Barley, 2001) and the counselor-client working alliance (Grace, Kivlighan, & Knuce, 1995; Trusty et al., 2005). Consequently, it is an important variable in counselor training and research. Therefore, the relevant literature regarding the nature and theoretical

construction of empathy, and empathy development and training, are reviewed. The following section will first address literature regarding the definition of empathy.

Defining Empathy

Although there are numerous definitions of empathy in the literature, it is broadly understood as “the reactions of one individual to the observed experiences of another” (Davis, 1983, p. 113). In the context of counseling, Rogers (1957) defined it as an interpersonal process whereby the counselor is able “to sense the client’s private world as if it were your own, but without ever losing the ‘as if’ quality” (p. 99). As a construct, empathy can be viewed as a trait, skill, or situation-specific way of being, each potentially overlapping with one another (Duan & Hill, 1996). In terms of its nature, empathy can be described as primarily cognitive (e.g. Hogan, 1969), affective (e.g. Mehrabian & Epstein, 1972), or both (e.g. Davis, 1980, 1983; Rogers, 1957). Further, it also can be understood as a neurological response to the actions and feelings of others (Lamm et al., 2009; Leslie et al., 2004; Preston & de Waal, 2002). The definition of empathy, therefore, will vary depending on how it is viewed. This section will review literature concerning how the nature and construction of empathy impact how it is defined.

Nature of empathy. For more than two centuries, social theorists have described empathy as multidimensional, with affective and cognitive components (Davis, 1980). Although early twentieth-century theorists focused more on the affective nature of empathy, the cognitive perspective garnered more attention in the decades that followed until the latter part of the century when scholars more readily sought to integrate the two

dimensions (Davis, 1983). Generally, those who endorsed a cognitive view of empathy emphasized the intellectual ability to take another's perspective (Dymond, 1949, 1950; Hogan, 1969; Kohut, 1971) while those who endorsed an affective view of empathy emphasized one's emotional or immediately felt experience of another (Hoffman, 1977; Mehrabian & Epstein, 1972). Further, some theorists have incorporated both dimensions in their view of empathy (e.g. Davis, 1980, 1983; Rogers, 1957, 1975; Truax & Carkhuff, 1967), suggesting that a one dimensional view of empathy may misrepresent the phenomenon (Davis, 1983; Duan & Hill, 1996).

Determining the nature of empathy is further complicated by questions regarding whether the two dimensions are related and how they may influence one another. Feshbach (1975) stated that empathy can be conceived as “a cognitive product mediated by affective factors or an affective response mediated by cognitive processes” (p. 25). This perspective is reflected in the later work of Davis (1983) who maintained that empathy is best understood as a “set of constructs, related in that they all concern responsivity to others but are also clearly discriminable from each other” (p. 113). Additionally, Gladstein (1983) stated that empathy can be either cognitive or affective depending upon the specific situation. To further elucidate the nature of empathy, following are definitions of the cognitive and affective dimensions of empathy and the relevant literature.

Cognitive empathy defined. Although Rogers (1957) endorsed an affective component of empathy when he stated that empathy involves the counselor's ability “to sense the client's anger, fear, or confusion as if it were your own” (p. 99), he is still

viewed as an early endorser of a cognitive view of empathy because he described sensing another's experience with an "as if" quality (Davis, 1980). In this regard, the counselor senses the pain of another but does not become immersed in it. Rogers (1975) suggested that the ability to maintain an "as if" quality marked an important distinction between empathy and identification. Proponents of cognitive empathy believed this "as if" quality on the part of the empathizer was the cognitive process needed for accurate understanding and prediction of another's thoughts, feelings, and behaviors (Dymond, 1949; Hogan, 1969; Rogers, 1957, 1975). Over the years, scholars have offered several definitions of cognitive empathy that echo this "as if" quality. Hogan (1969), for example, defined cognitive empathy as "the intellectual or imaginative apprehension of another's condition or state of mind" (p. 307). Similarly, Gladstein (1983) described cognitive empathy as "intellectually taking the role of another" or "seeing the world as the other person does" (p. 468). Duan and Kivlighan (2002) preferred the term *intellectual* empathy, which they defined as "the therapist taking the perspective of the client and understanding the client's cognitive or emotional state, or both, as the client experiences it" (p. 24). Across these definitions, empathy is a phenomenon which requires a cognitive understanding of another's experience and any related affective experience is epiphenomenal.

Cognitive empathy, which is most often operationalized as either role-taking, predicting, or communicating understanding of another's thoughts, feelings, and/or behaviors, has dominated counseling and psychology outcome research on empathy (Duan & Hill, 1996; Gladstein, 1983; Hogan, 1969; Truax & Carkhuff, 1967). Some

researchers have suggested this may have been a function of the available empathy instruments which favored cognitive empathy (Duan & Hill, 1996; Gladstein, 1983). Others suggested it may have been the result of misinterpretation of Rogers' conceptualization of empathy (Gladstein, 1983; Hackney, 1978). Hackney (1978) stated that researchers may have strayed from Rogers' definition of empathy which characterized it as an internal, unobservable phenomenon (i.e. act of perceiving) by attempting to operationalize it as an observable event such as one's use of a communication skill. This externalization of empathy may have shifted scholarly attention toward cognitive or behavioral aspects of empathy as opposed to exploring it as an affective phenomenon. In addition, the emphasis placed on accurate empathy as necessary for its effective use in counseling may also have influenced the direction of research toward observable empathy skills versus viewing empathy as an attitude or way of being (Rogers, 1957, 1975) or an affective experience (Mehrabian & Epstein, 1972). Further, Duan and Hill (1996) and Feshbach (1975) suggested that the terms cognitive and affective empathy are imprecise, potentially confusing, and may represent a false dichotomy because evidence has suggested the two dimensions are intertwined. Therefore, in addition to cognitive empathy, affective empathy also must be defined to appreciate each dimension's distinct, yet overlapping contributions to overall empathy.

Affective empathy defined. Affective empathy is broadly understood as experiencing the emotions of another. Over time and across disciplines, affective empathy has been given alternative names such as emotional empathy, empathic concern, emotional contagion, resonance, and emotional reactivity. de Waal (2008), a

primatologist and ethologist, defined empathy as comprising three conditions: (a) to be affected by and share the emotions of another, (b) to determine the reason for the other's emotional state, and (c) to adopt the other's perspective. de Waal further proposed, however, that empathy is present even if only the first condition is met. In this regard, affective empathy is primary. In the context of counseling, Rogers's (1957) early definition of empathy, "to sense the client's anger, fear, or confusion as if it were your own" (p. 99) suggested that the experience of empathy involved an affective component, although he did not explicitly name it as such. Gladstein (1983) defined affective empathy as "responding with the same emotion to another person's emotion...feeling the same way as another person does" (p. 468). Mehrabian and Epstein (1972) preferred the term emotional empathy and defined it as "a vicarious response to the perceived emotional experiences of others" (p. 525). Across these definitions, the emotional experiencing of another's feelings is the primary means through which empathy occurs.

Throughout the literature, scholars have given considerable attention to drawing parallels and distinctions between emotional empathy and related phenomenon such as emotional contagion, sympathy, personal distress, identification, and compassion. In Gladstein's (1983) review of the earlier empathy literature, the terms affective empathy and emotional contagion were synonymous. Schulte-Rüther, Markowitsch, Fink, and Piefke (2007) suggested that empathy is distinct from emotional contagion because one's emotional reaction to another can be similar *or* different from the one being observed. de Waal (2008), however, described emotional contagion as the same as personal distress and as the lowest level of empathy, defining it as the "self-centered vicarious arousal,

known as personal distress” (p. 288). Similarly, Davis (1980) defined personal distress within human relationships as “the ‘self-oriented’ feelings of personal anxiety and unease in tense interpersonal settings” (p. 114). Therefore, the affective component of empathy involves having genuine feelings of concern for another person as opposed to personal distress, or concern for one’s own emotional reaction to an uncomfortable interpersonal situation (Davis, 1983). This appears to echo Rogers’s (1957) view that to sense another’s feelings without maintaining an “as if” quality is identification, not empathy. Despite these distinctions, Davis (1983), who favored a multidimensional view of empathy, still included personal distress as one of the dimensions of empathy as did de Waal (2008), although for de Waal it was viewed as a more primitive form of the construct.

Wispe (1986) highlighted similar confusion regarding empathy and sympathy, noting that cognitive understanding of another’s internal states has been equated with both empathy and sympathy, which are used interchangeably despite efforts to distinguish them. Gladstein (1977) attempted to distinguish these terms, arguing that sympathy involves a loss of objectivity when having an emotional response to another, whereas empathy has an objective quality to it. Dymond (1950) made a similar distinction, stating that empathy is a neutral process, and that any resultant positive feelings or closeness is sympathy, not empathy. This lack of objectivity or neutrality has been more recently described as an inability to regulate one’s emotions in response to excessive emotional contagion (Goetz, Keltner, & Simon-Thomas, 2010). Further, sympathy has been characterized as having an affective response which includes feelings

of sorrow for someone in need as compared to merely a shared emotional response (de Waal, 2008). A clear distinction between empathy and sympathy was provided by Iannotti (1975) who stated that empathy emphasizes the feelings of the observed person while sympathy emphasizes the feelings of the observer as he or she responds to the other person's experience. Therefore, both sympathy and empathy are distinct from personal distress as they both have an "other" orientation, but they are similar to one another in that they both involve having feelings in reaction to another's suffering. Goetz et al. (2010) stated that sympathy is different from empathy; however, because it involves feeling sorrow for another, which is not necessarily an aspect of empathy.

Another term that has become intertwined with overall empathy and the affective component of empathy is compassion. In fact, the terms empathy and compassion appear interchangeable at times in the literature. Goetz et al. (2010) distinguished compassion from empathy, however, stating that compassion is "the feeling that arises in witnessing another's suffering and that motivates a subsequent desire to help" (p. 351) while empathy is merely the "vicarious experience of another's emotions" (p. 351). Therefore, there is an altruistic or behavioral response implicit in compassion that is not necessarily inherent in empathy. Frequently, empathy is described as a necessary precursor to compassion, as one cannot feel concern and react to it unless the distress of another is first recognized (Knafo, Zahn-Waxler, Van Hulle, Robinson, & Rhee, 2008). Therefore, although affective empathy may be a part of the same emotion family as sympathy, compassion, emotional contagion, and personal distress, (Goetz et al., 2010), affective empathy appears to be distinct from these other constructs.

Despite the lack of agreement of terms, affective empathy has long been considered an important dimension of overall empathy. The significance of the affective component of empathy may have been most vigorously emphasized by de Waal (2008) who stated, “without emotional engagement induced by state-matching, perspective-taking would be a cold phenomenon that could just as easily lead to torture as to helping” (p. 287). In the context of counseling, emotional empathy has been associated with counseling skill, helping behavior, the working alliance, and counselor effectiveness (Mehrabian & Epstein, 1972; Rogers, 1957; Trusty et al., 2005). Although emotional empathy appears to play an important role in helping behavior (Coke, Batson, & McDavis, 1978; Davis, 1983; Rogers, 1957; Trusty et al., 2005), the relative dominance of research on cognitive empathy has dampened investigation of empathy as an affective phenomenon in psychotherapy research (Duan & Hill, 1996). Even though Mehrabian and Epstein (1972) had created an early instrument that measured emotional empathy to aid in such research, the instrument had been criticized, even later by the first author, as merely a measure of emotional arousal (Mehrabian, Young, & Sato, 1988; Spreng et al., 2009). To improve upon the available instruments, Davis (1980) created a new measurement and operationalized the affective component of empathy as *empathic concern*, or “the ‘other-oriented’ feelings of sympathy and concern for unfortunate others” and *personal distress*, or “the ‘self-oriented’ feelings of personal anxiety and unease in tense interpersonal settings” (p. 114). This instrument also included subscales to measure the cognitive component of empathy as Davis (1980) determined that a more comprehensive measurement of empathy was needed. This marked a shift when

researchers began to recognize that both elements of empathy were likely important to a full understanding of the phenomenon.

Cognitive-affective empathy. Although there has historically been alliance with one component of empathy over another among theorists and researchers, there has and continues to be a growing consensus that both cognitive and affective components are relevant to empathy (Barrett-Lennard, 1962; Coke et al., 1978; Davis, 1980, 1983; de Waal, 2008; Duan & Hill, 1996; Feshbach, 1975; Gladstein, 1977; Ionatti, 1975; Spreng et al., 2009). This is particularly important to counseling and counseling research as both cognitive and affective empathy have been found to play a role in facilitating helping behavior (Coke et al., 1978). Rogers (1957) emphasized both components of empathy suggesting that the counselor needs to sense another's felt experience and also maintain an "as if" quality. Barrett-Lennard (1962) described empathy as a situation-specific, cognitive-affective state whereby the affective components of empathy, "empathic recognition" (p. 3) and the cognitive components, "empathic inference" (p. 3) occur together, but will vary based on the specific relationship or moment within the relationship. Similarly, Davis (1980, 1983) described empathy as comprising both cognitive and affective components which are further delineated into a set of related, but distinguishable constructs. Relatedly, Duan and Hill (1996) similarly emphasized the importance of both dimensions and encouraged researchers to investigate how each component of empathy may be separate, coexist, or influence one another. In a study designed to develop a new measure of empathy, Spreng et al. (2009) determined that there is significant overlap in cognitive and affective empathy as their general measure of

affectively oriented empathy correlated with a number of other measures representing both domains of empathy.

Within other disciplines, researchers also have recognized the importance of a cognitive-affective view of empathy. Primatologist and ethologist de Waal (2008) endorsed a joint cognitive-affective view of empathy, arguing that perspective taking is only empathy when combined with emotional engagement. Cognitive neuroscience research, using brain imaging instruments, supports the theory that cognitive and affective empathy are shared processes in that they both depend upon mirror neurons, neurons that react as we observe the actions and feelings of others in the same way as they react to those same actions and feelings when they originate within the self (Lamm et al., 2009; Leslie et al., 2004; Preston & de Waal, 2002; Spreng et al., 2009). In fact, neuroscience research is fast becoming a means for understanding the nature of empathy that may ultimately provide a more objective measure of the construct.

Neurological empathy. New technology, demand for measurable outcomes, and increased interdisciplinary research have paved the way for the influence of neuroscience, neuropsychology, and social cognitive neuroscience on the helping professions. Functional magnetic resonance imaging, or functional MRI (fMRI), has enabled researchers to map the brain by measuring changes in blood flow related to neural activity (Devlin, 2008). As a result, internal phenomenon, such as empathy, which could previously only be understood through counselor or client self-report, physical measures such as skin conductivity, or by observation of counselor-client interactions, can be measured more objectively. Because of its widespread significance, empathy has

emerged as a focus of neuroscientific research and efforts have been made to use fMRI to identify the brain processes associated with empathy. Researchers have used the fMRI to assess cognitive and affective empathy, and have shown support that similar neural networks “fire” whether a person is observing the action or emotion of another or experiencing it themselves or whether it is “observed” visually, tactically, or auditorily (Lamm et al., 2009; Lang et al., 2011; Leslie et al., 2004; Preston & de Waal, 2002). Preston and de Waal (2002) concluded from studies using primates that these neural representations of observing another’s state are automatic unless inhibited. This may be important to counselor development because, not only may there be trait differences in empathy or developmental differences (maturity, learning), but there may be other factors (e.g. anxiety) that inhibit the ability for some counselors to be empathic globally or situationally. Further, Lamm et al. (2009) suggested that the same neural structures are required for one’s ability to infer the affective state of another, whether the other person is like us or not. This has implications for counselors as they are faced with delivering services to diverse populations and client conditions.

Additional support for the importance of mirror neurons to empathy was provided in a study that showed mirror neurons associated with both behavior and emotion were more strongly activated in participants who scored higher on the Interpersonal Reactivity Index (IRI; Davis, 1980), a widely used self-report measure of empathy (Jabbi, Swart, & Keysers, 2007). Decety and Moriguchi (2007) identified four components to empathy: affect sharing, self awareness, mental flexibility and perspective taking, and emotion regulation. According to Gerdes, Segal, and Lietz (2010), research in social cognitive

neuroscience has suggested that all four neural networks associated with these four components must be activated for empathy to occur. Social cognitive neuroscience and neuropsychology along with brain imaging techniques may offer new possibilities for discovering what helps or hinders counselor trainee empathy. For example, researchers have used fMRIs to study the impact of meditation on the brain and have shown that long time meditators have increased responsiveness in areas of the brain associated with empathy (Lutz et al., 2008). Therefore, there is growing neuroscientific evidence that mindfulness and empathy are related neurologically and that mindfulness may be a useful tool to cultivate empathy in counselors.

Empathy constructs. Empathy has been represented as a variety of constructs within the literature. Most notably, it has been viewed as a personality trait, a communication skill, a situation specific occurrence, and an interpersonal process (Bodenhorn & Starkey, 2005; Duan & Hill, 1996; Gladstein, 1977). These different empathy constructs are reviewed in this section.

Personality trait. Theorists across disciplines, including psychotherapy researchers (Dymond, 1950; Hogan, 1969; Rogers, 1957), characterized empathy as a trait or general ability that varies across individuals due to inherent or developmental differences (Duan & Hill, 1996). From this perspective, one's empathic ability can grow with maturity but is generally stable over time (Dymond, 1950; Feshbach, 1975; Hogan, 1969). A variety of terms have been used to represent empathy as a trait such as *empathic disposition* (Hogan, 1969) or *dispositional empathy* (Davis, 1983) or *empathic tendency* (Mehrabian & Epstein, 1972). Rogers initially described empathy as a cognitive-affective

state, although he later emphasized empathy as an interpersonal process (Rogers, 1957, 1975). Based on their research, Mehrabian and Epstein (1972) concluded that the tendency to be empathic is the major personality determinant of helping behavior. In the context of counseling, the trait view of empathy is useful to research efforts geared toward the identification of high or low facilitative counselors (e.g., Rogers, 1957). As a personality trait, a person with higher empathy is sympathetic, perceptive, insightful, warm, compassionate, helpful, and good-natured (Hogan, 1969, 1975; Johnson, 1990), whereas a person with low empathy would not only be lacking in these characteristics, but might also appear aloof, disaffected, cold, cruel, quarrelsome, and alienating (Hogan, 1969, 1975). It is important to note, however, that samples in these studies often were exclusively men which may have impacted which descriptors emerged. Dymond (1950) made a similar determination as to the type of characteristics that are associated with highly empathic individuals which included outgoing, optimistic, warm, emotional, and possessing a strong interest in others. Empathy viewed as a trait invites questions as to its origins. Literature suggests that the origins of empathy can be understood through a variety of theoretical perspectives.

One perspective on the origins of empathy is based in evolution and animal studies. Decety and Moriguchi (2007) argued that social behaviors, including empathy, are best understood as serving the specific needs of each species' ecology within the context of evolution. In this view, empathy is a social behavior which evolved as a necessary means of survival in humans. For example, empathy first evolved as a means for ensuring parental care in other species, then humans, and then later evolved to other

social applications important to survival (e.g. vocalizing distress to induce empathy) (de Waal, 2008). Others have hypothesized that there is a biologically driven innate tendency to be empathic (de Waal, 2008; Hogan, 1975; Hoffman, 1977). Hogan (1975) also proposed that empathy naturally emerged in humans as cultural, group dependent agents. Thus, it was further hypothesized that empathy development was facilitated by four factors: inherent role-taking ability, parental training, parental modeling, and personal suffering (Hogan, 1975). Finally, there is evidence of a genetic explanation for empathic ability. In the largest study to date on children's empathic development in late infancy and early childhood, Knafo et al. (2008) concluded that empathy is relatively stable across time and consistent across contexts and across cognitive and affective empathy dimensions. The authors further concluded that genetic components to individual differences in empathy increase with age, while environmental components decrease with age, further supporting the inherent nature of empathy. The trait view of empathy continues to persist. Limiting the counseling profession to only those naturally strong in empathy, however, may prove unrealistic. Theorists interested in the contextual aspect of empathic interactions sought a different perspective that challenged the trait perspective of empathy.

Situation-specific. In contrast to a trait perspective, the underlying premise of situation-specific empathy is that it is the situation that will impact the presence or degree of empathy, regardless of inherent or developmental level of empathy (Duan & Hill, 1996). In other words, empathy is an experience that occurs, rather than a fixed disposition that one brings to an experience. Operationally, situation-specific empathy is

defined and measured as a match between the affect or cognition of the client and counselor or as the extent to which the counselor feels the experiences of the client (Duan & Hill, 1996). Empathy as a situation-specific phenomenon allows for the possibility that anyone can be empathic in any given situation. Research from this perspective, however, suggests that empathy is not necessarily associated with helping behavior, depending on the circumstances (Decety & Moriguchi, 2007; Hoffman, 1977). In fact, empathy is a neutral process that can be used for harming or assisting (Decety & Moriguchi, 2007; Dymon, 1950; Hoffman, 1977). Relying on his clinical experience, Gladstein (1983) provided a list of counseling circumstances in which affective and/or cognitive empathy might lead to positive client outcomes depending on counseling goals, stages, or client preferences. This view expanded research opportunities to include the study of situational factors that may facilitate or inhibit empathy and offered guidance on empathy training. Training counselors to be empathic would be less reliant on a counselor's disposition, but rather on the counselor's way of being, to have a positive impact on clients. This perspective aligns with Rogers's (1957) therapist offered conditions; if the counselor offers the right conditions (i.e. ways of being or experience), change can occur. Attempting to teach and measure a way of being, however, proved difficult for counselor educators. As a result, theorists became interested in a more readily observable and teachable approach of empathy. Thus, an interest in observable empathy, or empathy skills, came into favor among many theorists (Carkhuff, 1969; Truax & Carkhuff, 1967).

Observable skill. Another overlapping empathy construct is empathy as an observable skill. Scholars and theorists, who adopted the view that empathy could be

conceived as an interpersonal process, or stage model, highlighted the importance of the communication and reception of empathy (Barrett-Lennard, 1981; Carkhuff, 1969; Truax & Carkhuff, 1967). This view placed greater emphasis on empathy as an observable process involving specific communication skills. To support this effort, Truax and Carkhuff (1967) developed the *Accurate Empathy Scale* (AES; Truax & Carkhuff, 1967) to measure empathy as an observable communication skill. These scholars outlined eight stages of empathy, where stage one, the lowest level of empathy, involve inaccurate responses to obvious feelings, and stage 8, the highest level of empathy, a high level of accuracy in understanding clients, feelings, content, and intensity. Carkhuff (1969) later revised the AES to five stages that theoretically covered the same range of accuracy. Ivey (1971) later built upon this idea and introduced microskills training, which helped trainees learn discreet skills needed to perform counseling (e.g. reflective listening skills and paraphrasing). This emphasis on empathy as an observable microskill dominated counselor training for decades (Ridley et al., 2011). Although microskills training played an important role in filling the gap between theory and practice, researchers have argued that this approach may not readily cultivate the ability to be genuinely empathic (Greason & Cashwell, 2009; Hick, 2008; Ridley et al., 2011). Fundamental to the notion of skills training is the understanding that counseling is a communication *process*. Skills are only useful in teaching new counselors how to do counseling, if they are understood as a means by which to be responsive to the client. That is, empathy as a process has received a great amount of attention in the counseling literature.

Interpersonal process. Prominent theorists such as Barrett-Lennard (1981) and Rogers (1975) were concerned with the experience between counselor and clients and, therefore, began to conceptualize empathy as a multiphase, interpersonal process with affective, cognitive, and communication components. This was a departure from Rogers's (1957) earlier work in which empathy was characterized more as a trait than a process. Later, Rogers (1975) revised his early definition of empathy and described empathy as a two-part process of "temporarily living in" (p. 4), whereby the counselor first senses the client's inner world and then, secondly, communicates that sensing to the client. He further described it as a "way of being" and a "moment-to-moment experience" (p. 4). Other theorists had similar descriptions of empathy as a multistage process involving several, sequential events. For example, Gladstein (1983) characterized empathy as a multistage interpersonal process which included emotional contagion, identification with the client, and role taking. Barrett-Lennard (1981) proposed a five stage cycle of relational empathy: (a) empathic set (e.g. unconditional regard), (b) inner process, or emotional resonance, (c) communication of empathic understanding, (d) received empathy, and (e) feedback. Fundamentally, Barrett-Lennard regarded the inner process or resonance of another's feelings as foundational to the process. He also strongly postulated, however, that the client's experience of the counselor's response is the key influencing factor in the therapeutic relationship. This contrasted with Rogers's (1957) early work in which the therapist's experience, such as feeling empathy, was paramount and the communication of this empathy was secondary (Barrett-Lennard, 1981). This highlights one of the challenges with viewing empathy as an interpersonal process. A

dilemma exists regarding when and with whom the process begins, what situational factors influence it, and what should be the focus of measurement. This has limited the ability to adopt fully this perspective in counselor training programs. Although empathy as a teachable sequential process has appeal for training purposes, there has been limited ability to operationalize it in this way (Duan & Hill 1996). Two instruments which emerged from the trend toward relational empathy were the *Accurate Empathy Scale* (Truax & Carkhuff, 1967) which measures empathy communication, and the *Barrett-Lennard Relationship Inventory* (BLRI, Barrett-Lennard, 1962), which measures counselor resonance, counselor's expressed empathy, and client received empathy. Both instruments continue to be utilized in research today. The overall contribution of relational empathy was critical, as it underscored the complexity of empathy, including the need to incorporate affective, cognitive, and communication components. Further, relational empathy highlighted the importance of understanding empathy within the counseling environment.

Empathy in Counseling

Although empathy can be traced back to early psychological theorists such as Sigmund Freud and Heinz Kohut (Duan & Hill, 1996; Pigman, 1995), it was the influence of Carl Rogers which situated empathy as a central aspect of counseling and ignited decades of research. Although it has been more than 50 years since Rogers (1957) proposed that empathy was a necessary and sufficient condition for therapeutic change, it has remained a cherished construct within the counseling profession and is still considered vital to the therapeutic relationship and positive counseling outcomes.

Because of its importance to the profession, there have been several proposed explanatory models of empathy development, methods for training counselors in empathy, and considerable efforts to determine its role within the therapeutic relationship and counseling outcomes. In this section, the relevant literature on empathy development models, empathy in the therapeutic relationship, empathy and counseling outcomes, and empathy training methods will be reviewed.

Empathy and counseling outcomes. More than 70 years ago, Saul Rosenzweig conducted a seminal survey on common factors in diverse methods of psychotherapy (as cited in Luborsky et al., 2002) where he predicted that common factors (i.e. therapist qualities, therapeutic relationship) were so pervasive that varying forms of psychotherapy would only account for small differences in outcome. Since then, the premise that common factors across theoretical approaches is most influential to client outcomes has been widely acknowledged and researched in the counseling profession (Block-Lerner et al., 2007; Bruce et al., 2010; Horvath, 2005; Lambert & Barley, 2001; Luborsky et al., 2002; Luborsky, Singer, & Luborsky, 1975; Orlinsky et al., 1994; Rogers, 1957, 1975; Shapiro & Izett, 2008). Empathy is important to common factors research, as it is considered both a therapist quality and an essential aspect of the therapeutic relationship (Lambert & Barley, 2001; Lambert & Simon, 2008; Rogers, 1957; Shapiro & Izett, 2008; Trusty et al., 2005). For example, Lambert and Barley (2001) determined the percent of improvement in psychotherapy patients as a function of therapeutic factors by examining a subset of more than 100 studies which provided statistical analyses of predictors of client outcome, and concluded that empathy accounted for up to 30% of the variance in

client outcome. Similarly, using meta-analysis of 47 studies, encompassing 190 separate tests of the empathy-outcome association, and representing more than 3,000 clients, Elliott et al. (2011) found a medium effect size ($r = .32$) in the relationship between empathy and outcome. Although this suggested that empathy accounted for about 10% of client outcome, less than Lambert and Barley (2001) found, the finding still supports the significance of empathy as the effect size was slightly larger than that found in research on therapeutic alliance and outcome and accounted for an equal or greater amount of outcome variance than that of specific interventions. Further, Ridgway and Sharpley (1990) examined the relationship between cognitive, emotional, and communicated empathy to three outcome variables, counseling skill, counselor behavior, and client satisfaction, in beginning counselor trainees, and found that only emotional empathy was significantly related to the outcome variables.

Emotional empathy also has been identified as important to initial stages of counseling and facilitating client awareness (Gladstein, 1983; Trusty et al., 2005) and more generally to helping behavior (Coke et al., 1978; Mehrabian & Epstein, 1972). Specifically, in a study of 44 psychology students, Coke et al. (1978) found evidence for their model in which cognitive empathy (i.e. perspective taking) increased emotional empathy which then led to helping behavior. Similarly, Grace et al. (1995) found a positive association between emotional empathy and the counselor–client working alliance in a study of 18 counseling students randomly assigned to empathy training and non-verbal sensitivity training, although these results are limited by the small sample size.

Limitations of research on empathy. Although there is a diverse body of empathy research in counseling, a significant focus of study has been on finding a relationship between empathy and client outcome. Although there have been numerous studies showing the relationship between empathy and outcome, differences in the definition and measurement of empathy, small sample sizes, and differences in outcome measures make it difficult to draw conclusions. Because of these differences and the great number of studies on the topic, researchers employed meta-analytic techniques to enable them to broadly assess the relationship between empathy and outcome. Overall, researchers using this approach offered support that common factors such as empathy are related to outcome (Elliot et al., 2011; Lambert & Barley, 2001; Luborsky et al., 2002; Luborsky et al., 1975) as there was little difference attributable to theoretical approach. As researchers began reporting such conclusions (e.g., Luborsky et al., 1975; Smith & Glass, 1977), it was met with resistance as these results were enormously challenging to those heavily invested in their respective treatment approach (Wampold, 2001). This led to a variety of criticism regarding meta-analytic techniques including issues related to the type of variable measured, duration of treatment, severity of client problem, variation in outcome measures, time period in which the individual studies occurred, and variation in classification of approaches (Wampold, 2001). In later meta-analytic studies, efforts had been made to address these confounds and researchers (Elliott et al., 2011; Wampold, 1997) still found support for the hypothesis that outcomes are insignificantly related to theoretical approach. As support grew for common factors such as empathy, so did the

recognition that theories were needed to understand how empathy develops and how it might be developed within children, adults, and counselors.

Models of Empathy Development

Despite strong evidence for the importance of empathy in counseling, there is little to guide counselor educators as to the best way to develop it in counselors. In this section, available empathy development models and counselor training methods will be reviewed.

Hoffman's Model. Hoffman (1977) postulated that until children develop role taking skills, or the ability to take the perspective of another, they cannot distinguish between self and others and will observe the distress of others as the same as his or her own. After role-taking skills develop, children can then have feeling of compassion for the suffering of others which motivate them to take action to help those in distress. Role-taking is one of four phases in a child's development toward being able to take the perspective of another:

- 0 – 1 years old there is no distinction between self and other;
- At nearly one year, there is awareness of others as permanent or distinct
- Just after one year, there is a basic awareness that others have their own inner states; and
- By middle/late childhood, there is recognition that others have separate identities and experiences beyond the child's immediate awareness (Hoffman, 1977).

In the development of a measure of multidimensional empathy, Davis (1980) offered support of Hoffman's model in adults because he found that higher perspective taking was associated with lower personal distress regarding the experience of others and greater concern for the other. Although this model emphasized perspective taking, Hart (2004) remarked that empathy, "through the eye of the heart" (Attention section, para. 3) verses our mind, is the basis of Hoffman's work on empathy and moral development.

Feshbach's Three-Factor Model. Feshbach (1975) proposed that both affective and cognitive factors were important in understanding empathy, and therefore proposed a three component model of empathy comprised of two cognitive elements and one affective element. The cognitive components included the ability to differentiate the perspective of another from one's own and the ability to take the role of another, where role taking is considered a higher order cognitive process. The affective component is defined as emotional capacity and responsiveness. Feshbach suggested that all three components are necessary for empathy and that children's empathy will advance based on their experiences and general development. She further hypothesized that this development may continue into adulthood. This model focused on children and the development of empathy and prosocial behavior and, therefore, offered little regarding empathy development in adults.

In contrast to both Hoffman and Feshbach, more recent neuroscientific research offers an alternative perspective. Currently, there is wide recognition of what is called "theory of mind," which is defined as the ability to attribute thoughts and goals to others (Leslie et al., 2004). This is viewed as a mental processing mechanism that has been

shown to be present very early in life before the development of knowledge and reasoning abilities. As such, Leslie et al. (2004) suggested that researchers should shift their focus from child “theories” to instead understanding brain mechanisms.

Buddhist psychology and Mindfulness Model. Buddhism is an eastern tradition tracing its roots back over 2500 years (Pierce, 2003). It has philosophical, psychological, and cultural traditions that originated with the story of the Buddha, or the enlightened one (Kelly, 2008). Central to Buddhist teaching is that suffering is alleviated through acquiring insight and cultivating compassion for one’s self and all sentient beings (Brantley, 2010; Kraus & Sears, 2009; Schmidt, 2004). Similar to those who view empathy as situation-specific or process oriented, in Buddhist psychology empathy is viewed as a capacity that can be cultivated through learning and mental training, such as meditation (Block-Lerner et al., 2007; Bruce et al., 2010; Goldstein & Michaels, 1985; Greason & Cashwell, 2009; Kristeller & Johnson, 2005; Lesh, 1970; Sweet & Johnson, 1990). Similar to Rogers’s (1975) perspective, in Buddhist psychology empathy is viewed as an experience that is available to anyone. Unlike child development models, however, Buddhist psychology offers a means for the development of empathy and compassion in both children and adults (Thompson, 2008). Mindfulness is a central teaching of Buddhism and mindfulness meditation is an important means through which an individual can gain insight, compassion, and the alleviation of suffering (Brantley, 2010; Kraus & Sears, 2009; Schmidt, 2004). Empathy is considered an outcome of gaining insight (or perspective taking) and compassion (recognition of the suffering of another with the desire to alleviate it) (Schmidt, 2004). Similar to Rogers’s (1975)

description of empathy, mindfulness requires a moment-to-moment, accepting, non-judgmental awareness. Mindfulness is becoming increasingly recognized as a method for cultivating empathy in clinical populations and in counselors (Baer, 2003; Greason & Cashwell, 2009; Kristeller & Johnson, 2005; Lesh, 1970; Teasdale, Segal, & Williams, 1995). This is of value to the counseling profession, as there have been few, empirically based methods for developing counselor empathy.

Methods for Developing Counselor Empathy

The development of new counselors has and continues to be a challenging endeavor for which there is no well researched or widely accepted solution (Bodenhorn & Starkey, 2005; Hackney, 1978; Ivey, Normington, Miller, Morrill, & Haase, 1968; Lesh, 1970; Ohrt, Foster, Hutchinson, Hutchinson & Ivey, 2009; Ridley et al., 2011). More specifically, since Rogers (1957) described empathy as an essential component to counseling, educators have been seeking ways to help students develop empathy with their clients (Bodenhorn & Starkey, 2005; Hackney, 1978; Lesh, 1970; Truax & Carkhuff, 1967; Ohrt et al., 2009). Hackney (1978) pointed out the irony that counselor educators employed *training* to help students be *spontaneous* in their empathic responses to another's emotion. Although there is not agreement regarding the exact nature of empathy, various methods for developing affective, cognitive, and communicated empathy, appear in the counseling literature. Available methods for empathy development in counselors are reviewed in this following section.

Self-exploration. Early on, much of the literature described empathy as an internal process (feeling or perceiving) and it was difficult to determine how best to teach

empathy to counseling students. Consequently, early training approaches in counseling adhered to two general approaches, didactic-intellectual, which focused on teaching theory to students, and relationship-oriented teaching, which emphasized self-exploration with the support of an empathic instructor (Ridley et al., 2011). It was assumed with the latter approach that experience and self-awareness were sufficient to set counselor trainees on a path toward competent therapy. Because counseling sessions were considered private, there was no means for researchers to determine precisely how either approach impacted performance. In a landmark work, Truax and Carkhuff (1967) recognized there was little evidence that counselor training was successful, and they offered an approach that focused on the communication of empathy. This marked a dramatic shift from earlier approaches and set the path toward a more skills based approach.

Microskills training. Until the late 1960's, most counselor training focused on content or self-exploration, with little attention to counselor behaviors (Ridley et al., 2011). In an attempt to fill the gap between theory and practice, Truax and Carkhuff (1967) made the first effort to shift the focus toward the communication of empathy, as this is something that could more readily be observed, taught, and researched. Although knowledge and awareness were not abandoned, training shifted toward learning how to communicate empathy and eventually role plays became commonplace (Ridley et al., 2011). Thereafter, Ivey (1971) built upon this approach and introduced the concept of microcounseling or microskills training. Microskills training is a method developed to systematically teach counselor trainees discrete counseling behaviors such as active

listening, attending, confrontation, and paraphrasing (Ridley et al., 2011; Yul, Zingle, Patterson, Ivey, & Haase, 1976). The premise was that counselors could more readily learn counseling through adapting single skills and learning to use of verbal and nonverbal behaviors. The tangible, teachable nature of this approach had widespread appeal. Consequently, for the past four decades counseling programs have relied markedly on microskills training as a core means for teaching counselors the specific behaviors needed to “perform” counseling (Ridley et al., 2011).

Although counselor preparation programs may successfully teach observable empathy skills such as reflective listening (Hill & Lent, 2006), the ability to cultivate an empathic quality in the counselor presents a greater challenge (Bien, 2008; Bodenhorn & Starkey, 2005; Bruce et al., 2010; Greason & Cashwell, 2009). Therefore, some researchers have argued that counselor training should place greater emphasis on developing the counselor as an instrument (Bien, 2008; Greason & Cashwell, 2009; Grepmaier, Mitterlehner, Loew, Bachler, et al., 2007; O’Driscoll, 2009). In other words, little attention has been given to developing *intrapersonal* skills, as compared with *interpersonal* skills, in counselor trainees. Scholars have argued that observable empathy skills are not necessarily equivalent to authentic empathy (Bodenhorn & Starkey, 2005; Greason & Cashwell, 2009; Lambert & Simon, 2008; Ridley et al., 2011; Shapiro et al., 2004). Although new counselors can successfully perform observable empathy skills after receiving training, they do not appear to be internalized as they do not demonstrate them in routine practice (Lambert & Ogles, 1997; Lambert & Simon, 2008). In addition, there is evidence that empathy tends to erode over the course of training for counselors

(Lesh, 1970; Truax & Carkhuff, 1963) and, similarly, declines in other health care professionals (Shapiro et al., 2004). Further, there is evidence that the educational process in general can undermine existing empathy (Bodenhorn & Starkey, 2005).

Additionally, although there is a great deal of empirical support, Ridley et al. (2011) conducted an extensive investigation into microskills training research and determined that it is plagued with numerous flaws such as small sample sizes, poor external validity, and lack of a control group. Further, the authors determined that microskills research is time-limited and focused on the basic skills of novice counselors. Therefore, there is little evidence that trainees are able to later demonstrate higher order skills (e.g. complex processes such as multicultural sensitivity or long-term treatment planning), maintain what they've learned, or impact client outcome. These limitations make the effectiveness of microskills training uncertain, as it is unclear if such an approach produces genuine empathy in a real counseling environment. Methods for cultivating the kind of attitude that promotes empathy and the therapeutic relationship have not been well developed within counselor education (Greason & Cashwell, 2009; Hick, 2008). Consequently, various alternative methods have been suggested to help counselors with self-exploration and empathy development.

Alternative methods. There have been a number of other methods utilized to cultivate empathy which emphasized body awareness such as Rolfing, dance therapy, bioenergetics, and biofeedback, although only biofeedback was studied related to empathy development and results were mixed (Goldstein & Michaels, 1985). Similarly, Bodenhorn and Starkey (2005) drew on theatre techniques to assist students in their

ability to take the perspective and role of clients. Their approach was based on the premise that empathy will not be genuine or accurately communicated unless the counselor genuinely feels empathic. In their study, 18 counselors went through a variety of techniques taught to help actors enter into the world of their character. They reported finding no significant difference in self-report measures of empathy pre/post treatment, but argued that this may be a result of the small sample size. Ohrt et al. (2009) suggested that film, music, and music videos may prove effective in developing empathy in counselors. They offered a case illustration where a music video involving child abuse was shown in class and discussed. They reported that students expressed feeling sad and more empathic, but such results remain anecdotal.

Mindfulness training. Although this topic will be addressed more extensively in the literature review on mindfulness, it is important to mention briefly here as mindfulness has been employed as a means of empathy development in clinical, non-clinical, and counselor populations.

It is not by accident that mindfulness has been proposed as a plausible means for empathy development in counselors, as two highly influential teachers on empathy and compassion have expressed similar views regarding what it takes to be empathic. Thich Nhat Hanh, a lifelong meditator and Zen master, stated

when you are mindful . . . you are more solid in order to handle the suffering inside of you and around you . . . you can recognize, embrace and handle the pain, the sorrow in you and around you . . . you'll be able to transform the suffering inside and help transform the suffering around you. (as cited in Hick & Bien, 2008, p. 6)

Similarly, Rogers (1975) wrote, “The better integrated the therapist is within himself [sic], the higher degree of empathy he [sic] exhibits” (p. 5). Thus, mindfulness and meditation training have been proposed as a means for cultivating both cognitive and affective empathy (Block-Lerner et al., 2007; Bruce et al., 2010; Greason & Cashwell, 2009; Goldstein & Michaels, 1985; Lesh, 1970; Sweet & Johnson, 1990). Block-Lerner et al. (2007) reported relationships between mindfulness and two aspects of empathy, perspective taking and empathic concern. Shapiro et al. (2005) similarly reported positive benefits, such as increased compassion, in a mindfulness training program for health care professionals including psychologists. Meditation training also has been associated with increased counselor empathy (Lesh, 1970) and improved client outcomes (Grepmaier, Mitterlehner, Loew, Bachler, et al., 2007).

Mindfulness research related to counselor empathy is in its nascent stages. Further, although mindfulness training may prove useful in empathy development, most studies to date have assessed cognitive empathy, creating uncertainty regarding the relative importance of affective empathy. Additionally, mindfulness has been measured primarily in terms of awareness, similarly leaving questions unanswered as to how other important aspects of mindfulness such as compassion, might relate to empathy.

Summary of Empathy

Empathy has a long history of scientific inquiry across disciplines, including counseling. Despite difficulties in defining and measuring empathy, it is widely recognized as an essential counselor quality, a central component of the therapeutic relationship, and an important contributor to positive client outcomes. The emphasis on

cognitive empathy in research and the dominance of teaching observable empathy skills may have inhibited exploration of all potential facets of empathy. Consequently, there is a dearth of available methods for developing genuine empathy that involves attention to both cognitive and affective dimensions. Empathy development models and social cognitive neuroscience provide some degree of visibility into how empathy develops, yet they offer little that is actionable for counselor training. For decades, microskills training has been the dominant paradigm for training counselors to be empathic with clients. This approach, however, suffers from a lack of sound empirical evidence and does little to develop a genuinely empathic presence. Mindfulness training has recently garnered attention from researchers as a promising method for developing this type of empathic attitude in counselors. The research in this area, however, is in its early stages.

Before providing an overview of mindfulness and how it relates to key counselor attributes and outcomes, it is important to address another critical training variable, anxiety, that not only impacts counselor empathy, but also adversely affects other important counselor variables such as counselor self-efficacy, counselor wellness, cognitive functioning, supervision, and counseling performance.

Anxiety

Anxiety is considered a common variable in human experience and a construct found in most personality theories (Bandura, 1956, 1988; Barlow, 2000; Endler & Kocovski, 2001; Eysenck, 1992; Spielberger, 1972). Anxiety also is considered an important variable in counselor training and performance (Bandura, 1956; Bowman & Geisen, 1982; Bowman et al., 1978; Duncan & Brown, 1996; Friedlander et al., 1986;

Hale & Stoltenberg, 1988; Hiebert et al., 1998; Larson & Daniels, 1998; Levitt, 2001; Ridley et al., 2011; Trusty et al., 2005). Generally, anxiety is regarded as similar to fear, although some scholars have attempted to distinguish the two. In this regard, anxiety is an experience involving worry, unease, and perceived loss of control related to a possible threat or danger, whereas fear is a reaction to an imminent and present danger (Barlow, 2000). Alternatively, Gray (1991) described fear as a “subspecies” (p. 77) of anxiety, suggesting it is inherent to anxiety but does not explain the phenomenon as a whole.

Similar to empathy, anxiety has been imbued with different meaning from scholars across disciplines and, therefore, definitions and measurements vary widely (Eysenck, 1992; Krug, Scheier, & Cattell, 1976; Lehrer & Woolfolk, 1982; Sarason, 1972; Scholing & Emmelkamp, 1992; Spielberger, 1972; Wine, 1971). The nature of anxiety has been defined as cognitive, behavioral, affective, and somatic, and it has been conceptualized as a trait (general disposition), a state (situational experience), or both (Bowman & Geisen, 1982; Eysenck, 1992; Endler & Kocovski, 2001; Lehrer & Woolfolk, 1982; Spielberger, 1972). Researchers have varied in which system(s) (e.g. cognitive-somatic; somatic-affective) they have investigated, which has yielded disparate findings and confounded efforts to attain a unified theory of anxiety (Eysenck, 1992). The diverse literature on anxiety, however, has firmly established the multidimensional nature of anxiety and offers insight regarding the many situational factors that produce it.

Anxiety occurs when individuals confront high uncertainty and lack of control (Smith & Ellsworth, 1985) and when they experience new or novel situations (Brooks & Schweitzer, 2011; Gray, 1991). In addition, it occurs in situations that are “ego-

involving” (Spielberger, 1972, p. 40), where circumstances involve risk of failure, where personal adequacy is evaluated, or where self-esteem is threatened. Similarly, Rogers (1951) described anxiety as occurring when there is a perceived threat to self-concept. Sarason (1980) described anxiety as a “response to perceived danger and inability to handle a challenge or unfinished business in a satisfactory manner” (p. 6). Sarason further delineated five characteristics of anxiety, including: (a) a challenging and threatening situation, (b) inadequacy regarding one’s ability to handle it, (c) focus on negative consequences and personal inadequacy, (d) negative self-talk, and (e) expectations of failure and loss of regard by others.

Because counselor training involves many novel, ego-involving, and potentially threatening situations (e.g. observed role play, negative feedback in supervision, initial counseling interviews, taped performances, intimacy with clients, and strong client emotions) there is considerable anxiety associated with becoming a counselor (Bandura, 1956; Bischoff, 1997; Borders & Brown, 2005; Hiebert et al., 1998; Larson, 1998; Ridley et al., 2011; Ronnestad & Skovholt, 1993; Stoltenberg, 1981; Trusty et al., 2005). Consequently, anxiety in counselor trainees has been a topic of interest for researchers.

Numerous researchers have concluded that higher trainee anxiety is a hindrance to counselor training and performance (Bandura, 1956; Bowman et al., 1978; Daniels & Larson, 2001; Duncan & Brown, 1996; Friedlander et al., 1986; Hale & Stoltenberg, 1988; Hiebert et al., 1998; Larson, 1998). Specifically, counselor anxiety has been shown to adversely impact important counselor variables such as empathy (Bowman & Giesen, 1982), self-efficacy (Larson & Daniels, 1998), cognitive complexity (Duncan & Brown,

1996), attending skills, supervision (Levitt, 2001), and counselor wellness (Shapiro et al., 2007). Despite the fact that anxiety permeates many aspects of counseling and counselor training, there is little research to guide educators as to how they can successfully address anxiety to improve the education and performance of new counselors (Hiebert et al., 1998). Therefore, counselor educators would benefit from empirically proven methods that mitigate unproductive levels of anxiety in counselor trainees. In this section, literature regarding the multidimensional nature of anxiety, its role and impact in counseling and counselor training, and methods to address it will be reviewed.

Defining Anxiety

Anxiety is defined as experiencing worry, social avoidance, and autonomic responses such as increased heart rate or perspiration in response to a possible threat or negative event (Lehrer & Woolfolk, 1982). Although anxiety is most often characterized as a negative experience to be eliminated, it serves individuals in ways that are both positive and negative. Anxiety can be helpful as a warning signal of potential harm and has been associated with motivation (Bandura, 1988; Bandura & Locke, 2003; Barlow, 2000; Endler & Kocovski, 2001; Eysenck, 1992; Lazarus & Averill, 1972). Further, Barlow (2000) argued that anxiety represents our capabilities to adjust and plan for the future. Conversely, higher levels of anxiety are associated with poor performance (Eysenck, 1992; Krohne & Hock, 1993; Sarason, 1972; Spielberger, 1972), hypervigilance, poor attention, distractibility (Eysenck, 1992), and, in the extremes, social phobias, panic attacks, and inability to function in daily life (American Psychological Association [APA], 2000; Barlow, 2000; Rosen & Schulkin, 1998).

Therefore, it is not that one experiences anxiety, but the degree to which one experiences it, that determines its utility. Because it can either enhance or diminish one's functioning, anxiety has garnered the attention of researchers across disciplines (Brooks & Schweitzer, 2011; Daniels & Larson, 2001; Gray, 1991; Lehrer & Woolfolk, 1982; Morris, Davis, & Hutchings, 1981; Roberts & Bowman, 1978). In this regard, it has suffered a similar fate as empathy, as various fields have defined and measured anxiety somewhat differently. As a construct, there is one major division in the literature: anxiety as a state versus anxiety as a trait. In terms of its nature, there seems to be general agreement that anxiety is multidimensional, although the exact components may vary. Anxiety may be viewed as somatic, behavioral, affective, and cognitive and research suggests these components function somewhat independently (Lehrer & Woolfolk, 1982; Roberts & Bowman, 1978). Therefore, to clarify these differences, the literature regarding anxiety components and constructs will be reviewed in this section.

Components of anxiety. Anxiety is a complex construct with multiple components that vary across disciplines. For decades, researchers across disciplines primarily studied the somatic and cognitive aspects of anxiety (Endler & Kocovski, 2001; Lehrer & Woolfolk, 1982; Scholing & Emmelkamp, 1992). In the *test anxiety* literature, however, anxiety has been widely studied as a cognitive and affective experience (Morris et al., 1981). Lehrer and Woolfolk (1982) recognized the absence of important behavioral components to anxiety, such as social avoidance and, therefore, proposed a tripartite definition and developed an accompanying measure, the *Trimodal Anxiety Questionnaire* (TAQ; Lehrer & Woolfolk, 1982). These authors proposed that anxiety encompasses

somatic (bodily), cognitive (worry and rumination), and behavioral components (avoidance of social situations). Although researchers may focus on certain elements or systems associated with anxiety, they appear to recognize its multiple dimensions and rarely focus on only one aspect. It is, therefore, difficult to neatly extract the different dimensions for the purposes of clarifying their specific meaning. Because the different components are considered to be somewhat independent, however, following are descriptions of cognitive, affective, somatic, and behavioral anxiety.

Cognitive. Lehrer and Woolfolk (1982) described the cognitive component of anxiety as worry or rumination, and this can include negative thoughts about the future, concerns regarding conveying a negative image to others, and the tendency to have negative thoughts. Krohne (1978) similarly described worry as a component of anxiety but also defined it as a subjective perception of arousal. Ree (2008) defines cognitive anxiety as thought processes such as worry, intrusive thoughts, or lack of concentration. Similarly, Morris et al. (1981) states that “worry refers to the cognitive elements of the anxiety experience, such as negative expectations and cognitive concerns about oneself, the situation at hand, and potential consequences” (p. 541). Eysenck (1992) suggests that a cognitive perspective is useful because worry and apprehension regarding future aversive events are inherent to anxiety, and this form of future oriented thinking has been associated empirically with anxiety. Although varied definitions exist in the literature, cognition is widely regarded as an important aspect of anxiety.

Somatic. In contrast to cognitive anxiety, somatic anxiety refers to a physiological or bodily experience, and is characterized by tense muscles, digestive upset, and rapid

breathing and heartbeat (Lehrer & Woolfolk, 1982). Similarly, Ree (2008) described somatic anxiety as physical manifestations such as hyperventilation, sweating, trembling, palpitations, muscle tension, and stiffness. The importance of physiological representations of anxiety was recognized by early theorists such as Freud, but it was not considered of great theoretical value (Spielberger, 1972). Therefore, researchers more readily focused on anxiety as an affective experience.

Affective. Freud conceptualized anxiety as “something felt” (p. 23, as cited in Spielberger, 1972) and an unpleasant affective state (Spielberger, 1985). Although anxiety is widely recognized as an affective experience (Brooks & Schweitzer, 2011; Deffenbacher, 1980; Lazarus & Averill, 1972; Lehrer & Woolfolk, 1982; Morris et al., 1981; Sarason, 1980; Spielberger, 1972, 1985), it is often described as intertwined with physiological experiences. For example, Brooks and Schweitzer (2011) defined anxiety as “a state of distress and/or physiological arousal in reaction to stimuli including novel situations and the potential for undesirable outcomes” (p. 44). This may be, in part, because non-emotional responses involving high physiological activation appear similar to emotional responses (Spielberger, 1972). Similarly, Lazarus and Averill (1972) stated that “anxiety is an emotion based on an appraisal of threat” (p. 246). Thus, it is an emotional response that emanates from a cognitive process. As an emotion, anxiety is considered different from “negative” emotions, such as anger, because it triggers a “flight” versus “fight” response (Brooks & Schweitzer, 2011). In social anxiety literature, trait anxiety includes two components, social avoidance and distress, and was defined as the “emotional or physical discomfort in and a desire to avoid social interaction

(primarily emotionality), and fear of negative evaluation (primarily worry)” (Morris et al., 1981, p. 547). Thus, anxiety is characterized as affective *and* cognitive within both the social anxiety and test anxiety literature.

Behavioral. Generally, anxiety is considered an aversive state that motivates individuals to escape threatening situations (Brooks & Schweitzer, 2011). Behaviorally, this is conceptualized as the “fight or flight” response, or the active attempt to either escape or “conquer” the threatening stimuli (Brooks & Schweitzer, 2011; Spielberger, 1972). The “flight” response can be active, as in escape, or passive, as in “freezing” to avoid punishment (Spielberger, 1972). Therefore, behavioral anxiety is intertwined with physiological aspects of anxiety and the stress response. Because anxiety literature tended to focus on cognitive, affective, and somatic anxiety, Lehrer and Woolfolk (1982) proposed that the behavioral component should be explored. Therefore, they defined the behavioral component of anxiety as social avoidance which is characterized by avoiding social gatherings, unfamiliar situations, and people of authority (Lehrer & Woolfolk, 1982). A behavioral component defined as social avoidance may be particularly useful for research on counselor trainees, as they experience anxiety related to inherent social and relational aspects of cultivating therapeutic relationships with clients (Freeman, 1993; Fry, 1973).

Trait and state anxiety. In addition to having many dimensions, anxiety is also conceptualized in different terms, including state and trait anxiety. Although researchers may have focused on one or the other, they are both widely recognized and frequently studied together. Initially, anxiety was conceptualized as a trait, or a personality

characteristic which reflects an individual's tendency toward feeling anxious (Spielberger, 1972, 1985). Therefore, much of the literature and early assessments of anxiety focused on trait anxiety. As anxiety research progressed, it became apparent that individuals low in trait anxiety could still become highly anxious in specific situations and individuals high in trait anxiety could be very relaxed in certain situations (Eysenck, 1992; Spielberger, 1972). This highlighted the fact that situational factors were important regardless of trait anxiety. State anxiety, therefore, was defined as a subjective, transitory, emotional state involving perceived feelings of tension and apprehension and accompanied by arousal of the autonomic system (Spielberger, 1972). Thus, one's level of state anxiety will fluctuate over time and across situations. Brooks and Schweitzer (2011) used research on stress and trait anxiety to define state anxiety as "distress and/or physiological arousal in reaction to stimuli including novel situations and the potential for undesirable outcomes" (p. 44). Therefore, anxiety is understood as an experience that is driven by situational factors versus personal variables. Although researchers may have focused on trait or state anxiety, there was a general understanding that both constructs were relevant to the phenomenon of anxiety and could influence one another. Morris et al. (1981) sum this up by stating that anxiety is a function of person and situation.

Counselor Trainee Anxiety

Anxiety is an expected and difficult part of learning to become a counselor, particularly as trainees attempt to meet the various demands of counselor training (Bandura, 1956; Bischoff, 1997; Borders & Brown, 2005; Hiebert et al., 1998; Ridley et al., 2011; Trusty et al., 2005). Counselor trainees confront numerous novel and

potentially threatening experiences inherent in counselor education such as observed performance, supervision and feedback, initial counseling interviews, taped performances, exposure to strong client emotions, and increased self-awareness (Bowman et al., 1978; Daniels & Larson, 2001; Freeman, 1993; Hale & Stoltenberg, 1988). Further, counselor trainees must confront these specialized training situations concurrently with the more common sources of anxiety inherent in education such as academic performance and testing (Sarason, 1980; Wine, 1971). Although some degree of anxiety motivates one to learn, higher levels of anxiety become counterproductive (Bernard & Goodyear, 2004; Choate & Granello, 2006; Freeman, 1993). Therefore, anxiety has been an area of investigation in counselor education and, generally, researchers have determined that higher trainee anxiety is a hindrance to counselor training and performance (Bowman et al., 1978; Duncan & Brown, 1996; Friedlander et al., 1986; Hale & Stoltenberg, 1988; Hiebert et al., 1998). In this section, the extant literature regarding sources of counselor trainee anxiety, the impact on training and performance, and methods for reducing trainee anxiety are reviewed. It is noteworthy that although there was considerable research on anxiety in the 1970's and 1980's, published research on counselor trainee anxiety has greatly diminished. Further, the extant research on anxiety in counselor trainees is scant and diverse, making it difficult to meaningfully consolidate. Therefore, the literature review is inclusive of older studies to best support a meaningful understanding of counselor anxiety.

Origins of counselor trainee anxiety. Many common counselor trainee situations, such as supervision and evaluation, observation of performance, greater self-

awareness, and counseling itself, have been associated with producing anxiety. The pressure to maintain a high level of academic performance is an additional source of stress and anxiety (Mauzey, Harris, & Trusty, 2000; Ronnestad & Skovholt, 1993; Sarason, 1980; Wine, 1971). Anxiety is expected particularly at early developmental levels of the counselor training process (Mauzey et al., 2000; Ronnestad & Skovholt, 1993). Research related to these and other counseling sources of anxiety will be discussed in this section.

Supervision and evaluation. Supervision is a critical and valuable component of counselor education but also may be a source of significant counselor trainee anxiety (Bowman, 1980; Daniels & Larson, 2001; Freeman, 1993; Hale & Stoltenberg, 1988; Ronnestad & Skovholt, 1993). Freeman (1993) noted that trainee anxiety in supervision may arise from a variety of sources, such as the need for approval, intimacy with clients, skills application, being observed, personal inadequacies, worry about performance, and unclear evaluation criteria. There is empirical support that even a single element, such as the evaluative nature of supervision (e.g. observation, taped performance, feedback), may account for supervision related anxiety in counselor trainees. For example, in a study where 45 counselor trainees were given both positive and negative fictitious feedback after a 10-minute mock counseling session, Daniels and Larson (2001) found that negative feedback increased anxiety and decreased self-efficacy. Because supervisors must provide feedback, some of which may be negative, supervision is an anxiety producing aspect of training.

Similarly, Bowman (1980) concluded that the evaluative nature of supervision produces anxiety in counselor trainees. The author subjected 19 counselor trainees to each of three conditions: (a) reading a counseling session, (b) counseling and tape recording a session, and counseling, and (c) tape recording, with subsequent evaluation, and measured anxiety using both skin conductance and self-report measures of anxiety. Self-report measures of anxiety were significantly different across conditions ($F_{(2,30)} = 17.91, p < .001$) and higher for condition 2 versus 1 and highest for condition 3 where evaluation was present. Skin conductance measures yielded no significant differences across conditions. Bowman's findings must be contextualized, however, within the small sample size that he used.

In addition, Hale and Stoltenberg (1988) examined the effects of self-awareness and evaluation apprehension on anxiety in counselor trainees. Forty upper level undergraduate psychology students interested in learning basic counseling skills and practicing them in mock counseling sessions were recruited and subjected to three conditions: (a) self-awareness plus evaluation apprehension (i.e. subjects were informed they would be taped and evaluated), and (b) self-awareness only (taped but no evaluation), and a control condition (not taped or evaluated). Subjects demonstrated the highest level of anxiety in the self-awareness plus evaluation apprehension condition. The researchers concluded that anxiety was related to concern regarding one's performance and the subsequent evaluation by others. Evaluation apprehension compounded the aversiveness of becoming self-focused and led to greater anxiety.

Further, in a qualitative study, Olk and Friedlander (1992) found that new counselor trainees had more anxiety about evaluation, disclosing personal doubts, and were more dependent on supervisors than doctoral level counselor trainees. In this same study, the authors also found that anxiety level was inversely related to trainee performance and the strength of trainees' self-efficacy expectations. In a similar qualitative study of new counselors' experiences that focused on evaluation anxiety, Bischoff (1997) concludes that novices lack the internal gauge to evaluate their own performance and are, therefore, dependent upon and vulnerable to supervisor feedback. Hale and Stoltenberg (1988) suggest that higher anxiety in trainees may impact their attending skills, counseling effectiveness, and ability to benefit from supervisor feedback. Thus, there is empirical and scholarly support that the evaluative nature of supervision is associated with counselor trainee anxiety.

Counseling. Another source of counselor trainee anxiety is related to the mere act of providing counseling services (Bischoff, 1997; Bowman & Roberts, 1979; Bowman et al., 1978; Mooney & Carlson, 1976). Bowman and Roberts (1979), for example, found that among 28 counselor trainees, self report and skin conductance measures of anxiety were significantly higher during 10-minute counseling sessions as compared with conversations of the same duration. In this same study, measures of heart rate did not vary across conditions. Bowman et al. (1978) conducted a similar study with 20 master's-level students in a supervised counseling experience and with no prior practicum or interviewing experience, to determine anxiety levels in initial client sessions. The researchers used three measures including self-report, skin conductance, and heart rate

prior to and during two conditions, a counseling session and reading a counseling article (neutral condition). Researchers found that students demonstrated higher levels of anxiety across measures for the counseling interview compared with the neutral condition. Additionally, the students' anticipation of the interview also was related to anxiety. This finding was limited, however, by the small sample size.

Mooney and Carlson (1976) conducted a similar study and found that self-report and physiological measures of anxiety prior to starting counseling sessions were higher for counselor trainees at the beginning of the semester as compared to the end. The largest difference in anxiety was found for the self-report measure. During post-session structured interviews, subjects reported worry regarding client's perceptions of them and performance and evaluation concerns.

Further, Bischoff (1997) conducted interviews with 13 masters-level counselor trainees to explore how they experienced the first three months as a counselor. The author found that participants were anxious, lacked confidence in their abilities, and experienced somatic manifestations of stress and anxiety such as crying spells, insomnia, decreased appetite, and gastrointestinal ailments. Retrospective reporting is a limitation of this study as later accounts may vary from actual experiences. These studies suggested, however, that anticipation of, or experience in, a counseling session produces trainee anxiety. Although there is evidence this anxiety decreases over time, if ignored it can impede the potential learning opportunity.

Self-awareness. Another area of trainee anxiety may stem from the self-awareness that is encouraged and gained through various aspects of the counselor training

experience including supervision, counseling, and course related requirements (e.g. reflection papers, discussion of sensitive and personal topics). Self-awareness is considered vital to effective counselor development and client service (Fauth & Nutt-Williams, 2005) and is represented in the standards of the Council for Accreditation of Counseling and Related Educational Programs (CACREP) which sets standards for counseling programs (CACREP, 2009). There is evidence, however, that inherent demands for increased self-awareness in training programs may be a source of counselor trainee anxiety (Friedlander et al., 1986; Hale & Stoltenberg, 1988; Nutt-Williams & Hill, 1996; Reynolds, 2011; Sue, 2001; Sue, Rivera, Capodilupo, Lin, & Torino, 2010). The pervasive need to focus on the self appears to also heighten self-criticism (Barlow, 2000; Hale & Stoltenberg, 1988; Hiebert et al., 1998), which may lead to avoidant behavior in class, in supervision, and with clients.

For example, Hale and Stoltenberg (1988) found that after separating out effects related to evaluation apprehension, increased self-awareness significantly increased participant anxiety. Because both self-awareness and evaluation apprehension were related to state anxiety, they concluded that self-awareness was aversive because it concomitantly engendered negative self-evaluation and anxiety. Nutt-Williams and Hill (1996) similarly determined that increased awareness adversely impacted performance. The authors recruited 31 counselor trainees to listen to an audiotaped counseling session while completing a thought listening procedure and process measures. The authors found that self-talk was influenced by the counselors' perceptions of the therapy process. The

awareness of negative self-cognitions related to increased negativity about their performance and negative reactions to clients.

Additionally, in a qualitative study, Williams, Polster, Grizzard, Rockenbaugh, and Judge (2003) used a structured interview format to ask 12 counselors (6 novice and 6 experienced) questions regarding in-session self-awareness and found that only novice counselors reported feeling lost, confused, anxious, and overwhelmed when experiencing distracting self-awareness. Friedlander et al. (1986) also suggested that counselor trainees experience negative self-awareness, such as performance anxiety. In contrast, Fauth and Nutt-Williams (2005) found that counselors perceived their in-session self-awareness as helpful to performance and thus became more interpersonally involved with clients. The increased efforts to manage in-session awareness, however, decreased involvement with the mock client and led to lower client ratings of the therapeutic alliance. To explain these conflicting results, the authors suggested that a low level of awareness may have been helpful, but once a certain threshold was reached, increased efforts to manage distracting self-awareness became counterproductive.

Additionally, self-awareness also may impact out of session training experiences such as in class discussions designed to raise awareness. For example, self-awareness is a major component of multicultural competency, defined as the cultural awareness, knowledge, and skills necessary to be effective when working with diverse clients (Sue, 1982, 2001; Sue, Arredondo, & McDavis, 1992). Reynolds (2011) surveyed 169 faculty members regarding their experiences teaching multicultural competence to trainees and found that students within the dominant cultural group often felt anxious in discussing

racial issues in class because they were concerned about the negative perceptions of others. Similarly, Sue et al. (2010) hypothesized that anxiety may interfere with self-exploration concerning multicultural issues. They tested this hypothesis by conducting a qualitative study to determine perceptions of racial dialogue in the classroom. Using a group interview format with 14 white counselor trainees, the authors found that trainees experienced intense anxiety and made efforts to avoid racial related topics. Although it is unclear whether this also translates to aversion of multicultural issues in counseling and supervision, it does suggest that self-awareness related to sensitive topics causes anxiety.

Therefore, self-awareness appears to impact counselor trainees' anxiety in counseling, supervision, and in classroom related exercises. Self-awareness is an important and cherished concept in counseling, but it also may bring about unintended consequences such as self-criticism, distraction, awareness aversion, evaluation apprehension, and anxiety. Germer (2006), a proponent of mindfulness, may have offered insight into this negative association between awareness and anxiety when he suggested that awareness without compassion can be a frightening process. Therefore, if students are required to increase their self-awareness during training, then similar efforts may be needed to help them mitigate resulting anxiety and its counterproductive manifestations.

Other sources of trainee anxiety. There are a variety of other noteworthy sources of counselor trainee anxiety. For example, client variables, such as the manner in which a client presents (e.g. anxiety or anger) also may be a source of anxiety in counselor trainees. In an early study, Russell and Snyder (1963) subjected 20 counselors to hostile and friendly role play clients and measured four indicators of anxiety: palmar sweating

(hand sweating), eye blink rate, client-actor estimates of counselor anxiety, and independent judgments of verbal anxiety (e.g. cracking voice, stuttering). As hypothesized, there was greater anxiety with hostile client behavior than friendly behavior for all measures except palmar sweating. Similarly, Bandura (1956) suggested that patient anxieties often elicit counselor anxiety and are, therefore, perceived as aversive stimuli to be thwarted. The author suggested that the counselor often will block client expressions by interrupting the client or with other efforts such as offering reassurance, and further suggested that insight into one's own anxiety is important to avoiding this. Further, new trainees may experience anxiety related to counselor-client relationship factors. Some scholars have suggested that fear of the type of intimacy that is inherent in therapeutic relationships with clients may cause anxiety (Freeman, 1993; Fry, 1973; Skovholt & Ronnestad, 1992; Trusty et al., 2005). In particular, Skovholt and Ronnestad (1992) suggested this anxiety is related to trainees' fear of client disapproval and inability to maintain appropriate boundaries. Lastly, the ambiguity and inherent lack of "right" answers that students encounter in counselor preparation is also noteworthy as a source of trainee anxiety (Choate & Granello, 2006). This is particularly evident in early developmental stages when students are anxious and dependent on faculty and supervisors to provide the answers.

In summary, there are numerous aspects of training that may be sources of counselor trainee anxiety such as supervision and feedback, initial counseling interviews, taped performances, exposure to strong client emotions, and inherent program wide demands for self-reflection. Because anxiety is a well-established trainee variable,

literature regarding the important effects of trainee anxiety will be reviewed in the following section.

Effects of Counselor Trainee Anxiety

There are a myriad of ways in which counselor trainee anxiety can adversely impact counselor training, performance, and client outcome including impaired cognitive functioning, empathic ability, self-efficacy, supervision, and counselor wellness. This section will review literature regarding some of the more prominent effects of counselor anxiety.

Cognitive functioning and abilities. There is strong evidence that anxiety impacts general cognitive functioning (Eysenck, 1992; Eysenck, Derakshan, Santos, & Calvo, 2007; Sarason, 1980) and may specifically impact a counselor's cognitive abilities (Choate & Granello, 2006; Duncan & Brown, 1996; Friedlander et al., 1986; Heibert et al., 1998; Levitt, 2001; Morran, 1986). For example, a number of researchers have linked anxiety with impaired ability to process information (e.g., Duncan & Brown, 1996; Eysenck, 1992; Heibert et al., 1998). Specifically, Eysenck (1992) stated that anxious individuals are more sensitive to threatening stimuli and therefore, will be hypervigilant, have narrowed attention, heightened distractibility when performing tasks, and selective bias, which is the tendency to focus on the threatening stimuli versus other neutral stimuli. Further, Eysenck et al. (2007) offered support that anxiety disrupts goal-directed attention by increasing susceptibility to distraction, impairing performance of secondary tasks when two tasks are required, and impairing the ability to switch tasks. Because counselors must be able to focus on the client and their own thoughts, make decisions

regarding what is salient in counseling sessions, and perform the complex task of counseling, these cognitive impairments are potentially threatening to overall performance. Other researchers have sought to understand the relationship between cognition and performance. Duncan and Brown (1996) purported that the complexities of group counseling would produce anxiety in trainees, but failed to support the claim empirically. Heibert et al. (1998) found that anxiety is related to intrapersonal cognitions such as negative self-talk. They conducted a study involving 95 graduate counseling trainees and assessed anxiety level, self-talk, and counseling skill. Researchers reported that high anxiety reflected high negative self-talk, low positive self-talk, and poor counseling performance.

Additionally, researchers have suggested that counselor anxiety is negatively associated with a counselor's cognitive, or conceptual, complexity (Choate & Granello, 2006; Duncan & Brown, 1996). Cognitive complexity is a developmental process characterized by the capacity to understand and interpret multidimensional aspects of social behavior (Choate & Granello, 2006; Spengler & Strohmer, 1994). It has been identified as an important component of counseling (Choate & Granello, 2006; Duncan & Brown, 1996; Duys & Hedstrom, 2000; Little, Packman, Smaby, & Maddux, 2005; Welfare & Borders, 2010a; Welfare & Borders, 2010b). Cognitive complexity has been linked to better clinical hypothesis formation, case conceptualization, nuanced client descriptions, flexibility, lower anxiety and self-focused attention, utilization of empathy, multicultural understanding, and tolerance of ambiguity (Choate & Granello, 2006; Duncan & Brown, 1996; Duys & Hedstrom, 2000; Little et al., 2005; Spengler &

Strohmer, 1994; Welfare & Borders, 2010a). Duncan and Brown (1996) attempted to provide empirical evidence for the relationship between anxiety and cognitive complexity in a study of new group counselors and pre-practicum students. Although findings were non-significant, the authors stated that the relationship may have been hidden because they combined participants of differing complexity levels in the same study pool. The authors further stated that students higher in conceptual complexity may be better able to manage anxiety and so by combining them, these students muted the anxiety levels of students with lower cognitive complexity. Therefore, further investigation is needed to conclude that increased anxiety may inhibit cognitive complexity and diminish counselor performance.

Self-efficacy. Another potentially adverse effect of counselor anxiety may be related to counselor self-efficacy. Counselor self-efficacy (CSE) is a counselor's belief in his or her ability to effectively counsel a client in the near future (Daniels & Larson, 2001) and is considered an important factor in the confident delivery of counseling (Friedlander et al., 1986; Kozina et al., 2010). There is evidence that both trait and state anxiety are negatively associated with counseling self-efficacy (Daniels & Larson, 2001; Friedlander et al., 1986; Larson et al., 1992; Larson & Daniels, 1998; Levitt, 2001). For example, in a literature review of 32 CSE studies from 1983-1998, Larson and Daniels (1998) found 7 studies measuring the relationship between CSE and anxiety and found that both state and trait anxiety were negatively associated with CSE ($r_s = -.24$ to $-.79$). Further, they reported that when CSE was tracked over 23 weeks for 8 beginning practicum students, state anxiety varied widely, but consistently showed a negative

relationship ($r_s = -.17$ to $-.82$) with CSE. Further, in the development of a counseling self-efficacy instrument (*Counseling Self-Estimate Inventory*, COSE; Larson et al., 1992), the authors found that scores on the COSE were negatively related to state and trait anxiety and that trait anxiety and counseling self-efficacy were significant predictors of counselor trainee performance.

Friedlander et al. (1986) investigated how four conditions related to role conflict (e.g. one-up as counselor, one-down as a supervisee, equal, control) affects trainees' self-statements, anxiety level, and performance in a sample of graduate student counselors. Anxiety scores and negative self-statement were independent ($r = .08$, ns), but the authors reported a significant inverse relationship between anxiety and performance ($r = -.37$, $p < .003$) and between self-efficacy expectations and anxiety ($r = -.34$, $p < .007$).

Empathy. Empathy is another performance outcome predicted to be negatively impacted by counselor anxiety (Bowman & Giesen, 1982; Kelly, Hall, & Miller, 1989; Roberts & Bowman, 1978; Trusty et al., 2005). Roberts and Bowman (1978) reviewed several early studies investigating the relationship between anxiety and empathy in counselor trainees and found mixed results. The authors concluded that this was due, in part, to methodological flaws such as measuring anxiety as a trait versus state or measuring only one dimensions of anxiety (i.e. physiological). To address these and other flaws found in the literature, Bowman and Giesen (1982) conducted a study using both physiological measures and self-report of anxiety along with multiple ratings of empathy (client rated and external reviewer rated). They measured anxiety as both a state and a trait, and assessed it prior to, during, and immediately after a counseling session. A

sample of 26 master's level students participated in the study and researchers reported that state anxiety was the best predictor of empathy ratings.

Trusty et al. (2005) studied the impact of adult attachment (avoidance and anxiety) and emotional empathy by recruiting 143 master's-level counseling students enrolled in their first counseling skills class (over four consecutive semesters). The authors found that avoidance and anxiety together impact empathy, and unexpectedly, that lower avoidance and higher anxiety were associated with the highest levels of empathy. They further stated that this finding may indicate that individuals with higher anxiety are more aware of themselves and their wounds and in turn be better helpers. Further, higher avoidance and lower anxiety was least associated with empathy, suggesting that these students may need the most guidance in empathizing with clients. To help students demonstrate empathy, the authors prescribed increased contact with one's own inner experience, normalization and proper channeling of anxiety, increased use of self in counseling, and development of personal coping skills and self-care.

Supervision. Anxiety also has negative implications for supervision. Counselor trainees tend to become more anxious when receiving negative feedback from supervisors (Larson & Daniels, 1998). In addition, evaluation anxiety has been associated with decreased likelihood of sharing about counseling experiences in supervision (Levitt, 2001). For example, Mehr, Ladany, and Caskie (2010) assessed reasons for trainee nondisclosure in supervision and how trainee anxiety and perception of the supervisory working alliance impact nondisclosure and willingness to disclose. Participants included 204 trainees' who provided feedback on a single supervision session. The authors

reported that 84.3% of trainees withheld information from their supervisors. More positive trainee perception of the supervisory working alliance was related to greater willingness to disclose and higher trainee anxiety was associated with greater nondisclosure and lower overall willingness to disclose in supervision. This suggests that if counselors are unable to receive feedback and their anxiety prevents them from sharing in supervision, then they will be less likely to benefit from the supervisory experience.

Other effects of trainee anxiety. In addition to adversely impacting supervision, key counseling elements such as empathy and counselor self-efficacy, anxiety has been found to effect outcomes, ability to cope with client anger, and counselor wellness. For example, Kelly et al. (1989) conducted a study of 32 master's level and doctoral level counseling students and found that counselor in-session anxiety was negatively associated with outcome ratings based on counselor, client and independent judges' ratings of the quality of counseling sessions. Sharkin (1989) reported that counselor trainee anxiety has been associated with difficulty coping with angry clients. Similarly, Hess, Knox, and Hill (2006) examined the effects of 3 types of training designed to help counseling students deal with client anger. Subjects included 62 graduate level counseling students and dependent measures included state anxiety, self-efficacy to deal with angry clients, and helping skills. Although students' skills and self-efficacy improved, there was no significant difference in state anxiety across types of training. Therefore, although students were better able to respond to clients, their feelings of apprehension related to interpersonal conflict remained. Finally, Mauzey et al. (2000) stated that although anxiety is developmentally normal in counselor trainees, they may

cope with anxious and defensive feelings by employing coping mechanisms such as projection, intellectualization, rationalization, anger, and silence, and that this form of coping may impede development of basic skills. Finally, anxiety, job stress, and burnout can lead to impaired counselor functioning (Mauzey et al., 2000; Roach & Young, 2007; Shapiro et al., 2007). Therefore, there are many sources and effects of counselor anxiety, leading researchers to search for ways to address anxiety in counselor training.

Reducing Trainee Anxiety

Despite the fact that anxiety permeates many aspects of counseling and counselor training, there is little research on how counselor educators can successfully address anxiety to increase the performance of new counselors (Hiebert et al., 1998). Although much of the extant research on issues related to counselor anxiety research is dated, available literature regarding reducing trainee anxiety will be reviewed.

In the 1970's, when counselor trainee anxiety research was thriving, there were many efforts to examine methods, such as systematic desensitization, to reduce anxiety in counseling students (Carter & Pappas, 1975; Fry, 1973; Monke, 1971). For example, Carter and Pappas (1975) tested the effects of three conditions (systematic desensitization, a treatment designed to increase awareness of interpersonal anxiety, and no treatment) on 41 counseling graduate students. The authors found that in comparison to a control group, both treatment conditions were associated with a significant reduction in anxiety based on post treatment measures of speech disturbance, extraneous body movement, and self-reported anxiety. The treatment conditions, however, were not significantly different from one another.

Similarly, Monke (1971) tested the use of desensitization to reduce new counselor anxiety that is present before and during a first counseling session. Thirty counselor trainees were randomly assigned to the desensitization group or a control group and anxiety was measured with heart rate and skin resistance, tape evaluations, and self-reports. The researchers reported significantly less anxiety in the experimental group, although only for the self-reported measure of anxiety. The authors concluded that the experiment failed to support the value of the intervention because it was only supported by self-report measures and participants may have had knowledge regarding the purpose of the experiment.

Fry (1973) tested the effects of helping skills training coupled with desensitization to improve trainees' ability to perform in a helping role. The reported hypothesis behind this study was that helpers have developed conditioned anxiety responses to "human warmth" communicated from significant others in the past. Therefore, communication of warmth, genuineness, and other intimacy qualities are dependent on the helper's ability to view intimacy as non-threatening. In this study, two systematically matched groups of 15 trainees were trained in helping skills and the experimental group additionally received desensitization treatment. Based on pre/post-test ratings on measures of helping skills, there was a significant training effect for both groups and desensitization treatment was a significant source of variance for the experimental group. Although together these studies suggest there may be some benefit from desensitization, these findings must be qualified as there are few studies, many with small sample sizes, and reliance on self-report measures. Further, there was no evidence based on physiological or behavioral measures

of anxiety and many of the researchers did not measure anxiety during the counseling interview.

Roberts and Bowman (1978) conducted a review of the counselor anxiety literature and found other methods for reducing anxiety, including alpha wave training, empathy training, modeling, and microcounseling; however, they stated that there was no conclusive evidence that these approaches were effective in reducing counselor anxiety during the counseling interview. These authors did conclude, however, that there is support that anxiety negatively predicts overall therapeutic effectiveness. These types of studies diminished in subsequent years as researchers shifted toward studying anxiety in relation to performance, evaluation, observation/monitoring and feedback, particularly within specific situations such as supervision.

For example, Daniels and Larson (2001) found that negative feedback increased anxiety and suggested that supervisors offer positive feedback to supervisees to raise confidence and lower anxiety. The authors further recommended that feedback be accurate, specific, and considerate of the trainee's capacity to change. In a review of literature regarding what conditions best address trainee anxiety, Larson and Daniels (1998) cited several presentations and unpublished studies which suggested that (a) self-modeling was more effective than self-observation in reducing anxiety, (b) experience over the course of practicum training decreased anxiety, and (c) positive feedback and positive reinforcement from supervisors did not decrease anxiety. Further, Bowman et al. (1978) found that anticipation of a first counseling interview led to anxiety as compared to a neutral situation, in part because an individual's expectations and appraisal of a

situation influence that person's reactions to it. Based on these findings, the authors suggested that techniques aimed at changing expectations regarding the interview may effect a change in anxiety level within the interview. In terms of offering developmental approaches to reduce counselor trainee anxiety, the authors mention the potential for systematic desensitization to help physiological responses but offer no suggestions for how verbal and cognitive response systems should be addressed.

Another avenue for impacting trainee anxiety is within supervision and the supervisory relationship. Freeman (1993) stated that anxiety in supervision can motivate resistance behaviors that may interfere with learning, communication, and the supervisory relationship. The author proposed that structure, which was defined as delineating roles, responsibilities, and methods for supervision, be used as a proactive means of reducing trainee anxiety within supervision. More specifically, five areas were identified as ways to structure supervision to reduce anxiety (roles and responsibilities, information, counseling theory, evaluation, and feedback), although the author did not test this empirically. Although these studies offer some insight into the reduction of trainee anxiety, they provide little guidance for how to help trainees reduce their own anxiety throughout the training experience. Most anxiety reduction efforts are targeted interventions that may help to reduce anxiety in specific contexts and situations (e.g. supervision), but offer few methods regarding how to address program wide (counseling, supervision, classroom, internship) issues with trainee anxiety. Consequently, mindfulness training, which enables an individual to better manage anxiety globally, has

gained interest and empirical support as a means for reducing anxiety in diverse populations (Baer, 2003, Carmody et al., 2009; Shapiro et al., 2005).

Summary of Anxiety

A review of the literature suggests that anxiety is an expected part of the counselor training experience. Although anxiety has some benefit to motivation and learning (Freeman, 1993; Spielberg, Heller, Silton, Stewart, & Miller, 2011), there is considerable evidence that it more typically has an adverse effect on many aspects of counseling, including counselor self-efficacy, supervision, empathy, and counselor wellness. Consequently, there are a number of methods for reducing trainee anxiety, but they appear to be based either on dated, limited studies, or have a narrow focus (i.e., one aspect of supervision). Mindfulness is becoming increasingly supported as a means for reducing anxiety in clinical and nonclinical populations and may be similarly useful with counselor trainees. Not only has mindfulness training been associated with reduced anxiety, but also with increased empathy, increased psychological wellbeing, compassion, and self-efficacy. Therefore, a review of the mindfulness literature will be addressed in the following section.

Mindfulness

There is a large and rapidly growing body of literature to support the use of mindfulness training for improved physical and mental health. Mindfulness is generally defined as “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (Kabat-Zinn, 1994, p. 4). Martin (1997) emphasized that mindfulness is not only paying attention, but engaging in a *quiet attention*, without attachment to any

particular view, such that one can experience psychological freedom from one's routinely held view of the self and the world. The non-judgmental awareness and quiet attention proposed in these descriptions are not an abstract and detached awareness devoid of an affective component. Thus, mindfulness has also been described as involving a quality of attending characterized by an attitude of openness, acceptance, trust, curiosity, compassion, kindness, equanimity, and patience (Carmody et al., 2009; Germer, 2006; Kabat-Zinn, 1994; Kraus & Sears, 2009; Shapiro et al., 2006). Consequently, there are two aspects to mindfulness: *that* we pay attention and *how* we pay attention.

Mindfulness-based training and interventions have been shown to help individuals attend to aversive stimuli, including sensations, cognitions, and emotions, with open, non-reactive, non-judging, present-moment awareness (Baer, 2003; Cardaciotto et al., 2008). Increasing one's ability to observe experience with such an attitude has been shown to improve both physical and mental health (Baer, 2003). Specifically, mindfulness has been associated with improvements in physical activity, self-esteem, empathy, self-acceptance (Rothaupt & Morgan, 2007), ability to cope with pain (Baer, 2003; Rothaupt & Morgan, 2007), heart disease, cancer, AIDS, stress (Kabat-Zinn, 1994; Pierce, 2003), depression, substance abuse, and disordered eating (Baer, 2003; Claessens, 2009; Kristeller & Hallett, 1999; Teasdale et al., 2000). Because these studies showed such promise, mindfulness garnered the attention of counselors and counselor educators, not only as an intervention for clients, but also as a possible tool for professional development.

More specifically, researchers have begun to explore how mindfulness may contribute to counselor development and performance (McCollum & Gehart, 2010; Greason & Cashwell, 2009; Hick & Bien, 2008; O'Driscoll, 2009) and client outcome (Grepmaier, Mitterlehner, Loew, Bachler, et al., 2007). Some scholars have proposed that mindfulness is a core therapeutic process associated with common factors across theoretical orientations (Germer, Siegel, & Fulton, 2005; Hick, 2008; Martin, 1997, 2002; Tannen & Daniels, 2010). It has been theoretically and empirically associated with important qualities of the counselor and the therapeutic relationship such as therapeutic presence (Geller et al., 2010), empathy (Gambrel & Keeling, 2010; O'Driscoll, 2009; Tannen & Daniels, 2010), attunement (Bruce et al., 2010), counselor self-efficacy (Greason & Cashwell, 2009), attentional abilities (Baer, 2003; Martin, 1997; O'Driscoll, 2009; Tannen & Daniels, 2010), affect tolerance or decreased experiential avoidance (Childs, 2007; O'Driscoll, 2009), compassion (Kristeller & Johnson, 2005), and engaged listening (Tannen & Daniels, 2010). Although there is strong theoretical support for using mindfulness to positively impact counselors and their work with clients, empirical research and support is in its nascent stage. In this section, the literature regarding the definition, mechanisms, and benefits of mindfulness, as well as available methods for cultivating mindfulness will be addressed.

Defining Mindfulness

Mindfulness is considered a basic human capacity that can be further developed with practices such as meditation (Bishop et al., 2004; Brown & Ryan, 2004; Ives-Deliperi, Solms, & Meintjes, 2011). The predominant view of mindfulness in the

literature is that it involves paying attention, in the present moment, in a nonjudgmental or accepting way (Baer et al., 2006). It is described as both a state and trait and can be further conceptualized as a theoretical construct (mindfulness), a practice by which mindfulness is cultivated (meditation), and a psychological process (mindful awareness or being mindful) (Germer, 2004). Alternatively, Shapiro (2009) differentiated mindfulness as an outcome (mindful awareness) and a process (mindfulness practice), where the former involves deep awareness and freedom of mind, and the latter is the structured practice aimed at knowing and shaping the mind in an open, caring manner. Bishop et al. (2004) also posited that mindfulness is a process, and thus concluded that mindfulness is more of a state than a trait, because it can be developed with practice. Therefore, the word “mindfulness” has been used in the literature to represent different aspects of the phenomenon. Additionally, because mindfulness is a subtle, non-verbal experience (Germer, 2004), it has an elusive nature that is difficult to define and subject to scientific investigation. Consequently, there are numerous conceptual and operational definitions of mindfulness in the literature.

For example, Jon Kabat-Zinn provided one of the most comprehensive definitions in the literature stating that mindfulness is the awareness

arising from the simultaneous cultivation of three components: (a) clear intention as to why one is practicing, such as for self-regulation, self-exploration, or self-liberation; (b) an attention characterized by the observation of one’s moment-to-moment experience without interpretation, elaboration, or analysis; and (c) a quality of attending characterized by an attitude of acceptance, kindness, compassion, openness, patience, nonstriving, equanimity, curiosity, and nonevaluation. (as cited in Carmody et al., 2009, p. 614)

More concisely, Cardaciotto et al. (2008) stated that mindfulness comprises two elements: present moment awareness and acceptance. The authors defined the first component, awareness, as the continuous, present-oriented monitoring of experience, and the second component, acceptance, as paying attention with non-judgment and an attitude of acceptance, openness, and compassion.

Operationally, mindfulness has been defined as the level of attention and awareness in the present moment (Brown & Ryan, 2003), as non-judgmental present-moment observation and openness to negative experience (Buchheld et al., 2001), and as curiosity and decentering (i.e. observing thoughts without elaboration or rumination) (Lau et al., 2006).

Most definitions, however, described two components to mindfulness: a behavior (attention, awareness, or both) and an attitude which prescribed *how* that behavior should be performed (e.g. with non-judgment, acceptance, compassion) (Baer et al., 2006; Cardaciotto et al., 2008; Germer, 2006; Kraus & Sears, 2009). The question among scholars, therefore, does not appear to be *that* we pay attention, but rather *how* we pay attention when practicing mindfulness, and how each of these components is conceptualized and defined. The literature concerning how these two aspects of mindfulness are defined will be reviewed in this section. It is necessary, however, to first offer some context for the evolution of these definitions by reviewing literature regarding the Buddhist roots and Westernization of mindfulness.

Buddhist roots of mindfulness. Mindfulness originated from Eastern contemplative traditions such as Buddhism (Rejeski, 2008) and dates back at least 2,500

years in Buddhist history (Pierce, 2003). Buddhism represents a set of philosophical beliefs, a psychological theory of mind and behavior, and a set of recommendations for ethical conduct, which are the foundation for mindfulness meditation, and together form the bases of Buddhist psychology (Kelly, 2008). The goal of Buddhist teaching and mindfulness practice is the alleviation of suffering through two means (a) acquiring insight, and (b) cultivating compassion for one's self and all sentient beings (Brantley, 2010; Kelly, 2008; Kraus & Sears, 2009; Schmidt, 2004). Although Buddhism has been linked with Western psychotherapy for nearly 100 years, it is only in the past few decades that it has attained significant interest and legitimacy (Kelly, 2008).

Westernization of mindfulness. Although it is possible to debate the exact beginning, consensus among scholars is that mindfulness first appeared in Western healthcare in the 1970's with the work of Jon Kabat-Zinn (Baer, 2003; Claessens, 2009; Pierce, 2003; Smith, Shelley, Leahigh, & Vanleit, 2006; Whitfield, 2006). Kabat-Zinn developed mindfulness based stress reduction (MBSR), a treatment for chronic pain, at the Stress Reduction Clinic at the University of Massachusetts Medical Center (Claessens, 2009; Pierce, 2003) and supported using mindfulness stripped of its religious dogma (Rothaupt & Morgan, 2007). In this form, mindfulness based stress reduction programs were adopted by more than 240 hospitals and clinics in the United States and abroad (Baer, 2003).

Having observed Kabat-Zinn's work, researchers Segal, Williams, and Teasdale (2002) shaped their interventions for depression relapse prevention around mindfulness giving rise to mindfulness-based cognitive therapy (MBCT) which was a catalyst for the

integration of mindfulness into Western psychotherapy (Claessens, 2009; Rejeski, 2008). Mindfulness has been incorporated into several counseling approaches such as Dialectical Behavior Therapy (DBT; Linehan, 1993), Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) and MBCT (Segal et al., 2002; Teasdale et al., 2000). Additionally, neuroscientists began demonstrating positive effects of mindfulness and meditation on the brain and related systems (Ives-Deliperi et al., 2011; Lutz et al., 2008). Therefore, stripped of its Buddhist roots, mindfulness gained legitimacy among researchers and across disciplines in the West. Subsequently, this raised questions such as (a) what aspects of mindfulness are inherent to the phenomenon (versus associated with Buddhist dogma), and (b) can and should mindfulness be stripped of its roots?

For example, Claessens (2009) posited that central tenets of Buddhism, such as the “four noble truths” that describe causes and alleviations of suffering, should be incorporated with mindfulness in existential therapy. Similarly, Khong (2009) stated that without the philosophy and attitude, mindfulness is reduced to a mere technique. In contrast, Buddhist teachers have supported the use of mindfulness in therapy and stated that it is not necessary to be Buddhist to be mindful (Johanson, 2006). Shapiro (2009) suggested that despite its Buddhist beginnings, the phenomenological nature of mindfulness fits with most world traditions, Western thinking, and psychological schools. Conceptually, mindfulness also is similar to Western European thought on existentialism and American views of transcendentalism and humanism (Brown, Ryan, & Creswell, 2007). Kabat-Zinn supported mindfulness without the dogma, although he still encouraged qualities of attending such as compassion, kindness, and equanimity, in his

definition. These mindfulness qualities are part of the Buddhist teaching of the *Four Immeasurables*, which are joy, compassion, equanimity, and loving-kindness (Kraus & Sears, 2009). Therefore, in addition to the awareness component, compassion and other heart qualities were still purported to be essential to mindfulness, regardless of their Buddhist beginnings. The relative importance of these two components and the exact mechanisms of mindfulness became uncertain, however, as some approaches emphasized one aspect of mindfulness over the other.

For example, the evidence-based research for MBCT has grown considerably and mindfulness has rapidly become an important part of the application of cognitive behavior therapy to a number of conditions (Baer, 2003; Claessens, 2009). MBCT incorporated nonjudgmental awareness and re-perceiving techniques (i.e. distancing from thoughts) to help prevent recurrent depression (Teasdale et al., 1995). Although based on MBSR, the approach emphasized attention control and non-elaborative thinking and did not employ compassion oriented meditation. This offered some support that mindfulness training could be effective primarily as a cognitive technique, at least with specific populations such as those who suffer from recurrent depression. The numerous studies that followed, however, used various adapted forms of “manualized” programs such as MBSR or MBCT and, therefore, the degree to which the cognitive and affective components of mindfulness were employed or emphasized were uncertain. Further, the numerous measures of mindfulness used in these studies operationalized mindfulness primarily as attention and non-judgment (Kraus & Sears, 2009), making it difficult to ascertain which aspects of mindfulness were producing the positive outcomes reported.

Consequently, the Westernized version of mindfulness tended to elevate cognitive aspects of mindfulness, such as awareness and attention, overshadowing other proposed essential aspects of mindfulness, such as compassion (Germer, 2006; Kraus & Sears, 2009; Shapiro et al., 2006). Thus, researchers have recently begun examining the relative impact of the awareness and compassion components of mindfulness. Compassion, and specifically, self-compassion, has been found to be a better predictor of positive client outcomes than mindful awareness (Van Dam, Sheppard, Forsyth, & Earleywine, 2010). Similarly, Hollis-Walker and Colosimo (2011) found that compassion and mindful awareness together better predicted psychological wellbeing (PWB) than mindful awareness alone. Thus, there is burgeoning support that both awareness and compassion warrant investigation as potential aspects of mindfulness.

Two Wings of Mindfulness: Awareness and Compassion

Mindfulness is made up of two wings, awareness and compassion, sometimes respectively referred to as the mind and heart qualities of mindfulness. The words “mind” and “heart,” in fact, are not considered separable in the language of many contemplative traditions. For example, the Japanese character for mindfulness is two interactive figures: one represents mind and the other represents heart (Shapiro et al., 2006). Kraus and Sears (2009) stated that like a bird trying to fly, mindfulness does not function well with only one wing. Germer (2006) echoed this, stating that increasing one’s awareness of potentially unpleasant thoughts, feelings, and sensations, without the support of a warm, friendly, compassionate attitude, can be counterproductive. Thus, both wings are central to Buddhist teaching and mindfulness practice that aim to alleviate suffering through

acquiring insight and cultivating compassion for one's self and others (Brach, 2004; Brantley, 2010; Kraus & Sears, 2009; Schmidt, 2004). Brach (2004) proposed the term *radical acceptance* to reflect both seeing clearly and holding whatever is seen with compassion.

Although the two wings are interrelated, the awareness wing is associated with insight, while the compassion wing fosters the intention to approach one's self and others with love and compassion (Schmidt, 2004). Some researchers have proposed that compassion may be an outcome of mindful awareness as opposed to an essential aspect of mindfulness (Baer et al., 2006). Similarly, Bishop et al. (2004) suggested that non-reactivity and compassion also may be outcomes of mindfulness practice instead of components of mindfulness itself. Although the mechanisms are unclear, however, the two aspects of mindfulness have been posited to work together in producing positive outcomes (Hollis-Walker & Colosimo, 2011). In other words, cultivating awareness may promote the perspective-taking needed to have compassion while promoting feelings of concern for others. Proponents of mindfulness have stated that kindness and compassion are two qualities that support the welcoming and allowing attitude needed to pay attention, on purpose, non-judgmentally (Brantley, 2010). Loving-kindness and compassion meditations were designed to cultivate qualities such as loving-kindness, compassion, joy and equanimity (Kraus & Sears, 2009; Schmidt, 2004) and are included in MBSR programs. Loving-kindness is described as friendliness or open heartedness, while compassion is the concern for and desire to alleviate suffering in the self and in others (Kristeller & Johnson, 2005). Just as mindfulness meditation is needed to raise

awareness of experience, so are compassion meditations needed to increase one's ability to "hold" these experiences with kindness, compassion, and equanimity (Brantley, 2010). Rosch (2007) stated that many Buddhist teachers may begin with friendliness and compassion teachings and practices before introducing mindfulness as compassion is considered foundational to one's path to enlightenment. In contrast, Tirsch (2010) stated that most Buddhist traditions focus on mindful awareness and then progress to compassion meditation. Although there are conflicting perspectives on the potential sequencing of the two aspects, they are nonetheless still both considered important. Further, Kraus and Sears (2009) proposed that cultivation of the positive qualities of the compassion wing of mindfulness are relatively unstudied, but are important as part of the growing trend examining the role of positive emotions to well-being. In other words, it is important to study mindfulness as a method that not only increases awareness, but also promotes positive emotions associated with well-being.

Although compassion is central to Buddhist psychology in which mindfulness is rooted (Baer et al., 2006), much of Western research has focused solely on mindful awareness. Germer (2006) suggested that throughout its 2,500 years history, mindfulness was never designed to be strictly awareness or attention regulation practice, and that the heart qualities (i.e. loving-kindness and compassion) are essential to mindfulness practice. Other scholars concur that compassion may have been erroneously omitted from mindfulness in Western psychology (Brantley, 2010; Hollis-Walker & Colosimio, 2011; Germer, 2006; Kraus & Sears, 2009; Schmidt, 2004) and that psychology and counseling researchers may be at risk of prematurely foreclosing on a mindfulness construct that is

not representative of the phenomenon (Germer, 2006; Rosch, 2007). Definitions of these two components of mindfulness, awareness and compassion, are outlined in this section.

Defining mindful awareness. From the Buddhist perspective, mindfulness simply means “bare attention” (Cardaciotto et al., 2008). Without 2,500 years of immersion in Eastern culture, however, a more elaborate definition is needed to convey its meaning in Western culture. Although Kabat-Zinn offered elaborate descriptions and definitions of mindfulness, he later defined it more succinctly as “the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 145). The essence of this definition, paying attention, in the present moment, non-judgmentally, was widely adopted in the literature and used to inform operational definitions (Baer et al., 2006). These definitions characterized mindfulness as an aspect of consciousness, or more specifically, attention and awareness. Although these definitions frequently include one quality of attending such as non-judgment, the compassion component was suppressed, and mindfulness was characterized as primarily mindful awareness by default. The following section, however, offers a review of literature related to conceptual and operational definitions of mindful awareness as a distinct aspect of the broader concept of mindfulness.

Conceptual definition. From a Buddhist perspective, mindfulness involves attention, awareness, and memory (Tirch, 2010). The preponderance of the literature, however, describes mindfulness in terms of awareness, attention or both, and the terms are often used interchangeably. Brown and Ryan (2004) posit that attention and

awareness are distinct, intertwined aspects of a broader concept of consciousness. The authors defined *awareness* as the subjective experience of internal and external events that make up our reality, and *attention* as one's focused awareness of some aspect of that reality. In other words, awareness is the background and attention is whatever has been brought to the foreground in any given moment. They further stated that both attention and awareness are distinct from emotions, motives, or cognition. Thus, attention and awareness are aspects of consciousness described as "metacognitions" because they are irreducible to other mental processes. Because mindfulness involves one's ability to monitor the contents of consciousness without being reduced to other mental processes (i.e. emotions, motives, and cognitions), it is considered a metacognitive skill (Bishop, 2002; Brown & Ryan, 2003, 2004; Teasdale et al., 1995). Mindfulness training, therefore, is intended to increase this already present metacognitive ability such that a trainee can enhance existing awareness and attentional abilities.

Bishop (2002) proposed that the awareness component of mindfulness involves self-regulation of attention. The authors stated that self-regulation involves sustained attention (maintaining awareness to the present moment), attention switching (flexibility of attention), and inhibition of elaborative processing (directly experiencing events without assigning meaning). From this perspective, mindfulness will improve attentional abilities, generate insight, and increase cognitive complexity, while also reducing cognitive and behavioral strategies to avoid aspects of experience.

Operational definition. As scholars sought to operationalize mindfulness, attention and awareness were emphasized over qualities of attending such as compassion.

For example, the *Mindful Attention Awareness Scale* (MAAS; Brown & Ryan, 2003), measures the tendency to be attentive and aware in the present moment. Similarly, the *Five Facet Mindfulness Questionnaire* (FFMQ; Baer et al., 2006) operationalized mindfulness primarily as non-judgmental awareness characterized by five components: describing, observing, acting with awareness, non-reactivity, and non-judging (FFMQ; Baer et al., 2006). The FFMQ does not account, however, for qualities such as compassion, joy, or equanimity. Similarly, the *Freiburg Mindfulness Inventory* (FMI; Buchheld et al., 2001) measures mindfulness as a single construct characterized by non-judgmental present-moment observation and openness to negative experience. In addition, the *Toronto Mindfulness Scale* (TMS; Lau et al., 2006) measures curiosity and decentering, neither of which reflects the compassion wing of mindfulness. The preponderance of mindfulness research has been based on the use of these and similar instruments which have not assessed compassion (Baer et al., 2004, 2006; Brown & Ryan, 2003; Buchheld et al., 2001; Cardaciotto et al., 2008; Chadwick et al., 2005; Feldman et al., 2007; Lau et al., 2006; Segal et al., 2002). Although some measures and definitions of mindfulness appear to include some qualities of attending (e.g. non-reactivity, non-judgment), they do not explicitly include items that measure compassion (Carmody et al., 2009) or the other qualities of attending to which Kabat-Zinn referred. The operationalized definition of mindfulness, therefore, is not compatible with scholars who have emphasized the importance of compassion in mindfulness (Allen & Knight, 2005; Bien, 2008; Germer, 2006; Hick, 2008; Kabat-Zinn, 1994; Kristeller & Johnson, 2005; Rosch, 2007; Shapiro et al., 2006; Van Dam et al., 2010). Further, the influence of

compassion has not been accounted for in studies which may have incorporated compassion into their treatment condition but not measured it as part of the outcome. Thus, research that includes compassion in the conceptualization of mindfulness and a definition of mindful compassion is necessary. Accordingly, the literature regarding the compassion wing of mindfulness will be addressed.

Defining mindful compassion. Although compassion is frequently acknowledged in the mindfulness literature, it is not typically defined. Additionally, within the broader literature, compassion, empathy, sympathy, loving-kindness, and altruism are frequently used interchangeably, although they are considered distinct yet overlapping constructs, and there is no consensus regarding their separate meaning (Gladstein, 1977; Kristeller & Johnson, 2005; Neff & Pommier, in press; Wispé, 1986). In the following section, the literature regarding the conceptual and operational definition of compassion will be reviewed, particularly in contrast to similar overlapping constructs.

Conceptual definition. Kristeller and Johnson (2005) distinguished compassion from loving-kindness within Buddhism, stating that loving-kindness involves transcending self-concerns and invoking a universal love and caring toward others, whereas compassion is a more focused concern on others who are suffering and also involves taking action to alleviate their suffering. In this sense, compassion is other-focused and requires active engagement with others, while loving-kindness is a stance that may lead one to be compassionate. There is recognition in Buddhism, however, that compassion for the self will help an individual become more compassionate toward others (Allen & Knight, 2005). For this reason, loving-kindness meditation is often

included as part of mindfulness training because it is a contemplative practice designed to foster acceptance and compassion for both one's self and others (Kabat-Zinn, 1990).

Although self and other-compassion both involve concern for, and the wish to alleviate suffering, self-compassion also has been defined as multidimensional within the mindfulness literature. For example, Neff (2003b) used the work of Buddhist scholars to inform a three component definition of self-compassion consisting of (a) self-kindness versus self-judgment, (b) a sense of common humanity versus isolation, and (c) mindfulness versus over-identification. In this context, mindfulness is defined as present moment awareness just as it is in the overall mindfulness literature; however, it also involves a quality of attending characterized by a balanced perspective of the self, free from elaborative thinking. These three facets (self-kindness, common humanity, and mindfulness) are posited to interact to form a self-compassionate stance. In this regard, mindfulness is a component of self-compassion. Although self-compassion is theorized to be the pre-cursor to *other-compassion*, this is a relatively new area of study. Consequently, the relationship is not well understood; however, there is some empirical evidence that self-compassion predicts other-focused concerns such as perspective taking, less personal distress, and greater forgiveness (Neff & Pommier, in press).

Similarly, overall compassion (as opposed to self-compassion) also has been described as multidimensional and involving several motivational elements, including sympathy, empathy, distress tolerance, care for the wellbeing of others, non-judgment, and distress sensitivity (Tirch, 2010). Altruism is a closely related concept to compassion, but it is typically operationalized as an act of helping (Kristeller & Johnson, 2005). In

addition, compassion is distinguished from empathy which also involves concern for others, but it does not necessarily include motivation to take action to alleviate the suffering of others (Patsiopoulos & Buchanan, 2011).

Operational definition. Given the complexities involved with defining compassion, it is not surprising that a review of the compassion related literature suggested that there is no widely endorsed operational definition or measure of compassion. One frequently noted measure of compassion is the *Compassionate Love Scale* (CLS; Sprecher & Fehr, 2005). The authors defined compassionate love as an attitude toward other(s) involving feelings, cognitions, and behaviors focused on caring, concern, tenderness, support, understanding, and helping when others seem to be suffering. This attitude can be expressed toward close others, strangers, or all of humanity. This scale typically does not appear in the mindfulness literature, however, particularly as there is another measure which is more closely aligned with the Buddhist roots of mindfulness and compassion.

The *Self-Compassion Scale* (SCS; Neff, 2003b) is based on an operational definition of mindfulness as self-kindness, common humanity, and mindfulness. This definition and measure has been frequently used in mindfulness related research as it is a measure of compassion informed by Buddhist roots and was the only available instrument of its kind for much of the past decade. More recently, however, Kraus and Sears (2009) proposed that a definition and measure that included both *self* and *other-compassion* would be useful to studies in the helping professions where empirical support of *other-compassion* may be important. The authors also used Buddhist teachings to

inform their measure which was based on the Four Immeasurables of empathetic joy, loving-kindness, equanimity, and compassion (SOFI; Self-Other Four Immeasurables, Kraus & Sears, 2009). As defined by the Four Immeasurables, loving-kindness is the capacity to offer joy, happiness, and other positive emotions to self and others; compassion is the capacity to offer relief from suffering to self and others; joy, sometimes called sympathetic joy, is the wish for joy and the tendency to see no separation from another's joy and one's own; and equanimity, or the capacity to accept whatever comes or to be free from judgments or bias and to wish this for others (Bien, 2008; Tirsch, 2010; Wallace, 2001). Together these qualities were defined as *positive qualities toward self and other* in the SOFI measure. The instrument also measures negative qualities toward self and others which were defined as the near and far "enemies" of the positive qualities. For example, a far enemy, or opposite of compassion would be "cruel" and a near enemy, or subtle imposter, would be "pity." Because of the complexities involved in understanding how mindful awareness and mindful compassion are defined, there are similarly many proposed mechanisms of mindfulness associated with the positive outcomes reported across studies.

Mechanisms of Change

Based on the early reported success of MBSR and MBCT training, there was a proliferation of intervention based research on mindfulness. After two decades of mounting support for salutary effects of mindfulness based interventions (Baer, 2003; Greeson, 2009), researchers began to investigate what mechanisms of mindfulness may have accounted for the positive outcomes in these studies (Carmody et al., 2009; Shapiro

et al., 2006). Further, Bishop (2002) posited that inadequate definitions, unclear mechanisms, and poor methodology such as a lack of controlled studies, made it difficult to make any solid conclusions regarding the efficacy of mindfulness training. Review of the substantial number of studies showing benefits of mindfulness, however, led researchers to suggest that further investigation is warranted (Baer, 2003; Bishop, 2002). Although research on the mechanism of mindfulness is in its nascent stage, various proposed mechanisms of mindfulness are reviewed in this section.

Exposure. Mindfulness-based training and interventions teach individuals to attend to aversive stimuli, including sensations, cognitions, and emotions, with open, non-reactive, non-judging, present-moment awareness (Baer, 2003; Cardaciotto et al., 2008). The goal is not to extinguish these stimuli, but rather to change one's relationship to them. Thus, an individual must be able to encounter, or have *exposure*, to these aspects of experience, without attempts to avoid them, so that a different relationship with them can be created over time. Further, the individual must also be able to observe that there are no catastrophic outcomes of the exposure for it to yield a decrease in aversion to the negative stimuli (Baer, 2003). Therefore, mindful meditation training is proposed to be similar to other "exposure" techniques such as systematic desensitization, because it is similarly designed to increase one's ability to tolerate aversive stimuli over time (Labbe, 2011). Linehan (1993) incorporated mindfulness into Dialectic and Behavioral Therapy (DBT) which was developed for the treatment of borderline personality disorder but later adapted for use with eating disorders. The author posited that fear and avoidance of intense emotions was an underlying intrapersonal dynamic in those diagnosed with the

disorder and that prolonged exposure without avoidance would increase the individual's ability to tolerate and cope with aversive emotional states more effectively.

Self-regulation and self-management. Another hypothesis regarding the positive effects of mindfulness training is that it increases self-observation and self-regulation which may enhance utilization of a broader array of coping skills. Carmody et al. (2009) defined self-regulation as stable functioning even when experiencing difficult internal states and the ability to manage emotions and thoughts. There is ample support for the positive effects of MBSR which was designed as a method to increase self-regulation of stress and emotions among individuals with a physical illness (Baer, 2003; Bishop, 2002; Greeson, 2009; Kabat-Zinn, 1982). The premise of the approach was that when individuals increased their awareness of aversive sensations and related stress reactions, they would have a greater ability to draw from a repertoire of responses versus more habitual responses (Kabat-Zinn, 1982). Similarly, mindfulness has been proposed as a means to enhance self-management for conditions where dysregulation of emotion and behavior is a factor, such as with binge eating. Researchers have found that an increase in mindfulness was associated with increased self-observation (i.e. noticing thoughts, feelings, sensations, and perceptions; recognizing satiety cues and urges to eat) and a reduction in bingeing (Baer et al., 2005; Kristeller & Hallett, 1999). Additionally, the impact of mindfulness on self-regulation has been studied with depression relapse. Teasdale et al. (1995) found that heightened awareness of early signs of depression offered the opportunity for early self-intervention and relapse prevention. Finally,

Shapiro (1992) found that when meditators entered into practice with the intention of greater self-regulation, they obtained outcomes that reflected this intention.

Acceptance. Acceptance is frequently noted as an important aspect of mindfulness and a mechanism for change (Baer, 2003; Bishop et al., 2004; Brown & Ryan, 2004; Cardaciotto et al., 2008; Shapiro et al., 2006). Bishop et al. (2004) posited that acceptance during mindfulness practice leads to decreased experiential avoidance and promotes greater affect tolerance, coping, and increased self-observation which, in turn, leads to greater emotional awareness and cognitive complexity. Brown and Ryan (2004) also proposed that acceptance was an aspect of mindfulness and developed a measure of present moment awareness and acceptance (*Mindful Awareness Attention Scale*, MAAS; Brown & Ryan, 2003). In this study, although both awareness and acceptance were related and “nested” beneath an overarching mindfulness construct, the authors failed to find convergent, discriminant, or criterion validity that acceptance offered explanatory power over awareness alone. Despite this finding, there is substantial scholarly support that acceptance is an important component of mindfulness, although it is not clear whether it is a mechanism of change, an outcome, or a component of mindfulness. Further, acceptance is sometimes described as adopting an attitude of compassion (Brown & Ryan, 2003), and recent research suggested it may be an important mechanism in the outcomes associated with mindfulness (Hollis-Walker & Colosimo, 2011; Van Dam et al., 2010).

Intention. Although intention is not widely proposed as a mechanism of mindfulness, Shapiro et al. (2006) posited that it was an often overlooked but central

aspect of the phenomenon. The authors further stated that intention is a dynamic process that evolves over time. This assertion is supported by a study in which Shapiro (1992) examined the role of intention in meditation practice and found that with continued practice, intentions shifted along a continuum from self-regulation to exploration to liberation and that different intentions yield different outcomes related to that intention. Therefore, this aspect of mindfulness was incorporated into a meta-theory or model of mindfulness as an underlying mechanism of re-perceiving.

Re-perceiving. Shapiro et al. (2006) proposed a three part model of mindfulness: *intention* (why you are meditating), *attention* (observing moment to moment experience), and *attitude* (qualities of attending such as compassion) where each component interacts with one another and simultaneously contributes to one's mindfulness. The authors proposed that together these components led to a shift in perspective they called *re-perceiving*, which is a meta-mechanism of action comprised of four direct, interacting mechanisms including self-regulation; values clarification; cognitive, emotional, and behavioral flexibility; and exposure. An example of re-perceiving might be described as one's ability to notice a thought, feeling, or sensation without ascribing any truth or meaning to it. Brown and Ryan (2004) endorsed mindfulness as a meta-cognitive skill that involves awareness and attention and functions "outside of" other mental processes such as cognitions, emotions, and sensations.

Similarly, re-perceiving has been similarly described as *de-atomization*, where habitual ways of thinking are disrupted (Safran & Segal, 1990). Many other terms have been used to describe similar, if not identical, processes including *decentering*, *defusion*,

and *distancing* (Carmody et al., 2009). Reperceiving, or distancing, is not equivalent to detaching or disengaging, but rather is a means to connect more deeply with one's experience without elaborative thinking and rumination (Brown & Ryan, 2004; Carmody et al., 2009; Shapiro et al., 2006).

Carmody et al. (2009) tested Shapiro et al.'s (2006) mindfulness model using a sample of 309 MBSR participants who completed pre-post measures of mindfulness, reperceiving, and the four proposed underlying mechanisms (self-regulation; values clarification; cognitive, emotional, and behavioral flexibility; and exposure). The researchers found that all six measures increased from pretest to posttest, but that reperceiving did not mediate the relationship between mindfulness and the four mechanisms as predicted. The authors concluded that this was a result of a high degree of overlap between mindfulness and reperceiving (pre-MBSR, $r = .81$, $p < .0001$ and post-MBSR, $r = .74$, $p < .0001$). The authors further suggested that results may have been impacted by imprecise measures of the test variables and that further studies are needed.

Relaxation. Relaxation is not the goal of mindfulness, but it is sometimes an unintended consequence of various mindfulness activities, particularly as it has been utilized as a stress reduction technique. Because programs such as MBSR, which focus on stress reduction, have been used to inform significant mindfulness intervention research, it has been posited that relaxation, rather than increased awareness, may be responsible for the reported salutary effects of mindfulness in these studies (Bishop, 2002). There is evidence, however, that other mechanisms of mindfulness are responsible for these outcomes. For example, in a study comparing the effects of mindful breathing

against progressive muscle relaxation and loving-kindness meditation, mindfulness had a greater positive impact on decentering and reducing negative reactions to repetitive thoughts than the other interventions (Feldman, Greeson, & Senville, 2010). The authors concluded that this is evidence that mindfulness interventions are distinguishable from other stress-management approaches because mindfulness offers a decentering mechanism. Jain et al. (2007) compared the effects of mindfulness meditation and relaxation training and found that both interventions reduced stress and improved positive mood, but that mindfulness also reduced distractive and ruminative thoughts and behaviors, similarly offering support that mindfulness involves mechanisms of change beyond relaxation alone.

Social neurophysiology. Another proposed mechanism of mindfulness is explained by social neurophysiologic effects. There are a growing number of studies that offer evidence that positive outcomes associated with mindfulness may be a result of changes in the brain (Kelly, 2008; Lazar et al., 2005; Lutz et al., 2008; Tirch, 2010). Lutz et al. (2008) assessed differences in brain activity in novice and expert meditation practitioners using fMRIs and found that when experts cultivated positive mental states it altered the activation of brain circuitries previously linked to empathy and “theory of mind” as compared to the novice group. In addition to increased brain activity, there are also studies in which researchers have found evidence that meditation practice, over time, changes the actual structure of the brain (Lazar et al., 2005; Tirch, 2010). For example, Lazar et al. (2005) used fMRIs and found increased thickness in regions of the brain associated with care giving and compassion in experienced meditators as compared with

a matched control group. Kelly (2008) reviewed research related to mindfulness and the brain and found that mindfulness meditation has been associated with improved brain and immune function and increased perceptual abilities. These fMRI studies are limited, however, by small opportunistic samples. In another recent review of the literature, Greeson (2009) found that mindfulness meditation has been shown to influence areas of the brain associated with attention, awareness, and emotion (e.g. emotion regulation and recognizing and labeling emotion). Although this line of research is new, early results suggested that outcomes related to mindfulness may occur as a result of changes in the activity and structure of the brain.

Although the exact mechanisms of mindfulness continue to be investigated, the overwhelming number of mindfulness studies in which researchers have reported positive outcomes has encouraged a significant interest regarding its use in counselor development and performance.

Benefits of Counselor Mindfulness

Carl Jung is noted as saying “it is only what we are that has a power of healing” (as cited in O’Driscoll, 2009, p. 17). Increasingly, researchers, scholars, and educators are echoing this sentiment by suggesting that counselor training should place greater emphasis on developing the counselor as an instrument (Bruce et al., 2010; Greeson & Cashwell, 2009; Grepmaier, Mitterlehner, Loew, Bachler, et al., 2007; Hick & Bien, 2008; McCollum & Gehart, 2010; O’Driscoll, 2009) as opposed to focusing largely on imparting skill, theory, and technique. Because counselor training traditionally emphasizes knowledge and skill, methods for cultivating the kind of attitude that

promotes therapeutic relationship and outcome have not been well developed within counselor education (Hick, 2008). Therefore, mindfulness, which teaches cognitive skills and attitudinal qualities, is generating interest as a means for impacting how a counselor *is* and the therapeutic benefit this may have for clients (Bruce et al., 2010; McCollum & Gehart, 2010; O'Driscoll, 2009).

Mindfulness has been associated with many positive benefits for counselors and empirical evidence is limited but growing. Counselors in MBSR courses have reported positive outcomes such as reduced stress, state and trait anxiety, and negative affect and rumination as well as increased empathy, positive affect, and self-compassion (Aggs & Bambling, 2010). Further, mindfulness has been positively associated with counselor attention, self-efficacy (Greason & Cashwell, 2009), counseling skills (Newsome, Christopher, Dahlen, & Christopher, 2006), self-care (Christopher & Maris, 2010), and client outcomes (Grepmaier, Mitterlehner, Loew, Bachler, et al., 2007). In this section, both theoretical and empirical literature regarding these and other benefits of mindfulness for counselor development will be reviewed.

Client outcomes. Although there has been considerable research regarding positive outcomes associated with mindfulness training, there is only one study to date regarding the impact of counselor mindfulness on client outcome. In Germany, Grepmaier, Mitterlehner, Loew, Bachler, et al. (2007) conducted a study to examine the effects of mindfulness training on therapeutic process and outcomes for 124 inpatient clients. The researchers randomly assigned 18 counselor trainees to two groups (meditation and non-meditation) and measured therapeutic influencing factors (e.g. clarification, problem

solving, and relationship perspectives) and outcomes (e.g. perceived results of the treatment, symptom reduction). Compared to the control group, the meditation group had significantly higher ratings on clarification and problem solving and their clients reported higher ratings on overall perceived treatment and greater symptom reduction. Although only one study to date has examine client outcome, there is empirical evidence in the general mindfulness literature to suggest that it warrants further investigation as a potential method for improving counselor development and client outcomes.

Therapeutic relationship. The therapeutic relationship is considered essential to effective counseling and positive client outcomes (Hick & Bien, 2008; Lambert & Barley, 2001; Lambert & Simon, 2008; Rogers, 1957, 1975; Shapiro & Izett, 2008; Trusty et al., 2005). Mindfulness has been associated with many variables related to the therapeutic relationship and interpersonal function such as empathy, attunement, affect tolerance, therapeutic presence, unconditional positive regard, and compassion. Research regarding these relationships is reviewed in the following section.

Empathy. There is little question as to whether empathy is an important counselor quality or essential aspect of the therapeutic relationship (Hick & Bien, 2008; Lambert & Barley, 2001; Lambert & Simon, 2008; Rogers, 1957, 1975; Shapiro & Izett, 2008; Trusty et al., 2005). Because of the considerable evidence that empathy significantly impacts client outcome (Block-Lerner et al., 2007; Bruce et al., 2010) and the counselor-client working alliance (Trusty et al., 2005), there is great interest in cultivating empathy in counselor trainees. Many scholars have theorized that mindfulness training may be a viable means for enhancing genuine empathy in counselors (Aiken, 2006; Andersson,

King, & Lalande, 2010; Bruce et al., 2010; Fulton, 2005; Greason & Cashwell, 2009; Hick & Bien, 2008; Kristeller & Johnson, 2005; Lesh, 1970; Martin, 1997; O'Driscoll, 2009; Shapiro & Izette, 2008; Shapiro, Schwartz, & Bonner, 1998; Walsh & Shapiro, 2006). Although few in number, several researchers have offered empirical support that mindfulness is associated with empathy and that mindfulness training may increase empathy.

For example, in a study of 179 doctoral and master's level counseling students, Greason and Cashwell (2009) found that mindful awareness significantly predicted empathy ($\beta = .27$) and accounted for 7% of the variance in mean empathy scores (*adjusted* $R^2 = .07$, $t = 3.77$, $p < .01$). In a similar study using 33 couples, Wachs and Cordova (2007) found that mindful awareness was positively correlated with affective and cognitive empathy ($r = .38$, $p < .05$, $r = .49$, $p < .01$, respectively). These studies offered initial support for the relationship between mindfulness and empathy.

There are a limited number of intervention studies measuring the impact of mindfulness training on empathy, but these studies show promise. For example, an early pioneer of mindfulness research, Lesh (1970) attempted to bridge the gap between theory and practice by employing Zen meditation training to increase empathy (measured as affective sensitivity) in counselor trainees. The author reported that participants in the experimental group had a net mean gain in empathy (*Adjusted* $t = 7.23$, $p < .001$) after 4 weeks of meditation training which was greater than that obtained by two control groups (*Adjusted* $t = .29$ and -1.82 , non-significant).

Similar studies have been conducted with other health care professionals. Shapiro et al. (1998) conducted a study with 73 pre-med and medical students randomly assigned to either one of two 8-week MBSR training groups or a wait-list control group, found that subjects in the treatment group had significantly higher self-reported empathy than a control group ($F_{(1, 69)} = 4.3, p < .05$).

Qualitative data also seems to support the notion that mindfulness is related to empathy. For example, Aiken (2006) interviewed 6 psychotherapists with over 10 years of both therapy and mindfulness meditation experience and found consistent themes that mindfulness helped to develop the counselor's ability to experience and communicate a felt sense of clients' inner experience, increased presence with client suffering, and helped clients express body sensations and feelings. Similarly, Andersson et al. (2010) recruited 13 mental health professionals to participate in a workshop to learn about mindfulness-based role-play in supervision to determine the potential impact on empathy. Based on data from semi-structured interviews, the researchers reported that the intervention led to increased empathy for the client's emotional experience, enhanced awareness of functioning as a therapist, and thoughts about how to proceed in therapy.

Finally, there is some preliminary evidence that mindfulness meditation increases empathy as measured by activation of brain circuitries linked to empathy (Lutz et al., 2008). Together these studies suggested that mindfulness may be an effective way to cultivate genuine empathy in counselor trainees and enhance their effectiveness with clients. Further investigation is needed, however, as there are few studies and many are plagued by small sample sizes.

Attunement. Closely related to empathy is the concept of attunement which is another proposed benefit of mindfulness training. Attunement occurs when one person feels that another is attending to their inner world in such a way that they feel felt, understood, and connected (Bruce et al., 2010). Bruce et al. (2010) further stated that attunement is associated with a positive therapeutic relationship, ability to know when to connect or provide space to clients, decreased hostility toward clients, empathy, and corrective emotional experiences. This hypothesis is based on the premise that one's self attunement increases one's ability to be attuned to others. Because mindfulness cultivates non-judgmental observation and acceptance of sensations, cognitions, and emotions (Baer, 2003), it may promote the *intrapersonal* relationship necessary for establishing an accepting, non-judgmental, compassion oriented, *interpersonal* relationship.

Empirical evidence of increased attunement related to mindfulness training is limited. Mindfulness has been shown to increase a parent's ability to be attuned with their child and for couples to be more attuned with one another (Gambrel & Keeling, 2010). Further, in a study of parent-child interaction, Bögels, Hoogstada, van Duna, de Schuttera, and Restifo (2008) found that an 8-session mindfulness training program for both parents and their children with attention and impulsivity problems increased attunement, although it is unclear as to whether the parent or child contributed to this change.

Affect tolerance/experiential avoidance. Affect tolerance is another counselor ability that may be influenced by mindfulness. To be effective, counselors must be able to notice and tolerate client expressed feelings as well as their own if they are to be able to

respond empathically to clients (Fulton, 2005). This same phenomenon is also called experiential avoidance when it is described in its negative form. Experiential avoidance is an unwillingness to remain in contact with bodily sensations, emotions, thoughts, images, and memories accompanied by measures to alter or thwart these experiences even with maladaptive behaviors (Hayes et al., 2004). Because avoidance of experiences such as thoughts often increases them, it is considered counterproductive (Fulton, 2005; Hayes et al., 2004). For a counselor in a session with a client, this paradoxical response to avoidance may prove distracting. Beginning counselors are expected to tolerate, explore, and respond to both simulated and real client emotion which may elicit difficult thoughts, feelings, and sensations. Although counseling programs teach counselor trainees how to identify and reflect painful emotions, they do not necessarily help develop the internal abilities needed to manage their reaction to these experiences. Therefore, mindfulness training has been theorized to increase affect tolerance or decrease experiential avoidance (Baer, 2005; Childs, 2007; Fulton, 2005; O'Driscoll, 2009) as mindfulness training helps individuals attend to but not react to aversive stimuli (Baer, 2003, Cardaciotto et al., 2008). A number of methods aimed at reducing avoidance such as ACT and DBT incorporate mindfulness and have shown promise (Hayes et al., 1999; Linehan, 1993). However, these approaches are designed for clinical populations and disorders, and evidence has not yet accrued to offer insight as to how mindfulness may impact affect tolerance in counselor trainees.

Self and other compassion. Compassion is another important counselor quality that is difficult to transmit via training. For example, self-compassion is negatively

correlated with harsh self-judgment, anxiety, thought suppression, and emotional exhaustion and positively associated with emotional intelligence, social connection, and empathy (Birnie et al., 2010). Further, *self*-compassion is associated with compassion for others as higher levels of self-compassion are empirically linked to greater perspective taking, less personal distress, and greater forgiveness (Neff & Pommier, in press). Further, Horvath (2001) reported that there is evidence for the association between a counselor's self-hostility (or lack of self-compassion) and hostile or controlling reactions to clients and poor working alliance. A related concept to self and other-compassion is *compassion fatigue*. Beginning counselors, particularly in their first internship, may experience difficulty sustaining attention and decision-making when confronted with the stress of an emotionally demanding client load.

Mindfulness has been associated with increasing *self* and *other-compassion* (Kristeller & Johnson, 2005; Neff, 2003a, 2003b; Neff & Pommier, in press) which may be important in helping counselor trainees be more effective with clients as well as cope with self and other evaluation which occurs as part of the training experience.

Mindfulness has been associated with increasing one's ability to feel compassion while also reducing one's stress level (Newsome et al., 2006). Lutz et al. (2008) found that greater meditation expertise was related to an increased ability to experience shifts in brain activity associated with positive emotions like compassion. Thus, mindfulness training may help trainees increase their capacity to have compassion when faced with the high emotional demands of counseling. In addition, specific types of meditation, such

as loving-kindness meditation, are designed to promote compassion for oneself and others (Greeson, 2009).

Therapeutic presence. Therapeutic presence has been described as essential to fostering an effective therapeutic relationship (Geller & Greenberg, 2002; McCollum & Gehart, 2010; Tannen & Daniels, 2010). It has been defined as “bringing one’s whole self into the encounter with clients, by being completely in the moment on multiple levels: physically, emotionally, cognitively, and spiritually” and additionally includes four conditions such as have “the intention of being with and for the clients, in service of their healing process” (Geller et al., 2010, p. 599). Late in life Carl Rogers described presence as a potential fourth condition of the therapeutic relationship and possibly the most important element, describing it as “around the edges” of the other conditions (as cited in Geller & Greenberg, 2002, p. 73). Therapeutic presence has recently gained momentum as a way to describe how a counselor *is* with a client as opposed to what he/she *does* with a client (Gehart & McCollum, 2008). Researchers have suggested that mindfulness cultivates therapeutic presence (Geller et al., 2010; Gehart & McCollum, 2008).

Specifically, Gehart and McCollum (2008) recruited 13 counseling students to enhance their mindfulness through both in-class mindfulness instruction and extracurricular mindfulness exercises. Themes were identified based on written data from students’ journal entries over the semester. Students reported improved awareness and attention, both to internal and external experience, increased calmness, greater ability to manage internal chatter, improved ability to slow down in sessions, and greater compassion and acceptance toward both self and others. Although students were

instructed to be honest and journals were not graded, there was limited ability to control for social desirability.

Although research is limited, mindfulness may have a role in cultivating therapeutic presence as it is designed to increase awareness, attention, and openness which may facilitate a counselor's ability to be *with* and *for* clients. Although this may seem intuitively a part of counselor training, mindfulness training could help make this more explicit.

Emotion regulation. There is some evidence that mindfulness impacts emotion regulation in the brain, which may have important implications for counselor trainees, especially related to their empathic ability and management of stress and anxiety (Davis & Hayes, 2011; Farb et al., 2010; Jha, Stanley, Kiyonaga, Wong, & Gelfand, 2010; Lamm et al., 2009; Williams, 2010). First, it is necessary to review a study related to which brain mechanisms are involved with empathy and its implications. Lamm et al. (2009) used fMRIs to measure observer's responses to others who react to painful stimuli in ways that would be similar or different than the observer (i.e., with pain or without pain). The researchers indicated that the neural structures involved with empathy are similarly engaged when inferring the affective state of someone who is both like us and unlike us. Further, when strong emotional tendencies exist, individuals must overcome them by engaging executive functions such as the attention network of the brain. The authors concluded that regulation of one's egocentric perspective is vital to one's ability to have empathy for another. This is similar to Rogers's (1957) suggestion that to have

empathy one must relate to another with an “as if” quality rather than becoming absorbed in their own experience of another’s emotional state.

Mindfulness has been associated with executive functions and emotion regulation in a number of studies (Farb et al., 2010; Williams, 2010). In the first neuroimaging study to show how mindfulness effects emotion regulation, Farb et al. (2010) randomly assigned 36 participants to an 8-week MBSR training group or a waitlist control group and compared the two groups on measures of anxiety, depression, psychopathology, and neural reactivity (via fMRI) after each group watched a sad movie. Self-reported measures for the MBSR group were significantly lower on anxiety, depression, and psychopathology. Further, although the MBSR group reported having a similar sad reaction to the film, fMRIs indicated that they had less neural activity while watching the film than the control group, and their neural activity was different than it was prior to MBSR training. The researchers concluded that mindfulness meditation increased the ability to regulate emotion without necessarily avoiding it or being detached from it. This has important implications for counselors who must be able to sense and be present for a client’s affective state without become immersed in it.

In another study, Jha et al. (2010) examined the impact of mindfulness training on working memory capacity (WMC), which is associated with management of cognitive demands and emotion regulation. Stress decreases WMC and diminishes cognitive and affective functioning. To test the effects of mindfulness training on WMC, the researchers recruited three groups: a military group that received 8 weeks of mindfulness training ($n = 31$), a military control group ($n = 17$), and a civilian control group ($n = 12$).

Several findings were reported. First, the military control group had decreased WMC as compared to the relatively stable WMC observed in the civilian group. Second, the treatment group showed an increase in WMC that was proportional to the amount of time spent practicing meditation. Third, greater meditation practice was associated with higher levels of self-reported positive affect and lower levels of self-reported negative affect. Lastly, the researchers reported that WMC mediated the relationship between time spent meditating and negative affect. Thus, mindfulness training and practice may increase management of cognitive and affective processes when under stress. Earlier in this chapter, numerous sources of stress and anxiety associated with counselor training were enumerated. Increasing a counselor's ability to regulate emotion and improve cognitive functioning may be beneficial. Mindfulness training may prove to be a useful means to reduce stress and anxiety and increase emotion regulation and cognitive performance in trainees.

Unconditional positive regard. Unconditional positive regard is considered an essential element to building a therapeutic relationship (Rogers, 1957). Rogers states “to the extent that the therapist finds himself experiencing a warm acceptance of each aspect of the client's experience as being a part of that client, he is experiencing unconditional positive regard” (Rogers, 1957, p. 98). Mindfulness includes the capacity to be nonjudgmental and non-reactive (Baer et al., 2005; Cash & Whittingham, 2010) and to maintain open, non-judging, present moment awareness (Baer, 2003; Cardaciotto et al., 2008), similar to what Rogers described as unconditional positive regard. In this regard, mindfulness qualities may better enable counselors to maintain unconditional positive

regard for clients. Further, to have the warm, accepting attitude Rogers described requires that a counselor be able to remain connected to a client's experience without judging or reacting to it. Baer et al. (2006) found that non-reactivity and non-judging are components of mindfulness that, together, may be viewed as a way of operationalizing acceptance. This non-reactive stance is important both to unconditional positive regard and empathy. Barrett-Lennard (1981) describe the process of empathy as a cycle where a counselor must be unthreatened and non-defensive in relation to a client's presentation. Mindfulness is associated with improvements in metacognitive awareness and processing (Chiesa & Serretti, 2009; Garland & Gaylord, 2009; Segal et al., 2002) in which thoughts and feelings are perceived not as factual representations of reality to be reacted to, but as transient mental events that can be appraised from without elaboration or rumination. Thus, mindfulness may offer trainees a way to be less reactive, less judging, more empathic, and more genuinely accepting of a client's experience.

Counseling skills. In addition to improved client outcomes and relationship factors, there is some evidence that mindfulness may also be effective in improving counseling related skills in trainees. For example, in a 4-year study based on qualitative (journals and focus groups) and quantitative data (course evaluations) collected from counseling students, researchers found that a semester long (15 weeks, 3 credits) course on mindfulness and self-care led to many reported benefits (Newsome et al., 2006). In this same study, students reported greater capacity for empathy and compassion and enhanced listening skills which resulted in feeling more comfortable sitting in silence

with clients and staying focused during sessions. Further, students reported feeling more attuned with themselves and their clients.

Another counseling skill that has been associated with mindfulness is attention. Awareness and attention are considered central components of mindfulness (Bishop et al., 2004; Brown & Ryan, 2003, 2004; Rothaupt & Morgan, 2007). There have been numerous reports that mindfulness is empirically associated with attention and that improved attentional abilities follow mindfulness training (Brown & Ryan, 2003; Davis & Hayes, 2011; Lazar et al., 2005; Shapiro et al., 2006; Teasdale et al., 1995). Thus, mindfulness has been theorized as a means of developing important cognitive skills, such as attention, for counselors. Greason and Cashwell (2009) stated that strategic attention control is important to the counseling process yet training in this skill is not included in counselor training programs. In a study on mindfulness and counselor attention, the authors found that mindfulness, as measured by the FFMQ, predicted counselor attention ($\beta = .53$) and accounted for 28% of the variance in mean counselor attention scores (*adjusted R*² = .28, $t = 8.41$, $p < .01$). This study provided initial support that mindfulness may be useful in developing important cognitive skills in counselors.

Anxiety. Although anxiety is common and expected in counselor trainees, it may also be a hindrance to many aspects of counselor training and performance (Bowman et al., 1978; Duncan & Brown, 1996; Friedlander et al., 1986; Hale & Stoltenberg, 1988; Hiebert et al., 1998). There is little guidance to help educators offer students an effective means for reducing trainee anxiety across experiences in the counseling program. There are numerous studies, however, in which researchers have found a reduction in anxiety

following mindfulness training for both clinical and non-clinical populations (Baer, 2003; Cohen & Miller, 2009; Sears & Kraus, 2009; Shapiro et al., 1998; Shapiro et al., 2007).

For example, Sears and Kraus (2009) studies the effects of meditation training on anxiety, negative affect and rumination, and hope by assigning 57 college students to one of four conditions (no meditation, brief mindfulness meditation training, brief loving-kindness meditation training, and a longer training which included both awareness and loving-kindness meditations). The researchers found that longer combined meditation led to a reduction in cognitive distortions which yielded reductions in anxiety and negative affect and increased hope. The shorter versions also were associated with decreased anxiety and negative affect but effects were smaller.

Similar studies also have been conducted with counselor trainees and other health care professionals. Shapiro et al. (2007) examined the effect of an 8 week MBSR program on the mental health and well-being of 54 graduate counseling psychology students. Compared to cohort controls, the researchers found that students in the MBSR program reported significant pre-post reductions in state anxiety ($\beta = .52, p < .01$). Incidentally, participants also reported significant reductions in perceived stress, negative affect, and rumination, and significant increases in positive affect and self-compassion.

Similarly, Cohen and Miller (2009) tested the effects of the interpersonal mindfulness training (IMT), which is a 6-week mindfulness course based on the MBSR program but presented in the context of relational awareness relevant to counseling, on reducing stress and enhanced interpersonal well-being in counselor trainees. Participants included 20 master's-level counselor trainees and 1 doctoral trainee who reported

significant changes in anxiety from pre to post-test ($F = 5.733, p = .027$). Additional reported benefits included increased mindfulness, social connectedness, and emotional intelligence. Although this study was reviewed earlier related to anxiety, it is noteworthy that Shapiro et al. (1998) also reported decreased stress and anxiety among medical students after they participated in an 8-week mindfulness training course. Thus, there is preliminary evidence that mindfulness may reduce anxiety among health care professionals including counselor trainees. This may be particularly important as both trait and state anxiety are negatively associated with counseling self-efficacy (Daniels & Larson, 2001; Friedlander et al., 1986; Levitt, 2001).

Self-efficacy. Self-efficacy is an important counselor variable as it is a significant predictor of counseling performance and client outcome (Larson & Daniels, 1998). Research regarding the relationship between mindfulness and self-efficacy is sparse, however. Greason and Cashwell (2009) investigated this relationship and found that self-reported mindfulness among master's-level trainees and doctoral students significantly predicted counselor self-efficacy ($\beta = .34$). Further, mindfulness accounted for 11% of the variance in mean scores of counselor attention ($adjusted R^2 = .11, t = 4.88, p < .01$) which mediated the relationship between mindfulness and self-efficacy. Thus, this study offers support that mindfulness may increase self-efficacy in counselors by improving a counselor's ability to maintain attention in sessions.

Wellness. The high demands of academic and practice performance requirements in counselor training have encouraged researchers to explore the impact of mindfulness on issues of self-care and burnout (Christopher & Maris, 2010; Shapiro, Shapiro, &

Schwartz, 2000). Shapiro et al. (2000) found that stress may adversely impact the effectiveness of counseling students because it reduces attention, concentration, and decision-making which are all vital to performing counseling. Although wellness is strongly encouraged in client work, mainstream counseling programs have not readily integrated self-care programs into their curriculum (Christopher & Maris, 2010).

Mindfulness has gained attention as a means for facilitating self-care and wellness. There have been numerous studies regarding the positive impact of mindfulness training on psychological well-being in clinical and non-clinical populations (Baer, 2003; Christopher & Maris, 2010; Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008; Greeson, 2009; Hollis-Walker & Collosumo, 2011; Amrani, 2011). Research on counselor wellness is more limited. Christopher and Maris (2010) reviewed several qualitative research projects that were conducted from 2001 to 2010 and found that mindfulness training enhanced the physical and psychological well-being of counselor trainees. Schure, Christopher, and Christopher (2008) conducted a qualitative analysis across 4 counseling cohorts at the end of a semester-long course that involved meditation, yoga, and Qigong. Students reported that yoga increased body awareness, flexibility, energy, mental clarity and concentration; meditation increased awareness and acceptance of emotions and personal issues, mental clarity, organization, and pain tolerance; Qigong increased feeling centered, energy and mind-body connection. Therefore, there is preliminary evidence that mindfulness may help student self-care, prevent burnout, and increase wellness.

Mindfulness Practice and Training

Although open, receptive attention and awareness to internal and external experience may be cultivated through a variety of approaches in psychotherapy (Brown & Ryan, 2004), methods designed for use in counseling may not readily translate for use by educators within the parameters of a counseling program. Thus, mindfulness has been proposed as a way that may be incorporated in various aspects of a program as well as encouraged outside of curriculum requirements. Further, although mindfulness is most often associated with the practice of meditation, it can be cultivated in a number of formal and informal ways. Although regular meditation may help one to become increasingly mindful over time, it is not necessary to engage in formal practice to be mindful.

Informal and formal practice. Informally, mindfulness is a state that can be accessed at any given time and during any activity. For example, taking a moment to focus on the breath or giving any activity one's full attention in the present moment without judgment or elaboration are forms of mindfulness (Hahn, 1975).

In comparison, formal mindfulness practice involves an "activity" specifically utilized to cultivate mindfulness. This may include practices such as sitting meditation, walking meditation, or yoga. Although mindfulness meditation may lead to relaxation, this is not its primary purpose as non-judgmental awareness of painful thoughts, feelings, or sensations, may at times be at odds with relaxation.

Additionally, mindfulness meditation is distinguished from seemingly similar practices such as transcendental meditation (TM). As a concentration-based approach to

meditation, TM teaches individuals to focus on a single stimulus, such as a word (e.g., a mantra) (Baer, 2003) and to bring attention back to the stimulus whenever his/her mind wanders. In this respect, it is goal directed. In contrast, mindfulness meditation is awareness of what “is” from moment to moment, internally or externally. There is no emphasis on a goal. It is merely noticing whatever is present without judgment and with acceptance, compassion, equanimity, and curiosity. Mindfulness scholars have proposed, however, that when new to meditation, it should be learned in two stages with the first focusing on the breath to increase attentional abilities and the second focusing on whatever is present to increase insight (Brown & Ryan, 2004; Shapiro, 2009).

Mindfulness meditation is viewed as a means to cultivate insight and other types of meditations, such as loving-kindness and compassion meditations, are designed to cultivate compassion for the self and all sentient beings. Although very similar to mindfulness meditation, loving-kindness and compassion meditations involve focusing on the specific intention and may be supported with written meditations or exercises designed to foster kindness, compassion, and joy. Thus, formal meditations may be entered into with different intentions. Kabat-Zinn (1994) described three types of intentions, or *why* someone is practicing, including self-exploration, self-liberation, and self-regulation. Shapiro (1992) examined the role of intention in meditation practice and found that with continued meditation practice, intentions shift along a continuum from self-regulation to exploration to liberation and that different intentions yield different outcomes related to that intention. Therefore, some scholars propose that intention is a

central component of mindfulness (Bishop et al., 2004; Kabat-Zinn, 1994; Shapiro et al., 2006).

Mindfulness programs. Because of the widespread interest in mindfulness, a number of mindfulness based programs have been developed for different purposes and populations. Although variations continue to arise, the most widely known and used mindfulness training programs include mindfulness based stress reduction (MBSR) and mindfulness based cognitive therapy (MBCT). Mindfulness based role play (MBRP), the mindful therapy program (MT), and meditation enhanced empathy training (MEET) are also discussed as they are relevant to counselor training.

Mindfulness Based Stress Reduction (MBSR). MBSR is a mindfulness program developed by Jon Kabat-Zinn at the Stress Reduction Clinic at the University of Massachusetts Medical Center for the treatment of chronic pain (Baer, 2003; Bishop, 2002). Typically it is an 8-10 week class format with a one day mindfulness retreat that includes education regarding mindfulness and stress as well as meditation practices, yoga, and mindful eating exercises. Both mindfulness meditation and loving-kindness meditations are included in the program. This program has been widely adopted and researched and found to benefit numerous aspects of physical and mental health including chronic illness, heart disease, stress, anxiety, depression, and substance abuse (Baer, 2003; Bishop, 2002; Greeson, 2009).

Mindfulness Based Cognitive Therapy (MBCT). MBCT was developed by Teasdale et al. (1995) as a depression relapse prevention program. It was modeled after MBSR and also is typically an 8 week, 2-hour program offered in a group or class setting,

however, unlike MBSR, it does not incorporate yoga and meditation training relies heavily on out of class practice. The goal of this training is to increase attention control and reduce non-elaborate thinking and rumination. In other words, participants are taught to notice thoughts, emotions, and sensations but not attribute truth or meaning to them. The premise behind the approach is that distancing thoughts as mere mental events will prevent patterns of thinking that lead to depression. The program has been adapted for use with a variety of populations (Baer et al., 2005). It includes mindfulness meditation but does not typically involve loving-kindness and compassion meditations. The program does, however, emphasize both awareness and acceptance.

Mindfulness Based Role Play (MBRP). MBRP, developed by Andersson et al. (2010) is a mindfulness based intervention designed specifically for use within counseling supervision. It is based on the premise that although mindfulness is considered an individual, intrapsychic endeavor, it can also be a shared experience between two people. The authors offered the term *dialogic mindfulness*, which is defined as the application of mindfulness to a real or imagined (i.e. role play) dialogue between two people and involving all aspects of subjective experience (i.e. visual, auditory, kinesthetic, olfactory, gustatory, emotional, and cognitive) in the field of awareness. The premise of the approach is that increased mindfulness will enhance attention to subtle aspects of experience which may otherwise not come into the field of awareness. The approach requires mindfulness training in a single workshop setting which includes general mindfulness education and experience as well as mindfulness role play practice,

and the workshop is followed by one individual training session. It is relatively new and unstudied but may prove to be a resource for research on mindfulness and supervision.

Mindful Therapy program (MT). Proponents of mindfulness suggested that counselors must learn to be mindful to be able to use mindfulness with clients. Mindful therapy (Aggs & Bambling, 2010) is a program specifically designed for the purpose of teaching counselors mindfulness so they can achieve mindful states and use it with clients. Because little is known as to what amount of training is required to accomplish the, the researchers tested a three module mindfulness program (didactic, experiential, group discussion) consisting of 1.5 hour sessions over an 8 week period on 47 mental health professionals to determine the impact on knowledge acquisition, ability to invoke mindful states, and ratings of well-being. The authors created two scales for the study. The first scale, the Mindful Therapy Scale, was an adaptation of the FFMQ such that items reflected mindfulness within the counseling session (therapeutic mindfulness), and the second was scale was the Five-Minute Mindfulness Scale created to measure invoked mindfulness. Positive increases in all three variables, therapeutic mindfulness, invoked mindfulness, and well-being were reported from pre-post assessments. Further, the researchers reported that changes in therapeutic mindfulness were accounted for by changes in mindfulness attitudes such as acceptance and equanimity versus from increased attention regulation skills. Further studies are needed to validate the program and the instruments, but it may provide a mindfulness program that has greater applicability and face validity for counselors in training.

Meditation Enhanced Empathy Training (MEET). MEET (Sweet & Johnson, 1990) is a meditation technique derived from a traditional Buddhist practice. The meditation consists of five parts: (a) concentration; (b) friendliness; (c) compassion; (d) sympathetic joy; and (e) equanimity. This meditation involves adopting empathic and prosocial attitudes important to developing an enlightened attitude and improved interpersonal interactions. In practice, the meditator engages in silent repetition of certain self-statements (e.g. “I wish to be free from hatred, injury and disturbance by others; I wish to remain in comfort”) and the use of related mental imagery, while in a receptive, focused, concentrative state. This state is achieved through breath awareness. The technique was proposed both for client use and for training mental health professionals. The stance encouraged in this technique is posited to be similar to attitudes and behaviors associated with positive client outcomes including Roger’s facilitative conditions. The authors stated that MEET is a means for increasing affective empathy as opposed to cognitive or behavior empathy that is emphasized via microskills training. A limitation of this technique is that in comparison to manualized programs, it may be difficult to put into practice.

Summary of Mindfulness

Mindfulness has gained significant interest among researchers and practitioners as a means to improve physical and emotional health. More recently, it has garnered the attention of counselors and educators as a means to improve training and performance factors such as empathy, compassion, anxiety, and self-efficacy. Although there is evidence that mindfulness training can increase empathy and reduce anxiety in clinical

and non-clinical populations, studies examining these relationships among counselors are promising but few in number. Before programs can be tested, therefore, there is a need to first establish what relationships, if any, already exist between mindfulness and important counselor trainee variables such as empathy and anxiety. Further, because most studies on mindfulness have measured only the awareness component, a study is needed to determine how the compassion wing of mindfulness may be related to anxiety and empathy among counselor trainees.

CHAPTER III

METHODOLOGY

In Chapters I and II, the rationale and literature review for the study of the relationships among the awareness and compassion wings of mindfulness and empathy and anxiety among counselor trainees were presented. The literature review supports the hypothesis that a relationship exists between both wings of mindfulness and empathy and anxiety, suggesting that further research in this area is warranted. In this chapter, the methodologies for examining these relationships are explained, participants and instrumentation are described, and data collection and statistical procedures are delineated. Additionally, the design of the pilot study is discussed.

Research Questions and Hypotheses

The present study sought to examine the relationships among awareness, compassion, empathy, and anxiety among counselors-in-training. Based on an extensive review of the literature, awareness and compassion were hypothesized to have a positive relationship with counselor empathy (affective and cognitive), and an inverse relationship with anxiety. Additionally, the inclusion of compassion was predicted to increase the variance explained in affective empathy, cognitive empathy, and anxiety over awareness alone. To test these hypotheses, three primary research questions and nine hypotheses will be addressed.

Research Question 1: Will the addition of mindful compassion increase the proportion of variance explained in affective empathy, cognitive empathy, and anxiety beyond what is accounted for by mindful awareness alone?

Hypothesis 1a: The addition of mindful compassion will result in an increase in the amount of variance explained in affective empathy beyond the variance explained by mindful awareness alone.

Hypothesis 1b: The addition of mindful compassion will result in an increase in the amount of variance explained in cognitive empathy beyond the variance explained by mindful awareness alone.

Hypothesis 1c: The addition of mindful compassion will result in an increase in the amount of variance explained in anxiety beyond the variance explained by mindful awareness alone.

Research Question 2: What is the relationship between mindful awareness and compassion and affective empathy, cognitive empathy, and anxiety?

Hypothesis 2a: Awareness and compassion will have a significant relationship with affective empathy.

Hypothesis 2b: Awareness and compassion will have a significant relationship with cognitive empathy.

Hypothesis 2c: Awareness and compassion will have a significant relationship with anxiety.

Research Question 3: What is the relationship between the five facets of mindful awareness (observe, describe, act with awareness, non-judge, non-react) and two facets of

mindful compassion (positive qualities to self and others) and affective empathy, cognitive empathy, and anxiety?

Hypothesis 3a: The five facets of mindful awareness and two facets of mindful compassion will have a significant relationship with affective empathy.

Hypothesis 3b: The five facets of mindful awareness and two facets of mindful compassion will have a significant relationship with cognitive empathy.

Hypothesis 3c: The five facets of mindful awareness and two facets of mindful compassion will have a significant relationship with anxiety.

Participants

Master's-level counseling students with a minimum of one field based experience (e.g., practicum or internship) enrolled in a CACREP accredited counseling program were the population of interest and were recruited for this study. A power analysis suggested that a minimum sample size of 65 is needed for an effect size of .25 and power of .80 for a linear regression with 7 predictors. In an effort to insure this minimal sample size, counselor educators from approximately 12 CACREP programs across the U.S. were contacted via e-mail and enlisted to recruit participants and administer instruments. These educators were a convenience sample of former University of North Carolina at Greensboro (UNCG) counseling students currently on faculty at a CACREP program. Faculty who agree to participate provided a letter of support. Educators were asked to recruit students from their classes who have the minimum field based experience.

Instrumentation

Participants completed a packet of five instruments: the *Five Facet Mindfulness Questionnaire* (FFMQ; Baer et al., 2006), the *Trimodal Anxiety Questionnaire* (TAQ; Lehrer & Woolfolk, 1982), the *Self-Other Four Immeasurables* (SOFI; Kraus & Sears, 2009), the *Interpersonal Reactivity Index* (IRI; Davis, 1980), and a demographic questionnaire created by the author of this study. This set of instruments can be found in Appendix A.

Awareness—The *Five Facet Mindfulness Questionnaire* (FFMQ)

Mindful awareness will be measured using the *Five Facet Mindfulness Questionnaire* (FFMQ; Baer et al., 2006) which is a 39-item self-report measure with a 5-point Likert-type scale ranging from 1 (never or very rarely true) to 5 (very often or always true). It is an overall measure of mindfulness and a means for assessing specific mindfulness skills using five subscales: *observing* (noticing internal and external stimuli), *describing* (labeling experience with words), *acting with awareness* (attending to the present moment), *non-judging of inner experience* (refraining from evaluation of internal phenomena), and *non-reactivity to inner experience* (refraining from impulsive reactions to experience). Participants are instructed to express their opinion of what is generally true for them by rating responses to items such as “When I’m walking, I deliberately notice the sensations of my body moving” and “I’m good at finding words to describe my feelings.” The measure takes approximately 5-10 minutes to complete.

The FFMQ is the synthesis of five well-known mindfulness instruments and, therefore, reflects the collaborative effort of many mindfulness scholars. The FFMQ and

the five instruments used in its creation all measure mindfulness in terms that reflect the awareness wing of mindfulness and are, thus, for the purpose of this study, considered a measure of awareness. For example, The *Mindful Attention Awareness Scale* (MAAS; Brown & Ryan, 2003) measures mindfulness as a single construct defined as the general tendency to be attentive to and aware of present-moment experience. Authors of the *Freiburg Mindfulness Inventory* (FMI; Buchheld et al., 2001) suggest it is best used as a single measure of mindfulness defined as nonjudgmental present-moment observation and openness to negative experience. The *Kentucky Inventory of Mindfulness Skills* (KIMS; Baer et al., 2004) measures four mindfulness skills which include: observe, describe, act with awareness, and accept without judgment. The *Cognitive and Affective Mindfulness Scale* (CAMS; Feldman et al., 2007) is a single measure of mindfulness designed to capture several elements of mindfulness, including attention, awareness, present-focus, and acceptance/nonjudgment of thoughts and feelings in general daily experience. The final instrument used in the creation of the FFMQ is the *Mindfulness Questionnaire* (MQ; Chadwick et al., 2005) which assesses whether a person has a mindful approach to distressing thoughts and images. Therefore, the instruments used to create the item pool for the FFMQ all measure aspects of mindfulness that reflect the awareness wing of mindfulness, while none measures the compassion wing. This is reflected in the end product, as the FFMQ measures awareness and attention (i.e., observe, describe, act with awareness) and two qualities of attending (i.e. nonreact, nonjudge), none of which include items that explicitly address compassion (Carmody et al., 2009).

To determine the facet structure of mindfulness in the development of the FFMQ, Baer et al. (2006) first examined the psychometric properties and internal consistency of the five aforementioned instruments including their convergent and discriminant relationships with other variables. The researchers assessed the psychometric properties of the five instruments by testing 613 undergrad psychology students using a pool of all items from the five measures. Also included in this study were ten other instruments measuring constructs that were predicted to be either related to or not related to mindfulness. Among those included were a measure of psychological symptoms (*Brief Symptom Inventory*, BSI, Derogatis, 1992, as cited in Baer et al., 2006), thought suppression (*White Bear Suppression Inventory*, WBSI, Wegner & Zanakos, 1994 as cited in Baer et al., 2006), emotion regulation (*Difficulties in Emotion Regulation Scale*, DERS, Gratz & Roemer, 2004, as cited in Baer et al., 2006), absent mindedness (*Cognitive Failures Questionnaire*, CFQ, Broadbent, Cooper, Fitzgerald, & Parks, 1982, as cited in Baer et al., 2006), emotional intelligence (*Trait Meta-Mood Scale*, TMMS, Salovey, Mayer, Goldman, Turvey, & Palfai, 1995, as cited in Baer et al., 2006), acting without awareness (*Scale of Dissociative Activities*, SODAS, Mayer & Farmer, 2003, as cited in Baer et al., 2006), self-compassion (*Self-Compassion Scale*, SCS; Neff, 2003b), alexithymia (*Toronto Alexithymia Scale*, TAS-20, Bagby, Taylor, & Parker, 1993, as cited in Baer et al., 2006), experiential avoidance (*Acceptance and Action Questionnaire*, AAQ; Hayes et al., in press, as cited in Baer et al., 2006), and personality traits of neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (*NEO-Five Factor Inventory*, NEO-FFI; Costa & Mc-Crae, 1992, as cited in Baer et al.,

2006). All of the mindfulness questionnaires were significantly positively correlated with one another as expected and were correlated with related constructs in the predicted directions except for one (MQ and *openness to experience*).

Using the combined responses to all instruments taken by the same 613 students, researchers employed exploratory factor and correlational analyses to identify the facet structure of mindfulness. Although an initial exploratory factor analysis (EFA) yielded 26 factors, researchers identified 5 clearly distinguishable factors from a scree plot which were further tested using principal axis factoring and oblique rotation. Five factors were extracted from this analysis and accounted for 33% of the variance.

Respective alpha coefficients for the five subscales suggested adequate to good internal consistency for each of the scales (nonreactivity = .75, observing = .83, acting with awareness = .87, describing = .91, and nonjudging = .87). Correlations among the scales were modest but significant, suggesting the subscales are related but distinct facets of the construct. Further support for the distinct nature of the subscales was determined by using multiple regression analysis where each scale was tested using the other four as predictors. R-squares for these analyses ranged from .12 to .23. Researchers reported that when these R-squares are subtracted from their respective alpha coefficients, it provides a systematic variance of the facet independent of its relationship with the other scales. Based on these values (ranging from .56 to .75), the authors determined that most of the variance in each facet is distinct from the other four, respectively.

The five facet structure was further tested using confirmatory factor analysis (CFA) with a second independent sample of undergraduate psychology students ($n = 68$)

who completed the newly created 39-item FFMQ. In this study, researchers determined that the fit of a single-factor model, or measure of overall mindfulness, was poor. Researchers also tested a five-factor model based on the EFA from the first sample and found that it fit well; however, it did not address whether the factors were all part of an overall mindfulness construct. To address this question, a hierarchical model was then used and the data fit fairly well with the exception of the observe facet which did not load significantly on the overall mindfulness factor as did the other four facets. An alternative hierarchical model was tested utilizing four of the five facets (excluding observe) and the fit improved and provided support that the facets of describe, act with awareness, nonjudge and nonreact are part of a broader construct of mindfulness. The observe facet's poor fit is unexpected as it is equated with awareness and attention which are fundamental aspects of mindfulness. The researchers suggested this poor fit likely is due to the negative and non-significant correlation with the non-judge facet. Previous researchers (Baer et al., 2004) found that this negative relationship may be a function of meditation experience where non-meditators tend to observe with judgment while meditators are more capable of observing without judgment. Therefore, the negative relationship between observe and non-judge would hypothetically be less likely in samples of meditators. To test this likelihood, researchers compared intercorrelations among the facets between meditators and non-meditators (combining samples 1 and 2 to obtain a greater number of participants with meditation experience). Researchers found that the relationship between observe and non-judge was positively and significantly different in meditators than non-meditators, indicating that the observe facet may fit a

hierarchical model with all facets when sampling those with meditation experience. Because the sample in study 2 was too small for a CFA, researchers tested this model with participants from their combined sample who reported some meditation experience and found that all five facets loaded significantly on overall mindfulness. Using correlations of the five facets with other variables from sample 1 and 2, researchers found that all facets were differentially related to other variables which supports that the facets may be useful in understanding how mindfulness may relate to other related constructs. Finally, strong internal consistency was reported with a Cronbach's alpha of 0.96 for the total scale. The overall score on the FFMQ will be used as the unit of analysis for research questions one, two and four in this study and the five subscales will be the units of analysis for research question three.

Compassion—The *Self-Other Four Immeasurables* (SOFI)

Mindful compassion will be measured using The Self-Other Four Immeasurables (SOFI; Kraus & Sears, 2009), which is a 16-item (8 pairs) self-report instrument in which participants rank words (e.g., friendly, compassionate, joyful, angry) that describe different thoughts, feelings, and behaviors that participants have directed toward themselves and others during the past week. Words are ranked on a five-point Likert-type scale from 1 (very slightly or not at all) to 5 (extremely). The instrument consists of four subscales: *positive qualities toward self*, *positive qualities toward others*, *negative qualities toward self*, and *negative qualities toward others*. The need for this instrument grew from the authors' recognition that most available mindfulness instruments captured

the awareness and non-judging aspects of mindfulness but not the positive qualities such as compassion and loving-kindness. The SOFI typically takes 5-10 minutes to complete.

Items were developed based on the theoretical qualities of the “Four Immeasurables” (kindness, compassion, joy, and equanimity) from Buddhist teaching. Respective “far enemies” (i.e., attributes that are opposites) of the Four Immeasurables (hatred, cruelty, jealousy, and anxiety), also were included in the development of the instrument as were “near enemies” (i.e., qualities that can artificially mimic the desired quality, such as pity instead of compassion). Many meditation practices involving the four immeasurables begin with cultivating these qualities toward the self, and then extend them to friends, neutral individuals, difficult people, and all sentient beings. The authors developed a list of adjectives intended to capture these qualities for inclusion in the scale with the exception of the near enemy of joy (i.e., hypocrisy) because it may have been difficult to interpret by participants. The item for jealousy was only listed “toward others” as it would not apply to one’s self. Although the initial version produced 16 pairs of adjectives, the final version consists of only 8 pairs.

To develop and test the SOFI, Sears and Kraus (2009) recruited two samples: undergraduate students ($n = 124$) and a group of experienced meditators at a community meditation center ($n = 12$). The researchers conducted EFA using maximum likelihood extraction with varimax rotation and Kaiser normalization on all ratings. Six factors emerged accounting for 64.91% of the total variance. Items generally had factor loadings of greater than 0.50 on one of the six factors and not more than 0.40 on any other factor. The first factor was comprised of the positive qualities of *compassion*, *friendliness*,

acceptance, and joy, toward both self and other. Negative qualities toward self (i.e., *hateful, angry, cruel and mean*) and negative qualities toward others loaded on separate factors. *Overwhelmed* about self and others loaded on one factor, as did *apathy* and *judgment* toward self and others. These three factors (overwhelm, apathy, and judgment) together accounted for 22.39% of the total variability and were qualities associated with near enemies of the positive and negative scale. Because of the limited utility of a single factor measuring a single quality, near enemy items were removed from the scale. Using this refined list, a subsequent factor analysis with varimax rotation and Kaiser normalization was tested and researchers found that the first three factors from the original analyses remained stable and accounted for 59.63% of the total variance. Although ratings of negative qualities toward self and others loaded on different factors, the ratings for positive qualities for self and other were highly correlated and loaded on the same factor. Dependent sample *t*-tests were employed to further test if positive qualities toward self and others should be distinguished from one another to produce a total of four distinct factors. The factor of positive qualities toward others was significantly higher than the factor of positive qualities toward self, suggesting these factors are distinct. To test this further, a two-way repeated measures ANOVA was used and researchers reported strong main effects for both valence (positive or negative) and for target (self or other) as well as a significant interaction of these factors, suggesting that participants tend to assign higher positives and lower negatives to others than to themselves. Based on results from all of the analyses, the authors proposed a four-factor

scale design, with positive and negative qualities toward self and other as distinct measures.

To test for internal consistency of the overall scale and the four subscales, Cronbach's alphas were calculated and were found high for the subscales (Positive Self = 0.86; Negative Self = 0.85; Positive Other = 0.80; Negative Other = 0.82) but lower for the overall scale (.60) suggesting it is best to use the subscales. Further, corrected item total correlations ranged from $r = 0.54$ to 0.76 , indicating consistency between subscale items. Pearson correlations among the four subscales ranged from $r = 0.67$ for positive self and other ratings to $r = -0.20$ for self negative correlated with other positive ratings, indicating that although some variance is shared, each factor has unique contributions.

To test for concurrent and discriminant validity, the SOFI was tested against the *Cognitive and Affective Mindfulness Scale-Revised* (CAMS-R, 10-item version, Feldman et al., 2007), the *Positive and Negative Affect Scale* (PANAS; Watson, Clark, & Tellegen, 1988), the *Self Compassion Scale* (SCS; Neff, 2003b) and the *Marlowe-Crowne Social Desirability Scale*, 13-item Short Form (M-C 13, Crowne & Marlowe, 1960). Factor analyses using maximum likelihood extraction with varimax rotation converged on two factors for these variables, which accounted for 60.71% of the variance. The first factor consisted of self and other positive qualities from the SOFI, CAMS-R, PANAS positive, and Self Compassion Scale. The second factor consisted of the self and other negative SOFI qualities and the PANAS negative. The M-C 13 did not load strongly on either factor nor did it correlate significantly with positive qualities. It did correlate significantly, however, with negative qualities, although this correlation was not strong.

Therefore, the researchers suggested social desirability may somewhat impact participants' willingness to identify with negative feelings but does not account for it entirely. As expected, the SCS correlated strongly with positive and negative qualities toward self and less strongly for either ratings toward others, accounting for less than 20% of the variance on these measures. The CAMS-R was moderately correlated with the SOFI across all factors but only accounted for 6–15% of the variance. The PANAS-negative had a strong correlation with the SOFI negative self-ratings scale, accounting for 39% of the variance, but correlated less consistently with the other subscales (6–15% of the variance). Likewise, the PANAS positive correlated strongly with positive self-ratings, accounting for 22% of the variance, but correlated less to other ratings (3–15% of the variance). Although there is some overlap in the expected directions with affective ratings on the PANAS, emotion does not entirely account for results with the SOFI.

Construct validity was determined by sampling the portion of the original student population with no meditation experience ($n = 104$) and making comparisons with a second sample of those with meditation experience ($n = 12$). Those in the meditation group reported an average of 6.8 years of meditation experience and nearly 120 minutes of meditation per week. Using independent t -tests, significant differences were found between the groups for all subscales except for positive qualities toward others. Those who meditated regularly, however, had higher ratings for positive self and lower negative ratings for self and other. Because the positive qualities toward self and other subscales correlated positively and negatively with the SCS, respectively, they will be used as the units of analysis for all research questions in this study, as they represent both self and

other-compassion. Further, with the original scale author's permission, participants will be prompted to consider items based on their experience over the last month, as opposed to the last week, to capture a compassion trait versus state.

Empathy - The *Interpersonal Reactivity Index (IRI)*

Empathy will be measured using two of the four subscales of the Interpersonal Reactivity Index (IRI; Davis, 1983), which is a 28-item measure (7 items per subscale) to which participants respond on a Likert-type scale from 0 = "does not describe me well" to 5 = "describes me very well." Historically, the IRI was established to measure cognitive empathy through the Perspective Taking (PT) and Fantasy (F) subscales and emotional components of empathy through the Empathic Concern (EC) and Personal Distress (PD) subscales. The PT scale assesses one's tendency to take on the perspectives of others while the Fantasy subscale measures the tendency to identify with fictional characters in movies, plays, and novels. The EC scale addresses participants' feelings of warmth, compassion, and concern for others while the PD scale measures anxiety and discomfort resulting from witnessing another's negative experience (Davis, 1983). The Fantasy subscale will not be analyzed for this study because it is not considered an exclusive aspect of empathy and demonstrates poor concurrent validity with other empathy measures (Birnie et al., 2010). Additionally, it has been characterized as a measure of imagination rather than a theoretically based conceptualization of empathy (Spreng et al., 2009). The PD subscale also will be omitted as it does not appear to accurately measure empathy. Researchers Spreng et al. (2009) suggest that the PD subscale is a measure of emotional self-control (e.g., "In emergency situations I feel

apprehensive and ill at ease”) rather than empathy and appears to assess anxiety, discomfort, and loss of control in negative situations. Cliffordson (2001) finds through factor analytic and validity studies that the PD subscale did not assess a central component of empathy. Another study indicated that the PD subscale did not measure empathy, but rather assessed the personality trait of neuroticism (Alterman, McDermott, Cacciola, & Rutherford, 2003). The EC and PT subscales, which capture cognitive and affective components of empathy, respectively, appear to be the best representation of the construct of empathy (Spreng et al., 2009) and will be the units of analysis in this study. Sample items that measure PT include “I sometimes try to understand my friends better by imagining how things look from their perspective” and “I believe that there are two sides to every question and try to look at them both.” Items for the EC scale include “I often have tender, concerned feelings for people less fortunate than me” and “I would describe myself as a pretty soft-hearted person.” The IRI typically takes 5-10 minutes to complete.

In the initial development of the questionnaire, Davis (1983) created a pool of more than 50 items by writing new items to tap the cognitive or emotional aspects of empathy and by adapting items from other empathy measures (e.g., the *Emotional Empathy Scale*, EES, Mehrabian & Epstein, 1972; Stotland’s Fantasy-Empathy scale, Stotland, Mathews, Sherman, Hansson, & Richardson, 1978). A sample of 201 males and 251 females was used to test the items. Using factor analysis with oblique rotation for males and females separately, the strongest most discernible factors found were Fantasy, Perspective Taking, Empathic Concern, and Personal Distress. Using the four factors

from this study as a guide, a second 45-item instrument was created using some items from the first instrument (some were adapted) and adding new items written to fit the description of the four identified factors. These items were randomly ordered and administered to a second sample (males, $n = 221$; females, $n = 206$) of undergraduate psychology students. Factor analysis, using oblique rotation with a specified four-factor solution was conducted for both males and females and yielded nearly identical results. Most items loaded on only one factor with few loading minimally on two factors providing support that empathy is best measured as a multidimensional construct as hypothesized. Internal reliability was acceptable for all subscales for both sexes, ranging from .71-.78 for males and .73-.79 for females. The final 28-item version was created by excluding those items which loaded on more than one factor and by including those items that loaded highest on the four factors for both males and females. To confirm the factor structure for this new instrument, items were again randomly ordered and the scale administered to a group of psychology students (from neither of the first two administrations) including 579 males and 582 females. Again using factor analysis with oblique rotation, for males and females separately, a four-factor solution emerged with most items loading significantly on their respective factors (except item 10 for males which loaded, as expected on PD, but unexpectedly on EC). Internal reliability is similar to the previous version and acceptable for all subscales for both sexes, ranging from .72 - .78 for males and .70 - .78 for females. To determine test-retest reliabilities, an independent sample of undergraduates ($n = 56$ males, $n = 53$ females) was administered the questionnaire twice, with 60 - 75 days between, with correlations ranging from .61 -

.79 for males and .62 - .81 for females, suggesting good stability over time. Overall, women displayed higher mean scores on all subscales with the Fantasy subscale producing the largest difference. Intercorrelations of the subscales were similar for both males and females with F and PT producing the lowest correlation (.10) across both sexes. The other correlations ranged from .11- .33 for males and .01 to .31 for females with most correlations on the lower end of these ranges. Although there was some association between the cognitive and emotional subscales, the authors suggested they were not strong enough to interpret as measuring overall empathy. The PT subscale did correlate highly with the *Hogan Empathy Scale* (HES; Hogan, 1969), another measure of the cognitive aspect of empathy, and the EC subscale has been correlated strongly with the *Questionnaire Measure of Emotional Empathy* (QMEE, Mehrabian & Epstein, 1972), suggesting the two aspects of empathy are well represented with these subscales. Given the concerns with the F and PD subscales and the strength of the EC and PT subscales, only the latter two scales will be used for analysis in this study.

Anxiety—The *Trimodal Anxiety Questionnaire* (TAQ)

The *Trimodal Anxiety Questionnaire* (TAQ; Lehrer & Woolfolk, 1982) is a 36-item, self-report instrument that measures somatic, behavioral, and cognitive components of anxiety. The *somatic* subscale (16 items) references physical symptoms of anxiety and includes items such as “I can’t catch my breath” and “My heart pounds”; the *behavioral* subscale (9 items) primarily addresses avoidance of social situations with items such as “I avoid new or unfamiliar situations” and “I try to avoid social gatherings”; and the *cognitive* subscale (11 items) measures the tendency to worry or ruminate with items

such as “I dwell on mistakes I make” and “I have an uneasy feeling.” Participants respond to items on a 9-point Likert-type scale ranging from 0 (“never”) to 8 (“extremely often”) with total scores ranging from 0 to 288 with higher scores indicating higher levels of anxiety. The TAQ typically takes 5-10 minutes to complete. The total scale, a global measure of anxiety, will be the unit of analysis for all research questions. Although, the TAQ is somewhat dated, it remains a viable measure of anxiety that is used in contemporary research.

The TAQ was constructed by adapting items from the *Minnesota Multiphasic Personality Inventory* (MMPI), the *State-Trait Anxiety Inventory* (STAI, Spielberger, Gorsuch, & Lushene, 1970) and through clinical experience. Lehrer and Woolfolk (1982) developed and tested the instrument through a series of six studies, two to determine the factor structure and four to validate the scale. In the first study, researchers used principal components analysis to test the three hypothesized factors based on a sample of psychology undergraduates ($n = 451$) who responded to a 60-item scale (6 items which highly correlated with other items were dropped and 54 items were submitted for the analysis). Three factors were extracted and accounted for 32.2% of the variance in the item pool, with 21% of the variance accounted for by the somatic factor alone (cognitive and behaviors factors accounted for 6.8% and 3.9%, respectively). Using varimax rotation and a 0.5 cut-off criterion, three independent factors were reported with only one crossover item (one cognitive item loaded with somatic items) providing support of the independent nature of the three factors. In a second study, a 112-item scale was tested on three samples: adult night school students ($n = 289$), neurotic psychiatric patients

presenting with anxiety ($n = 70$), and community members from a stress workshop ($n = 67$). Of the 112 items, 44 were eliminated because they did not significantly discriminate between neurotic emotional disturbance and other dimensions, yielding 68 items for the principal components analysis (31 of these items overlapped with those items tested in their first study). From this analysis three orthogonal factors emerged and accounted for 37.9 % of the variance (28.3% accounted for by the somatic factor alone). The total items were then reduced to only those that loaded 0.5 on one of the factors (36 items), with 16 loading on the somatic factor, 9 loading on the behavioral factor, and 9 loading on the cognitive factor (including 2 behavioral items with a strong cognitive component).

Using only the items which factor greater than 0.5 in the analysis, inter-factor correlations ranged from .47-.66. In both studies, correlations were stronger between the cognitive factor and the other two factors as compared with correlations between the somatic and behavioral factors. Researchers reported split-half reliabilities for each of the factors in both studies as: somatic factor (.85-.93), behavioral factor (.84-.91), and cognitive factor (.83-.92) but did not report a total scale split-half reliability coefficient.

Having established support for the three factors, the authors then conducted four studies to validate the 36-item scale. In a preliminary effort to validate the study, the authors administered the Trait Anxiety scale of the *State Trait Anxiety Inventory* (STAI, Spielberger et al., 1970) to 65 subjects from study 2 and found that all three components of anxiety were strongly correlated with a general measure of anxiety with the cognitive factor correlating strongest.

The 36-item scale was then tested for validity in four studies. The first study was based on a sample which consisted of 140 night school students who completed the 36-item inventory; the *IPAT Anxiety Inventory* (IPAT; Krug et al., 1976); the *Eysenck Personality Inventory* (EPI, Eysenck & Eysenck, 1968); and Form B of the *Lykken Activity Preference Questionnaire* (LAPQ-B, Lykken & Katzenmeyer, 1971), using the physical and social threat subscales. All correlations were significant and in the expected directions except for the LAPQ-B which, according to the authors, was because this instrument is a measure of psychopathology and sensitive to very low levels of anxiety. In study 4, the TAQ was tested against the *Edwards Social Desirability Scale* (ESD, as cited in Lehrer and Woolfolk, 1982) with a sample of 64 college students. The ESD did not correlate strongly or significantly with the TAQ but accounted for approximately 25-35% of the variance in each of the three scales.

In study 5, a sample of 57 non-psychotic anxious clients were administered the TAQ, the EPI (neuroticism and introversion scales), the *Hopkins Symptom Checklist* (HSCL, Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974), the SCL-90R (Derogatis, 1977), a measure of psychopathological symptoms, and were also rated on the *Hamilton Anxiety Inventory* (HAI, Hamilton, 1959). *Neuroticism* correlated strongly with all three scales, but strongest with the cognitive and behavioral subscales. The same trend followed for the measure of *introversion*, except that it was not significantly correlated with the somatic subscale. The *general anxiety* and the *physiological factor* subscale of the HAI were significantly correlated with the somatic scale only. The *psychic symptoms* subscale of the HAI did not significantly correlate with any subscales

of the TAQ. The authors suggested these results indicated that somatic anxiety can be distinguished from other types of anxiety through two methods, self-report and psychiatrist ratings. Discriminant and convergent validity was determined via correlations with the SCL-90R. The somatic subscale of the TAQ correlated significantly with the SCL-90R somatization scale but not the psychoticism scales (which did correlate with the other two scales). Most other SCL-90R scales and the SCL-90R Global Symptom Index were related to the TAQ subscales, indicating all of the scales measure psychopathological dimensions. In a sixth study, additional validity was garnered using the TAQ as a pre-post measure of anxiety with anxious students randomly assigned to either a cognitive or behavior oriented treatment group. As expected, those students in the “cognitive” group showed significant improvement only on the cognitive scale of the TAQ. Similarly, students in the “behavioral” group showed significant improvements only on the behavioral subscale post treatment.

Ten years later, the TAQ was re-examined by researchers Scholing and Emmelkamp (1992) who tested the three factor model of the TAQ using confirmatory factor analysis using three samples: those with social phobia ($n = 108$), non-clinical adults ($n = 130$), and non-clinical adolescents ($n = 650$). With the exception of one item which correlated with two factors, factor loadings for the items were as expected, supporting a three factor structure across all three populations. The amount of the variance explained by all three factors was reported as 45.4%, 41.0% and 37.9%, respectively, across the three populations. Although factors shared a fair amount of variance, researchers suggest they still represent three distinct aspects of anxiety.

To test the validity of the TAQ subscales, researchers compared them with three other measures using the adolescent and social phobic samples. These measures included: the *Symptom Checklist* (SCL-90R; Derogatis, 1977), the *Fear Questionnaire* (FQ; Marks & Mathews, 1979), and the *Social Cognition Inventory* (SCI; as cited in Scholing & Emmelkamp, 1992). Overall, the relationships between the scales were found to be in the direction expected with two exceptions. First, as expected, the behavioral subscale correlated highly with another behavioral measure (FQ-social phobia subscale) but unexpectedly correlated highly with a measure of cognitive anxiety (the SCI). Second, the cognitive subscale had expected relationships with relevant subscales of the SCL-90-R but, had surprisingly low correlation with the SCI. Discriminant validity was supported as the TAQ consistently discriminated between the socially phobic and non-clinical adult groups with the behavioral subscale predicting group membership with 80.3% accuracy. Additionally, as expected, mean scores for social phobics were highest on all variables. The scale also showed sensitivity to treatment effects, with social phobics no longer scoring significantly different than adults and adolescents post treatment in both somatic and cognitive anxiety, though they still differed significantly in behavioral anxiety. The range of Cronbach's alphas for all subscales across the three samples indicate adequate to good reliability (somatic factor, .87-.92; behavioral factor, .81-.88; cognitive factor, .83 across all samples). Although reliability was not reported for the total scale in this study, it was reported to be .94 in a sample of 339 undergraduate and graduate students (Cashwell, Glossoff, & Hammond, 2010) and .81 in a sample of 152 master's-level counseling students (Hall, 2009, unpublished manuscript).

Demographic Questionnaire

A demographic questionnaire was designed by the author to provide descriptive information about the participant's age, gender, race/ethnicity, degree program and track, hours completed in their program, field experience, and compassion, meditation, and relaxation practices. Further, the questionnaire included 11 items designed to inquire about each study variable as it may occur within the context of counseling. For example, in the TAQ, somatic anxiety is measured with items such as "*My heart pounds.*" As a way of determining if participants would similarly endorse somatic anxiety as occurring specifically within the counseling context, items such as "*I sometimes feel my heart rate quicken or my palms get sweaty when I meet a client*" were included in the demographics questionnaire. The rationale for this was that the measures used in this study were general and may not directly correspond with in-session attitudes and behaviors.

Procedures

For this study, a convenience sample of counselor trainees was recruited by contacting professors who teach master's-level counseling students at approximately 12 CACREP accredited counselor-education programs across the country. Initially, professors were contacted via e-mail by the principal investigator. The purpose, goals, and procedures of the study were explained, and the professors were invited to participate in the study by administering the questionnaires during supervision or class. The professors who agreed to participate received by mail a packet containing the following: an overview letter addressed to the administrator describing the purpose, goals, and procedures of the study; instructions for administering the questionnaires (see Appendix

B); informed consent forms (see Appendix C); copies of the questionnaire packets; and a stamped, return envelope for confidentially returning forms to the principle investigator.

A 3-week period was allotted for data collection, and administrators were informed of this deadline in both their overview letter and in the administration instructions. Three weeks after distribution, administrators who had not returned their instruments were contacted to check on the project status.

Data Analysis

Descriptive statistics were calculated on participant demographics and the scales of interest on all the instruments (i.e., FFMQ, SOFI, TAQ, IRI) to provide a profile of the participants and a foundation for testing the nine hypotheses of the study (see Table 1). Additionally, Cronbach's alpha coefficients were computed to examine the reliability of each instrument for this sample.

Hypothesis 1a

To test that the addition of mindful compassion will result in an increase in the amount of variance explained in affective empathy beyond the variance explained by mindful awareness alone was examined using a Hierarchal Regression analysis.

Hypothesis 1b

To test that the addition of mindful compassion will result in an increase in the amount of variance explained in cognitive empathy beyond the variance explained by mindful awareness alone was examined using a Hierarchal Regression analysis.

Table 1

Description of Research Questions, Hypotheses, Independent and Dependent Variables, and Data Analyses

Research Questions	Hypotheses	Independent Variables	Dependent Variables	Data Analysis
1. Will the addition of mindful compassion increase the amount of variance explained in affective empathy, cognitive empathy, and anxiety beyond what is accounted for by mindful awareness alone?	1a. The addition of mindful compassion will result in an increase in the amount of variance explained in affective empathy beyond the variance explained by mindful awareness alone. 1b. The addition of mindful compassion will result in an increase in the amount of variance explained in cognitive empathy beyond the variance explained by mindful awareness alone. 1c. The addition of mindful compassion will result in an increase in the amount of variance explained in anxiety beyond the variance explained by mindful awareness alone.	Mindful awareness, mindful compassion (positive qualities toward self, positive qualities toward others)	Affective empathy, cognitive empathy, anxiety	Hierarchical Regression Analysis
2. What is the relationship between mindful awareness and compassion and affective empathy, cognitive empathy, and anxiety?	2a. Awareness and compassion will have a significant relationship with affective empathy. 2b. Awareness and compassion will have a significant relationship with cognitive empathy. 2c. Awareness and compassion will have a significant relationship with anxiety.	Mindful awareness, mindful compassion (positive qualities toward self, positive qualities toward others)	Affective empathy, cognitive empathy, anxiety	Hierarchical Regression Analysis

Table 1 (cont.)

Research Questions	Hypotheses	Independent Variables	Dependent Variables	Data Analysis
<p>3. What is the relationship between the five facets of mindful awareness (observe, describe, act with awareness, non-judge, non-react) and two facets of mindful compassion (positive qualities to self and others) and affective empathy, cognitive empathy, and anxiety?</p>	<p>3a. The five facets of mindful awareness and two facets of mindful compassion will have a significant relationship with affective empathy. 3b. The five facets of mindful awareness and two facets of mindful compassion will have a significant relationship with cognitive empathy. 3c. The five facets of mindful awareness and two facets of mindful compassion will have a significant relationship with anxiety.</p>	<p>Observe, describe, act with awareness, non-judge, non-react, positive qualities toward self, positive qualities toward others</p>		<p>Multiple Regression Analysis</p>

Hypothesis 1c

To test that the addition of mindful compassion will result in an increase in the amount of variance explained in anxiety empathy beyond the variance explained by mindful awareness alone was examined using a Hierarchical Regression analysis.

Hypothesis 2a

A multiple regression analysis was used to test if awareness and compassion have a significant relationship with affective empathy.

Hypothesis 2b

A multiple regression analysis was used to test if awareness and compassion have a significant relationship with cognitive empathy.

Hypothesis 2c

A multiple regression analysis was used to test if awareness and compassion have a significant relationship with anxiety.

Hypothesis 3a

To determine the relationship between the five facets of mindful awareness (observe, describe, act with awareness, non-judge, non-react) and two facets of mindful compassion (positive qualities to self and other), and affective empathy, a multiple regression analysis will be used.

Hypothesis 3b

To determine the relationship between the five facets of mindful awareness (observe, describe, act with awareness, non-judge, non-react) and two facets of mindful

compassion (positive qualities to self and other), and cognitive empathy, a multiple regression analysis will be used.

Hypothesis 3c

To determine relationship between the five facets of mindful awareness (observe, describe, act with awareness, non-judge, non-react) and two facets of mindful compassion (positive qualities to self and other), and anxiety, a multiple regression analysis will be used.

Pilot Study

A pilot study was conducted to field test the instrumentation instructions and data collection procedures. Participants of the pilot study were invited to complete a written feedback form (refer to Appendix D) to determine if there were any adjustments regarding instruction clarity, instrument layout, unclear items, completion time, or procedural issues that could be used to improve the full study. The opportunity to provide verbal feedback also was made available to participants. The full methodology and results of the pilot study including descriptive and statistical analyses are provided in Appendix E. A summary of the responses provided by pilot study participants and a description of how this feedback was utilized for the full study is presented in this section.

Participants provided feedback regarding the length of instruments, clarity of instructions, and items. Generally, there was little feedback regarding overall procedures, and all participants correctly filled in and signed the consent form, successfully completed all instruments, and did not offer any indication verbally or in written form

that the procedures were unclear. One exception is that participants verbally inquired as to whether they should circle their highest degree or all relevant degrees. Participants described the overall instrument packet length as either “a little long” or “just right.” Four of the five participants completed the packet in 15 minutes or less. One participant completed the form in approximately 30 minutes, but stated that significant ambient noise present during the administration impacted concentration and response time considerably. All participants stated that items were clear, although two participants stated items seemed “repetitive” and one participant expressed difficulty answering questions worded in the extremes (e.g., “always,” “never,” or “at all”) as this required greater concentration. All participants stated that they would have liked the scale for the FFMQ to be repeated at the top of the second page. One participant stated it was difficult to switch from a numerical to an alphabetical scale across instruments. Lastly, one participant stated the MCSDS was an obvious “lie scale” and that these items should be dispersed among other items to better obscure the purpose of that instrument.

The following are the suggestions which were integrated into the full study including the rationale for these decisions. Integrated changes included:

- The FFMQ scale identifiers were repeated on the second page to eliminate the need for participants to flip between pages for this information.
- The prompter for “degree program” on the demographic questionnaire were changed to “highest degree program” so that those students seeking a specialist degree in addition to a master’s degree can indicate this.

- The MCSDS was removed from the study based on both participant feedback and dissertation committee feedback.
- The estimated amount of time to complete the packet will be changed from 30 minutes to 20-25 minutes in the faculty administrator instructions to more accurately reflect the mean number of minutes required to complete the set.

Because the instruments have been well-established in previous research no adjustments were made to the existing response scales nor were items reworded as suggested by participants.

Summary

New counselor preparation methods are needed to aid the cultivation of authentic empathy while mitigating unproductive levels of anxiety in counselors-in-training so they can negotiate the emotional challenge of counselor training and establish sound therapeutic relationships with clients. This study examined the relationships between awareness and compassion and empathy and anxiety using hierarchical and multivariate multiple regressions. In this chapter, the research questions and hypotheses were stated; participant recruitment methods, instrumentation, and research procedures described; and the required data analyses and the outcome of the pilot study were delineated.

CHAPTER IV

RESULTS

The purpose of this study was to explore the relationships between mindful awareness and compassion, and empathy and anxiety among counselor trainees. In this chapter, the results of the study are presented. Specifically, demographic data describing the sample and descriptive statistics and reliability coefficients for all administered scales are provided. Additionally, correlational analyses used to assess the nature and strength of the relationships among variables are reviewed. Finally, the results of analyses for research questions are presented.

Description of the Sample

Participants were recruited by contacting counselor educators at 12 CACREP programs and obtaining their agreement to distribute instrument packets to master's-level students who had completed at least one semester of field experience, including practicum or internship. These educators were a convenience sample of former counseling students from the researcher's institution who were on faculty at CACREP programs across the U.S. One additional program was obtained by faculty referral to improve geographic diversity. Professors were surveyed regarding the number of eligible students in their program and mailed a commensurate number of packets. Further, they were encouraged to administer the instruments during class time to maximize participation. Three programs were unable to distribute the surveys during the data

collection period. A total of 218 packets along with administrator instructions, consent forms, and self-addressed stamped envelopes were mailed to 12 programs. Of these, 200 were distributed to students and 133 were returned from 9 programs for a response rate of 67%. Two surveys were removed from the dataset because partial or whole surveys were incomplete. The remaining 131 participants constituted the study sample used for analysis. See Table 2 for demographic data for the full sample study ($N = 131$). Based on an a priori power analysis using G*Power 3.0 (Faul, Erdfelder, Lang, & Buchner, 2007), a minimum of 65 participants was necessary to obtain power of .80 and a moderate effect size of .25 for multiple regression analyses with seven predictors.

All 131 participants were master's-level students from CACREP accredited programs because these were the only programs from which students were recruited. One student reported seeking a Specialist degree. Based on the total sample of 131 participants, 110 (84%) were female, and only 21 (16%) were male. The average age of participants was 28.96 ($SD = 7.15$). The majority of students ($n = 73, 55.7%$) were in the clinical mental health track followed by 39 (29.8%) in the school counseling track, 8 (6.1%) in the couples and family track, 6 (4.6%) in college counseling, and 2 (1.5%) in a dual track. The overall sample had completed an average of 53.13 ($SD = 11.84$) graduate credit hours. The majority of participants identified as Caucasian ($n = 103, 78.6%$), with 21.4% identifying as an ethnic minority, most of whom were African-American ($n = 13, 9.9%$). Others self-identified as Hispanic/Latino/a ($n = 4, 3.1%$), Asian-American ($n = 4, 3.1%$), Biracial ($n = 5, 3.8%$), or Other ($n = 2, 1.5%$).

Table 2**Demographic Data for the Full Study Sample (N = 131)**

Variable	<i>n</i>	<i>Mean</i>	<i>SD</i>	%
Age		28.96	7.15	
Degree				
Master's	130			99.2
Specialist	1			0.8
Program Hours Completed		53.13	11.84	
Program Track*				
Clinical Mental Health**	73			55.7
School Counseling	39			29.8
Couples and Family	8			6.1
Student Affairs/Higher Education	6			4.6
Dual Track	2			1.5
Sex				
Female	110			84
Male	21			16
Race				
Caucasian/White	103			78.6
African American/Black	13			9.9
Hispanic/Latino/a	4			3.1
Asian American	4			3.1
Biracial/Multiracial	5			3.8
Native American	0			0
Other	2			1.5
Previous Field Experience	57			43.5
Compassion Practice	106			81.7
Relaxation Practice	121			92.4
Mindfulness Practice	51			38.9
Mindfulness Training in Program	50			38.2

*Note: *n= 128, **Community counseling included in clinical mental health*

The majority of participants identified having a compassion practice ($n = 106$, 80.9%). The most frequently described forms for this practice among these participants were church/religious activities ($n = 22$, 20.8%), yoga ($n = 19$, 17.9%), meditation/prayer ($n = 19$, 17.9%), counseling others ($n = 18$, 17.0%), volunteering ($n = 18$, 17.0%), own counseling ($n = 17$, 16.0%), exercise ($n = 15$, 14.2%), reflection ($n = 14$, 13.2%), TV/movies/stories ($n = 12$, 11.3%), and mindfulness ($n = 11$, 10.4%).

Similarly, the majority of participants endorsed having a stress reduction practice ($n = 121$, 92.4%). The most frequently cited forms of relaxation practice among these participants were exercise ($n = 95$, 78.5%), spending time with family and friends ($n = 40$, 33.1%), hobbies ($n = 25$, 20.7%), reading ($n = 18$, 14.9%), breathing exercises ($n = 15$, 12.4%), meditation ($n = 13$, 10.7%), and prayer/ spirituality ($n = 11$, 9.1%). Other forms endorsed were journaling/ reflecting ($n = 8$, 6.6%), sleeping ($n = 6$, 5.0%), time for self ($n = 5$, 4.1%), and time with animals ($n = 5$, 4.1%). Additionally, among those participants who reported engaging in a mindfulness practice ($n = 51$, 38.9%), the most frequently reported forms of this practice were yoga ($n = 41$, 80.4%), meditation ($n = 30$, 58.8%), and prayer ($n = 14$, 27.5%). Fifty participants (38.2%) reported that mindfulness training was included in their counselor preparation program. Responses to this question varied, however, even within the same program, suggesting that participants had different views of what constitutes mindfulness training. Lastly, among participants endorsing mindfulness training in their program, the most frequently reported form of this training was class content ($n = 27$, 54.0%), class exercises ($n = 8$, 16.0%), wellness plans ($n = 7$, 14.0%), or an optional workshop ($n = 7$, 14.0%).

Preliminary Analyses

Means and standard deviations for total and subscale scores were calculated for the *Five Facet Mindfulness Questionnaire* (FFMQ), the *Trimodal Anxiety Questionnaire* (TAQ), the *Self-Other Four Immeasurables* (SOFI), and the *Interpersonal Reactivity Index* (IRI), and these were compared to published norms. Results of these calculations are presented in Table 3.

Table 3

Total Sample Score Ranges, Means, Standard Deviations, and Norms ($N = 131$)

Instrument	Possible Range	Sample Range	Sample		Norm	
			Mean Scale	SD	M	SD
FFMQ						
Total	8 - 40	104 - 163	135.17	14.06	126.3	13.8
Observe	8 - 40	18 - 38	26.99	4.60	24.2 - 32.0	4.2 - 5.6
Describe	8 - 40	16 - 38	30.29	4.48	26.5 - 31.8	5.3 - 7.1
Act with Awareness	8 - 40	12 - 38	27.23	4.66	25.3 - 28.3	5.1 - 6.6
Non-judge	8 - 40	17 - 39	28.44	5.36	27.8 - 32.4	5.6 - 7.3
Non-react	7 - 35	11 - 32	22.21	3.73	20.5 - 25.7	3.8 - 4.9
IRI						
Empathic Concern	0 - 28	10 - 28	21.98	4.03	19.0-21.7	Unpublished
Perspective Taking	0 - 28	10 - 28	20.15	3.84	16.8-18.0	Unpublished
TAQ						
Total	0 - 288	6 - 167	81.95	35.94	62.0	15.9
Cognitive	0 - 128	0 - 53	23.54	11.82	22.4	6.7
Behavioral	0 - 88	0 - 44	18.41	9.14	16.1	6.0
Somatic	0 - 72	6 - 84	40.00	17.08	23.5	7.1
SOFI						
Positive-Self	4 - 20	6 - 20	13.95	2.62	Unpublished	
Friendly	1 - 5	2 - 5	3.60	.72	3.60	.92
Joyful	1 - 5	1 - 5	3.47	.88	3.37	1.09
Accepting	1 - 5	1 - 5	3.51	.89	3.49	1.11
Compassionate	1 - 5	1 - 5	3.37	.96	3.07	1.15
Positive-Other	4 - 20	11 - 20	16.25	1.93	Unpublished	
Friendly	1 - 5	2 - 5	4.06	.57	3.99	.77
Joyful	1 - 5	1 - 5	3.79	.83	3.43	1.11
Accepting	1 - 5	3 - 5	4.11	.65	3.82	.89
Compassionate	1 - 5	2 - 5	4.28	.67	3.57	1.14

Norms for the FFMQ are from the Baer et al. (2008) study of the construct validity of the FFMQ and based on a range from four samples: meditating ($n = 128$), demographically-matched non-meditating, ($n = 174$), community non-meditating ($n = 293$), and student non-meditating ($n = 269$). Norms for the IRI are from the Davis (1980) study of the construction of the instrument which was based on a sample of psychology students ($n = 579$ males, 582 females). Norms for the TAQ are based on a study of its psychometric properties among 103 non-clinical adults (Scholing & Emmelkamp, 1992). Finally, norms for the SOFI are based on a study of the construction and validation of the SOFI using a sample of 124 college students (Kraus & Sears, 2009). Overall, means and standard deviations are comparable to published studies, although the mean total TAQ score appeared higher than the norm with the somatic subscale showing the greatest difference. Also, there was greater variability in mean scores for this scale.

Instrument reliability for this sample was assessed by computing Cronbach's alpha (α) as a measure of internal consistency for total scales and subscales. The same studies were used as normative comparisons with the exception that previous internal consistency scores for the FFMQ were derived from the Baer et al. (2006) study in which 613 college students were sampled and total FFMQ norms were based on a study of non-meditating students ($n = 263$) (Van Dam, Earleywine, & Danoff-Burg, 2009). The full sample was used to compute alpha coefficients which were compared with published data for each instrument (see Table 4). Instrument reliability of .70 is considered adequate in social science research although reliability of at least .80 is desirable (Heppner, Kivlighan, & Wampold, 1999). Accordingly, all scales met or exceeded acceptable alpha

levels for social science research and were comparable to those reported in other published studies except the SOFI “compassion for others” subscale ($\alpha = .66$). Based on these results, all four instruments used in this study were deemed to have adequate to good reliability, with the exception of this one subscale. Accordingly, results from analyses using the noted SOFI subscale were interpreted with some caution.

Table 4**Instrument Scale Reliabilities***

Instrument	# items	α	α in previous studies
FFMQ			
TOTAL	39	.88	.96
Observe	8	.75	.83
Describe	8	.86	.91
Act with Awareness	8	.84	.87
Non-judge	8	.89	.87
Non-react	7	.81	.75
IRI			
Empathic Concern	7	.79	.70 - .72
Perspective Taking	7	.75	.75 - .78
TAQ			
TOTAL	36	.93	.94
Cognitive	11	.78	.83
Behavioral	9	.74	.87
Somatic	16	.85	.87
SOFI			
Positive-Self	4	.75	.86
Positive-Other	4	.66	.80

* Alpha coefficients for scales and subscales utilized in this study

As a preliminary analysis, the mean total and subscale scores for all instruments were correlated to examine the relationships among study variables and to rule out multicollinearity among mindful awareness and mindful compassion. Examination of these correlations suggested that overall mindful awareness and compassion had statistically significant, but weak to moderate correlations, so multicollinearity was not a concern in subsequent analyses (Table 5). Findings were similar at the facet level, although not all relationships were significant at the $p < .05$ level. Additionally, several of the five facets of mindfulness were significantly related, but these correlations were weak to moderate suggesting that they do measure different aspects of mindfulness. Accordingly, all five facets were included in subsequent regression analyses. Similarly, self and other mindful compassion were significantly related, but only moderately, and were both included in regression analyses. Mindful awareness was significantly correlated with both cognitive empathy and anxiety in the expected directions. Mindful awareness was not significantly, however, with affective empathy. Mindful compassion toward others was significantly correlated with affective and cognitive empathy and anxiety, in the expected directions, although its relationship with anxiety was modest. Mindful compassion towards oneself had a significant, moderate relationship with anxiety in the expected direction, but had lower and nonsignificant relationships with both aspects of empathy.

Table 5

Pearson Product-Moment Correlation Coefficients ($N = 131$)

Variable	Mindful Awareness	Mindful Observe	Mindful Describe	Mindful Act with Awareness	Mindful Non-judge	Mindful Non-react	Affective Empathy	Cognitive Empathy	Mindful Self Compassion	Mindful Other Compassion	Anxiety
Mindful Awareness	.88	.51**	.62**	.73**	.66**	.54**	.12	.35**	.45**	.26**	-.56**
Mindful Observe		.75	.25**	.20*	-.01	.14	.15	.18*	.14	.21*	-.04
Mindful Describe			.86	.33**	.25**	.05	.12	.05	.28**	.18*	-.36**
Mindful Act with Awareness				.84	.39**	.32**	.03	.27**	.28**	.27**	-.47**
Mindful Nonjudge					.89	.28**	-.01	.23**	.40**	-.03	-.50**
Mindful Nonreact						.81	.09	.36**	.28**	.22*	-.30**
Affective Empathy							.79	.23**	.14	.38**	-.02
Cognitive Empathy								.75	.15	.30**	-.12
Mindful Self Compassion									.75	.40**	-.37**
Mindful Other Compassion										.66	-.20*
Anxiety											.93

* $p < .05$; ** $p < .01$; test reliabilities on the diagonal

Research Questions and Hypotheses

The primary purpose of this study was to examine the relationships between mindful awareness and compassion and empathy and anxiety and ascertain the incremental contribution of mindful compassion in explaining counselor empathy and anxiety above and beyond what can be explained by mindful awareness alone.

Accordingly, three research questions and nine hypotheses were developed and the results of the statistical analyses used to examine these are presented in this section.

Research Question 1 / Hypotheses 1a-c

Research question one examined whether the addition of mindful compassion would increase the proportion of variance explained in (a) affective empathy, (b) cognitive empathy, and (c) anxiety, beyond what is accounted for by mindful awareness alone. For hypothesis 1a, it was proposed that the addition of mindful compassion would increase the amount of variance explained in affective empathy beyond that explained by mindful awareness alone. Based on a hierarchical multiple regression using the “Enter” method, mindful compassion increased the variance explained in affective empathy by 11.5% above that explained by mindful awareness alone (1.0%) (see Table 6), thus supporting the hypothesis.

For hypothesis 1b, it was proposed that the addition of mindful compassion would increase the proportion of variance explained in cognitive empathy beyond that explained by mindful awareness alone. Using the same method, mindful compassion increased the variance explained in cognitive empathy by 4.3% above that explained by mindful awareness alone (11.3%), and thus supported the hypothesis (see Table 7).

Table 6**Hierarchical Regression of Awareness and Compassion as Predictors of Affective Empathy**

Model	<i>B</i>	<i>SE</i>	β	<i>Adj. R²</i>
1 Mindful Awareness	.003	.03	.12	1.0%
2 Mindful Awareness	.007	.03	.03	12.5%
Self -Compassion	-.03	.15	-.02	
Other Compassion	.80	.19	.38*	

* $p < .001$; $Adj. R^2\Delta = 11.5\%$ **Table 7****Hierarchical Regression of Awareness and Compassion as Predictors of Cognitive Empathy**

Model	<i>B</i>	<i>SE</i>	β	<i>Adj. R²</i>
1 Mindful Awareness	.09	.02	.35*	11.3%
2 Mindful Awareness	.09	.03	.32*	15.6%
Self -Compassion	-.15	.14	-.10	
Other Compassion	.52	.18	.26*	

* $p < .01$; $Adj. R^2\Delta = 4.3\%$

Lastly, for hypothesis 1c, it was proposed that the addition of mindful compassion would increase the proportion of variance explained in anxiety beyond that explained by mindful awareness alone. It was found that while mindful compassion increased the variance explained in anxiety above that explained by mindful awareness alone (30%), it explained less than 1% and was not a significant relationship. Therefore, mindful compassion was not found to be a significant predictor in explaining anxiety. Mindful

awareness was significantly related and accounted for most of the variance explained in anxiety (see Table 8).

Table 8

Hierarchical Regression of Awareness and Compassion as Predictors of Anxiety

Model	<i>B</i>	<i>SE</i>	β	<i>Adj. R²</i>
1 Mindful Awareness	-1.42	.19	-.56*	30.3%
2 Mindful Awareness	-.124	.21	-.49*	31.1%
Self -Compassion	-2.03	1.18	-.15	
Other Compassion	-.17	1.49	-.01	

* $p < .001$; $Adj. R^2\Delta = .08\%$

Research Question 2 / Hypotheses 2a-c

Research question two examined the overall relationship between mindful awareness and compassion and (a) affective empathy, (b) cognitive empathy, and (c) anxiety. For hypothesis 2a, it was proposed that mindful awareness and compassion have a significant relationship with affective empathy. Based on a hierarchal multiple regression using the Enter method, a model including mindful awareness and compassion had a significant relationship with affective empathy ($F_{(3, 127)} = 7.19, p < .001$) and explained 12.5% of the variance, supporting hypothesis 2a (Table 6). Notably, mindful awareness alone was not a significant predictor of affective empathy and mindful compassion toward others was the only variable to significantly predict affective empathy ($\beta = .38, p < .001$).

For hypothesis 2b, it was proposed that mindful awareness and compassion have a significant relationship with cognitive empathy. Based on a hierarchical multiple regression using the Enter method, a model of mindful awareness and compassion had a significant relationship with cognitive empathy ($F_{(3, 127)} = 9.03, p < .001$) supporting hypothesis 2b (Table 7). Awareness and compassion explained 15.6% of the variance in cognitive empathy. Awareness and other-compassion were each significantly predictive of cognitive empathy. For hypothesis 2c, it was proposed that mindful awareness and compassion have a significant relationship with anxiety. Using the same analysis, a model of mindful awareness and compassion had a significant relationship with anxiety ($F_{(3, 127)} = 20.56, p < .001$) and explained 31.1% of the variance supporting hypothesis 2c (Table 8). In this case, only mindful awareness significantly predicted anxiety.

Research Question 3 / Hypotheses 3a-c

Research question three examined whether the various facets of mindfulness and compassion differentially predict (a) affective empathy, (b) cognitive empathy, and (c) anxiety in counselor trainees. In hypothesis 3a it was proposed that the five facets of mindfulness and two aspects of compassion would account for a significant proportion of the variance in affective empathy, although no specific hypotheses were made regarding which facets would best predict affective empathy. Based on a multiple regression analysis using the Enter method, only compassion for others was a significant predictor of affective empathy ($\beta = .39, t = 4.01, p < .001$) (Table 9), accounting for 11.3% of the variance. Thus, the hypothesis was only partially supported.

Table 9**Multiple Regression of Mindful and Compassion Facets as Predictors of Affective Empathy**

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>
Observe	.07	.08	.07	.06
Describe	.06	.08	.06	.40
Act with Awareness	-.10	.09	-.12	.50
Non Judge	.02	.08	.03	.24
Non React	.03	.10	.03	.77
Self Compassion	-.04	.16	-.03	.79
Other Compassion	.81	.20	.39	4.01*

Note: * $p < .001$

Adj. $R^2 = 11.3\%$

In hypothesis 3b it was proposed that the five facets of mindfulness and two aspects of compassion would account for a significant proportion of the variance in cognitive empathy, although no specific hypotheses were made regarding which facets would best predict cognitive empathy. Based on a multiple regression analysis using the Enter method, mindful nonjudge ($\beta = .21, t = 2.19, p < .05$), nonreact ($\beta = .24, t = 2.77, p < .01$), and compassion for others ($\beta = .28, t = 3.0, p < .01$) were significant predictors of cognitive empathy (Table 10), accounting for 19.5% of the variance in cognitive empathy. Thus, the hypothesis was partially supported.

Table 10**Multiple Regression of Mindful and Compassion Facets as Predictors of Cognitive Empathy**

Variable	<i>B</i>	SE	β	<i>t</i>
Observe	.10	.07	.12	1.37
Describe	-.07	.08	-.09	-.98
Act with Awareness	.06	.08	.08	.81
Non Judge	.15	.07	.21	2.19*
Non React	.25	.09	.24	2.77**
Self Compassion	-.19	.14	-.13	-1.33
Other Compassion	.55	.18	.28	3.00**

* $p < .05$, ** $p < .01$, *Adj. R*² = 19.5%

In hypothesis 3c it was proposed that the five facets of mindfulness and two aspects of compassion would account for a significant proportion of the variance in anxiety, although no specific hypotheses were made regarding which facets would best predict anxiety. Based on a multiple regression analysis using the Enter method, mindful describe ($\beta = -.19$, $t = -2.44$ $p < .05$), act with awareness ($\beta = .23$, $t = -2.79$, $p < .01$), and nonjudge ($\beta = -.30$, $t = -3.56$ $p < .001$) had a significant relationship with anxiety, accounting for 37.1% of the variance in anxiety. Thus, the hypothesis was partially supported (see Table 11).

Table 11**Multiple Regression of Mindful and Compassion Facets as Predictors of Anxiety**

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>
Observe	.72	.58	.09	1.24
Describe	-1.53	.63	-.19	-2.44*
Act with Awareness	-1.79	.64	-.23	-2.79**
Non Judge	-2.04	.57	-.30	-3.56***
Non React	-.97	.75	-.10	-1.30
Self Compassion	-1.24	1.18	-.09	-1.05
Other Compassion	-1.31	1.52	-.07	-.86

* $p < .05$, ** $p < .01$, *** $p < .001$, $Adj. R^2 = 37.1$

Additional Analyses for Heuristic Purposes

Although not originally proposed as research questions, several supplementary analyses were conducted to further elucidate the findings. Because mindful awareness and compassion explained such a large amount of the variance in anxiety, multiple regressions assessing how they predict specific aspects of anxiety were performed. Mindful awareness and compassion explained 26.8% of the variance in somatic anxiety ($F_{(3, 127)} = 16.86, p < .001$), 27% of the variance in cognitive anxiety ($F_{(3, 127)} = 17.0, p < .001$), and 31.8% of the variance in behavioral anxiety ($F_{(3, 127)} = 21.21, p < .001$). Mindful awareness and compassion, therefore, appear to be related to all facets of anxiety, particularly behavioral anxiety.

Additionally, because each of the instruments measured the study variables generally (as opposed to within a counseling context), 11 Likert-type items assessing each study variable as it may occur within a counseling context, were constructed and

included in the demographics questionnaire (see Appendix A). For example, in the TAQ, somatic anxiety is measured with items such as “*My heart pounds.*” As a way of determining if participants would similarly endorse somatic anxiety as occurring specifically within the counseling context, items such as “*I sometimes feel my heart rate quicken or my palms get sweaty when I meet a client*” were included in the demographics questionnaire. These demographic items were each correlated with the corresponding subscale of the general measures (see Table 12).

Table 12
Study Variables and Facets Correlated with Demographic Items (N = 131)

Variable	<i>r</i>
Mindful Awareness	.53 ^{**}
Observe	.16
Describe	.29 ^{**}
Act with Awareness	.59 ^{**}
Nonjudge	.12
Nonreact	.20 [*]
Affective Empathy ⁺	.27 ^{**}
Cognitive Empathy ⁺	.20 [*]
Self Compassion	.31 ^{**}
Other Compassion	.22 [*]
Anxiety	-.31 ^{**}
Cognitive Anxiety	-.14
Somatic Anxiety	-.37 ^{**}
Behavioral Anxiety	-.14

* $p < .05$; ** $p < .01$; + cognitive and affective empathy correlated with one item that addressed both components of empathy

Additionally, a sum of the demographic items constructed to assess each facet of mindfulness in the counseling context were summed and correlated with mindful awareness as measured by the FFMQ. Similarly, the demographic items constructed to assess each type of anxiety as it may occur in the counseling context were summed and correlated with anxiety as measured by the TAQ.

All of the study variables correlated significantly with their corresponding scales. Correlations for specific sub facets such as observe, nonjudge, cognitive anxiety, and behavioral anxiety, however, were weak and nonsignificant. These data may offer some additional support for obtained results, but they should be interpreted with caution as variables were measured with few items.

Summary

In this chapter, the results of the study were provided. Sampling procedures as well as a description of the study sample were outlined. Descriptive statistics, including scale ranges and reliabilities for the current sample, were detailed for all instrumentation. Based on these results, it was determined that the measures were generally reliable for this sample, although the SOFI “compassion for others” was below the desired level. Correlational analyses were used to assess the relationships between mindful awareness and compassion and these results suggested that multicollinearity was not problematic in the regression analyses. The data analysis used for each hypothesis was described and results presented. Mindful awareness and compassion (self and other) were significantly related to anxiety and in the expected directions, with mindful awareness having the strongest relationship. Mindful awareness and compassion for others had a significant

relationship with cognitive empathy in the expected directions. Interestingly, however, self-compassion had a weak, nonsignificant relationship with cognitive empathy. Only compassion for others had a significant relationship with affective empathy.

Awareness and compassion explained a modest amount of the variance in affective empathy with compassion for others contributing significantly. Awareness and compassion explained a moderate amount of variance in cognitive empathy with nonjudge, nonreact, and compassion for others emerging as significant predictors. A substantial amount of the variance in anxiety was explained by awareness with describe, act with awareness, and nonjudge facets being significant predictors. Mindful compassion increased the variance explained in affective empathy, cognitive empathy, and anxiety, offering the greatest lift for affective empathy. In Chapter V, the results are discussed, potential limitations are described, and implications for counselor education and directions for future research are proposed.

CHAPTER V

DISCUSSION

In Chapter IV, the results of the study examining the relationships between mindful awareness and compassion and empathy and anxiety among counselor trainees was presented. In this chapter, a brief overview of the study is provided, results are discussed, limitations outlined, implications for counselor education and counseling performance are addressed, and future research opportunities are proposed.

Overview of the Study

Empathy and anxiety are two training variables regarded as important to counseling performance. Specifically, empathy is considered an important factor in the development of an effective therapeutic relationship (Rogers, 1957; Shapiro & Izett, 2008; Trusty et al., 2005) and positive counseling outcomes (Elliott et al., 2011; Lambert & Barley, 2001). Teaching genuine empathy, however, as opposed to observable empathy skills (e.g. reflective listening) is a challenge for educators (Ridley et al., 2011) and there is evidence that empathy tends to erode over the course of training (Lesh, 1970; Shapiro et al., 2004). Methods for cultivating an empathic attitude and strong therapeutic relationships have not been well developed within counselor education (Hick, 2008). Additionally, higher anxiety in trainees can impede the cultivation of empathy (Hiebert et al., 1998) and also is negatively associated with counselor self-efficacy (Larson & Daniels, 1998), attending skills (Levitt, 2001), and cognitive complexity (Duncan &

Brown, 1996). Thus, finding a way to cultivate empathy and mitigate anxiety could prove useful in the education of counselors and for the successful delivery of counseling.

Mindfulness has been proposed as a potential method for addressing important counseling skills and attitudes (Aiken, 2006; Andersson et al., 2010; Bruce et al., 2010; Fulton, 2005; Gehart & McCollum, 2008; Germer et al., 2005; Greason & Cashwell, 2009; Hick, 2008). More specifically, mindfulness has been associated with counselor empathy both theoretically and empirically (Bruce et al., 2010; Greason & Cashwell, 2009; Hick, 2008; Johanson, 2006; Kristeller & Johnson, 2005; Lesh, 1970; Shapiro et al., 2005, 2007). Similarly, there have been a number of studies in which researchers have found mindfulness training to be effective in reducing anxiety in diverse populations (Baer, 2003; Carmody et al., 2009; Shapiro et al., 2005), suggesting it might also be useful for reducing counselor trainee anxiety. Empirical evidence for the relationship between mindfulness and empathy and anxiety in counselors is limited, however. Additionally, there are few studies which have examined mindfulness inclusive of both of its wings, mindful awareness and mindful compassion.

This study was designed to address this gap in the literature by examining the relationships between mindful awareness and compassion, and empathy and anxiety, and determining the incremental contribution of mindful compassion in explaining these relationships. Master's-level students from 9 geographically diverse CACREP programs completed five instruments to assess the variables of interest: mindful awareness (FFMQ; Baer et al., 2006), mindful compassion (Self-Other Four Immeasurables [SOFI]; Kraus & Sears, 2009), cognitive and affective empathy (Interpersonal Reactivity Index [IRI];

Davis, 1980), anxiety (*Trimodal Anxiety Questionnaire* [TAQ]; Lehrer & Woolfolk, 1982), and a demographic questionnaire which included items assessing each study variable as it may occur in the context of counseling. A total of 133 students participated and 131 surveys were used in the analyses.

The full sample was used to analyze results including mean scores for each instrument. Additionally, Cronbach's alphas were computed as estimates of internal consistency for total scales and utilized subscales. Pearson product-moment correlations for the four study variables and their respective facets were computed as a preliminary measure to assess the nature and strength of relationships and to rule out multicollinearity between mindful awareness and mindful compassion. To determine whether mindful compassion would augment mindful awareness in predicting counselor empathy and anxiety as hypothesized, a hierarchical regression was conducted in which mindful awareness was entered first followed by a model inclusive of both mindful awareness and compassion. This hierarchical regression also was used to examine whether mindful awareness and compassion together had a significant relationship with empathy and anxiety. Further, the relative contribution of each facet of mindful awareness and compassion in explaining empathy and anxiety was determined using a multiple regression analysis. Finally, for heuristic purposes several supplementary analyses were conducted to further elucidate the research findings. These included multiple regression analyses assessing how mindful awareness and compassion predicted specific aspects of anxiety and correlation analyses between demographic items constructed to address each study variable in the context of counseling and the corresponding subscales.

Overall, results supported the relationship between mindful awareness and compassion and empathy and anxiety. Awareness and compassion explained a modest amount of the variance in affective empathy with *compassion for others* as the significant contributor. Awareness and compassion explained a modest, but greater amount of variance in cognitive empathy with awareness facets (*nonjudge* and *nonreact*) and *compassion for others* emerging as significant predictors. A substantial amount of the variance in anxiety was explained by awareness and compassion with awareness facets (*describe*, *act with awareness*, and *nonjudge*) emerging as significant predictors. Mindful compassion increased the variance explained in affective and cognitive empathy, but only provided a negligible increase for anxiety. A discussion of the results for the specific hypotheses follows.

Discussion of the Results

Preliminary Analyses

Pearson product-moment correlations were conducted to assess the strength and nature of the bivariate relationships among all study variables. Although extant research on the relationship between mindfulness and empathy is limited, in this study mindfulness was found to be related to empathy consistent with other studies (Greason & Cashwell, 2009; Lesh, 1970; Shapiro et al., 1998, 2007; Wachs & Cordova, 2007). Findings from this study not only added support to this literature, but also further elucidated the relationship. In particular, mindful awareness had a moderate statistically significant relationship with cognitive empathy, and a weaker nonsignificant relationship with affective empathy among counselor trainees, suggesting that mindful awareness may

be more relevant to perspective taking than empathic concern. This study further extended this literature as mindfulness was conceptualized as inclusive of both awareness and compassion components. The relationship between mindful compassion and both affective and cognitive empathy was moderate and significant, although only for compassion toward others. Taken together these preliminary findings suggested that further examination of the predictive relationships of awareness and compassion and empathy is warranted and that mindfulness training may be a potential method for cultivating empathy in counselor trainees. Further, if counselor educators use mindfulness based training to develop both perspective taking and empathic concern in counselors, preliminary findings further suggested that the training may be more beneficial if it is inclusive of both awareness and compassion related meditations and exercises.

Correlations between mindful awareness and compassion and anxiety also provided some interesting findings. There are few published studies relating these variables in counselor trainees, however, in one study mindfulness training was shown to reduce anxiety in therapists in training (Shapiro et al., 2007). Further, researchers have found mindful awareness to be inversely related to anxiety (Baer, 2003; Shapiro et al., 2007) and mindful compassion, specifically self-compassion, to be inversely related to anxiety (Birnie et al., 2010; Neff, 2003b). Consistent with these studies, mindful awareness and compassion had a significant negative relationship to anxiety. The relationship was strongest for mindful awareness ($r = -.56, p < .01$), followed by compassion toward others ($r = -.37, p < .01$), and compassion toward self ($r = -.20, p < .05$). Overall, correlation analyses supported further exploration of the relationships

between mindful awareness and compassion and empathy and anxiety among counselor trainees. Additionally, because the mindful awareness facet *nonjudge* was moderately and significantly related to self-compassion ($r = .40$), which includes acceptance of self and others, these variables may be similar. Further exploration is needed to more fully understand these constructs.

Hypotheses 1a-c

It was proposed in hypotheses 1a-1c that mindful compassion would increase the amount of variance explained in (a) affective empathy, (b) cognitive empathy, and (c) anxiety above that explained by mindful awareness alone. The first two hypotheses were supported as mindful compassion increased the variance explained in affective empathy by 11.5% and cognitive empathy by 4.3% above mindful awareness alone. This finding is consistent with scholarly writing in which compassion has been proposed as a theoretically important aspect of mindfulness (Germer, 2006; Kraus & Sears, 2009; Van Dam et al., 2010). Further, this finding is in concert with findings in which self-compassion has been found to either augment or supersede mindfulness in predicting a number of variables such as psychological well-being (Hollis-Walker & Colosimo, 2011), anxiety, depression, worry, and quality of life (Van Dam et al., 2010). An interesting exception is that for hypothesis 1c mindful compassion did not significantly add to explained variance in anxiety, increasing it by only 0.8%. This is inconsistent with the literature in which self-compassion was found to be negatively related to anxiety (Birnie et al., 2010; Van Dam et al., 2010; Neff, 2003b). There are two noteworthy explanations for this discrepancy. First, in the current study, self-compassion had a

modest, but significant negative relationship with anxiety ($r = -.20, p < .05$) and individually explained 13.2% of the variance in anxiety ($F_{(1, 129)} = 20.7, t = -4.55, p < .001$). Thus, this study supports that there is a relationship between self-compassion and anxiety. In the multivariate model, however, compassion for others and mindful awareness had stronger bivariate relationships with anxiety and mindful awareness was the only significant contributor in the regression model. It appears, then, that much of the shared variance between mindful awareness and compassion for self accounted for variance in anxiety, parceling out the predictive value of compassion for self in the multivariate model. Second, the discrepancy also may have resulted from the difference in how self-compassion was measured across studies. In the limited number of studies of mindfulness and self-compassion, including both the Van Dam et al. (2010) and Neff (2003b) studies, the *Self Compassion Scale* (SCS; Neff, 2003b) was used to measure self-compassion. This scale includes two subscales relating to mindfulness (mindfulness and self-judgment), and therefore, may have lessened visibility into the unique and differential relationships between mindful awareness and compassion and anxiety. Overall, these findings suggest that mindful compassion is most relevant to affective empathy and mindful awareness is most important to cognitive empathy and anxiety.

Hypotheses 2a-c

It was proposed in hypotheses 2a-2c that mindful awareness and compassion would have a significant relationship with (a) affective empathy, (b) cognitive empathy, and (c) anxiety. First, as hypothesized in 2a and 2b, a model of mindful awareness and compassion had a significant relationship with affective and cognitive empathy,

explaining 12.5% and 15.6% of the variance, respectively. This is consistent with findings in which higher reported levels of mindfulness were associated with higher levels of empathy (Greason & Cashwell, 2009; Lesh, 1970; Shapiro et al., 1998; Wachs & Cordova, 2007). In the current study, however, compassion for others was the only significant predictor of affective empathy, while both mindful awareness and compassion for others were significant predictors of cognitive empathy. Although mindful awareness has been differentially related to affective empathy in at least one other study (e.g. Wachs & Cordova, 2007), it appears that a model inclusive of mindful compassion yields compassion toward others as the more robust predictor of this aspect of empathy. The finding that mindful awareness is differentially predictive of cognitive empathy also is consistent theoretically. The measure of mindful awareness used in this study conceptualized it as a set of cognitive oriented skills and attitudes such as observing and describing experience and non-judgment of experience (Baer et al., 2006). It is conceptually congruent that mindful awareness is more predictive of perspective taking, while mindful compassion is more predictive of empathic concern.

Because there is a growing consensus that both cognitive and affective components of empathy are important (Duan & Hill, 1996; Feshbach, 1975; Gladstein, 1977; Spreng et al., 2009) and both have been found to play a role in facilitating helping behavior (Coke et al., 1978), based on the current findings it appears that mindfulness based training for counselors may be more beneficial if it is inclusive of both mindful awareness and compassion as each aspect appears to have more influence on specific components of empathy.

Second, for hypothesis 2c, it was proposed that mindful awareness and compassion would have a significant relationship with anxiety. As hypothesized, the relationship was significant and a model inclusive of awareness and compassion explained 31.1% of the variance in anxiety. Mindful awareness, however, emerged as the only significant predictor. This is consistent with a number of studies supporting the use of mindfulness training for the reduction of anxiety (Baer, 2003; Carmody et al., 2009; Shapiro et al., 2005, 2007) and, similarly, may offer additional support for the use of mindfulness training for the reduction of counselor trainee anxiety. Further, Greason and Cashwell (2009) found that attention mediated the relationship between mindfulness and counselor self-efficacy and that mindfulness was related to counselor attention. This may offer some context for understanding why mindful awareness emerged as particularly important to counselor anxiety in this study. Although not specifically studied, counselors who reported higher mindful awareness may be less anxious as a result of having the necessary skills, such as attention, to feel more self-efficacious. Additionally, at the subscale level of analysis, mindful awareness and compassion explained nearly 32% of behavioral anxiety, or social avoidance. This is consistent with scholarly opinion that counselor trainees experience anxiety related to inherent social and relational aspects of cultivating therapeutic relationships with clients (Freeman, 1993; Fry, 1973).

Lastly, the fact that compassion, particularly self-compassion, did not significantly predict anxiety was a curious finding as it has been negatively associated with anxiety in other studies (Birnie et al., 2010; Neff, 2003b; Van Dam et al., 2010). As mentioned, it may be related to the way self-compassion was measured in other studies

(i.e. inclusive of mindfulness) making the unique contributions of self-compassion and mindful awareness unclear. Additionally, compassion research within the broader context of mindfulness research has been almost solely focused on self-compassion. The SOFI is a relatively new instrument and the only one to measure both self and other-compassion in the context of mindfulness. Additionally, the SOFI “positive feelings towards others” subscale had a relatively low alpha which may partially account for this finding. Thus, there is a paucity of literature to offer insight regarding how self and other-compassion relate to one another or other variables, limiting meaningful interpretation of the current findings. In this study self-compassion had a moderate significant relationship with other-compassion. It is possible that compassion for others has been a strong moderator of the relationship between self-compassion and anxiety in previous studies but the lack of inclusion of other-compassion limited visibility of this factor. Further empirical testing is needed to better understand the nature of these relationships.

Hypotheses 3a-c

It was proposed in hypotheses 3a-3c that the five facets of mindful awareness and two aspects of mindful compassion would have a significant relationship with (a) affective empathy, (b) cognitive empathy, and (c) anxiety, although no specific hypotheses were made regarding which facets would emerge as the significant predictors. Interestingly, for hypothesis 3a, although the overall model was significant and explained 11.3% of the variance in affective empathy, only *compassion for others* emerged as a significant predictor. This is consistent with the findings in hypothesis 2a. In the relevant literature, mindfulness has been primarily measured and defined in terms of awareness,

leaving questions unanswered as to how other important aspects of mindfulness, such as compassion, might relate to empathy. There is little research, therefore, with which to compare this finding. The relationship between compassion for others and affective empathy in the current study, however, is theoretically consistent. Davis (1980) operationalized the affective component of empathy as *empathic concern*, or an ‘other-oriented’ feeling of sympathy and concern which closely aligns with the operational definition of mindful compassion, or positive feelings for others such as acceptance, friendliness, joy, and compassion. Further, empathy is considered an outcome of gaining insight (perspective taking) and compassion (Schmidt, 2004), and thus, the finding that mindful compassion predicted affective empathy and awareness facets and mindful compassion both predicted cognitive empathy, offers empirical support for this theoretical supposition. The finding that none of the other facets were predictive of affective empathy is also theoretically consistent because the other facets are more cognitive in nature and focus on present moment awareness and attention, which is what the FFMQ was designed to measure.

Hypothesis 3b was also partially supported as *nonjudge*, *nonreact*, and *compassion for others* were the significant predictors in an overall significant model which explained 19.5% of the variance in cognitive empathy. These findings suggest that the ability to be nonjudging and nonreactive to experience while also feeling compassion, may increase one’s perspective taking ability. This finding echoes Rogers’s (1957) view that empathy requires the ability to sense another’s feelings while maintaining an “as if” quality. Reactivity would be akin to personal distress, or concern for one’s own

emotional reaction to an uncomfortable interpersonal situation (Davis, 1983). Rogers (1957) described this experience as identification, not empathy. Mindfulness includes the capacity to be nonjudgmental and non-reactive (Baer et al., 2005; Cash & Whittingham, 2010) and to maintain open, non-judging, present moment awareness (Baer, 2003; Cardaciotto et al., 2008), similar to what Rogers described as unconditional positive regard where a counselor is able to remain connected to a client's experience without judging or reacting to it. Further, mindfulness meditation in the Buddhist tradition is designed to cultivate perspective taking so that compassion for all sentient beings can be developed. It is hypothesized that by perspective for one's own suffering yields the perspective needed to extend compassion to others, potentially leading to more effective counseling work.

Lastly, hypothesis 3c was partially supported as the overall model was significant explaining 37.1% of the variance in anxiety. Only *describe*, *act with awareness*, and *nonjudge* facets emerged as significant predictors. It is noteworthy that the model with each facet of mindfulness and compassion explained more variance than was explained with full scale scores (31%), suggesting that predictive power is lost when the subscales are aggregated. Additionally, in the differentiated model, it was only mindful awareness facets which emerged as predictors of anxiety. This finding is consistent with research that has supported the relationship between mindfulness and anxiety (Baer, 2003), particularly as mindfulness has been conceptualized as nonjudgmental present moment awareness. Further, mindful awareness has been positively associated with self-efficacy in counselors (Greason & Cashwell, 2009). It is plausible that the finding that the ability

to act with awareness was predictive of lower anxiety in the current study may be related to this previous finding that awareness increases counselor self-efficacy. A counselor's belief in his or her ability to effectively counsel a client in the near future (Larson & Daniels, 1998) is negatively correlated with anxiety in counselors (Daniels & Larson, 2001). This is further buttressed by another recent study of counselor trainees in which the awareness facet, *describe*, was associated with greater counselor self-efficacy and lower levels of behavioral anxiety was significantly predictive of self-efficacy (Hall, 2009). Lastly, it was unexpected that compassion, particularly self-compassion, would not significantly contribute to variance in anxiety. This is inconsistent with the literature in which self-compassion was found to be negatively related to anxiety (Birnie et al., 2010; Van Dam et al., 2010; Neff, 2003b). As mentioned in the discussion for hypothesis 1c, this may be related to the inclusion of mindfulness in the measure of self-compassion in those studies. Additional inquiry into this disparate finding is warranted.

Additional Analyses for Heuristic Purposes

Although not originally proposed as research questions, several supplementary analyses were conducted to further elucidate the findings, and therefore, no specific hypotheses were proposed. Under the direction of the dissertation committee, it was recommended that the researcher include items in the demographics questionnaire which attempt to capture a self report measure of each study variable as it may occur within the context of counseling. The rationale for this was that the measures used in this study were general and may not directly correspond with in-session attitudes and behaviors. For example, to address the mindful facet of “describe” measured by the FFMQ, a

corresponding item “when discussing cases with my supervisor I am able to describe my thoughts and feelings” was included (all items are in Appendix A). These items were then correlated with their respective subscales. All of the variables correlated significantly with the general measures of awareness, compassion, empathy, and anxiety (Table 12), although some correlations were weak or insignificant at the facet level of analysis. These results offer some additional evidence that the results of this study may be relevant to the counseling context. This finding should be considered with caution as few items were used to correlate with subscales and not all correlations were strong or significant. Further studies that measure the relevant variables within the context of counseling would increase confidence in the findings from this study.

Additionally, because mindful awareness and compassion explained such a large amount of the variance in anxiety, multiple regressions assessing how they predict specific aspects of anxiety were performed. Mindful awareness and compassion explained 26.8% of the variance in somatic anxiety, 27% for cognitive anxiety, and 31.8% for behavioral anxiety. Mindful awareness and compassion appear to be related to all facets of anxiety, although they were slightly more predictive of behavioral anxiety. Specifically, mindful awareness significantly contributed to all aspects of anxiety with self-compassion significantly contributing to behavioral anxiety only. This latter finding is likely what slightly boosted the variance explained in behavioral anxiety above the other types. This finding offers additional support to earlier findings that mindful awareness may be most relevant to anxiety and that mindful compassion may be most relevant to empathic concern and perspective taking.

Limitations

The results of the current study may provide some insight into the relationships between mindful awareness and compassion and empathy and anxiety among counselor trainees as well as offer guidance as to which aspects of mindfulness are most salient for mindfulness-based training for counselors. These results, however, need to be reviewed with respect to the limitations of the study design and sample.

The study was based on a survey design which has inherent limitations including non-responders. That is, it is unclear how non-responders may differ systematically from those who respond. Efforts were made to mitigate this potential threat to internal validity. First, the language in the consent form and administrator instructions were devoid of wording relating to the specific variables of the study to lessen the chance that the nature of the study would impact the choice to participate. Second, counselor educators were asked to administer the instruments during class time to increase the likelihood of participation. Some participants, however, were given the surveys to complete outside of class or supervision. Although the response rate was above average for survey designs (67%), it is still possible that those who participated were identifiably different from those who did not. Thus, the survey design may have resulted in some degree of bias in the current sample.

Another potential limitation of the study is related to the accuracy of self-reported measures. Self-report can be influenced by the degree of self-knowledge and social desirability (Heppner et al., 1999). For example, individuals with greater levels of awareness may be more likely to recognize when it is absent, and consequently be more

conservative in how they endorse mindfulness on a self-report measure, yielding lower scores. Conversely, individuals with lower levels of mindfulness may report higher levels of mindfulness because they are not aware of when they are not paying attention, thus falsely inflating their scores. Additionally, 39% of participants reported that mindfulness training was included in their program. The description of this training, whether they participated in it, and whether it was actually a part of the program varied widely within each program. Nonetheless, differences in exposure to mindfulness training may have impacted their actual or perceived level of mindfulness. A comparison of the means and variance of these two groups (reported training versus no training) suggest that they were similar, however, so this may not be a major limitation of the current study. Another limitation of self report survey designs is the potential for responders to offer socially desirable answers. To reduce the chance of this occurring in this study, administrator instructions included a statement that the educator distributing the survey would not see it and participation would not be tied to any evaluative aspect of the course. Additionally, all participant-facing documents such as the consent form were worded to keep the participant naïve to the variables being measured as this is proposed as a means to reduce socially desirable answers (Heppner et al., 1999). Additionally, prompts for the instruments included statements to encourage honest participation. Based on the variance of means scores, social desirability was not determined to be a major limitation of the study. Additional research that replicates and extends the results of the current still are needed, however, to increase confidence in these results.

A final potential issue related to the measures is that they assessed each variable in general as opposed to specifically within the counseling context. It is possible that participants' levels of awareness, compassion, anxiety, and empathy are different when they are with a client than how they are in other situations. This limitation was addressed by adding items in the demographic questionnaire that assessed each study variable in the context of counseling. These items were correlated with the respective instrument measuring each variable. Most items significantly correlated with the respective instrument but these were single items and some correlations were not significant. Consequently, it remains unknown how results from this study generalize to the counseling context. Confidence in the results will increase when further studies using instruments that measure each variable within the counseling context confirm the results of this study. In addition, empathy and anxiety are purported to shift over time and circumstances (Borders & Brown, 2005; Lesh, 1970), making it difficult to determine whether results would be similar at other times during the program or semester.

Finally, a potential limitation of the study is the sampling procedure. Although geographically diverse, participants were a convenience sample of CACREP accredited programs which may limit the ability to generalize results to students in non-CACREP programs. Additionally, results from the current study may not generalize to all students as participants in this study were primarily Caucasian females.

Implications

The current study offered support that mindful awareness and compassion are related to empathy with awareness as predictive of perspective taking and compassion for

others as predictive of both empathic concern and perspective taking. The study also offered evidence that a higher level of mindful awareness is negatively related to anxiety in counselors. Several facets were determined to be significant predictors of empathy and anxiety. Compassion for others emerged as the single contributor that explained variance in affective empathy but also contributed to explaining cognitive empathy, along with nonjudge and nonreact. Three awareness facets, describe, act with awareness, and nonjudge, emerged as significant contributors in explaining anxiety. Although self-compassion was related to other-compassion, mindful awareness, and anxiety, it had weak relationships with both aspects of empathy and did not significantly contribute to explaining empathy or anxiety in any of the models tested. The findings from this study may have several implications for the education and supervision of counselors.

Counselor Education and Supervision

Empathy is considered an important aspect of the therapeutic relationship and a significant contributor to positive client outcomes (Lambert & Barley, 2001; Rogers, 1957; Shapiro & Izett, 2008; Trusty et al., 2005). Microskills training, which offered a productive advance in the training of counselors, has remained a dominant approach for the past four decades. Although this method has helped educators to successfully teach observable empathy skills such as reflective listening, there is little to guide educators on how to best teach genuine empathy, or a *way of being*, similar to that espoused by Rogers (1957). This therapeutic stance described by Rogers and others included a warm acceptance of all aspects of the client's experience, empathic concern, perspective taking without over-identification, and presence. Mindful awareness and compassion have been

associated with compassion, empathic concern, acceptance, non-judgmental awareness, perspective taking, and non-reactivity. Results from the current study suggest that mindful awareness and compassion may provide a supplemental tool to help educators in cultivating genuine empathy and a strong therapeutic relationship among counselor trainees, although this remains an empirical question that is, as of yet, unanswered. Additionally, mindfulness-based counselor training could be tailored to the needs of students. For example, findings from this study indicated that specific types of meditations (i.e. awareness versus compassion) may be useful depending on the specific training goal or developmental need. A trainee who demonstrates strong empathic concern but experiences personal distress or over-identification may benefit from awareness practices while a trainee who is able to cognitively understand clients but cannot adequately convey genuine concern may benefit from compassion practices. Because the results of the current study are correlational, causation cannot be inferred, so additional research is needed to know if systematic training in mindfulness does impact counselor outcomes such as empathy and anxiety.

The current study offered further insight regarding which specific mindfulness skills may have the greatest utility in developing specific types of empathy. For example, the ability to be nonjudging of and nonreactive to experience was associated with greater perspective taking. Understanding these relationships could help inform a supervisor regarding what skills and interventions may be most beneficial to develop proficiency in that ability. In addition, empathy has been found to erode over the course of training (Lesh, 1970; Shapiro et al., 2004). Mindfulness training could potentially offer a means

to mitigate this erosion. Training could be offered in a group format (Kabat-Zinn, 1990) or individually within supervision using mindfulness-based role-play which has shown to increase empathy (Andersson et al., 2010). Again, because the current data is correlational, intervention studies are needed to confirm that such training affects relevant outcomes.

This study also has implications for counselor education related to counselor trainee anxiety. Anxiety is a common and expected part of the counselor training experience, however, it can also be a hindrance to many aspects of training and performance (Bowman et al., 1978; Duncan & Brown, 1996; Friedlander et al., 1986; Hale & Stoltenberg, 1988; Hiebert et al., 1998). For example, anxiety is negatively associated with counselor self-efficacy (Daniels & Larson, 2001) and can interfere with accepting negative feedback in supervision (Larson & Daniels, 1998). There is little to guide educators on how to address trainee anxiety across experiences in the counseling program. Findings from the current study suggest that general mindfulness training could be beneficial for the reduction of anxiety in counseling students similar to what has been found in research with other populations (Baer, 2003; Shapiro et al., 1998, 2007). In the current study, mindful awareness was particularly important in explaining behavioral anxiety, or social avoidance. This finding may be useful to counselor trainees who experience anxiety related to inherent demands for intimacy within the therapeutic relationship (Freeman, 1993; Fry, 1973). Mindfulness training not only decreases anxiety directly, but it also tends to decrease experiential avoidance (Baer, 2003) and fosters greater social connection (Birnie et al., 2010; Neff, 2003b). Thus, it may be a useful tool

in reducing social avoidance and may improve trainees' ability to have a strong therapeutic relationship with clients. In addition, mindfulness is associated with greater attentional skills and self-efficacy (Greason & Cashwell, 2009). Since increases in self-efficacy are related to decreased anxiety, increasing attentional abilities through mindfulness training might also increase counselor self-efficacy and performance, though additional empirical attention to this question is needed.

In addition to empathy development and anxiety management, mindfulness training may offer some additional benefits to counselors in training. Mindfulness training has been successfully used to reduce stress which can lead to burnout, reduced attention, concentration, and decision making in health-care professionals (Christopher & Maris, 2010; Shapiro et al., 1998, 2000, 2005). Mindfulness training and tools are now widely available, making it possible for a student to work on the practices autonomously in addition to any work included within the counseling program. In addition, the availability of manualized programs offer support to educators in need of guidance regarding how to incorporate mindfulness into a program. One caveat is that it is generally suggested that those who teach mindfulness also practice it.

Future Research

This was the first empirical study to determine the potential relationships between two aspects of mindfulness and empathy and anxiety in counselor trainees. Further studies are needed to corroborate these findings. In particular, the measures used assessed the study variables as general dispositions rather than counseling specific situational phenomena. A study in which mindful awareness and compassion are related to empathy

and anxiety using counseling specific measures would offer further support for the inclusion of mindfulness based training in counselor education. In addition, the degree to which mindfulness develops naturally over time, particularly within the counseling context, has not yet been explored. Replicating the current study with both counselor trainees and more experienced counselors at different post education experience levels may offer some insight regarding the developmental nature of mindfulness. If mindfulness develops over time, then studies would be needed to determine if mindfulness training would enhance this process. Related, as the current study involved a cross-sectional design, longitudinal studies that include measures of mindfulness, empathy, and anxiety over the duration of the training program would add useful information.

Another area for future study is related to the nature of the relationship between self and other-compassion. Findings from this study did not coincide with existing literature in terms of the predictive relationship between self-compassion and anxiety. Although self and other-compassion were related in this study, it is unclear whether compassion for others moderates the relationship between self-compassion and anxiety such that other-compassion emerged as the stronger predictor. Further studies testing this path would offer insight regarding these relationships and provide clarity to discrepancies between findings. Additionally, because both wings of mindfulness proved to be relevant to empathy in this study, future mindfulness oriented studies should include a compassion measure as part of measuring the construct, particularly an instrument(s) that measures both self and other-compassion as they appeared to differentially relate to empathy in this

study. Some researchers have proposed that compassion may be an outcome of mindful awareness as opposed to an essential aspect of mindfulness (Baer et al., 2006). Although the mechanisms are unclear, the two aspects of mindfulness have been shown to work together in producing positive outcomes (Hollis-Walker & Colosimo, 2011). Studies that assess these relationships, therefore, would further advance mindfulness research in counselor education and in general.

Although findings from this study suggest that the type of meditation exercise or practice may be important to a particular outcome such as increased affective empathy, randomized controlled studies designed to measure specific changes as a result of mindfulness training are needed. Further, the ideal delivery of mindfulness training, such as within supervision or class, and the optimal timing of that delivery are areas for study that would offer important guidance regarding the inclusion of mindfulness training in counselor education.

Further, future studies on the relationship between mindfulness and empathy and anxiety should include alternate forms of measurement. This study relied solely on self-report measures. Because of the inherent limitations of self report data, other measures such as direct observation and client report would be needed to help solidify understanding of these relationships. Client outcome measures would be particularly important in understanding whether enhanced empathy or reduced anxiety as a result of increased mindfulness transfers to the counseling experience.

Finally, because mindfulness training and having a mindfulness practice may impact participants' self-report of mindful awareness and compassion, and empathy and

anxiety, future studies examining the relationships between these variables among those who have training and/or a mindfulness practice and those who do not, may offer additional insight regarding the utility of mindfulness.

Conclusion

This study examined the relationships between mindful awareness and compassion and empathy and anxiety among counselor trainees. Additionally, the study addressed whether mindful compassion augments mindful awareness in predicting these counselor training variables. A total of 131 participants from 9 schools participated in the study. Data were analyzed using correlations and multiple regression analyses. Results from these analyses supported the hypotheses that mindful awareness and compassion have a significant relationship with empathy and anxiety and that mindful compassion augments mindful awareness for both aspects of empathy. These findings suggest that mindfulness based training may be useful to counselor educators in the cultivation of empathy and mitigation of anxiety. Additionally, both mindful awareness and compassion differentially contributed to counselor empathy and anxiety, suggesting that specific types of mindfulness training may be needed to adequately address different training variables. Based on the findings in this study, mindful awareness training may be useful in developing perspective taking and reducing anxiety, while compassion practices focused on others may be useful for engendering empathic concern. Specifically, the mindfulness activities that enhance the counselor trainee's ability to describe experience, act with awareness, and maintain a non-judgmental stance could be useful in reducing anxiety, while mindfulness activities that emphasize their ability to also minimize

reactivity in sessions and have compassion for others may additionally enhance their ability to take the client's perspective and experience empathic concern. Although not specifically addressed in this study, findings may support extant literature that proposes that mindfulness may help a counselor to enhance the therapeutic relationship by increasing one's ability to maintain empathy and compassion for clients while also managing stress and anxiety, reducing burnout, and improving well-being.

The current study supports further inquiry into the relationships between mindful awareness and compassion and empathy and anxiety. In particular, exploring these variables more thoroughly within the counseling context and related to client outcomes and employing diverse data collection methods will further inform educators and counselors as to how mindfulness training can be used to improve counselor training and performance, client outcomes, and counselor wellness.

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APPENDIX A
INSTRUMENTS

Demographic Questionnaire

Five-Factor Mindfulness Questionnaire (FFMQ)

Interpersonal Reactivity Index (IRI)

Self-Other Four Immeasurables (SOFI)

Trimodal Anxiety Questionnaire (TAQ)

Marlowe-Crowne Social Desirability Scale (MCSDS) – Used only in pilot study

Demographic Questionnaire

Directions: Please circle, "x," or write in the appropriate information for each question. The information collected on this questionnaire is for data analysis purposes only. Your responses will in no way be used to identify you as an individual.

Age: _____

Highest Degree Program: Master's Specialist Doctorate

Field Experience *Completed* (please circle all that apply): Practicum Internship

Other (please explain):

Prior Counseling Related Experience: Yes _____ No _____

If Yes, please describe duration and type of activity:

Number of credit hours *completed* in your program to date: _____

Program Track(s): _____ (e.g. School Counseling, Clinical Mental Health, Couples and Family, Higher Education)

Sex: _____ Male _____ Female

Ethnicity:

_____ African American/Black

_____ Asian or Pacific Islander

_____ Caucasian/White

_____ Hispanic/Latino/a

_____ Native American/American Indian

_____ Biracial/Multiracial

_____ Other, Please specify: _____

Do you engage in practices that help develop compassion toward yourself and others?

Yes _____ No _____

If yes, please specify the type of practice and frequency of your practice:

Do you engage in practices that help reduce stress? Yes _____ No _____

If yes, please specify the type of practice and frequency of your practice:

Does your counseling program include mindfulness training? Yes _____ No _____

If yes, please describe:

Do you engage in any form of meditative practice (e.g., meditation, yoga, Qigong, Tai Chi)?

Yes _____ No _____

If yes, please specify the type of practice and frequency of your practice:

The following statements inquire about your experiences as a counselor. For each item, indicate how well it describes you by choosing the appropriate number using the scale provided. Please fill in the number in the space to the left of each item. Read each item carefully and respond as honestly as you can.

Does *not* describe
me well

1

2

3

4

Describes
me well

5

- _____ 1. When I am with a client, I readily observe what is happening in the session as it is happening.
- _____ 2. When discussing cases with my supervisor I am able to describe my thoughts and feelings.
- _____ 3. I am easily distracted and my mind wanders when I am with clients.
- _____ 4. When I have strong feelings or negative thoughts in sessions, I am able to quickly calm myself.
- _____ 5. I tend to be critical of myself during sessions or when I review them later.
- _____ 6. I have trouble viewing some clients with compassion.
- _____ 7. I feel concern for my clients and can readily see things from their perspective.
- _____ 8. I feel worried and nervous when I am with a client.
- _____ 9. I sometimes feel my heart rate quicken or my palms get sweaty when I meet a client.
- _____ 10. I find it hard to be accepting and kind to myself when a session isn't going well.
- _____ 11. It is uncomfortable for me to walk into a first session with a client and start a conversation.

FFMQ

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.
- _____ 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.

FFMQ—Continued

- _____ 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.

IRI

Directions: The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate letter on the scale at the top of the page: A, B, C, D, or E. When you have decided on your answer, fill in the letter on the answer sheet to the left of the item number. Read each item carefully and respond as honestly as you can.

ANSWER SCALE:

A	B	C	D	E
DOES NOT DESCRIBE ME WELL				DESCRIBES ME VERY WELL

- _____ 1. I daydream and fantasize, with some regularity, about things that might happen to me.
- _____ 2. I often have tender, concerned feelings for people less fortunate than me.
- _____ 3. I sometimes find it difficult to see things from the “other guy’s” point of view.
- _____ 4. Sometimes I don’t feel very sorry for other people when they are having problems.
- _____ 5. I really get involved with the feelings of the characters in a novel.
- _____ 6. In emergency situations, I feel apprehensive and ill-at-ease.
- _____ 7. I am usually objective when I watch a movie or play, and I don’t often get completely caught up in it.
- _____ 8. I try to look at everybody’s side of a disagreement before I make a decision.
- _____ 9. When I see someone being taken advantage of, I feel kind of protective towards them.
- _____ 10. I sometimes feel helpless when I am in the middle of a very emotional situation.
- _____ 11. I sometimes try to understand my friends better by imagining how things look from their perspective.
- _____ 12. Becoming extremely involved in a good book or movie is somewhat rare for me.
- _____ 13. When I see someone get hurt, I tend to remain calm.
- _____ 14. Other people’s misfortunes do not usually disturb me a great deal.
- _____ 15. If I’m sure I’m right about something, I don’t waste much time listening to other people’s arguments.
- _____ 16. After seeing a play or movie, I have felt as though I were one of the characters.
- _____ 17. Being in a tense emotional situation scares me.
- _____ 18. When I see someone being treated unfairly, I sometimes don’t feel very much pity for them.
- _____ 19. I am usually pretty effective in dealing with emergencies.
- _____ 20. I am often quite touched by things that I see happen.

IRI—Continued

- _____ 21. I believe that there are two sides to every question and try to look at them both.
- _____ 22. I would describe myself as a pretty soft-hearted person.
- _____ 23. When I watch a good movie, I can very easily put myself in the place of a leading character.
- _____ 24. I tend to lose control during emergencies.
- _____ 25. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.
- _____ 26. When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.
- _____ 27. When I see someone who badly needs help in an emergency, I go to pieces.
- _____ 28. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

SOFI

This scale consists of a number of words that describe different thoughts, feelings, and behaviors. Read each item and then circle the appropriate answer next to that word to indicate to what extent you have thought, felt, or acted this way toward yourself and others during the *past month*.

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Friendly—toward myself	1	2	3	4	5
Friendly—toward others	1	2	3	4	5
Hateful—toward myself	1	2	3	4	5
Hateful—toward others	1	2	3	4	5
Angry—with myself	1	2	3	4	5
Angry—with others	1	2	3	4	5
Joyful—for myself	1	2	3	4	5
Joyful—for others	1	2	3	4	5
Accepting—toward myself	1	2	3	4	5
Accepting—toward others	1	2	3	4	5
Cruel—toward myself	1	2	3	4	5
Cruel—toward others	1	2	3	4	5
Compassionate—toward myself	1	2	3	4	5
Compassionate—toward others	1	2	3	4	5
Mean—toward myself	1	2	3	4	5
Mean—toward others	1	2	3	4	5

TAQ

Please read each item and circle the number to the right that indicates how often you experience it (0 = you never have this experience, and 8 = you experience it extremely often)

	0 = Never	←————→	8 = Extremely Often						
I can't catch my breath	0	1	2	3	4	5	6	7	8
I breathe rapidly	0	1	2	3	4	5	6	7	8
I feel dizzy	0	1	2	3	4	5	6	7	8
I experience chest pains	0	1	2	3	4	5	6	7	8
My arms or legs feel weak	0	1	2	3	4	5	6	7	8
My stomach hurts	0	1	2	3	4	5	6	7	8
I experience muscular aches and pains	0	1	2	3	4	5	6	7	8
My muscles twitch or jump	0	1	2	3	4	5	6	7	8
My arms or legs feel stiff	0	1	2	3	4	5	6	7	8
I have difficulty in swallowing	0	1	2	3	4	5	6	7	8
My limbs tremble	0	1	2	3	4	5	6	7	8
I feel numbness in my face, limbs, or tongue	0	1	2	3	4	5	6	7	8
My neck feels tight	0	1	2	3	4	5	6	7	8
My heart pounds	0	1	2	3	4	5	6	7	8
I experience a tingling sensation somewhere in my body	0	1	2	3	4	5	6	7	8
My throat gets dry	0	1	2	3	4	5	6	7	8
I try to avoid social gatherings	0	1	2	3	4	5	6	7	8

TAQ—Continued

	0 = Never ←————→ 8 = Extremely Often								
	0	1	2	3	4	5	6	7	8
I avoid going into a room by myself where people are already gathered and talking	0	1	2	3	4	5	6	7	8
I try to avoid starting conversations	0	1	2	3	4	5	6	7	8
I pass by school friends, or people I know but have not seen for a long time, unless they speak to me first	0	1	2	3	4	5	6	7	8
I avoid talking to people in authority (my boss, policemen)	0	1	2	3	4	5	6	7	8
I prefer to avoid making specific plans for self-improvement	0	1	2	3	4	5	6	7	8
I find myself staying home rather than involving myself in activities outside	0	1	2	3	4	5	6	7	8
I try to avoid challenging jobs	0	1	2	3	4	5	6	7	8
I can't get some thought out of my mind	0	1	2	3	4	5	6	7	8
I can't get some picture or images out of my mind	0	1	2	3	4	5	6	7	8
I picture some future misfortune	0	1	2	3	4	5	6	7	8
I think about possible misfortunes to my loved ones	0	1	2	3	4	5	6	7	8
I have an uneasy feeling	0	1	2	3	4	5	6	7	8
I am concerned that others might not think well of me	0	1	2	3	4	5	6	7	8

MCSDS

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. Mark “T” for true and “F” for false in the space to the left of each item.

- ___ 1. Before voting I thoroughly investigate the qualifications of all the candidates.
- ___ 2. I never hesitate to go out of my way to help someone in trouble.
- ___ 3. It is sometimes hard for me to go on with my work if I am not encouraged.
- ___ 4. I have never intensely disliked anyone.
- ___ 5. On occasion I have had doubts about my ability to succeed in life.
- ___ 6. I sometimes feel resentful when I don't get my way.
- ___ 7. I am always careful about my manner of dress.
- ___ 8. My table manners at home are as good as when I eat out in a restaurant.
- ___ 9. If I could get into a movie without paying and be sure I was not seen I would probably do it.
- ___ 10. On a few occasions, I have given up doing something because I thought too little of my ability.
- ___ 11. I like to gossip at times.
- ___ 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.
- ___ 13. No matter who I'm talking to, I'm always a good listener.
- ___ 14. I can remember “playing sick” to get out of something.
- ___ 15. There have been occasions when I took advantage of someone.
- ___ 16. I'm always willing to admit it when I make a mistake.
- ___ 17. I always try to practice what I preach.
- ___ 18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.
- ___ 19. I sometimes try to get even rather than forgive and forget.
- ___ 20. When I don't know something I don't at all mind admitting it.
- ___ 21. I am always courteous, even to people who are disagreeable.
- ___ 22. At times I have really insisted on having things my own way.
- ___ 23. There have been occasions when I felt like smashing things.

MCSDS—Continued

- ___24. I would never think of letting someone else be punished for my wrongdoings.
- ___25. I never resent being asked to return a favor.
- ___26. I have never been irked when people expressed ideas very different from my own.
- ___27. I never make a long trip without checking the safety of my car.
- ___28. There have been times when I was quite jealous of the good fortune of others.
- ___29. I have almost never felt the urge to tell someone off.
- ___30. I am sometimes irritated by people who ask favors of me.
- ___31. I have never felt that I was punished without cause.
- ___32. I sometimes think when people have a misfortune they only got what they deserved.
- ___33. I have never deliberately said something that hurt someone's feelings.

APPENDIX B

ADMINISTRATION INSTRUCTIONS

Thank you for agreeing to distribute these assessments to your students. Please review the following instructions:

- Population: Distribute assessments to master's-level students who have completed *at least* one semester of field experience (e.g. practicum or internship).
- Time/Location: Please administer these assessments during class if possible. The assessments should take approximately 15-20 minutes to complete. If this is not possible, please distribute and have students return by the next class.
- Informed Consent: Prior to distributing the assessments please obtain informed consent from students. Provide those students who agree to participate with two copies of the consent form. They will sign both copies. They should keep one copy for their records and return the other to you. Please read the following narrative to obtain informed consent:

“The purpose of this study is to examine attributes and attitudes in counselor trainees. It is being conducted by a doctoral student at The University of North Carolina at Greensboro. Results will be used to inform the future development of counselor training programs designed to increase counseling performance. If you choose to participate in this study, you will be asked to complete a packet of assessments and a demographic questionnaire. It should take approximately 15-20 minutes for you to complete. If you choose not to participate, you may use the time to work on class work.”

“Participation is voluntary and is not tied to your grade in this class. I will not be looking at these assessments. The data will be reviewed only by the researcher. The assessments will be sealed in an envelope after you complete them and mailed back to the researcher. All data will be stored in a locked filing cabinet or in a password-protected computer file and will be destroyed after five years. If you choose to participate, I will provide you with two informed consent forms. Please read the form and sign both copies. *Please return one copy back to me.* The second copy is for your records.”

- Collecting assessments: Please have students place informed consents and assessment packets in the enclosed envelope and seal it once all students have finished and turned in materials.
- Returning assessments: Please return the assessments to the researcher by February 20th, 2012.

Thank you for your help with this research project!

APPENDIX C

INFORMED CONSENT

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
CONSENT TO ACT AS A HUMAN PARTICIPANT: LONG FORM

Project Title: Attributes and Attitudes of Counselor Trainees

Project Director: Craig S. Cashwell, Ph.D., LPC, NCC, ACS

Participant's Name: _____

DESCRIPTION AND EXPLANATION OF PROCEDURES:

This is a research project. The purpose of this study is to examine attributes of Master's students enrolled in CACREP accredited counseling programs. You are invited to participate because you are a master's-level counseling student with a minimum of one field experience (e.g. practicum or internship). You will be asked to complete a packet of paper and pencil measures which are estimated to take 15-20 minutes.

RISKS AND DISCOMFORTS:

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. However, some questions on the surveys are personal in nature. You are invited to ask questions of the researcher after reading this consent form. Should any of these questions raise personal concerns you would like to discuss further, you can contact your university's counseling center (referral information has been included in this packet). Your participation in this study is entirely voluntary. You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state.

If you have any concerns about your rights or how you are being treated please contact Eric Allen in the Office of Research and Compliance at UNCG toll-free at (855)-251-2351. Questions, concerns or complaints about this project or benefits or risks associated with being in this study can be answered by Craig S. Cashwell by calling (336) 334-3427.

POTENTIAL BENEFITS:

Participation in this study may stimulate dialogue among participants about the stress and challenges associated with counselor training. Additionally, the study will add to the general understanding of the relationships among key counselor attributes and counselor training outcomes. Furthermore, these findings will inform both counselor-education practices and future research.

CONFIDENTIALITY:

All information obtained in this study is strictly confidential unless disclosure is required by law. The information packet will be coded so that no information will be on the survey that identifies you as a participant in this study. The data from your survey will be stored by the student researcher in a locked file cabinet. Initially the locked file will be stored in her on-campus office and moved to her off-campus office after graduation. Electronic data will be stored on the researcher's hard drive and password protected. Data will be kept for 5 years after the data collection is complete. After this time the survey packets will be shredded and any electronically archived data will be deleted from computer systems and flash disks.

Your privacy will be protected because you will not be identified by name as a participant in this project and all completed forms will be kept in a secure place.

CHANGES TO THE STUDY:

If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

WILL I GET PAID FOR BEING IN THE STUDY?

There are no costs to you or payments made for participating in this study, however, you may choose to have your name entered into a drawing for a \$20 Target gift card.

VOLUNTARY CONSENT:

By signing this consent form you are agreeing that you read, or it has been read to you, and you fully understand the contents of this document and are openly willing consent to take part in this study. All of your questions concerning this study have been answered. By signing this form, you are agreeing that you are 18 years of age or older and are agreeing to participate, or have the individual specified above as a participant participate, in this study described to you by your instructor.

Participant Name

Date

APPENDIX D**PILOT STUDY FEEDBACK FORM**

Your thoughts about this research project are appreciated and will be used to improve this study. Please share your experience about the following:

1. How long did it take you to complete all of the instruments?

2. Did you find the length of the questionnaires just right, too long, too short?

3. Which items were unclear to you? Why?

4. Which, if any, instructions were unclear? Why?

5. Which parts of the questionnaires should be changed? Why?

6. What else would you like to comment on with regard to this research?

APPENDIX E
PILOT STUDY RESULTS

Participants in the pilot study included 5 master's-level students in a small counseling course in their final semester of their counseling program. The complete demographic data of the sample are detailed in Table 13.

Table 13
Demographic Data for Pilot Study Sample ($N = 5$)

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	%
Age	5	29.0	7.52	
DEGREE				
Master's/Specialist	5			100.0
Doctoral	0			0.0
Course Hours Completed	5	64.8	5.02	
Mindfulness Training*	5	9.0	.00	
GENDER				
Female	4			80.0
Male	1			20.0
RACE				
Caucasian/White	5			100.0
African American/Black	0			0.0
Hispanic/Latino/a	0			0.0
Native American	0			0.0
Biracial/Multiracial	0			0.0
Other	0			0.0
Mindfulness Practice	1			20.0

* Mindfulness training reported in number of hours

As illustrated in Table 13, the majority of participants were female ($n = 4$, 80.0%), master's or specialist-level students ($n = 5$, 100.0%), and Caucasian ($n = 5$, 100.0%). The mean age was 29 but there was a wide age range ($SD = 7.5$). As all students were in their final semester of their counseling program, they reported having completed approximately 65 hours of study ($M = 64.8$, $SD = 5$). All five study participants reported receiving 9 hours of mindfulness training (6 weekly, 1.5-hour classes) their first semester of their program as they all participated in a research project on mindfulness. Only one participant reported engaging in a regular mindfulness practice.

Each participant completed the survey packet comprised of the FFMQ, IRI, TAQ, SOFI, MCSDS, and demographics questionnaire, totaling 162 items. The mean scores for the sample were 135.8 ($SD = 13.76$) for mindfulness, 85.4 ($SD = 36.8$) for anxiety, 14 ($SD = 2.92$) and 16.2 ($SD = 2.01$) for self and other-compassion, respectively, and 19.40 ($SD = 5.51$) and 20.60 ($SD = 3.05$) for affective and cognitive empathy, respectively. Cronbach's alpha levels for most instruments ranged from .84 to .92 which is above .70, the recommended level for internal consistency for social science research (Heppner & Heppner, 2004). Cronbach's alpha for perspective taking, however, was just below this threshold at .68. Further, two subscales of the FFMQ, observe and non-react, had extremely low alphas, respectively, suggesting that these subscales were particularly sensitive to the small sample size and could not be adequately determined. Alpha levels for all instruments and subscales will be examined prior to answering the research questions for the full study. The complete descriptive statistics of the instruments are provided in Table 14.

Table 14**Descriptive Statistics for Pilot Study Instruments ($N = 5$)**

Measure	<i>M</i>	<i>SD</i>	α	# Items
FFMQ Total	135.8	13.8	.88	39
FFMQ Observe	27.8	1.9	.06*	8
FFMQ Describe	27.8	4.7	.84	8
FFMQ Act Awareness	25.2	8.2	.88	8
FFMQ Non-judge	33.6	4.3	.85	8
FFMQ Non-react	21.4	0.6	-5.4*	7
IRI - Empathic Concern	19.4	5.5	.84	7
IRI - Perspective Taking	20.6	3.1	.68	7
SOFI - Positive Self	14.0	2.9	.92	4
SOFI - Positive Others	16.2	2.0	.35*	4
TAQ - Total	85.4	36.8	.91	36
MCSDS	9.8	5.7	.90	33

* Cronbach's alphas likely impacted by small sample size

The first research hypothesis, that awareness and compassion would have a significant positive relationship with both cognitive and affective empathy, and a significant negative relationship with anxiety, was addressed using a Pearson Product-Moment Correlation Coefficient. The full results of the analysis are reported in Table 15. There was a significant correlation between mindful awareness and cognitive empathy ($r = -.90, p < .05$), although not in the expected direction. Although mindful awareness has a strong, negative correlation with anxiety ($r = -.58$), it is not significant due to the small sample size. Similarly, compassion for self and other had moderate to strong correlations with anxiety ($r = .46$ and $r = .83$, respectively), although not significant and not in the

expected direction, likely due to the small sample size. All other correlations were not significant at the $p < .05$ level.

Table 15

Pearson Product-Moment Correlation Coefficients for Pilot Study Variables ($N = 5$)

Variable	Overall Mindfulness	Affective Empathy	Cognitive Empathy	Comp. for Self	Comp. for Others	Anxiety	Social Desirability
Overall Mindfulness	-	-.29	-.90*	-.57	-.41	-.58	-.26
Affective Empathy		-	.62	-.14	-.47	-.60	.19
Cognitive Empathy			-	.31	.22	.23	.21
Compassion for Self				-	-.08	.46	.83
Compassion for Others					-	.83	-.59
Anxiety						-	-.10
Social Desirability							-

* No variables significant at $p < .05$ (2-tailed)

The second research question had three hypotheses: that a statistically significant proportion of the variance in (a) affective empathy, (b) cognitive empathy, and (c) anxiety can be accounted for by awareness and compassion. These hypotheses were addressed using multiple regression analyses, the full results of which can be found in Tables 16, 17, and 18, respectively. Awareness and Compassion together did not significantly predict affective empathy ($R^2 = .99$, $F = 34.55$, $p > .05$), cognitive empathy ($R^2 = .95$, $F = 5.8$, $p > .05$), or anxiety ($R^2 = .99$, $F = 46.33$, $p > .05$). The insignificant, but

high proportion of variance in affective empathy, cognitive empathy, and anxiety explained by mindful awareness and compassion likely is an artifact of small sample size.

Table 16**Awareness and Compassion as Predictors of Affective Empathy**

Variable	β	<i>SE</i>	<i>t</i>
Mindful Awareness	-1.25	.06	-8.76
Self-Compassion	-.94	.25	-7.2
Other Compassion	-1.06	.32	-9.0

Note: $R^2 = .97$; No variables significant at $p < .05$

Table 17**Awareness and Compassion as Predictors of Cognitive Empathy**

Variable	β	<i>SE</i>	<i>t</i>
Mindful Awareness	-1.30	.08	-3.82
Self-Compassion	-.46	.33	-1.46
Other Compassion	-.35	.42	-1.24

$R^2 = .95$; No variables significant at $p < .05$

Table 18**Awareness and Compassion as Predictors of Anxiety**

Variable	β	<i>SE</i>	<i>t</i>
Mindful Awareness	.17	.33	1.36
Self-Compassion	.64	1.43	5.63
Other Compassion	.96	1.83	9.39

$R^2 = .99$; No variables significant at $p < .05$

The third research question also had three hypotheses, that the five facets of mindful awareness and two facets of mindful compassion would account for a statistically significant proportion of the variance in affective empathy, cognitive empathy, and anxiety, respectively. However, there was an inadequate sample size to obtain results at the facet level.

The final hypotheses that the addition of mindful compassion would result in a statistically significant increase in the amount of variance explained in affective empathy, cognitive empathy, and anxiety, respectively, beyond the variance accounted for by mindful awareness alone, was addressed using multiple regression analyses (Tables 19, 20, and 21, respectively). Although none of the results are statistically significant at the $p < .05$ level, observable differences in R -squared and the F -statistic signaled that compassion may augment mindful awareness in explaining *affective* empathy (mindfulness alone; $R^2 = .08$, $F = .27$, $p > .05$; mindful awareness and compassion; $R^2 = .99$, $F = 34.6$, $p > .05$) (see Table 19). Because the sample size is small, however, these results should be interpreted with caution.

Table 19

Compassion Augments Mindful Awareness in Predicting Affective Empathy

Variable	β	SE	t
Mindful Awareness Only Model*	-.29	.22	-.52
Mindful Awareness**	-1.25	.06	-8.76
Self Compassion**	-.94	.25	-7.2
Other Compassion**	-1.06	.32	-9.0

* Mindful awareness modeled independently; ** Mindful awareness and compassion variables modeled together; No variables significant at $p < .05$

Similarly, compassion may augment mindful awareness in explaining *cognitive* empathy, although results are mixed. In this case, the *R*-squared is greater for the model comprised of both compassion and mindful awareness (mindful awareness alone; $R^2 = .80$, $F = 12.27$, $p < .05$; mindful awareness and compassion; $R^2 = .95$, $F = 5.81$, $p > .05$) (Table 20). Further, the *F*-statistic is greater and statistically significant for mindful awareness alone. Although compassion may augment mindful awareness for both cognitive and affective empathy, these findings may suggest that mindful awareness alone is a better predictor of *cognitive* empathy. Although the results are based on a small sample size, there is some promise for examining these variables within the full study.

Table 20

Compassion Augments Mindful Awareness in Predicting Cognitive Empathy

Variable	β	<i>SE</i>	<i>t</i>
Mindful Awareness Only Model*	-.90	.06	-3.5***
Mindful Awareness**	-1.3	.08	-3.82
Self Compassion**	-.46	.33	-1.46
Other Compassion**	-.35	.42	-1.24

*Mindful awareness modeled independently; **Mindful awareness and compassion variables modeled together; ***significant at $p < .05$

Finally, compassion may also augment mindfulness in explaining *anxiety* (mindfulness alone; $R^2 = .34$, $F = 1.53$, $p > .05$; mindfulness and compassion; $R^2 = .99$, $F = 46.3$, $p > .05$) (Table 21), although results are not significant and the sample size is small.

Table 21**Compassion Augments Mindful Awareness in Predicting Anxiety**

Variable	β	<i>SE</i>	<i>t</i>
Mindful Awareness Only Model*	-.58	1.26	-1.24
Mindful Awareness**	.17	.33	1.36
Self-Compassion**	.64	1.43	5.63
Other Compassion**	-.96	1.83	9.39

* Mindful awareness modeled independently; ** Mindful awareness and compassion variables modeled together; No variables were significant at $p < .05$

APPENDIX F
INSTRUMENT PERMISSION LETTERS

TAQ:

To: lehrer@umdnj.edu

Dr. Lehrer,

I am writing to request permission to use the Trimodal Anxiety Questionnaire for my dissertation in which I will examine the relationships between mindfulness and empathy and anxiety among counselors-in-training. Please advise me if I have your permission and if there are any costs associated with using the measure.

Thank you,

Cheryl L. Fulton

Cheryl Fulton, Ed.S., MBA, NCC
Doctoral Student
Department of Counseling and Educational Development
The University of North Carolina at Greensboro
clfulton@uncg.edu
336.501.0444

On Fri, Aug 26, 2011 at 9:58 AM, Paul Lehrer <lehrer@umdnj.edu> wrote:

Certainly. Please send results when you get them.

Paul Lehrer, PhD
Professor of Psychiatry
UMDNJ Robert Wood Johnson Medical School
671 Hoes Lane
Piscataway, NJ 08854 USA
Tel: [+1-732-235-4413](tel:+1-732-235-4413)
Fax: [+1-732-235-4430](tel:+1-732-235-4430)

FFMQ:

To: rbaer@email.uky.edu

Dr. Baer,

I am writing to request permission to use the Five Facet Mindfulness Questionnaire for my dissertation in which I will examine the relationships between mindfulness and empathy and anxiety among counselors-in-training. Thank you in advance for considering my request and for your work in this area of research.

Sincerely,

Cheryl L. Fulton

 Cheryl Fulton, Ed.S., MBA, NCC
 Doctoral Student
 Department of Counseling and Educational Development
 The University of North Carolina at Greensboro
clfulton@uncg.edu
 336.501.0444

On Sun, Aug 28, 2011 at 8:25 PM, Ruth Baer <rbaer@email.uky.edu> wrote:

Dear Cheryl,

That would be fine - permission is not required. Good luck with your project!

Ruth Baer

Ruth A. Baer, PhD
 Professor of Psychology

Dept of Psychology
 115 Kastle Hall
 University of Kentucky
 Lexington, KY
 40506-0044
 phone: [859-257-6841](tel:859-257-6841)
 fax: [859-323-1979](tel:859-323-1979)
 email: rbaer@email.uky.edu

IRI:

To: davismh@eckerd.edu

Dr. Davis,

I am writing to request permission to use the Interpersonal Reactivity Index for my dissertation in which I will examine the relationships between mindfulness and empathy

and anxiety among counselors-in-training. Please advise me if I have your permission and if there are any costs associated with using the measure.

Thank you,

Cheryl L. Fulton

Cheryl Fulton, Ed.S., MBA, NCC
Doctoral Student
Department of Counseling and Educational Development
The University of North Carolina at Greensboro
clfulton@uncg.edu
336.501.0444

On Fri, Aug 26, 2011 at 11:00 AM, Mark Davis <davismh@eckerd.edu> wrote:

Dear Cheryl:

Thanks for your interest in the IRI. You have my full permission to use the instrument in your dissertation, and to reproduce it in any way necessary for that purpose. I am attaching a few items that you may find useful. Please let me know if I can be of any further assistance, and best of luck with your dissertation!

Regards,

Mark

SOFI:

To: Kraus_s@fortlewis.edu

Dr. Kraus,

I am writing to request permission to use the Self-Other Four Immeasurables for my dissertation in which I will examine the relationships between the awareness and compassion wings of mindfulness and empathy and anxiety among counselors-in-training. Additionally, I would like to request your permission to adjust the item prompter from “during the last week” to “what is generally true for you” so that I may capture a trait vs. state. Thank you for your consideration and for your important contribution to the mindfulness literature.

Sincerely,

Cheryl L. Fulton

Cheryl Fulton, Ed.S., MBA, NCC
Doctoral Student
Department of Counseling and Educational Development
The University of North Carolina at Greensboro
clfulton@uncg.edu
336.501.0444

On Fri, Aug 26, 2011 at 8:20 PM, Susan Kraus <kraus_s@fortlewis.edu > wrote:

Cheryl, I am very happy that you would like to use SOFI in your research, and look forward seeing your findings. Your project seems perfect for SOFI, and we have modified the scale as needed for other projects, so that is no problem. Please send me a copy of your findings when you complete your work, so I can see what you did and what you found- you sound like someone whose career I'll need to watch!

Sue

APPENDIX G
LETTERS OF SUPPORT

From: Kerrie Kardatzke KKardatzke@siu.edu
To: clfulton@uncg.edu
Date: Friday Sep 30, 2011 at 10:00pm
Subject: Dissertation Data Collection

UNCG Institutional Review Board
Office of Research Compliance
203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the study entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I would be happy to support Ms. Fulton and Dr. Cashwell in their research efforts by distributing the survey packet to students in the Counselor Education Program at Southern Illinois University Carbondale. I agree to follow the data collection procedures provided to me. Please let me know if I can be of further assistance.

Sincerely,

Kerrie N. Kardatzke, Ph.D., LPC, NCC, ACS
Assistant Professor
Marriage, Couple, and Family Track Coordinator
Department of Educational Psychology and Special Education
Southern Illinois University Carbondale
223-S Wham Education Building
Carbondale, Illinois 62901
[618 453-6919](tel:6184536919)(office)
[618 453-7110](tel:6184537110) (fax)

From: Spurgeon, Shawn Lamont sspurgeo@utk.edu
To: clfulton@uncg.edu
Date: Wed, Oct 12, 2011 at 1:29pm
Subject: CED faculty help

UNCG Institutional Review Board
Office of Research Compliance

203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Sincerely,
Dr. Spurgeon

Shawn L. Spurgeon, PhD, LPC-MHSP, ACS
Assistant Professor, Mental Health Counseling program
Department of Educational Psychology and Counseling
The University of Tennessee at Knoxville
442 Claxton Complex
1122 Volunteer Boulevard
Knoxville, TN 37996
[\(865\) 974-4181](tel:(865)974-4181)
sspurgeo@utk.edu

From: Clarke, Philip clarkepb@wfu.edu
To: clfulton@uncg.edu
Date: Tue, Oct 4, 2011 at 12:21am
Subject: Philip Clarke Letter of Support

UNCG Institutional Review Board
Office of Research Compliance
203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and

believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Sincerely,

Philip Clarke, MS/EdS, NCC, LPC
Department of Counseling
Wake Forrest University

From: Welfare, Laura welfare@vt.edu

To: clfulton@uncg.edu

Date: Mon, Oct 3, 2011 at 9:34 AM

Subject: Dissertation Research

UNCG Institutional Review Board
Office of Research Compliance
203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Sincerely,

Laura Welfare

Laura E. Welfare, PhD, LPC, ACS
Assistant Professor of Counselor Education
Virginia Tech
309 East Eggleston Hall (0302)
Blacksburg, VA 24061
[\(540\) 819-7551](tel:(540)819-7551)
welfare@vt.edu

From: Sejal Mehta Sejal.Mehta@ucf.edu

To: clfulton@uncg.edu

Date: Sun, Oct 2, 2011 at 8:37 PM
Subject: RE: Reaching out to UNCG alumni

UNCG Institutional Review Board
Office of Research Compliance
203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Sincerely,

Sejal Mehta, Ph.D.
Assistant Professor
Department of Educational and Human Sciences
University of Central Florida

From: Tammy Cashwell thcashwe@gmail.com

To: clfulton@uncg.edu

Date: Thu, Oct 6, 2011 at 4:07 PM

Subject: support for dissertation

UNCG Institutional Review Board
Office of Research Compliance
203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Sincerely,

Tammy H. Cashwell, Ph.D., L.P.C, N.C.C.
Faculty
Department of Counseling and Educational Development
University of North Carolina at Greensboro

From: Fernando, Delini Delini.Fernando@unt.edu

To: clfulton@uncg.edu

Date: Wed, Oct 12, 2011 at 6:04 PM

Subject: IRB

UNCG Institutional Review Board
Office of Research Compliance
203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Delini M. Fernando, Ph.D., LPC-S, NCC
Assistant Professor, Coordinator, Counseling Internship
Dept. of Counseling & Higher Education
University of North Texas

From: Culbreth, Jack JRCulbreth@uncc.edu

To: clfulton@uncg.edu

Date: Thu, Oct 13, 2011 at 3:27 PM

Subject: IRB

UNCG Institutional Review Board
Office of Research Compliance
203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Sincerely,

John R. Culbreth, Ph.D.
Professor|Doctoral Program Coordinator
Department of Counseling|University of North Carolina at Charlotte
9201 University City Blvd.|Charlotte, NC 28223
704-687-8973|<http://education.uncc.edu/counseling>

From: Graves, Elizabeth graveseg@appstate.edu
To: clfulton@uncg.edu
Date: Fri, Oct 14, 2011 at 10:38 AM
Subject: IRB Letter of Support

UNCG Institutional Review Board
Office of Research Compliance
203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Sincerely,

Elizabeth Graves, MA Ed, NCC, NCSC, NCLPSC, LPC-S, ACS
Human Development and Psychological Counseling Dept
Appalachian State University
RCOE Building #314A
Boone, NC 28608
828-262-8376

From: Sylvia Nassar-McMillan snassar@ncsu.edu
To: clfulton@uncg.edu
Date: Sun, Feb 12, 2012 at 8:04 PM
Subject: CED faculty help

UNCG Institutional Review Board
Office of Research Compliance
203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Sincerely,

Sylvia Nassar-McMillan, Ph.D.
Professor
Department of Curriculum, Instruction and Counselor Education
North Carolina State University

UNCG Institutional Review Board
Office of Research Compliance
203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindful Awareness

and Compassion, Empathy and Anxiety in Counselor Trainees” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Sincerely,

Dr. Marty Slyter

Marty Slyter, Ph.D., L.M.H.C., N.C.C., E.S.A.
 Program Director Counselor Education
 Coordinator of School Counseling Program
 Assistant Professor, Eastern Washington University
 (509) 359-7439
 mslyter@ewu.edu

From: Clemens, Elysia Elysia.Clemens@unco.edu
 To: clfulton@uncg.edu
 Date: Wed, Jan 4, 2012 at 11:02 PM
 Subject: CED Faculty Help

UNCG Institutional Review Board
 Office of Research Compliance
 203 Foust Building

Dear Colleagues,

I am writing to inform you of my support for the Protocol entitled “Mindfulness and Counselor Trainee Empathy and Anxiety” which will be directed by Dr. Craig S. Cashwell and conducted by Cheryl L. Fulton.

I support the research proposed by Dr. Craig S. Cashwell. I agree with all procedures and believe that the data obtained will be beneficial.

This research will provide Dr. Cashwell, Counseling and Educational Development with important evaluative information which can be used for continuous program improvement.

Sincerely,
Elysia Clemens, Ph.D.
Assistant Professor
Department of Counselor Education and Supervision
University of Northern Colorado
248 McKee Hall
elysia.clemens@unco.edu
970.351.3044

APPENDIX H**IRB APPROVAL**

IRB irbcorre@uncg.edu to cscashwe@uncg.edu, clfulton@uncg.edu
Fri, Oct 28, 2011 at 5:56 AM

To: Craig Cashwell
Counsel and Ed Development
215 Ferguson Building

From: UNCG IRB

Authorized signature on behalf of IRB

Approval Date: 10/25/2011
Expiration Date of Approval: 10/23/2012

RE: Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)
Submission Type: Initial
Expedited Category: 7.Surveys/interviews/focus groups
Study #: 11-0358 Study Title: Mindfulness and & Counselor Trainee Empathy and Anxiety

This submission has been approved by the IRB for the period indicated. It has been determined that the risk involved in this research is no more than minimal.

Study Description:

The purpose of this study is to address a gap in the counselor education literature by examining the relationships between the compassion and awareness wings of mindfulness and anxiety and empathy among counselors-in-training.

Investigator's Responsibilities

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator's responsibility to submit for renewal and obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study on the expiration date.

Signed letters, along with stamped copies of consent forms and other recruitment materials will be scanned to you in a separate email. These consent forms must be used unless the IRB has given you approval to waive this requirement.

You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented (use the modification application available at <http://www.uncg.edu/orc/irb.htm>). Should any adverse event or unanticipated problem involving risks to subjects or others occur it must be reported immediately to the IRB using the "Unanticipated Problem/Event" form at the same website.

CC: Cheryl Fulton, Counsel and Ed Development, (ORC), Non-IRB Review Contact



OFFICE OF RESEARCH COMPLIANCE
 2718 Beverly Cooper Moore and Irene Mitchell Moore
 Humanities and Research Administration Bldg.
 PO Box 26170
 Greensboro, NC 27402-6170
 336.256.1482
 Web site: www.uncg.edu/orc
 Federalwide Assurance (FWA) #216

To: Craig Cashwell
 Counsel And Ed Development
 215 Ferguson Building

From: UNCG IRB

Authorized signature on behalf of IRB

Approval Date: 1/18/2012
Expiration Date of Approval: 10/23/2012

RE: Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)
Submission Type: Modification
Expedited Category: Minor Change to Previously Reviewed Research
Study #: 11-0358

Study Title: Mindfulness and & Counselor Trainee Empathy and Anxiety

This submission has been approved by the above IRB for the period indicated. It has been determined that the risk involved in this modification is no more than minimal.

Submission Description:

This modification, dated 1/18/12, addresses the following:

- Change project title to "Mindful Awareness and Compassion, Empathy and Anxiety in Counselor Trainees"
- Change in project title in consent form and changes in wording of study description in consent form.
- Change completion time from 30 to 15-20 minutes.
- Changes to demographic questionnaire.
- Addition of 4 new research sites.

Investigator's Responsibilities

Signed letters, along with stamped copies of consent forms and other recruitment materials will be scanned to you in a separate email. These consent forms must be used unless the IRB has given you approval to waive this requirement.

CC:
 Cheryl Fulton, Counsel And Ed Development
 ORC, (ORC), Non-IRB Review Contact