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The number of counseling positions in the United States is expected to grow at least 27% by the year 2014. Counselor educators are ethically charged with ensuring that these new counselors are well-prepared to handle the challenges of the profession. This requires attention to both specific skill training and the cultivation of confidence in those skills – counseling self-efficacy. The key skills for effective counseling include the ability to strategically control attention and genuinely empathize with the client. Current counselor education methods are effective in teaching discrete behavioral manifestations of these skills. Counselor educators have little guidance from the literature, however, on how to prepare students in the *habits of mind* and *ways of being* necessary for sustained attention and empathic understanding. A number of theorists have suggested that mindfulness training may be an important tool for bridging this gap.

In this study, a path model was examined that hypothesized a relationship between mindfulness and counseling self-efficacy mediated by attention and empathy. A total of 179 master's level counseling interns and doctoral counseling students were surveyed to determine their levels of mindfulness, attention, empathy, and counseling self-efficacy using the Five-Factor Mindfulness Questionnaire, the Counseling Attention Scale, the Everyday Attention Questionnaire, the Interpersonal Reactivity Index, and the Counseling Activity Self-Efficacy Scales.

Pearson Product Moment Coefficients revealed significant pairwise relationships among the four variables of interest. A MANOVA found that doctoral students scored

significantly higher than master's students on measures of mindfulness, attention, and counseling self-efficacy. An ANOVA found that females had higher mean scores of empathy than males. A path analysis supported the hypotheses that mindfulness is a significant predictor of counseling self-efficacy and that attention is a mediator of that relationship. The results indicated that empathy, however, was not a mediator of this relationship and that it did not significantly predict counseling self-efficacy.

The results suggest that mindfulness may be an important variable in the development of key counselor training outcomes. The results have implications for counselor training admissions, counselor education, and counseling practice. Further research using different research methodology is needed to provide more empirical support for these findings.

MINDFULNESS AND COUNSELING SELF-EFFICACY: THE MEDIATING
ROLE OF ATTENTION AND EMPATHY

by

D. Paige Bentley

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Committee Chair

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This dissertation has been approved by the following committee and Faculty of the Graduate School at The University of North Carolina at Greensboro.

Committee Chair _____

Committee Members _____

Date of Acceptance by Committee

Date of Final Oral Examination

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CHAPTER I

INTRODUCTION

The counseling profession represents a growing discipline in the mental-health field. The number of counseling positions in the United States has grown from 175,000 in 1996 to more than 601,000 positions in 2004, and, by the year 2014, the number of new counseling positions is expected to have grown by 27% or more, a rate that is faster than the national average for all occupations (U.S. Department of Labor Bureau of Labor Statistics, 1998, 2006). Further, according to the National Board for Certified Counselors (K. McCaskill, personal communication, July 26, 2006), 4,200 individuals registered to take the National Counselor Examination in 2005. Clearly, the counseling profession is strong and growing.

Because counselors play a crucial role in helping individuals deal with a vast array of mental health and developmental issues, it is critically important that they are well prepared upon entering the profession to work effectively with clients and provide quality services. Not only must counselors be proficient in assessing client needs and developing appropriate treatment plans, they also must be skillful in implementing those plans and in demonstrating efficacy of treatment. Counselor educators are ethically charged with ensuring that new counselors in the field are competent to meet these demands (American Counseling Association, 2005).

Much progress has been made over the years in developing empirically validated protocols for treating various mental health issues (Bergin & Garfield, 1994). Despite the

attention paid to designing these treatments, outcome research suggests that “common factors” (e.g., qualities of the counselor and the counseling relationship) across all treatment modalities are more influential in determining client outcomes than is the specific treatment model (Lambert & Barley, 2001; Luborsky, Rosenthal, Diguier, Andrusyna, Berman, Levitt, Seligman, & Krause, 2002; Wampold, 2001; Watson, 2001). Many researchers and critics of counselor education, however, suggest that training programs do not do enough to develop the “person” of the counselor or the requisite cognitive skills for establishing a therapeutic relationship (Bergin, 1997; Fong, Borders, Ethington, & Pitts, 1997; Fuqua, Johnson, Anderson, & Newman, 1984; Gallagher & Hargie, 1992; Mahoney, 1986; Morran, Kurpius, Brack, & Brack, 1995; Nelson & Neufeldt, 1998; Strupp & Anderson, 1997; Winslade, Monk, & Drewrey, 1997). Together, this suggests that new training approaches may be needed. It is important that researchers in the counseling profession continue to study methods for cultivating those aspects of the counselor that are associated with positive counseling outcomes.

Among the fundamental skills that counselors need in order to establish a therapeutic relationship are the ability to focus attention on the various aspects of the session and the capacity to empathize with the client’s situation (Greenberg, Elliott, Watson, & Bohart, 2001; Lambert & Barley, 2001; Norcross, 2001; Orlinsky, Grawe, & Parks, 1994; Pope & Kline, 1999; Rogers, 1957; Wampold, 2001; Watson, 2001). Accreditation standards require that helping-skills classes “provide an understanding of counseling and consultation processes, including ... counselor and consultant characteristics and behaviors that influence helping processes including age, gender, and

ethnic differences, verbal and nonverbal behaviors and personal characteristics, orientations, and skills” (Council for Accreditation of Counseling and Related Educational Programs, 2001, p. 62). Researchers have found that current counselor education methods are effective in teaching discrete behavioral skills such as reflection of feelings and attending behavior (Baker, Daniels, & Greeley, 1990; Hill & Lent, 2006; Kurtz, Marshall, & Banspach, 1985). Less is known, however, about the development of “internal” (i.e., cognitive) counseling skills. A review of the current counselor education literature suggests that there is little guidance on how to prepare students in the “habits of mind” and “ways of being,” such as attention control and empathic understanding. It appears that a conceptualization of how these essential skills develop is less clear and, as of yet, less researched.

Unfortunately, a self-perceived or actual deficit in the areas of attention control and empathy may lead to lower counseling self-efficacy among counselors-in-training (Al-Darmaki, 2004; Bandura, 1977, 1986a, 1986b; Larson & Daniels, 1998). Low self-efficacy is associated with increased anxiety and a decreased ability to establish a working relationship with clients (Larson & Daniels, 1998). Researchers have indicated that low confidence, high anxiety, and a lack of a strong working relationship are related to poor treatment outcomes (Orlinsky et al., 1994). Counselor educators need a better understanding of how best to develop these important internal skills that appear to increase counselor self-efficacy. A starting place for research in this area is an exploration of the factors that contribute to the development of these skills.

Mindfulness training may be a helpful way to teach attention skills and empathy, thus potentially increasing counselor self-efficacy. Emerging evidence suggests that mindfulness training for clients is related to positive outcomes in the treatment of a variety of mental-health disorders such as depression and anxiety (Baer, 2003; Bishop, 2002; Grossman, Niemann, Schmidt, & Walach, 1990; Lazar, 2005). Furthermore, theorists suggest that mindfulness may be helpful in the training of counselors as it may be related to increases in sustained attention, empathy, openness to experience, and self-awareness and decreases in anxiety (Fulton, 2005; Germer, 2005; Morgan & Morgan, 2005; Walsh & Shapiro, 2006). Although current mindfulness research suggests some links between mindfulness and key counselor-training outcomes (Shapiro, Astin, Bishop, & Cordova, 2005), there is little research specifically on counselor mindfulness.

Given the relatively limited time that counselor educators have to train students and the already expansive curriculum, it is critical that curricular additions or changes be grounded in empirical research. Because of methodological flaws in previous mindfulness research, most notably small sample sizes, inadequate control groups, and confounding variables, additional empirical research into the relationships between mindfulness and counselor-training outcomes is needed prior to considering the development of mindfulness-based training in counselor education.

In this chapter, the rationale for a study of the relationship between mindfulness and attention skills, empathy, and counseling self-efficacy is presented. The chapter includes a statement of the problem, the purpose and significance of the study, and

research questions. The chapter concludes with definitions of key terms used in the study and an outline of the organization of the study.

Rationale for the Study

Although theorists have suggested that mindfulness training may be helpful in cultivating the *person* of the counselor and that internal skills are necessary for effective counseling, a better understanding of the relationship that exists between mindfulness and counselor self-efficacy and the potential mediating roles of attention and empathy is a crucial first step in considering the development of mindfulness-based counselor-training programs. In this section, an overview is provided regarding counseling self-efficacy and the importance of attention and empathy among counselors-in-training. Finally, the hypothesized impact of mindfulness on the above variables is considered.

Counseling Self-Efficacy

Self-efficacy is defined as “people’s beliefs about their capabilities to exercise control over their own level of functioning and other events in their lives” (Bandura, 1991, p. 257). Self-efficacy theory posits that beliefs about one’s abilities to perform a certain task are determining factors in how people behave, think, and feel in response to various situations (Bandura, 1977, 1986a, 1986b; Williams, 1992). Also, self-efficacy is considered an important predictor of performance – specifically goal intentions, behavior, and willingness to persevere in the face of challenges. Although self-efficacy is not equivalent to competence, researchers consistently have shown that higher perceived self-efficacy is related to higher performance attainment (Bandura, 1986b, 1992). Those who are more efficacious seem to set higher performance goals, discard faulty strategies more

quickly, persist in the face of obstacles, and work more accurately than those with lower efficacy.

Counseling self-efficacy (CSE) has been defined as “one’s beliefs or judgments about his or her capabilities to effectively counsel a client in the near future” (Larson & Daniels, 1998, p. 180). To clarify this construct further, Lent, Hill, and Hoffman (2003) conceptualized counseling self-efficacy “as encompassing three broad sub-domains of perceived ability to (a) perform basic helping skills, (b) manage session tasks, and (c) negotiate challenging counseling situations and presenting issues” (p. 98). According to theory, CSE is a primary mechanism between simply knowing *how* to counsel and actually executing effective counseling actions (Bandura, 1977; Larson, 1998).

Researchers have demonstrated a high correlation between CSE and positive counselor and client outcomes (Larson & Daniels, 1998; Orlinsky et al., 1994). In their review of the CSE literature, Larson and Daniels (1998) found that higher CSE is related to perseverance in the face of challenging counselor tasks and the ability to receive and incorporate evaluative feedback. Furthermore, counselors with strong counseling self-efficacy report less anxiety and interpret the anxiety they do have as challenging rather than overwhelming or hindering. Also, they tend to view their successes as more stable and related to their own abilities, and they have more positive expectancies and self-evaluations. Confidence in counseling ability is related to therapist well-being, which is correlated consistently with good treatment outcomes (Beutler, Machado, & Neufeldt, 1994). In fact, in their review of psychotherapy outcome research, Orlinsky et al. (1994)

found that client outcome was positively related to therapist confidence in 59% of the research.

Unfortunately, the process of counselor preparation can, at least initially, negatively impact confidence levels, resulting in a pervasive sense of anxiety (Bischoff, 1997; Bischoff, Barton, Thober, Hawley, 2002; Larson, 1998; Loganbill, Hardy, & Delworth, 1982; Ronnestad & Skovholt, 1993; Skovholt & Ronnestad, 1992a, 1992b, 2003; Stoltenberg, 1981). Early in their training, many students report feeling confused, out of control, and overwhelmed both by the process of counseling and their perceived weaknesses. In fact, some beginning counselors are so preoccupied with feelings of anxiety and incompetence that they are unable to sleep, have difficulty concentrating, and develop physical symptoms (Bischoff & Barton, 2002).

It has long been known that low to moderate amounts of anxiety may actually help performance (Yerkes & Dodson, 1908) and that, to a point, questioning one's competence is developmentally appropriate and a sign of healthy self-awareness. Too little confidence and the resultant anxiety, however, may be a barrier to learning new skills and can make receiving feedback difficult, if not impossible (Larson & Daniels, 1998; Ronnestad & Skovholt, 1993). Ultimately, low self-efficacy and anxiety can have a deleterious impact on development and performance (Bandura, 1992; Larson & Daniels, 1998). Although anxiety typically lessens as students progress through their training programs and gain more experience and counseling self-efficacy, finding specific ways to facilitate this process early in training programs is an important goal for counselor educators if they are to create an optimal learning environment.

Because of the relationship between counseling self-efficacy and counseling outcomes and the impact increased self-efficacy may have on reducing anxiety among counselors-in-training, researchers have asserted that cultivating self-efficacy in counselors needs to be a primary objective of counselor-training programs (Bischoff, 1997; Duryee, Brymer, & Gold, 1996; Skovholt & Ronnestad, 1992a, 1992b; Stoltenberg & Delworth, 1987; Tyron, 1996). Increasing self-efficacy is theorized to occur through four primary sources: (1) mastery experiences, (2) vicarious learning, (3) verbal persuasion, and (4) reductions in emotional arousal (Bandura, 1977). Mastery experiences where individuals have personal experience with a task are considered to be the most powerful means of developing a sense of efficacy (Bandura, 1977, 1986b, 1992). The earliest scholars in counselor education suggested the same – that counselors must learn by doing (Truax & Carkhuff, 1969).

Empirical evidence in the counseling literature supports this theory. Researchers have found that CSE is related to counselor training level and experience and that counselor training can positively influence self-efficacy over time (Bischoff et al., 2002; Daniels & Larson, 2001; Larson, Suzuki, Gillespie, Potenza, Bechtel, & Toulouse, 1992; Leach, Stoltenberg, McNeill, & Eichenfield, 1997; Lent et al., 2003; Melchert, Hays, Wiljanen, & Kolocek, 1996; Tang, Addison, LaSure-Bryant, Norman, O'Connell, & Stewart-Sicking, 2004). Providing experiential learning opportunities appears to be a highly effective way to develop key behavioral counseling skills, increase self-efficacy and performance, and reduce anxiety (Bandura, 1992; Larson & Daniels, 1998). Unfortunately, although current training programs do a good job of providing training in

external skills (Baker et al., 1990; Hill & Lent, 2006; Kurtz et al., 1985), the counselor education literature does not provide similar direction on training in the cognitive skills, including the abilities to sustain attention and experience empathy.

Attention

Almost 50 years ago, Freud (1958, as cited in Epstein, 1995) suggested that the ability to sustain “evenly hovering attention” is a central component of therapy. Since that time, others have posited that the abilities to observe and listen are cornerstone skills for counselors (e.g., Carkhuff, 1999; Carkhuff & Berenson, 1977; Egan, 1998; Horney, 1950; Ivey & Ivey, 2003; Truax & Carkhuff, 1967, 1969). To be completely attuned to the client and accurately perceive the client’s situation, however, requires honed skills in attention and concentration. Although everyone has the capacity for attention, individuals differ in their ability and propensity to sustain attention and control its focus (Brown & Ryan, 2003; Kabat-Zinn, 2003; Leclercq, 2002; Walsh, 2000).

Effective counselors must learn not only to sustain attention over extended periods of time, but also to direct their attention to the appropriate cues. A counselor’s capacity for sustained attention helps to create the right conditions for client growth and development (Germer, 2005; Fulton, 2005; Morgan & Morgan, 2005; Truax & Carkhuff, 1969). Truax and Carkhuff (1969) suggested that counselors who can bring full attention to the client during session are more likely to hear fully what the client is saying rather than getting lost in their own thoughts or feelings. Focusing on the client in this way helps to minimize the likelihood that the counselor will make judgments about the client based on the counselor’s own ideals or values and promotes unconditional positive

regard. The ability to shift and control attention allows counselors to place their attention deliberately and intentionally on various aspects of the counseling session, including the counselors' here-and-now experience. This phenomenological awareness helps the counselor form tentative hypotheses about what the client is experiencing (Carkhuff, 1969; Carkhuff & Anthony, 1979; Truax & Carkhuff, 1967, 1969).

Not surprisingly, the ability to stay fully attuned to the client is considered an essential first step in being able to be compassionate and empathic (Morgan & Morgan, 2005; Truax & Carkhuff, 1967, 1969). In fact, Truax and Carkhuff's (1969) first guideline for expressing empathy states that the counselor "will find that he (sic) is most effective in communicating an empathic understanding when he (sic) concentrates with intensity upon the helpee's expressions, both verbal and nonverbal" (p. 202). Focused concentration on the client gives the counselor information about how her or his statements are received by the client, promoting accurate communication of empathy (Truax & Carkhuff, 1969).

Unfortunately, the human capacity for higher-order thinking means that the mind tends to wander. For counselors, this tendency to wander can make it difficult to pay attention to the client throughout a counseling session – particularly after a long day of back-to-back counseling sessions. When the counselor is unable to sustain attention, the session may be characterized by a lack of intimacy, remoteness, and detachment, and the therapist may be perceived as an outsider, whose aloofness makes her or him appear unconcerned (Truax & Carkhuff, 1967). In such a situation, the client may feel that the counselor does not care, or worse, that the client is not worth the effort (Greenberg et al.,

2001; Truax & Carkhuff, 1967). What is needed is specific training in attention control, which researchers indicate is possible (Gopher, 1996; Leclercq, 2002; Morley, Shapiro, & Biggs, 2004). In fact, other helping professions (e.g., medicine, sports) are beginning to see the value in attention control training (Epstein 1999, 2003a, 2003b; Gill, 2000).

Despite the importance of attending cognitively to the client in session and the natural difficulties humans have in doing so, the literature on counselor training lacks information on the cultivation of habits of mind related to attention. Helping skills books do provide specific instruction on the aspects of the client's presentation to which counselors should attend (e.g., posture, facial expressions, context, and verbal messages), but a review of the literature reveals that these authors do not provide instruction on how to hold attention or prevent the mind from wandering.

Empathy

Early in the development of the counseling profession, Rogers (1957) identified empathy as one of the necessary and sufficient conditions of change. Since that time, counseling researchers and educators have given a great deal of attention to the role of empathy in the counseling process (Altmann, 1973; Andersen, 2005; Bachrach, 1976; Barrett-Lennard, 1962, 1981; Carkhuff & Truax, 1967; Duan & Hill, 1996; Gladstein, 1977, 1983; Greenberg et al., 2001; Keefe, 1976; Miller, 1989; Mitchell, Bozarth, & Kraft, 1977; Patterson, 1984; Puleo & Schwartz, 1999; Ridgway & Sharpley, 1990; Trusty, Ng, & Watts, 2005; Wampold, 2001; Watson, 2001; Zimmer & Anderson, 1968). Although researchers have conceptualized empathy in a variety of ways, empathy reflects an ability to understand and feel the client's world "as if" stepping into the client's shoes

and the communication of that experience to the client (Barrett-Lennard, 1962; Rogers, 1975, 1980). This suggests that empathy is multidimensional, involving both cognitive and affective processes (Duan & Hill, 1996). Researchers have defined cognitive empathy as “intellectually taking the role or perspective of the other person” (Gladstein, 1977, p. 468) and affective or emotional empathy as a vicarious emotional response to the emotions of another person (Gladstein, 1977; Mehrabian & Epstein, 1972).

Researchers have found that affective empathy is significantly related to outcome variables (e.g., counseling skill, client satisfaction) among counseling students whereas cognitive empathy and communication of empathy are not (Ridgway & Sharpley, 1990). Affective empathy from the counselor appears to help clients develop better self-awareness and is crucial in the early stages of counseling (Gladstein, 1983), whereas cognitive empathy helps a counselor communicate empathic understanding to the client. These findings suggest that cultivating both cognitive and affective empathy in counseling students is an important goal for counselor educators.

How empathy of either type develops is still a source of debate among scholars, theorists, and researchers. Some modern theorists suggest that a crucial step in the cultivation of empathy is the development of self-compassion (Morgan & Morgan, 2005; Neff, 2003a, 2003b). Self-compassion involves “being touched by and open to one’s own suffering, not avoiding or disconnecting from it” (Neff, 2003b, p. 87) and tends to enhance feelings of compassion for others. Similarly, early work in the field posited that a necessary condition for empathic understanding of the client is the ability to be undefended and “freely and deeply” (Rogers, 1957, p. 97) oneself. Being

“psychologically unthreatened” (Barrett-Lennard, 1962, p. 5) in this way allows the counselor to be “maximally open to awareness of what the other person is communicating” (Barrett-Lennard, 1962, p. 5).

To be truly empathic, many scholars posit that the counselor not only must be able to experience her or his own suffering and the suffering of others, but also non-judgmentally accept the present moment (Barrett-Lennard, 1962; Morgan & Morgan, 2005; Rogers, 1957; Truax & Carkhuff, 1967, 1969). Brown and Ryan (2004) suggested that when an individual does not accept what is happening in the present moment, he or she may react by trying to redirect attention away from the experience. In the counseling session, this may have the effect of diminishing the counselor’s ability to mentally attend to important aspects of the counseling session or communicating to the client that her or his experience is not worth the counselor’s attention (Brown & Ryan, 2004; Greenberg et al., 2001). Others have suggested that empathic understanding is reduced when the counselor projects her or his own judgments about the experience onto the client (Barrett-Lennard, 1962; Egan, 1998; Rogers, 1975; Truax & Carkhuff, 1967, 1969). Therefore, embedded within the capacity to be empathic appears to be the ability to be non-judgmentally open to and accepting of the suffering of the self and others.

In reviews of the literature, scholars consistently have found support for the importance of empathy in the counseling relationship (Beutler et al., 1994; Duan & Hill, 1996; Greenberg et al., 2001; Lambert & Bergin, 1994; Orlinsky et al., 1994; Patterson, 1984; Wampold, 2001; Watson, 2001, Whiston & Sexton, 1993). Like the literature on attentive presence, however, literature regarding training in empathy focuses primarily on

the external manifestations of empathy. Since the earliest years of counselor training, the literature has emphasized training in the external, observable communication of empathy. For instance, in Truax and Carkhuff's (1967) model of empathy training, students were taught first to discriminate between relative levels of recorded empathic statements and then practice making empathic statements on their own. More recent training programs follow a similar model (e.g., Carkhuff, 1999; Egan, 1998; Ivey & Ivey, 2003).

Although these models may be helpful in teaching students to identify feelings and communicate those feelings specifically and concretely, they do not help students have a resonated experience of empathy that is considered necessary for the development of empathy (Barrett-Lennard, 1962; Morgan & Morgan, 2005; Rogers, 1957, 1975). Counselor training programs may be able to help students act "as if" they were empathic; it is much more difficult to train students to have a vicarious experience of empathy. Furthermore, although counselor education research and literature encourages exploration of personal values and biases, specific instruction on how to let go of the human tendency to judge and evaluate experience is lacking. The expectation seems to be that the ability to non-judgmentally experience the client's world will naturally grow out of the ability to accurately identify and communicate client feelings.

Because of the importance of empathy in supporting client change, it is important for counselor education programs to explore methods of developing empathy among counseling students. Thus, for counselors-in-training to become proficient in the skills that form the core of the counseling relationship, an exploration of new training methods

is needed. Mindfulness training may represent a viable supplement and complement to existing counselor training.

Mindfulness

In the last 20 years, mindfulness has become the focus of much clinical and theoretical attention. Mindfulness is defined 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). Practices designed to cultivate this type of awareness have been used for thousands of years to help train the mind to stay non-judgmentally focused on the present moment and to increase compassion (Epstein, 1995; Germer, 2005; Kabat-Zinn, 1990, 1994, 2003; Olendzki, 2005). Recently, researchers and clinicians have applied the techniques of mindfulness to the treatment of such physical and mental health issues as chronic pain (Kabat-Zinn, 1982; Randolph, Caldera, Tacone, & Greak, 1999), depressive relapse (Ma & Teasdale, 2004; Teasdale, Segal, Williams, Ridgeway, Soulsby, & Lau, 2000), borderline personality disorder (Linehan, Tutek, Heard, & Armstrong, 1994), and generalized anxiety disorder (Kabat-Zinn, Massion, Kristeller, Fletcher, Pbert, et al., 1992; Miller, Fletcher & Kabat-Zinn, 1995; Semple, Reid, & Miller, 2005) with significant results.

In addition to client training in mindfulness, a number of scholars have suggested that counselor mindfulness may be an essential ingredient of clinical practice that cuts across all theoretical orientations and that mindfulness training and practice may be an untapped resource for developing core counseling skills as well as the “person” of the

counselor (M. Epstein, 1995; R. Epstein, 1999, 2003a, 2003b; Germer, 2005; Fulton, 2005; Morgan & Morgan, 2005; Walsh & Shapiro, 2006).

Mindfulness is considered a capacity available to everyone, although individuals differ in their propensity or willingness to be mindful (Brown & Ryan, 2003; Kabat-Zinn, 2003; Walsh, 2000). Researchers have suggested that mindfulness can be cultivated through either formal practices, such as sitting meditation, or informal practices, such as eating mindfully or brushing one's teeth mindfully (e.g., Bishop, Lau, Shapiro, Carlson, et al., 2004; Hahn, 1974; Kabat-Zinn, 1990). The only requirement is that the individual bring full attention to the present moment non-judgmentally and simply notice what is present. In a state of mindfulness, the emphasis is simply on noticing either internal or external experience without making judgments, reacting in habitual ways to the stimulus, or elaborating on the meaning of the event (Bishop et al., 2004).

Both conceptual and empirical literature suggest that mindfulness practice helps to increase attentive presence, acceptance, empathy, and self-awareness, as well as reduce stress (Baer, 2003; Bishop et al., 2004; Brown & Ryan, 2004; Fulton, 2005; Lazar, 2005; Lesh, 1970; Leung, 1984; Rosenzweig, Reibel, Greeson, Brainard, & Hojat, 2003; Shapiro, et al., 2005; Shapiro, Schwartz, & Bonner, 1998; Sweet & Johnson, 1990; Valente & Marotta, 2005; Valentine & Sweet, 1999). As these are all skills that are considered fundamental for effective counseling (Orlinsky et al., 1994), the use of mindfulness training in counselor education holds promise as an important tool for facilitating the development of counseling skills and potentially increasing counselor self-efficacy.

Statement of the Problem

Outcome research reveals that the capacities to confidently bring attentive presence and empathy to the counseling session are essential for successful counseling (Lambert & Barley, 2001; Luborsky et al., 2002; Orlinsky et al., 1994; Wampold, 2001; Watson, 2001). Accordingly, ninety-eight percent of surveyed counselor education programs expect that, by the end of their practicum, students should be proficient in listening and empathy skills (Bradley & Fiorini, 1999). The majority of counselor education training literature focuses on developing observable manifestations of these skills such as attending behavior and reflection of feeling (e.g., Carkhuff, 1999; Egan, 1998; Ivey & Ivey, 2003). A review of the literature reveals that much less attention, however, has been paid to cultivating the internal “habits of mind” necessary for sustained attention and empathy.

Although expert counselors may develop these capacities over time (Etringer & Hillerbrand, 1995; Hillerbrand, 1989; Jennings, Hanson, Skovholt, & Grier, 2005; Skovholt & Ronnestad, 1992a, 1992b), some researchers have suggested counselor education programs leave much cognitive skill development to chance (Fong et al., 1997). Researchers and theorists have suggested that this inattention to the cultivation of internal skills may result in decreased counselor self-efficacy, increased anxiety, decreased counseling performance, and decreased ability to learn new skills (Bandura, 1977; Larson & Daniels, 1998; Ronnestad & Skovholt, 1993). Clearly, a gap exists between theory and practice in counselor education that may have a profound impact on counselor development and counseling outcomes. Counseling researchers need to explore

new methods for cultivating counselor cognitive skills in order to increase counseling self-efficacy.

Mindfulness training may be a viable method for bridging this gap. Such training is hypothesized to help in the cultivation of such core skills as attention and empathy (Andersen, 2005; Fulton, 2005; Germer, 2005; Keefe, 1985; Morgan & Morgan, 2005; Walsh & Shapiro, 2006), possibly resulting in increased self-efficacy among counselors-in-training. A review of the literature, however, reveals a lack of empirical studies about mindfulness in counselor training. No research has been conducted on how mindfulness skills relate to counseling self-efficacy, attention, and empathy in counselors-in-training. Furthermore, the research on mindfulness that does exist is marked by methodological flaws, including small sample sizes and confounding variables (Baer, 2003; Bishop, 2002; Grossman et al., 2004; Lazar, 2005).

Because of the impact that counseling self-efficacy can have on counselor development and counseling outcomes, the dearth of systematic training in the core cognitive skills related to attention and empathy as well as the potential of mindfulness training to enhance counselor development, research into the relationships between these variables is warranted. Such research will provide much needed information for guiding intervention studies and the development of future counselor-training initiatives designed to cultivate foundational counseling skills and increase counselor self-efficacy.

Understanding the variables associated with the development of important mental skills for counselors will provide a starting point for continued research into how to cultivate the person of the counselor and internal mental skills.

Purpose of the Study

The purpose of this study was to address an important gap in the counselor education literature by examining the relationships between mindfulness, attention, empathy, and counseling self-efficacy among counselors in training. Differences between these relationships based on level of training (i.e., master's level intern, doctoral student) and gender were explored. Path-analysis techniques were used to clarify the relationships between these variables. In this study, the researcher examined a path model that hypothesized a relationship between mindfulness and counseling self-efficacy that is mediated by attention and empathy. This examination was conducted to gain an understanding of how mindfulness relates to key outcomes of counselor training and provide a valuable model for guiding the development of future intervention studies and counselor-education initiatives.

Research Questions

This study investigates the relationship between mindfulness and key counselor-training outcomes – the cultivation of attention skills, empathy, and self-efficacy for counseling – and examines a hypothesized path model between those variables. The following research questions were addressed:

Research Question 1: What are the relationships between mean scores of mindfulness, attention, empathy, and counseling self-efficacy among master's-level counseling interns and doctoral students?

Research Question 2: What are the differences in mean scores of mindfulness, attention, empathy, and counseling self-efficacy between master's level counseling interns and doctoral students and males and females?

Research Question 3: What are the relationships between mindfulness, attention, empathy, and counseling self-efficacy within a path model that specifies a relationship between mindfulness skills and self-efficacy mediated by attention and empathy?

Research Question 4: How does the fit of the specified hypothesized path model differ for master's level counseling interns, doctoral students, males and females?

Figure 1 below depicts the hypothesized path model that the researcher examined in this study.

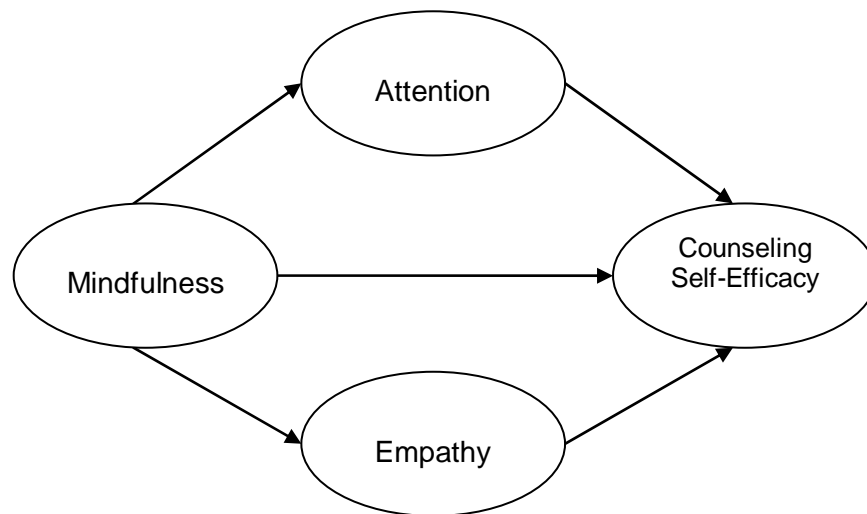


Figure 1. Hypothesized path model

Significance of the Study

Cultivating the counselor's ability to perform counseling tasks confidently and competently is a fundamental goal for counselor educators. To date, counselor training has focused on teaching discrete, observable skills. Facilitating student development in internal cognitive skills has evolved less systematically. Because of the important role that counselor ability to sustain attention and experience empathy has on client outcomes, it is imperative that counselor education programs provide learning experiences that cultivate these skills.

An examination of the relationship between mindfulness and counseling self-efficacy will provide important information about the process of cultivating confidence in counselors in training. Understanding the mediating effects of attention and empathy in training will provide much needed information for the development of targeted counselor-training interventions and programs.

Definition of Key Terms

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

Attention is defined as a multidimensional process that includes four components: sustained attention (i.e., the ability to maintain attention over an extended period of time), selective attention (i.e., the ability to select target information from an array of distracters), divided attention (i.e., the ability to simultaneously hold attention on all relevant stimuli), and attention switching (i.e., the ability to shift attentional focus) (Leclercq, 2002).

Counselor-in-training is a master's-level or doctoral-level student in a counselor-preparation program.

Counseling self-efficacy (CSE) is defined as “one’s beliefs or judgments about his or her capabilities to effectively counsel a client in the near future” (Larson & Daniels, 1998, p. 180) and encompasses three broad sub-domains of perceived ability, including the ability “to (a) perform basic helping skills, (b) manage session tasks, and (c) negotiate challenging counseling situations and presenting issues” (Lent, Hill, & Hoffman, 2003, p. 98).

Empathy is defined as a multidimensional construct that includes both cognitive understanding of another person’s situation and affective responding to the feelings of the other (Davis, 1983). Affective responding is a feeling of genuine concern for the other, although the feelings may not be an exact match with the other. Affective responding is distinguished from personal distress, which is associated with having a vicarious affective response that is experienced as self-concern, and emotional contagion, which refers to having the same emotional response as the other (Lennon & Eisenberg, 1987).

Mindfulness is defined 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) and is characterized by five factors including nonreactivity, observing, acting with awareness, describing, and nonjudging (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006).

Organization of the Study

This study is organized into five chapters. In Chapter 1, attention, empathy, counselor self-efficacy, and mindfulness are defined and a preliminary examination of the research related to these concepts is presented. Also included in Chapter 1 is the statement of the problem, the purpose of the study, research questions, the significance of the study, a definition of terms, and a description of the organization of the study.

In Chapter 2, a review and critique of the literature relevant to the questions for this study is presented. This chapter is divided into sections, with each section examining an aspect of the relevant literature related to counseling self-efficacy, attention, empathy, and mindfulness. Chapter 3 contains an overview of the research methodology, procedures, and data analysis, as well as research questions and hypotheses for the study, participants, instrumentation, potential limitations, and the results of the pilot study. Chapter 4 provides a presentation of the results of the study, and Chapter 5 includes a discussion of relevant findings from the study and implications for counselor educators.

CHAPTER II

REVIEW OF RELATED LITERATURE

In Chapter I, the rationale for a study of the relationship between mindfulness and self-efficacy was discussed. In this chapter, the literature relevant to this study is presented. This chapter is divided into the following sections: (a) self-efficacy theory and its relevance for counselors, (b) the core skill of attention, (c) the core skill of empathy, (d) and mindfulness as it relates to counselor development. Implications for future research will be discussed.

Self-Efficacy

Becoming a counselor is an intellectually and emotionally challenging task (Skovholt & Ronnestad, 2003). Counselors-in-training are expected to learn a new way of relating to others that often runs counter to social norms (Skovholt & Ronnestad, 1992a). For example, rather than telling a client that everything will be OK, they are asked to sit with a client's emotions. Instead of knowing the right answer, they are required to get comfortable with ambiguity. In place of smiling in acquiescence, they are challenged to be genuine and, at the same time, non-judgmental. Furthermore, the academic skills that helped counselors-in-training succeed academically in the past do not necessarily translate into the ability to succeed in the interpersonal aspects of counseling.

Qualitative research suggests that the result of these training expectations is low confidence in counseling ability and pervasive anxiety, particularly in the beginning stages of training (Bischoff & Barton, 2002; Bishoff, Barton, Thober & Hawkley, 2002;

Ronnestad & Skovholt, 2003; Skovholt & Ronnestad, 1992a). In fact, Bischoff (1997) found that many counselors-in-training reported being so preoccupied by feelings of incompetence that they were losing sleep and unable to concentrate. Some even reported developing physical symptoms (e.g., nausea). This anxiety, in turn, can lead to impaired clinical judgment and performance (Skovholt & Ronnestad, 2003; Urbani, Smith, Maddux, Smaby, Torres-Rivera, & Crews, 2002). Larson (1998) suggested that training programs grounded in self-efficacy theory hold promise for addressing these issues as well as cultivating counselors who can successfully meet the challenges of the profession. A review of self-efficacy theory and counseling self-efficacy follows.

Self-Efficacy Theory

Since the concept was first proposed by Bandura (1977), self-efficacy has received a tremendous amount of attention from theorists and researchers in a wide variety of fields. A substantial body of research supports the proposition that self-efficacy exerts significant influence over human action, thought, and affective arousal (Bandura, 1992). Researchers have demonstrated that self-efficacy is related to task performance and persistence in the face of challenges, suggesting that self-efficacy is a critical variable in training of any sort. In this section, a definition of self-efficacy and an overview of how self-efficacy beliefs develop are provided along with an examination of the hypothesized relationship between self-efficacy and anxiety.

Self-efficacy is task-specific confidence that one has the ability and skills to perform the task successfully. Bandura (1977) defined self-efficacy as “the conviction that one can successfully execute the behavior required to produce the outcomes” (p.

193). The concept grew out of evidence that cognitive processes play an important role in the acquisition of new behaviors (Bandura, 1977). Self-efficacy is the central component in Bandura's (1986b) Social Cognitive Theory. As such, self-efficacy plays a key role in the cognitive appraisal of person, environment, and behavioral variables. Self-efficacy is instrumental in determining a person's choice of behavior, effort and persistence in the face of challenges, and state of physiological arousal (Bandura, 1977, 1986b, 1991, 1992). Of all the aspects of self-knowledge, belief in personal efficacy may be the most influential in everyday life (Bandura, 1986).

Self-efficacy mediates the relationship between knowledge and action (Bandura, 1977, 1986b). Self-efficacy is not, however, the only determinant of behavior. If knowledge and skills are lacking, then motivation to do a task will be lower and performance will suffer. When plagued with self-doubt due to lack of skill or lack of self-efficacy, it is difficult to sustain the effort needed for successful performance of a task (Bandura, 1982). Changes in self-efficacy have been shown to result in changes in motivation and in actual behavior (Bandura, 1992). Therefore, competency requires having both the skills and the self-efficacy necessary to use those skills effectively.

Strong self-efficacy leads to higher personal goals, commitment to those goals, and coping efforts once plans for accomplishing the goals are initiated (Bandura, 1977, 1986b, 1992). Individuals form beliefs about what they can do, anticipate likely outcomes of behavior, set goals, and set in motion plans to achieve those goals (Bandura, 1992). Those who judge themselves inefficacious are likely to engage in negative thought patterns that limit performance. A person with strong self-efficacy for a particular task

believes that he or she is capable of successfully performing the task. These beliefs, in turn, will contribute significantly to task performance, if requisite skills are in place. Faulty or low self-efficacy beliefs, however, will lead to ineffective thought patterns and behaviors, even with appropriate skills and knowledge.

Research consistently shows that higher perceived self-efficacy is related to higher performance attainment (Bandura, 1992). Those who are more efficacious seem to set higher performance goals, discard faulty strategies more quickly, persist in the face of obstacles, and work more accurately than those with lower efficacy (Bandura, 1986b, 1992). Researchers have found that people may perform poorly because they lack ability or because they have ability but they lack perceived self-efficacy necessary to make use of their skills (Bandura, 1992). Furthermore, remaining task-focused in the face of pressing situational demands requires strong self-efficacy.

Self-efficacy varies along three dimensions: magnitude or level, strength, and generality (Bandura, 1986b). *Magnitude* refers to the number of tasks a person thinks he or she can do. *Strength* refers to how strong an individual's conviction is that he or she can master a task. *Generality* refers to the extent to which self-efficacy in a certain area generalizes to other areas. For instance, people may see themselves as capable in a particular domain, but that sense of confidence may or may not spread to other similar tasks.

Self-efficacy and outcome expectations are related but distinct (Bandura, 1977, 1986b, 1992). Whereas self-efficacy refers to a self-judgment about personal capacity for performing in some way, outcome expectations refer to beliefs about the consequences of

that performance. For example, a counselor may have high self-efficacy for establishing rapport with a client and expect that the outcome of such behavior will be increased commitment to counseling by that client. When the quality of performance is highly related to the outcome, self-efficacy beliefs contribute significantly to motivation to perform a certain task (Bandura, 1992).

Sources of Self-Efficacy. Four sources of knowledge inform self-efficacy beliefs. These include mastery experiences, vicarious experiences, verbal persuasion, and emotional arousal (Bandura, 1977, 1986b).

Mastery experiences are considered the most persuasive sources of self-knowledge. Such experiences provide direct evidence of personal capability. Repeated success in a particular performance domain not only increases self-efficacy, but also buffers the individual against the potential negative impact of occasional failures. Past experience will influence the cognitive appraisal of challenging tasks as well as the degree of effort and persistence in overcoming those tasks.

Vicarious experiences occur when people observe others engage in various activities. Similarity between the observer and the observed is hypothesized to strengthen the influence of vicarious experiences on self-efficacy (Bandura, 1986b). Watching someone else perform a task successfully generates expectations in the observer that they, too, can perform the task.

Verbal persuasion, defined as encouragement or discouragement by another person, is less effective than mastery or vicarious experiences, but it still can have an impact on self-efficacy beliefs. Bandura (1986b) suggested that positive encouragement

is most effective for people who already have some reason to believe that they can perform a task. Encouragement is quickly disconfirmed if task performance does not match expectations.

The final source of information for self-efficacy beliefs is *emotional arousal*. People gather information about their experience and their abilities based, in part, on judgments they make about changes in their somatic arousal. For example, increased sweating or difficulty breathing just before taking the stage can be interpreted as being inept. Unfortunately, physiological states actually can decrease performance ability, resulting in a vicious circle of self-defeating thoughts and behavior (Bandura, 1986b).

These four sources of information become instructive through cognitive appraisal by the individual (Bandura, 1986b). Appraisal is influenced by a variety of person and environmental factors such as the amount of aid they receive, how much effort they expend, the difficulty of the task. These appraisals are filtered through a host of person and environmental factors, which explains why a person may successfully perform a task, but not necessarily have an increase in self-efficacy.

Self-Efficacy Conceptualization of Anxiety. Self-efficacy theory holds that anxiety and avoidant behavior are outcomes of perceived inefficacy (Bandura, 1977, 1986a, 1986b, 1988; Williams, 1992). People who judge themselves inefficacious in the face of some threat or task visualize negative outcomes, become anxious, and avoid the situation. Sometimes these perceptions are faulty; at other times, they reflect real deficits in ability. According to the theory, anxiety arousal and avoidance reflect not only inefficacy about

performing a specific behavior, but also inefficacy about coping with whatever unexpected events might arise.

For counselors, self-efficacy theory suggests that successful “performance” as a counselor requires not only training in counseling skills, but also cultivation of self-confidence in those skills. The concept of counselor self-efficacy is discussed more fully below.

Counseling Self-Efficacy

Counselor development requires both specific skill training and confidence in those skills (Leach, Stoltenberg, McNeill, Eichenfield, 1997; Loganbill, Hardy, & Delworth, 1982; Skovholt & Ronnestad, 1992a, 1992b). Leach et al. (1997) stated that paying attention to counselor confidence may help anticipate counselor concerns and reduce anxiety. Lent, Hackett, and Brown (1994) posited that self-efficacy is related to career performance, and some have gone so far as to assert that developing confidence is “the primary task facing beginning therapists” (Bischoff et al., 2002, p. 372).

Research supports these propositions. In their review of the literature, Orlinsky, Grawe, and Parks (1994) found that 59% of the 27 studies that explored therapist confidence demonstrated a significant positive association with client outcome. Similarly, Beutler, Machado, and Neufeldt (1994) reviewed the literature on therapist variables and found that client perceptions of counselor confidence were related to client improvement and overall effectiveness. Cultivating counseling self-efficacy (CSE), therefore, is an important outcome goal for counselor educators. This section defines counselor self-efficacy and examines CSE research.

Counseling Self-Efficacy Definition. Larson and Daniels (1998) defined counseling self-efficacy as “one’s beliefs or judgments about her or his capabilities to effectively counsel a client in the near future” (p. 180). Lent, Hill, and Hoffman (2003) further clarified the concept by conceptualizing it along three broad subdomains, including perceived ability to perform basic helping skills, manage session tasks, and negotiate challenging counseling issues. Counseling self-efficacy is the primary mechanism between knowing the skills of counseling and effectively executing them (Bandura, 1977; Larson, 1998; Larson & Daniels, 1998).

Counseling self-efficacy may affect a counselor’s choice of behavior, how much effort he or she expends, and persistence in the face of counseling challenges (Larson, 1998; Larson & Daniels, 1998). Counselors-in-training with low self-efficacy, for example, would be unlikely to expend the necessary energy to learn new skills. Self-efficacy also impacts a counselor’s cognitive appraisal of her or his own experience. Counseling self-efficacy affects not only the amount of anxiety a trainee experiences, but also whether that anxiety will be interpreted as self-aiding or self-hindering (Larson & Daniels, 1998). For instance, a counselor-in-training with higher CSE would be more likely to view anxiety as challenging rather than debilitating, set realistic goals, and engage in facilitative self-talk (Larson & Daniels, 1998).

Counselor Self-Efficacy Research. In the early 80s, researchers in the field began to turn their attention to counseling self-efficacy. Larson and Daniels (1998) found 32 studies, including dissertations, from 1983 to 1998 on the topic. A review of *PsychInfo* revealed that 21 articles on counseling self-efficacy have been published in peer-

reviewed, electronic journals since 1998. The majority of studies in the counseling literature explore the relationship between counseling self-efficacy and counselor development or counselor characteristics and the effectiveness of interventions to cultivate counseling self-efficacy. Some have explored the relationship between counseling self-efficacy and performance outcomes; however, these typically use self-perceptions of outcome (Larson, Suzuki, Gillespie, Potenza, Bechtel, & Toulouse, 1992) or third-party raters (Johnson, Baker, Kopala, Kiselica, & Thompson, 1989; Larson et al., 1992; Munson, Stadulis, & Munson, 1986) rather than client reports. The findings from these studies are outlined below along with a critique of methodology.

Counseling self-efficacy and counseling outcome: In their review of the literature, Larson and Daniels (1998) found a total of eight studies (including doctoral dissertations) that directly explored the relationship between counseling self-efficacy and counseling outcomes. These studies used both self-reports and supervisor reports of counselor performance and discrete counseling skills (e.g., attending, challenging) as outcome measures. Self-report studies found correlations ranging from .19 to .42 between self-efficacy and counseling outcome. The evidence in supervisor-rating studies was mixed. Larson and Daniels (1998) suggested that third-party ratings might yield more consistent results.

One study was found that used client process outcomes (i.e., working alliance, perceived progress toward goals, career decidedness) as outcome measures (Heppner, Multon, Gysbers, Ellis, & Zook, 1998). In their study of 24 counselors-in-training enrolled in a career counseling practicum, Heppner et al., (1998) found that career

counseling self-efficacy improved significantly from pre-test to post-test ($F(1, 21) = 13.49, p = .001, d = 1.47$) and that client scores on various career outcome measures (e.g., Career Transitions Inventory; Heppner, 1991, as cited in Heppner et al., 1998) improved significantly. The authors found few relationships between overall career counseling self-efficacy and client outcomes. They did find, however, that counselor self-efficacy in specific areas (e.g., developing a therapeutic alliance) was related to various client outcomes (e.g., motivation to work on goals, $r = .54, p < .05$), suggesting that the relationship between self-efficacy and outcome may be a complex relationship.

Although the research is encouraging, the limited amount of research and various confounding variables (e.g., different outcome measures, rater bias, small sample sizes) make it difficult to draw firm conclusions about the relationship between counseling self-efficacy and counseling outcome. Researchers in other fields suggest, however, that self-efficacy is related to performance outcomes in the workplace (Ballantine & Nunns, 1998; Harrison, Rainer, Hochwarter, & Thompson, 1997; Kahn & Long, 1988; Riggs, Warka, Babsa, & Betancourt, 1994; Sadri & Robertson, 1993; Stajokovic & Luthans, 1998). Larson and Daniels (1998) recommend that more research be conducted on the relationship between counseling self-efficacy and counseling outcome.

Counseling self-efficacy and counselor development: Researchers have found limited but persuasive evidence of a relationship between counselor developmental level (as defined by several different developmental models) and counselor self-efficacy. Using Stoltenberg and Delworth's (1987) Integrated Developmental Model (IDM), Leach et al. (1997) examined the relationship between developmental level, as identified by the

Supervisee Levels Questionnaire-Revised (SLSQ-R; McNeill, Stoltenberg, & Romans, 1992, as cited in Leach et al., 1997), experience with clients, and self-efficacy. They found a significant difference between Level 1 students and Level 2 students on various self-efficacy scores with Level 2 students scoring significantly higher (Wilks' Lambda = .594, $F(5,136) = 18.59, p < .01$). The authors also found a significant difference in self-efficacy based on experience and client type (Wilks' lambda = .822, $F(10, 332) = 2.40, p < .01$). Similarly, other researchers have demonstrated evidence that counseling self-efficacy is stronger in counselors with more counseling experience (Larson et al., 1992; Melchert et al., 1996; Murdock, Wendler, & Nilsson, 2005; Tang, Addison, LaSure-Bryant, Norman, O'Connell, & Stewart-Sicking, 2004).

In their review of the literature, Larson and Daniels (1998) found that the relationship to counselor training level (i.e., year in the program) is unclear. They stated that some studies show evidence of a linear relationship, with higher self-efficacy in more advanced students, and some studies found a non-linear relationship. These findings are in keeping with developmental models (Stoltenberg & Delworth, 1987) and qualitative research (Skovholt & Ronnestad, 1992a, 2003) that describe periods of wavering confidence in counseling ability across training experience. Others have concluded that counselor training can positively influence self-efficacy over time (Bischoff et al., 2002; Daniels & Larson, 2001; Larson et al., 1992; Leach et al., 1997; Lent et al., 2003; Tang et al., 2004).

Counseling self-efficacy and counselor characteristics: The majority of studies on counseling self-efficacy do not test the differences in self-efficacy based on such stable

counselor characteristics as age and gender. Those that have tested differences based on gender found non-significant differences. For instance, Larson et al. (1992) found no significant differences between scores on the Counselor Self-Estimate Inventory, which assesses counseling self-efficacy, based on gender ($F(1, 211) = .172, p > .05$). Romi and Teichman (1995) found similar non-significant differences ($F(8, 94) = 2.07, p > .05$). Larson and Daniels (1998) reported that correlations between counselor self-efficacy and age are also low. Studies indicate, however, that CSE is related to cognitive and affective variables including emotional intelligence (Martin, Easton, Wilson, Takemoto, & Sullivan, 2004) and anxiety (Larson & Daniels, 1998).

Martin et al., (2004) studied the relationship between emotional intelligence and counseling self-efficacy in 140 counseling students and practicing counselors. Using a stepwise multiple regression, they found that the *Using Emotions in Problem Solving* factor and the *Identifying Own Emotions* factor of the Emotional Judgment Inventory (Bedwell, 2002, as cited in Martin, 2004) significantly predicted counseling self-efficacy in counseling students ($R^2 = .362, F(2, 63) = 17.84, p = .000$). For practicing counselors, *Expressing Emotions Adaptively* and *Identifying Own Emotions* were significant predictors of self-efficacy ($R = .166, F(2, 71) = 7.048, p = .002$). They also found that practicing counselors reported higher self-efficacy than counseling students (Wilks' lambda = .672, $F(5, 134) = 13.082, p = .000; \eta^2 = .328$). These findings suggest that counselor training designed to help increase the ability to identify personal emotions, use emotions to help problem solve, and communicate emotions to another may help increase counselor self-efficacy.

Studies examining anxiety in counseling studies typically use the State-Trait Anxiety Inventory (STAI: Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). Spielberger et al. (1983) defined state anxiety as a situation-specific emotional and physiological reaction. Trait anxiety reflects a more stable personality characteristic. According to Larson and Daniels (2001), most studies assess state anxiety in relation to CSE because self-efficacy is an immediate, situation-specific cognitive appraisal. Researchers have found a negative relationship between counseling self-efficacy and state anxiety with correlations ranging from $-.24$ to $-.79$ (Larson & Daniels, 1998). Aside from prior levels of CSE, anxiety was found to contribute the most to the variance in counseling self-efficacy (Larson & Daniels, 1998). To date, however, researchers have used correlational designs to assess counseling self-efficacy and state anxiety. Therefore, additional research is needed to ascertain how interventions designed to increase self-efficacy may impact performance anxiety and task performance for counselors-in-training. Other characteristics examined in the literature include the supervision alliance (Ladany, Ellis, & Friedlander, 1999), self concept (Larson et al., 1992), outcome expectancies (Larson et al., 1992), performance appraisal (Daniels & Larson, 2001), perception of the environment (Sutton & Fall, 1995), and job satisfaction (Larson & Daniels, 1998).

Interventions to increase counseling self-efficacy: Researchers have explored the impact of specific interventions and training methods on the cultivation of counseling self-efficacy. These studies generally tap the four sources of self-efficacy outlined by

Bandura (1977) (i.e., mastery, vicarious learning, verbal persuasion, and emotional arousal) and can be classified accordingly.

A variety of mastery-based interventions have been examined in the research. These include role plays (Larson et al, 1992; Larson, Clark, Weselly, Koraleski, Daniels, & Smith, 1999; Munson et al., 1986; Munson, Zoerink & Stadulis, 1986; Romi & Teichman, 1995), practicum (Johnson et al., 1989), and practice based on theory-driven instruction (Grace, Kivlighan, & Kunce, 1995; Levitt, 2001; Urbani et al., 2002). These studies consistently demonstrated support for Bandura's hypothesis that mastery experiences are the most influential in the cultivation of counseling self-efficacy. For instance, in a study that combined training in a specific skill or skill set with practice, Urbani et al. (2002) found significant increases in self-efficacy in the skill-training group compared to the practice-only group ($t(59) = 5.29, p < .001$). Levitt (2001) found that training in active listening skills resulted in increases in mean ratings of counseling self-efficacy over the course of the semester (range = 1.5-2.5).

Some researchers combined mastery and vicarious learning experiences or explored the differences between both. Two studies demonstrated that counseling self-efficacy increases in undergraduate recreation students when role plays and/or visual imagery are used in combination with modeling (Munson, Stadulis & Munson, 1986; Munson, Zoerink, & Stadulis, 1986). Romi and Teichman (1995) examined the differences in self-efficacy among youth counselors who were trained using a participant modeling program (i.e., mastery experience) compared to a symbolic modeling program (i.e., vicarious experience). They found that both methods affected self-efficacy when

compared to a control group ($F(16,196) = 1.96, p < .05$) and that self-efficacy for counseling in various situations in the participant modeling group increased significantly over symbolic modeling ($F_s(2,112) = 5.39, p < .01; 8.32, p < .01; 4.64, p < .05; 3.38, p < .05; 5.91, p < .01; 6.58, p < .01$). Larson et al. (1999) found that the impact of more risky mastery experiences is moderated by self-appraisals of performance ($R^2 = 13.90, p < .001$), suggesting that awareness of self-generated outcome appraisals is an important factor in counseling self-efficacy.

Other researchers have examined the impact of peer or supervisor feedback on CSE. Cashwell and Dooley (2001) found a statistically significant difference in CSE between counselors who received clinical supervision and those who did not ($p = .024$). In her correlational study, Constantine (2001) found evidence in support of a predictive relationship between multicultural supervision and multicultural counseling self-efficacy (R^2 change = .07, $F(3, 109)$ change = 10.04, $p < .01, R^2 = .19$). Although and Borders (1997) found non-significant treatment effects across supervision groups using variations of peer feedback models, they did find movement in the hypothesized positive direction. In a study with 29 college students without counseling training, Lane, Daugherty, and Nyman (1998) found that negative feedback about innate counseling ability was related to lower self-efficacy for counseling ($t(43) = 1.71, p = .05$). In an extension of that study, Daniels and Larson (2001) found that positive feedback aimed at helping counselors-in-training see the mastery components of their counseling activities helped to increase self-efficacy, whereas bogus negative feedback had the opposite effect ($F(1,43) = 20.78, p < .001$).

Although a clear relationship has been established between anxiety and self-efficacy (Bandura, 1988, 1992; Larson & Daniels, 1998; Williams, 1992), researchers have paid minimal attention to interventions that would impact affective arousal in counselors. Larson and Daniels (1998) identified four studies that examined the impact of various interventions on anxiety. Of these, three were unpublished doctoral dissertations and the fourth was a paper presented at the annual convention of the American Association of Applied and Preventative Psychology. More recently, Daniels and Larson (2001) published a study demonstrating that positive feedback is associated with reductions in anxiety ($F(1, 43) = 26.94, p < .001$) and increases in self-efficacy ($F(1,43) = 20.78, p < .001$).

Critique of methodology: Research to date suffers from a number of methodological flaws, including small sample sizes, rater bias, self-report bias, and measurement issues. Of primary concern are issues with assessment. These are presented below.

Researchers have used a wide variety of counselor self-efficacy measures. These include the Interpersonal Skills Efficacy Scale (ISES; Munson, Zoerink, & Stadulis, 1986), the Counselor Self-Efficacy Survey (CSS; Sutton & Fall, 1995), the Counselor Behavior Evaluation--Self-efficacy (CBE-SE; Munson, Stadulis, & Munson, 1986), the Counselor Self-Efficacy Scale (CSES; Johnson et al., 1989), the Counselor Self-Estimate Inventory (COSE; Larson et al., 1992), and the Counselor Activity Self-Efficacy Scales (CASES; Lent et al., 2003). In addition, two new measures were developed recently, the School Counselor Self-Efficacy Scale (SCSE; Bodenhorn, & Skaggs, 2005) and the

Addiction Counseling Self-Efficacy Scale (ACSES; Murdoc, Wendler, & Nilsson, 2005), adding to the confusion. These are all self-report measures that operationalize counselor self-efficacy in slightly different ways. Furthermore, reliability estimates vary from .65 (CSS; Sutton & Fall, 1995) to .97 (CASES; Lent et al. 2003), limiting the ability to make valid inferences. Except for the CASES, these measures are not grounded in theories of counselor development, and many measures focus on self-efficacy for basic helping skills rather than more advanced skills. Therefore, although the research is promising, more methodologically sound research is needed on counselor self-efficacy.

Summary

Counselors-in-training are faced with the challenging task of learning a new way of being with others, which may result in pervasive anxiety and lowered confidence. In their training programs, they are taught a variety of skills designed to aid the helping process, yet knowledge alone is insufficient for success. Once skills are honed, confidence often means the difference between success and failure. Researchers have found that people may perform poorly because they lack ability or because they have ability but they lack confidence necessary to make effective use of their skills. Anxiety related to low confidence in skills can actually impair counseling performance, resulting in even lower confidence.

Researchers have linked counseling self-efficacy to counselor development, emotional intelligence, counseling performance, and counseling outcomes as well as anxiety. Counselors-in-training with higher self-efficacy for counseling are more likely to persist in the face of demanding counseling tasks, view those demands as challenges to

be overcome and their successes as more stable and related to their own abilities, engage in internal dialogue that is self-aiding, and, ultimately, be more satisfied with their career. The first step in building this confidence, however, is a solid skill base. Without solid skills, confidence will be meaningless. A review of the literature on two key counseling skills, attention and empathy, follows.

Attention

The counseling relationship tests the ability of the counselor to actively and non-judgmentally attend to a client (Rogers, 1957; Wampold, 2001). Counselors are challenged to engage in empathic listening (Barrett-Lennard, 1981), absolute listening (Gendlin, no date, as cited in Rogers, 1975), and active listening (Egan, 1998). The ability to focus and sustain attention on relevant cues in the session is central to this way of attending. Etringer and Hillerbrand (1995) pointed out that expert counselors can both direct their attention more efficiently and monitor their own cognitions. Similarly, O'Byrne, Clark, and Malakuti (1997) stated that advanced counselors are skilled in focusing their attention strategically.

Without strong attention skills, the counselor may be unable to perceive or understand the client's phenomenological world. He or she may appear distracted, disinterested, or uncaring, or worse, may act unethically due to missing key information (Cegala, 1984; Cegala, Savage, Brunner, & Conrad, 1982). Unfortunately, perhaps because it seems so basic, actual training in cultivating attention skills is missing from counselor education. This section will review the sub-processes involved in attention,

threats to attention control, research into attention-training, and current attention-training methods in counselor education.

Attentional Competencies

Attention is a complex and nebulous construct. Because it is related to a variety of cognitive processes (e.g., perception, memory, planning, speech), it is a difficult construct to define (Mirsky, Fantie, & Tatman, 1995; Zimmerman & Leclercq, 2002). Because of its centrality in the counseling process, however, it is of critical importance.

Neuropsychologists consider attention to be a system of cognitive subprocesses rather than a single function, yet a full understanding of how these subprocesses operate is still unknown (Gopher, 1993; 1996; Leclercq, 2002; Riccio, Reynolds, & Lowe, 2001; Zimmerman & Leclercq, 2002). Theorists and researchers have identified a number of different processes of this system (e.g., focused attention, selective attention, arousal, divided attention, attentional capacity, effort, attentional shift), which are in reciprocal relationship to each other. At any one time, the individual selects an object or objects for attention, focuses on that object, holds attention on the object, and shifts attention as necessary.

Although theorists have attempted to create various models of attentional processes (e.g., Posner & Rafal, 1987; van Zomeren & Brouwer, 1994), there is no general consensus about a classification system. Furthermore, research suggests that attention is not simply a cognitive process. Rather, it is related to emotion and motivational processes (Parasurman, 1998; Zimmerman & Leclercq, 2002) and is

theoretically intertwined with the larger construct of executive function and executive control (Gopher, 1996; Riccio et al., 2001).

Posner and Rafal (1987) proposed one of the earliest models of attentional subprocesses. Their multi-component model includes selective attention, alertness, and sustained concentration. Later, van Zomeran and Brouwer (1994) proposed a heuristic model that divided attentive processes into two categories – intensity and selectivity. In their model, alertness and vigilance fall under the intensity category, and focused attention and divided attention are encompassed within the selectivity category. All of these functions are under the supervisory attentional control of executive function. The concept of executive function has to do with more general regulation of mental processes (e.g., problem solving, planning, sustaining attention).

Despite the variety of models, four primary attention capacities -- or competencies -- dominate the literature. These include selective attention, divided attention, sustained attention, and attention switching. These should not be viewed as independent, isolated attentional types. Rather, they are interacting attentional competencies, and a deficiency in any competency area will result in problems within the whole system. A review of the various attention competencies as well as related gender differences follows.

Selective Attention. Selective attention refers to the ability to attend to some aspect of experience while ignoring others. This capacity to adopt a specific focal point and not be distracted by interference from irrelevant information is alternately referred to in the literature as focused attention or directed attention. In the counseling session, for instance, selective attention is at work when the counselor focuses on the client's verbal

presentation to the exclusion of other possible stimuli (e.g., noise outside the room, the internal dialogue of the counselor). This aspect of attention corresponds to James' (1890) early description of attention:

It is the taking possession of the mind, in clear and vivid form, of one out of what seem several simultaneously possible objects or trains of thought. Focalisation, concentration, of consciousness are of its essence. It implies withdrawal from some things in order to deal effectively with others. (p. 403-404).

Leclercq (2002) referred to selective attention as an “imperative necessity” (p. 4) for managing life tasks. Without this ability, individuals would be overwhelmed by the constant stream of internal or external stimuli as is seen in those diagnosed with attention deficit/hyperactivity disorder. A certain level of distractibility is seen in the general population, as well (some might argue on a growing scale). For example, the inability to remember names, arriving at a destination without awareness of how one got there, or overeating are examples of being distracted by other stimuli to the point of ignoring important cues in the environment.

Divided Attention. Divided attention refers to the ability to simultaneously hold attention on two different objects or tasks. Examples of divided attention from everyday life are abundant – talking to a passenger while driving a car, problem-solving while walking, eating while watching television (Lane, 1982). For the counselor, divided attention would include the ability to take notes during the session or attend to the client's non-verbal behaviors while still listening to the client's verbal narrative.

The theories about the underlying functions at work in divided attention are controversial. Some authors support a limited capacity model that assumes that

simultaneous performance of two tasks divides limited attentional resources between the various tasks (Broadbent, 1958; Kahneman, 1973; Norman & Bobrow, 1975; Posner, 1980; Posner & Rafal, 1987). Hirst (1986) described resources as mental fuel that drives cognitive processes that could be reduced by structural limitations (e.g., short-term memory loss). Others propose that simultaneous focus is a function of switching between focal objects (Allport, Antonis, & Reynolds, 1972; Allport, 1993; Pashler & Johnston, 1998; Sanders, 1997). Performance of dual tasks is limited by how quickly a person can switch focal points. These models provide little insight, however, into the underlying processes at work in attention. Leclercq (2002) suggested that it is not possible to choose between these models based on empirical research to date.

Despite the controversy regarding the process of divided attention, researchers have shown that the capacity for divided attention can be improved with practice (Gopher, 1993, 1996; Schneider & Shiffrin, 1977; Spelke, Hirst, & Neisser, 1976). Also, they have demonstrated that the attention demands involved in divided attention are not equal to the sum of the demands for each individual task. Eysenck and Keane (1991) pointed out that the dual-task paradigm has the added demand of coordinating the various tasks to avoid interference of one task with the other.

Sustained Attention. The ability to hold attention over some period of time is called sustained attention or vigilance. Although these two terms are often used synonymously, the neuropsychology literature distinguishes the two as representing two ends of the same continuum (Zimmerman & Leclercq, 2002). Mackworth (1957), who is considered a pioneer in the field, defined vigilance as “a state of readiness to detect and

respond to certain small changes occurring at random intervals in the environment” (p. 389-390). Whereas, vigilance does not require much processing of information, sustained attention is activated in situations high on content and requiring the individual to be in a state of continuous information processing. Both require voluntary effort.

Early studies into attention were conducted on military personnel (Mackworth, 1957). In those studies, subjects were required to monitor a needle and press a response key every time they detected a jump in the needle. The studies found that task vigilance declined dramatically after 30 minutes and remained low for the remainder of the time. Other researchers demonstrated that this decline is related to the attitude of the subjects, the type of task, and the context of the task (Leclercq, 2002). Accordingly, many theorists propose that vigilance should be considered distinct from sustained attention. In vigilance tests, the decline in vigilance is related to a shift in attention, whereas in sustained attention experiments where the object of attention is more cognitively demanding, decrements in attention are due to fatigue. Sustained attention is subject to lapses of attention and fatigability (Leclercq, 2002).

Attention Switching. Attention switching refers to that aspect of executive function that provides control over other attentional competencies (Gopher, 1996; Riccio et al., 2001; van Zomeren & Brouwer, 1994). Attention switching involves the voluntary and involuntary changing of focus from one object to another. Zimmerman and Leclercq (2002) suggested that the ability to adapt to the environment and meet goals is possible only when attentional switching capacity is flexible and under the individual’s strategic control. Individuals who have no control over the focus of their attention are prone to

distractibility. On the other end of the spectrum, individuals who exhibit too much control may exhibit rigid, obsessive behavior.

Brownell (2006) suggested that switching occurs at three levels. At the first level, switching is voluntary and conscious. This is the level of selective attention. The individual selects what object he or she will attend to and maintains focus on that object despite other distractions – or until a more urgent distraction occurs. At the second level, the individual is focused on one object, but still conscious of other objects. For example, a counselor may be focused on the client and be aware of – and perhaps slightly distracted by -- a baby crying outside the office.

At the third level, the autonomic nervous system responds to a stimulus because of its warning signal qualities (e.g., the sound of a fire alarm). The individual has very little control over the switch in attention to focus on new stimuli. Researchers have demonstrated the existence of involuntary processing of meaning of unattended stimuli. For instance, Corteen and Wood (1972) found that if individuals are given a slight electric shock when certain types of words (e.g., city names) are inserted in a list of words, they will have a psychogalvanic response when those same words are inserted into the unintended track of a dichotic listening test. In dichotic listening tests, two different auditory tracks are sent to each ear, and the individual must respond to only one of the tracks. These studies suggest that processing can occur even if attention is not voluntarily directed on the stimuli.

Gender Differences in Attentional Competencies. Gender differences in attentional competencies have been studied in the research, and questions surrounding

biological differences that may account for attention variation have been the subject of debate for decades. In his review of the studies on sustained attention and gender, Warm (1987) concluded that despite the occasional evidence of differences in sustained attention in favor of males, these differences are so small as to be of little importance. Popular wisdom holds that gender differences in the size of the corpus callosum, which connects the left and right cerebral hemispheres, may be the basis for attentional differences between females and males such as the ability to divide attention in women. Recent studies using imaging techniques have found significant size differences between males and females (Dubb, Gur, Avants, & Gee, 2003; Shin, Kim, Ha, Park, Moon, Chung, Lee, Kim, Kim, Kwon, 2005), although the relationship to attention control is unclear.

In studies using dichotic listening procedures, where the participant is asked to either attend to one thing while tuning out distractions or simultaneously attend to two things at once, significant gender differences have been reported (Lake & Bryden, 1976; McGlone & Davidson, 1973; Welsh & Elliott, 2001). In these studies men tend to demonstrate right-ear advantage (REA), which is associated with left-brain processing. Left-brain functions include processing language, math, and detailed information. Information received in the right-ear is assumed to be processed more quickly because it has “direct” access to this left-brain processing center. Women tend to use both ears equally. When measured across time, however, the results switch, with women showing greater REA than males. Welsh and Elliott (2001), for instance, found a significant initial main effect for gender with males better overall than females on dichotic listening tasks

($F(1, 38) = 5.078, p < .05$). Over time, however, females showed a significant increase in REA (Pages $L = 981, p < .05$). The authors concluded that gender differences may be due to differences in initial attentional strategy rather than biological variation.

Compromises in these attention competencies can come from many sources. The primary threats identified by theorists and researchers are reviewed below.

Threats to Attention

Our understanding of the challenges to attention is limited by our understanding of the exact processes at work when a person pays attention. Despite the debate about how processing occurs, neuropsychologists agree that the process of paying attention is multi-faceted and that problems in any area can affect attention capability. This section will outline the various threats to attention proposed by theorists and researchers. These include issues with limited capacity, strategic control and flexibility, arousal, automatic versus controlled tasks, and width and direction of attentional focus.

Limited Capacity. Limited capacity models propose that individuals have a limited number of resources available to attend to various stimuli (Broadbent, 1958; Kahneman, 1973; Norman & Bobrow, 1975). As mentioned previously, these resources are considered the fuel for attention, although it is not clear exactly what this fuel actually is (Hirst, 1986). Some propose that availability and consumption of these resources at any given moment is a function of the individual's degree of investment, motivation, and effort. From this perspective, if two tasks require different processing resources, then performance levels when doing those tasks simultaneously will be identical to those obtained when performing the tasks individually. If the tasks require the same resources

(e.g., listening to a client and listening to internal dialogue), however, the performance on one of the two tasks will vary as a function of the other. Simultaneous performance on two tasks requires that the limited available resources are divided among both tasks.

Early theorists from this perspective suggested that the ability to sustain attention is a function of how well an individual can filter out extraneous stimuli (Broadbent, 1958). Therefore, these early theories are known as *filter theories*. Broadbent (1958) proposed that individuals tune out information based on its physical properties (e.g., intensity, tonality, position). Treisman (1960) proposed a hierarchical model where all information is first processed through an *acoustical* filter that analyzes input based on physical characteristics. The second level involves an *attenuator* that discriminates between stimuli based on recognition. Stimuli that are activated by the recognition system are completely processed, and other information is dropped. Similarly, Neisser (1976) proposed that individuals chose what to attend to based on past experiences and current expectations – what he calls *schemata*. Leclercq (2002) suggested that filter theories and schemata theories are complementary. “Schemata determine *why* something is selected whereas filter theories describe *how* things happen” (p. 10).

Problems arise when an individual cannot adequately “filter” information or allocate resources or when the filtering system is so strong that attention is biased. Sometimes these challenges are due to organic biological deficiencies such as occurs with traumatic brain injury. Other times this deficit is attributable to fatigue, lack of motivation, or interference from emotional factors.

For counselors, fatigue, lack of motivation, and emotional interference are all likely experiences. A counselor may find that by the end of the day, it is very difficult to maintain focus on the client's narrative. Another counselor may find that the client's story hits close to home and, therefore, tunes it out to avoid the negative feelings associated with personal memories of past pain. Other likely interferences to attention include stereotypes about the client based on cultural differences, uncertainty about what to say or how to proceed with the client, rehearsing what to say next, and anxiety about competency.

Although fatigue is difficult to overcome, various authors propose that self-awareness is critical to dealing with emotional or motivational factors that block the ability to pay attention (Egan, 1998; Fulton, 2005; Hulnick, 1977; Keefe, 1976; Loganbill et al., 1982; Rogers, 1975; Stoltenberg, 1981). Egan (1998) specifically linked counselor self-awareness to improvements in attention skills. He suggests that counselors pay attention to their "second channel" (p. 78), referring to the counselor's internal dialogue, in order to transform these distractions into tools for use in the session. By training the mind to pay attention to both the internal and external experience of the counseling session, the counselor gains more clarity about her or his own filters to attention and, theoretically, can pay attention to more of the client's experience (Fulton, 2005).

Strategic Control. The ability to tune into various aspects of the counseling session requires strategic control over attentional competencies, which is a function of attention-switching capabilities. The ability to voluntarily and flexibly adjust the focus of attention is related to such other cognitive functions as creativity, adaptability, and

problem-solving (Zimmerman & Leclercq, 2002), which are all important aspects of effective counseling. A counselor who has limited voluntary control over attention switching will be prone to distractibility. Conversely, counselors who rigidly hold their attention may miss important information or may have a difficult time seeing another's perspective.

Counselors are faced with multiple, competing distractors in counseling sessions. Some theorists suggest that the simultaneous performance of several tasks is only possible by increasing skill in switching attention from one task to the other (Allport, 1993; Neisser, 1976; Sanders, 1997). From this perspective, the performance level of each task is inversely related to the amount of time the individual devotes to each task, which is a function of maturation and learning (Leclercq, 2002). Hirst (1986) proposed that the ability to switch attention quickly is a function of the individual's ability to integrate various components of a task into units rather than individual components. By organizing in this way, the person changes the activity itself rather than changing the internal processing ability.

Gopher (1996) found that having a clear attentional strategy improves performance. For example, a counselor entering a session with a plan to switch focus between non-verbals and the client narrative may succeed better at overall attention. Other theorists posited that control over internal conditions (e.g., anxiety levels, motivation) also will impact the ability to switch attentional focus (Nideffer, 1976a, 1976b; Parasuraman, 1998; Zimmerman & Leclercq, 2002).

Arousal. Arousal refers to the perceptual readiness of the individual. Increased readiness results in increased likelihood that attention will be drawn to the intended cue. Arousal has two components – *tonic arousal* and *phasic alertness*. *Tonic arousal* refers to the involuntary, physiological fluctuations in alertness that occur naturally throughout the day or due to some biological defect. The term *phasic alertness* was coined by Posner and Rafal (1987) to refer to the heightened awareness that occurs when an individual is given a warning signal that information they are about to receive requires attention. It can be triggered by both internal and external factors.

Arousal is a function of the emotional and motivational state of the individual (Leclercq, 2002; Parasuraman, 1998). Leclercq (2002) suggested that emotion determines the orientation of attention whereas motivation determines the maintenance of focus. Easterbrook (1959) posited that increased emotional arousal results in a narrowing of attention, which can be beneficial up to a point. Too much narrowing, however, can limit processing of important information. Similarly, Yerkes and Dodson (1908) suggested that there is an optimal level for arousal for each individual at which performance is at its peak. The relationship between arousal and performance is curvilinear. Lack of arousal results in poor performance as does being overly aroused. Anxiety, for example, can have a significant impact on concentration (Clark, 1989; Wheelless, 1975). Both internal and external events can cue anxiety to the detriment of attention control. Brownell (2006) referred to this as *listener apprehension* and suggested that such things as the fear of misinterpreting, inadequately processing information, or not being able to adjust psychologically to difficult stimuli (e.g., a client's story of incest) can increase

apprehension. Recommendations for dealing with this challenge to attention control include relaxation, imagery, mental rehearsal, and deep breathing (Brownell, 2006; Nideffer, 1976a; Nideffer & Sharpe, 1978).

Research in the area of arousal level is typically focused on the perception of attentiveness by others (Cahn & Frey, 1992; Smith-Hanen, 1977; Trout & Rosenfeld, 1980) or the impact on counseling outcomes (Beutler, Machado, & Neufeldt, 1994). Limited research suggests, however, that adopting an attentive physical position may increase attention by setting in motion physiological responses that cue readiness for attention (Davis & Hadiks, 1994).

Automatic versus Controlled Responses. Sometimes the threat to attentional control is related to whether the attentional task is habitual or non-habitual. Researchers refer to these as *automatic* or *controlled* tasks. The classic example of automatic processes is the skill of learning to drive a car. At first, the learner must allocate all of her or his attention to the various tasks of driving. At this point in the learning process, talking to a passenger is usually distracting. With practice, many aspects of driving will become automatic, and most drivers will be able to engage in a conversation without becoming overly distracted. Schneider and Shifrin (1977) found that once the task becomes habitual, it is less flexible and more resistant to change. This finding was confirmed by Schneider and Fisk (1982). They found that subjects who had learned a certain behavior to the point of habituation had more difficulty learning a new way of doing the same task.

Resource theorists posit that this phenomenon is due to a decreased need for limited attentional resources with habitual tasks. For example, Navon (1985) suggested that two or more tasks are difficult to perform together because they interfere with each other. These interferences are related to a task's requirement of a habitual or non-habitual response. Habitual responses do not require as much processing because they happen automatically. Therefore, engaging in this task does not interfere with another task, because it no longer requires attentional resources. Tasks that require non-habitual responses (e.g., having to consider a situation from a different point of view, learning a new skill) will interfere with typical cognitive processes that are associated with that type of task.

Hirst (1986) suggested that this phenomenon is a function of the task itself changing, and, therefore, placing different demands on attentional processes. As an individual learns a task, he or she integrates various aspects of the task and becomes more skilled in accomplishing the task. As the requirements of the task itself change, shifting attention from one task to another becomes easier. This assumes a type of divided attention. Leclercq (2002) pointed out, however, that this ability to switch quickly when doing two tasks simultaneously "no longer concerns divided attention strictly speaking" (p. 37). The exact nature of this process is not fully understood, and researchers have called for further research (Hirst, 1986).

For new counselors, learning to pay attention to the variety of stimuli in the counseling session and perform all the basic helping skills (e.g., asking open questions, making eye contact) takes practice. Challenges to attention are, in part, a function of

these tasks being non-habitual in the beginning of counselor training. As session tasks become more habitual, attention is freed to attend to other aspects of the session. In addition, paying attention, itself, is a task for counselors. Counselors need to know what to pay attention to and how to hold their attention on relevant aspects of the session without getting distracted. Therefore, when paying attention itself is not habitual, it may be more difficult to engage the attentional processes necessary to attend to the important aspects of the counseling session.

Thought-Speech Differential. According to research, humans can process up to 400 to 500 words per minute, and the average rate of speech is 120 to 180 words per minute (Brownell, 2006). This difference between how quickly people think and how quickly people talk is called the thought-speech differential, and it explains why it can be difficult to concentrate on another person's speech. Because speech does not fully occupy the human mental capacity, the mind fills this excess space with other thoughts (e.g., daydreams, worry thoughts). Some attention may be on the speaker, and some on internal thoughts. Gopher's (1996) research suggests that having an attentional strategy that alternates between targets may help alleviate this problem. He found that in situations where subjects need to pay attention to more than one thing at a time, they perform better when they have an alternating focus. For example, counselors-in-training who are cued to focus specifically on the client's non-verbals and their use of self-deprecating remarks should demonstrate better attentional performance overall.

Width and Direction. Sports psychology has long been interested in training in attention (Gill, 2002). Helping athletes control their minds is critical for superior

performance. Nideffer (1976a, 1976b) synthesized the work of other theorists into a model of attention that is the basis for an assessment of attentional type and a training program in cultivating various attentional capacities. It also helps organize the threats to attention in layperson's terms.

In his model, Nideffer divides attention into two dimensions – width and direction. Width encompasses broad and narrow attention and explains how much the individual focuses on at one time. The individual could be attending to a broad range of stimuli simultaneously or narrow her or his attention to focus in on one aspect of experience. For example, a soccer player who scans the entire field is using broad attention, whereas the soccer player preparing to kick a goal whose attention is directed squarely on the goal is using narrow focus. This is similar to the concepts of sustained attention and divided attention in the neuropsychology literature. The direction dimension refers to whether the focus is internal (e.g., planning thoughts) or external (e.g., location of other players on the soccer field).

Nideffer combined these two dimensions into a grid, resulting in four types of attention – broad internal, broad external, narrow internal, and narrow external. In their book on attentional control training for athletes, Nideffer and Sharpe (1978) stated that the ability to control attention under pressure and in response to changing demands separates the average person from the elite performer. “Winners somehow manage to shift from one type of attention to another whenever they need to; losers do not!” (p. 24).

Although Nideffer's conceptualization of attention has primarily been used by sport psychologists, it is relevant for counselors, as well. Counselors need to be able to

control their attention along both width and direction dimensions. An inability to narrow focus could result in the counselor becoming overloaded and even immobilized by the cascade of various stimuli (e.g., thoughts, feelings). Conversely, focusing too narrowly can lead to errors caused by lack of information.

Threats to attentional control can come from many sources and can have a serious impact on performance. Researchers have studied various training methods with the goal of helping individuals improve their attention control. These studies are reviewed below.

Research in Attention Control Training

Interest in attention control training initially arose during the industrial revolution when workers were asked to maintain focus on a monotonous flow of products on an assembly line (Warm, 1984). This interest was accelerated by World War II as the frequency of error rates in sonar operators' detection of military targets prompted laboratory research on attention control. Early laboratory investigations confirmed the field observation that performance declined rapidly over time (Mackworth, 1950). Efforts to address this practical problem spurred interest in developing methods to increase attention (Craig, 1984). Although much of the research on attention control comes from neuropsychological studies into individuals with brain damage, researchers are interested in helping a wide variety of individuals improve their attentional capacities. This section will provide an overview of the types of attention-control research being conducted and the outcomes of those studies.

Outcome Research. Much of the research in attention training comes from work in neuropsychology, and these studies show evidence that practice improves attention

skills (Gopher, 1993, 1996; Leclercq, 2002; Leclercq & Sturm, 2002). Although selective attention and sustained attention are considered the most widely researched aspects of attention control (Gopher, 1993), the majority of the experimental research focuses on how these aspects of attention operate (e.g., how do structural elements of stimuli impact recognition) rather than the impact of practice.

The majority of studies into attention-control training examine the cultivation of divided attention capacity using the dual-task paradigm and task performance as the outcome variable. Typical examples include examinations of the ability to conduct two simultaneous, independent searches (Schneider & Fisk, 1984) and to read while playing the piano (Allport et al., 1972). In a famous study, Spelke et al. (1976) trained two students for five hours a week for four months in the dual task of simultaneously reading prose while also writing words from dictation. At the end of the training, they were able to read as rapidly and comprehend dictation as they could while doing each task separately. The authors concluded, “People’s ability to develop skills in specialised (sic) situations is so great that it may never be possible to define general limits on cognitive capacity” (Spelke et al., 1976, p. 229).

Researchers have studied a variety of populations with regard to attention-control training. These include individuals with chronic pain (Kabat-Zinn, 1982, Kabat-Zinn, Lipworth, & Burney, 1985; Morley, Biggs, & Shapiro, 1999; Sagula & Rice, 2004), binge-eating disorder (Kristeller & Hallett, 1999), hypochondriasis (Papageorgiou & Wells, 1998), fibromyalgia (Weissbecker, Salmon, Studts, Floyd, Dedert, & Sephton, 2002), aphasia (Coelho, 2005), major depression (Ma & Teasdale, 2004; Segal, Williams,

& Teasdale, 2003; Papageorgiou & Wells, 2000; Ramel, Goldin, Carmona, & McQuaid, 2004; Teasdale, Segal, Williams, Ridgeway, Soulsby, & Lau, 2000; Williams, Teasdale, Segal, & Soubby, 2000), anxiety (Bogels, Sijbers, Voncken, 2006; Miller, Fletcher, & Kabat-Zinn, 1995; Mohlman, 2004; Papageorgiou & Wells, 2000; Semple, Reid, & Miller, 2005; Tacon, Caldera, & Ronaghan, 2004; Tacon, McComb, Calder & Randolph, 2003), psoriasis (Kabat-Zinn, Wheeler, Light, Skillings, Scharf, Cropley, et al., 1998) and stress-related disorders (McKnight & Fehmi, 2001; Speca, Carlson, Goodey, & Angen, 2000). In addition, researchers have studied athletes (e.g., Calmels, 2004; Hagemann, Strauss, & Canal-Bruland, 2006), medical students (Rosenzweig, Reibel, Greeson, Brainard, & Hojat, 2003; Shapiro, Schwartz, & Bonner, 1998), health-care professionals (Galantino, Baime, Maguire, Szapary, Farrar, 2005; Shapiro, Astin, Bishop, & Cordova, 2005), and the general public (Chang, Palesh, Caldwell, Glasgow, Abramson, Luskin, Gill, Burke, & Koopman, 2004; Kubose, 1976; Valentine & Sweet, 1999). Despite the wide variety of populations studied, a review of the literature revealed only one study, an unpublished doctoral dissertation, that examined attention control training specifically for counselors (Reiman, 1985). This is surprising given the central role that attention plays in the counseling relationship. (This study will be discussed in more detail in the section on mindfulness).

Several authors have reviewed studies of attention-training in individuals with severe attention deficits related to injury or disorder (Leclercq & Strum, 2002; Park & Ingles, 2000; Rojas & Chan, 2005; Suslow, Schonauer, & Arolt, 2001). In their review of experimental studies on the rehabilitation of attention in brain-injury patients, Leclercq

and Strum (2002) found that 10 out of 14 studies demonstrated improvements in attention. Two other studies suggested improvements but had methodological problems (e.g., no baseline condition, lack of control group). The authors concluded that the evidence in support of attention control training with this population is encouraging. They noted that the most favorable results were obtained in studies that targeted a specific aspect of attention.

In their meta-analysis of 30 studies of attention-training for brain-injured participants, Park and Ingles (2000) found that overall performance improved significantly after training ($d = 0.45$). In the few studies that attempted to rehabilitate specific life skills requiring attention (e.g., driving), the effect sizes were considerably larger ($d = 0.83$) than programs that attempted to provide general attention training ($d = 0.11$). The authors concluded that attention-based rehabilitation programs will be most successful if they focus on specific application of attention skills.

In a review of complementary and alternative medicine treatments for attention-deficit hyperactivity disorder (ADHD), Rojas and Chan (2005) found that yoga programs that combine breathing, relaxation, and concentration practice with postural exercise may be efficacious alternatives or complements to conventional medical treatments for ADHD. Some research has been conducted on the impact of meditation and imagery on selective attention and sustained attention (typically assessed using measures of mental absorption), and the findings suggest that meditation training can increase both attentional competencies (Bogels, Sijbers, & Voncken, 2006; Calmels, 2004; Davidson,

Goleman, & Schwartz, 1976; Sabel, 1980; Spanos, Gottlieb, & Rivers, 1980; Valentine & Sweet, 1999).

In their review of nine studies on attention training among individuals diagnosed with schizophrenia, Suslow et al. (2001) found significant improvement in performance on 16 of 35 outcome measures. On the majority of measures, however, improvement could not be determined. Furthermore, the authors found generally low effect sizes and low power for the studies. They concluded that the evidence of attention-training effectiveness in patients with schizophrenia is inconclusive and suggested longitudinal studies that look specifically at various components of attention.

In his review of studies into the role of executive function in attention control on participants with normal brain functioning, Gopher (1996) examined the added costs of switching attention and the impact on performance of establishing attentional strategies. He found that there were significant time costs in switching attentional focus and that those costs were reduced with training. He also found that under dual-task conditions, when cognitive demands are high (as in counseling), variable priority training, where participants are asked to shift their attention from one target to another, significantly improved participants' abilities to change attention strategies at will.

A study by Gopher, Weil, and Siegel (1989) provides an example of this aspect of attentional training. The authors used a flight simulator video game and compared four groups on game scores. Two groups were told to hold their attention on one aspect of the game (mine handling or ship control). The third group was instructed to alternate attention between the two. The fourth group, the control, was not given any instructions.

The group given the dual task made progress much faster and had higher performance levels than the other three groups ($F(3, 58) = 5.34, p < .0027$). The control group had the lowest performance, suggesting that lack of an attentional strategy in a high-demand situation results in lower performance. The authors concluded that having a specific attentional strategy improves performance, particularly under stressful conditions.

The majority of these studies found significant results, suggesting that training can be effective with a wide variety of populations. Although a few researchers specifically used attention assessments as outcome measures, the majority used task performance or psychological outcome measures, leaving specific improvements in attention control unclear. Although Gopher (1993) suggested that it is easy to assume that improvements in task performance are based on improvements in attention control, more research should be conducted specifically on the impact of attention control training on various attention competencies.

Although many attention-training researchers have used such methods as repeated computer-simulation tasks or video games to train attention, a number of the researchers have used more comprehensive training programs to increase various aspects of attention. These include the Attention Process Training program (APT; Sohlberg & Mateer, 1987), Attention Training System (ATS; Gordon, Thomason, Cooper, & Ivers, 1991), Attention Training (ATT; Wells, 1990), and mindfulness-based trainings (e.g., Mindfulness-Based Cognitive Therapy, MBCT; Segal et al., 2002).

APT is an 8-week program designed to rehabilitate attentional problems in people with head injuries. It is based on a multidimensional model of attention and consists of

exercises designed to treat four levels of attention (sustained, selective, divided, and alternating attention). Exercises include such things as cancellation tasks with figures and numbers, attention tapes, and card sorts. ATS uses a token reinforcement program to help children diagnosed with ADHD. ATT is designed for individuals diagnosed with panic or anxiety disorders. It consists of regular practice in exercises that direct attention outside the self in order to reduce hyper self-focus. The attention exercises are designed to cultivate the capacity for selective attention, attention switching, and divided attention. The authors state that the goal is not to distract from anxious thoughts. Rather, it is to turn off perseverative, self-focused thinking.

The most widely researched of the programs used in attention-training studies are those based in mindfulness such as the Mindfulness-Based Stress Reduction Program (MBSR; Kabat-Zinn, 1990), Mindfulness-Based Cognitive Therapy for Depression (MBCT; Segal et al., 2002;), and Dialectical Behavior Therapy (DBT; Linehan, 1993a, 1993b). In addition to being the most widely researched, researchers have used these programs with the widest variety of populations. Mindfulness-based programs use various forms of meditation (e.g., sitting meditation, walking meditation, awareness of daily activities) to train individuals in selective attention, divided attention, attention switching, and sustained attention. All of the dimensions of attention outlined by Nideffer (1976) (i.e., narrow, broad, internal, external) are explored in these programs. These studies do not assess specific increases in attention competencies, however, suggesting that more research in this area is needed.

The researchers cited above did not assess the impact of attention-control training on beginning counselors. One could infer, however, that when learning a new skill that requires attention (e.g., counseling), attention-training may significantly improve performance. Furthermore, having a strategy for attention control in the session can increase attending performance. An exploration of current methods of attention-control training in counselor education follows.

Attention Control Training in Counselor Education. Theorists and researchers consider the ability to control attention a “fundamental element in behavioral adaptation” (Warm, 1984, p. 7). For counselors, it is the central task requirement of the job. Everything that occurs in the counseling process builds upon the foundation of the counselor’s capacity for attention. As Hill (2004) pointed out, although a counselor may be able to pay attention and not be helpful, it is very difficult to be helpful and not pay attention. Because paying attention is so critical to the performance of other basic counseling skills (e.g., reflecting feeling, summarizing, confrontation), Levitt (2001) posited that a counselor who is unable to pay attention may doubt her or his ability to be effective in other areas, resulting in lowered self-efficacy for counseling. This suggests that training should be a primary focus of counselor education programs.

Surprisingly, a review of the literature on attention and counselor training revealed no published studies specifically on attention-control training in counselors. Rather, researchers have focused on the impact of various helping-skills programs on the development of cognitive empathy or exploration skills (e.g., reflection of feelings, open questions, re-statements) (Hill & Lent, 2006). A review of helping-skills books revealed a

similar pattern. Current counselor education training programs in helping skills (Egan, 2002; Ivey & Ivey, 2003) teach the foundational skills considered important for a successful counseling relationship. These authors typically adopt a microskills approach that breaks listening down into *attending skills* or *invitational skills* and *active listening skills*. A review of how attending and active-listening skills are taught and the research into the effectiveness of skills on improving attention in counselors follows.

Attending skills: Attending skills include such things as eye contact, body position, attentive silence, voice tone, facial expressions and gestures. Egan (1998) used the acronym SOLER to help counselors-in-training remember how to be visibly tuned in to clients. SOLER reminds students to squarely face the client, have an open posture, lean toward the client, maintain eye contact, and try to relax. Unfortunately, research into the relationship between non-verbal behavior and attention is limited and mixed.

Neuropsychology literature suggests that level of arousal is related to responsiveness of the attentional system (Posner & Boies, 1971). Brownell (2006) suggested that physical “readiness” in the form of such non-verbals as eye contact and leaning forward may send a physiological cue to this attentional system that increases arousal. In a study of 10 videotapes of the same therapist, Davis and Hadiks (1994) found positive and significant correlations between therapist nonverbal behavior and a scale of therapist experiencing, which measures the therapist’s level of involvement in the session. Cegala et al. (1982) explored the relationship between non-verbals and attention as part of a larger study to define the theoretical construct of interaction involvement. They did not specify a hypothesis because of the lack of research in the area. They found

non-significant relationships between non-verbal behavior while listening and self-reported attention.

Active-listening skills: Active-listening aspects of training tend to focus on the *what* of listening rather than the *how*. Egan (1998) proposed, for instance, that active listening involves attending to the client's verbal narrative, client non-verbals, context of the client's story, and the gap or discrepancies in the client's story. Although Egan did add that listening should be done empathically, he did not include information on how to train the mind to attend to these various aspects of the session.

In their model for cognitive-skill training in counselor education, Morran, Kurpius, Brack, and Brack (1995) included a skill called "attending to and seeking information," which echoed Egan's focus on *what* counselors should attend to rather than *how*. They suggested that the cognitive skill of *attending to and seeking information* includes considering all potential sources of information, making comparisons between information, sorting through information to sift out relevant from irrelevant, and identifying gaps in information.

Authors of helping skills books mention problems that can arise when trying to actively listen to the client's story, including both external and internal distractions (Egan, 2002; Ivey & Ivey 2003; Young, 2001). These internal distractions may take any number of forms, including such things as self-criticism, performance anxiety, preoccupation with personal problems, over-identification with the client, and judgmental thoughts about the client. Suggestions for dealing with such distractions are either nonexistent in the counseling literature or focused on how to recover from lost attention

while in the session. For example, Young (2001) stated, “When you find you have lost track of the client’s story because of mental noise, stop and request that the client repeat the last part again” (p. 101). Egan (1998) suggested that counselors pay attention to their internal dialogue as well as the client’s narrative in order to gain control over internal processes, but he made no suggestions about how to train the mind in this form of divided attention.

Only one researcher (Levitt, 2001) has examined the relationship between active listening training and counselor variables. Otherwise, researchers have focused specifically on active listening focused on client outcomes. The majority of researchers encompass active listening into larger studies on more global helping-skills training (Hill & Lent, 2006).

In a pilot study, Levitt (2001) examined the relationship between active-listening training and counselor self-efficacy among five first-year, counseling master’s students. Training lasted for 4½ hours over the course of a semester. A microskills approach based on Ivey and Ivey’s (1999) model was used that included instruction and feedback on the microskills of active listening, including paraphrasing, reflecting feeling, and summarizing. Using a 1-4 scale, participants and their instructor/supervisors weekly evaluated participants on their performance of attending, active listening, reflecting feeling, reflecting content, challenging/ confronting, and probing/questioning. Participants also rated their self-efficacy on a self-efficacy measure developed by the researcher. The researcher compared mean scores over time, but she did not conduct any statistical analysis to determine significance of the changes. She found that scores on

active listening ratings increased most on instructor/supervisor ratings (mean range = 2.0-3.375). Ratings from both participants and instructor/supervisors on other skills also demonstrated an upward slope, though more variable than that of active listening ratings. Mean ratings on self-efficacy also increased over the semester (mean range = 1.5-2.5). The researcher concluded that emphasizing active listening over other microskills may contribute to increases in self-efficacy and performance in other skill areas.

Although this study suggests that training in active listening may help with other foundational skills, it suffers from numerous methodological flaws. First and foremost, the study has a limited sample ($N = 5$). Further, internal validity is threatened by both the self-reported outcome measures and the use of the instructor/supervisor to provide observer ratings. Because the instructors knew about the purpose of the study, they may have been inclined to rate participants higher on active listening skills. Because this study does not examine the impact of active listening training on internal attention competencies, it is difficult to assess whether changes were due to increased attentional capacity or some other factor. Furthermore, the author does not use any statistical tests to examine the statistical significance of her findings.

Critique of attention training in counselor education: Given the importance of attention-control skills, it is unclear why attention control has not been included in counselor helping skills programs. Perhaps it is because the majority of training programs today have their origins in the early helping-skills models of the 1970s that are assumed to be effective. These early programs include Human Relations Training (HRT; Carkhuff, 1972), microcounseling (MC; Ivey, 1971), and Interpersonal Process Recall (IPR; Kagan,

1984). Fong (1998) suggested that models of teaching have not kept pace with changes in basic understanding of the processes of learning and knowing. Furthermore, a recent meta-analysis suggested that the ability to draw conclusions about the efficacy of current teaching methods is limited (Hill & Lent, 2006).

In their review of helping-skills programs, Hill and Lent (2006) posited that studies on helping-skills training do not meet current standards for research. They cited issues such as administration bias (e.g., unstandardized treatment, “teaching to the test”), lack of random assignment, and lack of generalizability based on program format used in the study (e.g., skills taught in small groups rather than classrooms). Furthermore, the majority of studies use cognitive empathy or exploration skills (e.g., reflecting feelings, open questions) as outcome variables. They stated that none of the studies reviewed focused on skills that are more difficult to teach, such as making interpretations. The authors suggested that future researchers focus on such things as trainee variables, sequencing of methods, and comparisons of training programs.

Surprisingly, even in their thorough review of the literature, Hill and Lent (2006) failed to mention attention-control skills. In fact, their operational definition of helping skills reads, “specific verbal skills such as open questions, reflections of feelings interpretations, and direct guidance” (p. 155). This inattention to attention suggests that it is a neglected area in counselor education not only at the program and research levels, but also at the meta-analysis/critique level.

Summary

The ability to hold attention to various aspects of the counseling session, particularly the content of the client's narrative, is a foundational skill for counselors-in-training. Without solid attention skills, counselors may become preoccupied with other thoughts or lost in the session. Their responses may be marked by vagueness or misunderstanding, and their relationships with clients may be marred as a consequence. Further, theorists suggest that attention is a key component in the larger construct of executive function and, as such, is related to other important counselor cognitive skills such as conceptualizing, hypothesizing, and planning. Challenges to attention include limited resources to devote to attention, difficulty in effectively switching attention from one stimulus to another, and inability to sustain attention on strategic targets despite other distractions.

Researchers suggest that training in various attention competencies (i.e., selective attention, divided attention, sustained attention, and attention switching) is possible and that programs designed to cultivate attention competencies are effective. A number of researchers used comprehensive attention-training programs that include practices targeted to specific attention competencies, although only a limited number actually measure changes in attention competencies. Of these programs, mindfulness-based training programs have received the greatest volume of research attention. Moreover, researchers have used mindfulness-based programs with the widest variety of subjects. Unfortunately, despite the importance of attention control and the research supporting the efficacy of attention training, counselor training programs have historically overlooked

this skill both at the theoretical level and the research level. Accordingly, there is a strong need for research into the attention competencies that relate to key counselor-training outcomes.

The ability to pay attention to the client is the first step in experiencing and expressing empathy. The construct of empathy and its relationship to counseling outcomes is reviewed below.

Empathy

Rogers' (1951, 1957) seminal writings on the importance of empathy in the counseling relationship generated much research into the concept and its impact on the counseling relationship and treatment outcomes. After almost 60 years, research findings demonstrate consistent evidence that empathy is "an essential component of successful therapy in every therapeutic modality" (Watson, 2001, p. 445). Reviewers have noted, however, that empathy researchers have conceptualized and defined empathy in a variety of ways, leading to some confusion in the literature (Duan & Hill, 1996; Gladstein, 1983; Moore, 1990; Sexton & Whiston, 1994; Watson, 2001). In the last 20 years, empathy research has decreased, and some have suggested that this is may be attributable, in part, to the lack of agreement among researchers about how to conceptualize empathy (Duan & Hill, 1996). Duan and Hill also propose that this diversity "needs to be understood but not discouraged" (p. 261) and that researcher should be clear about what type of empathy they are examining. With that goal in mind, this section presents a review of the history of the concept of empathy, empirical research on empathy, theories into how empathy

develops, and an exploration of the ways in which empathy is currently taught in counselor education.

Defining Empathy

Cross-disciplinary researchers and theorists suggest that empathy is a key factor in interpersonal relationships (Davis, 1986; Dymond, 1950; Eisenberg & Miller, 1987; Feshbach, 1975; Hogan, 1969, 1975; Hoffman, 1977; Kagan, 1971; Kohut, 1984; Mead, 1934; Rogers, 1957; Plutchik, 1987). This section will trace the definition of empathy from its historical roots to its modern-day conceptualization as a multidimensional process.

Historical Roots of Empathy. The term empathy has its origins in German aesthetics. Art critic Robert Vischer (1873; as cited in Wispé, 1987) first used the term *Einfühlung* to describe the projection of human feelings onto the natural world. Translated, *Einfühlung* means “to feel one’s way into” or “feeling into” (Barnes & Thagard, 1997; Wispé, 1987). Theodor Lipps (1903; cited in Wispé, 1987) extended the concept to interpersonal relations. He believed that empathy was a process of understanding and responding to others through projection and imitation. In contrast to later conceptualizations of empathy where a distinction is made between self and other, Lipps focused on the identification between oneself and the other and included motor mimicry as an important component of empathy. Freud used *Einfühlung* to mean that “we take the producing person’s psychical state into consideration, put ourselves into it and try to understand it by comparing it with our own” (1905/1960, p. 186, as cited in Wispé, 1987).

Edward Titchener (1910, as cited in Goldstein & Michaels, 1985) translated *Einfühlung* into English and coined the term “empathy.” The word “empathy” derives from the Greek word *empathia*, which means an active appreciation of another person’s feeling experience (Wispé, 1987). The Greek prefix “em” means “in” or “within,” and “pathos” translates as “suffering or passion.” By the mid-twentieth century, the concept of empathy had taken hold in the realm of counseling psychology and psychotherapy research as well as sub-disciplines such as developmental and social psychology. Duan and Hill (1996) suggested that this broad interest in the concept lends support to the claim that empathy is an essential part of human interaction, and it may also have contributed to the variety of ways in which researchers have characterized empathy over the years.

Empathic Tendency. Theorists have conceptualized an individual’s tendency to be empathic in three somewhat overlapping ways: as a personality trait, as an attitude or way of being, and as an observable skill.

Empathy as a personality trait: A number of theorists, particularly those in the developmental psychology and social cognition fields, consider empathy to be a personality trait that develops with maturity but is generally stable over time (Dymond, 1950; Feshbach, 1975; Hogan, 1969, 1975; Johnson, 1990; Mead, 1934). From this perspective, the tendency to be empathic developed as a function of the survival of the human species (Hogan, 1975; Plutchik, 1987). In order to manage in a group culture, humans must have the capacity to understand others. Hogan (1975) suggested that the development of empathy is facilitated by four factors: (1) inherent “role-taking” ability that is related to intelligence and maturity, (2) encouragement of parents, (3) modeling on

empathic others, and (4) experiencing some degree of personal suffering in order to understand the suffering of others. Generally, empathy as a personality trait is related to the capacity to be perceptive and insightful, warm, compassionate, and helpful (Hogan, 1969; Johnson, 1990).

Empathy as a way of being: In contrast to a fixed personality trait, many have conceptualized empathy as a situation-specific capacity for non-judgmental caring and compassion that is available to all (Bachrach, 1976; Barrett-Lennard, 1962, 1981; Greenson, 1960; Rogers, 1957, 1965, 1975). Viewed from this perspective, empathy in counseling is a function of the attitude and person of the counselor. It is a way of being that the counselor assumes when he or she is with a client.

Although Rogers (1975) felt that the capacity to be empathic could be cultivated by being in the presence of other empathic individuals, he conceded that more emotionally mature individuals would be able to be more genuinely empathic. This suggests a relationship between Rogers' "way of being" concept and empathy as a personality trait or function of development. From this perspective, identifying an empathic counselor involves paying attention to how the counselor *is* rather than what the counselor says or does. Some have argued that it is difficult to measure a "way of being" (Matarazzo, 1978, as cited in Gallagher & Hargie, 1992), which is why some theorists began to operationalize empathy, particularly in the counseling session, in terms of observable skills (Carkhuff, 1969; Truax & Carkhuff, 1967, 1969).

Empathy as an observable skill: The emphasis in the counseling literature from the 60s to late 70s was placed on empathy as a communication skill. This shift from

Rogers' conceptualization of empathy as a way of being traces back to the work of Truax and Carkhuff (1967). In their effort to research and teach empathy, Truax and Carkhuff (1967) operationalized empathy as a communication skill that could be observed and measured. Truax (1967) developed the Accurate Empathy Scale for use in rating observable empathy skill. Truax and Carkhuff (1967) outlined eight stages of empathy. Stage 1 is the lowest level of empathy as evidenced by the counselor's responses in the session. Similarly, stage 8 counselors accurately interpret and communicate the client's feelings.

A number of theorists were concerned with this shift in focus (Bachrach, 1976; Gazda & Evans, 1990; Gladstein, 1983; Hackney, 1978). Bachrach (1976) suggested that the shift in focus toward observable skill perverted Rogers' idea of empathy as a way of being. He suggested that rather than an attitude that the counselor assumes, empathy was viewed as something the helper does – a measurable behavior that has little to do with the emotional experience of the counselor. Hackney (1978) argued for more focus on the affective components of empathy. Rogers' (1975) reiteration of his conceptualization of empathy and Barrett-Lennard's (1981) presentation of the "empathy cycle" echoed this concern.

The different ways of conceptualizing empathic tendency were fueled by an ongoing debate about the processes involved in experiencing empathy. Social and developmental psychologists argued that empathy is primarily an affective phenomenon. Psychotherapists understood empathy as primarily empathic understanding. Some, including Rogers (1975), suggested that it was both.

The Cognitive and Affective Qualities of Empathy. Although researchers and theorists agree that empathy is a basic relationship skill (Barrett-Lennard, 1981; Bohart & Greenberg, 1997; Greenberg, Elliott, Watson, & Bohart, 2001; Hogan, 1969; Keefe, 1976; Kohut, 1971; Orlinsky et al., 1994; Rogers 1975; Wampold, 2001; Watson, 2001), there has been much debate over whether empathy is primarily a cognitive phenomenon, an affective phenomenon, or both. Early use of the term empathy, as proposed by Lipps (1903; cited in Wispé, 1987), focused on the experience of affective perception and identification with the other. Empathy was understood in terms of motor mimicry and an affective “merging of self and other” (Strayer, 1987, p. 219). Later, this affective focus shifted to a cognitive view of empathy. Mead (1934) proposed that empathy included a cognitive component – the ability to cognitively understand the experience of the other and, with this, empathy was no longer solely an affective perception of the emotions of another. Rather, it was the ability to understand the other from her or his perspective (Deutsch & Madle, 1975). Mead also suggested that empathy involved a role-taking capacity and a “feeling into” the other person rather than identification and “feeling with” the other. The shift in definitional focus prompted by Mead’s work is reflected in the debate among theorists and researchers about the cognitive and affective nature of empathy.

Empathy as a cognitive phenomenon: Much of the early writing and research on empathy in the psychology, social cognition, and psychotherapy arenas focused on empathy as a cognitive phenomenon (Dymond, 1949; Kohut, 1971; Truax & Carkhuff, 1967). From this perspective, empathy is considered an intellectual understanding of the

internal frame of reference of others, including their thoughts, intentions, and feelings. In this vein, empathy is defined alternately as “perspective taking, role-taking, social sensitivity, and person perception” (Strayer, 1987, p. 219). From this perspective, the process of understanding the thoughts *and* feelings of another are purely cognitive. If affect is evoked, it is considered an epiphenomenon of cognition. Gladstein (1983) referred to this aspect of empathy as *cognitive empathy*. Duan and Hill (1996) suggested the term *intellectual empathy* to refer to the cognitive phenomena involved in empathy.

Empirical research from this perspective operationalized empathy in terms of the ability to predict and communicate others’ attitudes and feelings, and the majority of counseling and psychotherapy researchers have focused on cognitive empathy in outcome research (Carkhuff, 1969; Duan & Hill, 1996; Gladstein, 1983; Truax & Carkhuff, 1967; Watson, 2001). Some have suggested, however, that this is due, in part, to a distortion of Rogers’ original intent when defining empathy (Bachrach, 1976; Gazda & Evans, 1990; Gladstein, 1983; Hackney, 1978) and, in part, to the measures of empathy available within the field (Duan & Hill, 1996; Gladstein, 1983; Watson, 2001). Others have suggested that this lack of focus on the affective component of empathy is related to a concern about the risk of over-identifying with the client (Bohart & Greenberg, 1997).

Based on their reviews of the literature, Duan and Hill (1996) and Gladstein (1983) concluded that an important aspect of empathy – the affective component -- has been excluded from empirical research and that the lack of attention to the role of counselor affective empathy may account for some of the inconsistencies found in research.

Empathy as an affective phenomenon: The affective qualities of empathy refer to the emotional experiencing of another person's emotions. Definitions of empathy from this perspective include "an emotional response that stems from another's emotional state or condition, is congruent with the other's emotional state or condition, and involves at least a minimal degree of differentiation between self and other" (Eisenberg & Fabes, 1990, p. 132), and "a vicarious emotional response to the perceived emotional experiences of others" (Mehrabian & Epstein, 1972, p. 525). Stotland, Mathews, Sherman, Hansson, and Richardson (1978) defined empathy as "an observer reacting emotionally because he (sic) perceives that another is experiencing or about to experience an emotion" (p. 12). From this perspective, empathy is present if the observer experiences the emotional state of the other. In an effort to make this aspect of empathy clear, Gladstein (1983) used the term *affective empathy* to mean "responding with the same emotion to another person's emotion" (p. 468). Duan and Hill (1996) used the term *empathic emotions* to refer to the emotional experience of empathy, and Mehrabian and Epstein (1972) refer to it as *emotional empathy*.

Lennon and Eisenberg (1987) identified three types of affective empathy in the literature: personal distress, emotional contagion, and genuine concern for another. *Personal distress* refers to experiencing the emotion of another as self-concern. It is unlikely to lead to compassion or altruistic behavior. *Emotional contagion* refers to vicariously feeling the same emotion of another, and *genuine concern* refers to feeling an emotion of concern for the other. With genuine concern, the emotion is typically not an exact match with the other.

Evidence from social and developmental psychologists suggests that affective empathy may be more related to altruistic behavior than cognitive empathy (Rushton, 1980). In recent years, theorists have moved toward a multidimensional model of empathy that includes both cognitive and affective aspects. This approach is outlined below.

Empathy as both cognitive and affective: Despite the differences in emphasis, it is generally recognized that to be truly empathic, a person must not only be able to cognitively understand the values, goals, and world views of another, but also be able to respond emotionally to that person (Bohart & Greenberg, 1997; Goleman, 1996; Greenberg, Rice, & Elliott, 1993; Moore, 1990; Watson, 2001). Some have argued that the cognitive and affective components of empathy are inseparable – that they are in a reciprocal relationship with each other (Feshbach, 1975; Greenberg et al., 1993; Hoffman, 1982; Strayer, 1987). From this perspective, empathy is a way of knowing that involves both affective and cognitive phenomena (Watson, 2001). Strayer (1987) suggested that much of the earlier focus on empathy as purely cognitive was “mislabeled and indistinguishable from general social cognition” (p. 219).

This inclusion of both cognitive and affective components is evident in early seminal writings in the counseling literature. Barrett-Lennard (1962), for instance, described empathic understanding as comprised of both “sensing the immediate affective quality and intensity of the other’s experience, as well as recognizing its particular context” (p. 3). Although Truax and Carkhuff (1967) operationalized empathy in terms of the cognitive dimensions, their writings suggest an affective quality to empathy as well.

They write that the empathic counselor, based on understanding of human feelings and past affective experiences, is able to “sense feelings that the client only partially reveals” (p. 46).

Several authors have suggested that Rogers’ original definition of empathy included both components, as well, although the cognitive component became the focus of research (Bachrach, 1976; Bohart & Greenberg, 1997; Gazda & Evans, 1990; Gladstein, 1983; Hackney, 1978). Rogers’ (1957, 1965, 1975) suggested that empathy involves a sensing and understanding of the client’s affective and cognitive state so that the client’s world is clear to the counselor. In 1957, he defined empathy as the ability “to sense the client’s private world as if it were your own, but without ever losing the ‘as if’ quality” (1957, p. 99). Bohart and Greenberg (1997) noted that although the majority of Rogers’ writings referred to a cognitive understanding of the client’s experience, he stressed that the counselor’s affective experience helps to inform that understanding.

The importance of both the affective experience and the cognitive experience of the counselor is underscored by theorists and researchers in developmental psychology and social psychology (Duan & Hill, 1996; Feshbach, 1975; Hoffman, 1982). Although both Feshbach’s (1975) and Hoffman’s (1982) models of empathy emphasize the affective component over the cognitive, they stress that both affective and cognitive processes are involved in the process. Keefe’s (1976) model of empathy also includes both affective and cognitive processes. Much of the current literature on empathy, in general, now focuses on the cognitive-affective process of being empathic in relationships (Beitel, Ferrer, & Cecero, 2004; Breggin, Breggin, & Bemak, 2002;

Constantine & Gainor, 2001; Gladding, 2004; Hoffman, 2002; Miville, Carlozzi, Gushue, Schara, & Ueda, 2005; Munro, Bore, & Powis, 2005).

Empathy as a multidimensional interpersonal process: As attention to the construct of empathy grew, researchers and theorists interested in empathy within the counseling relationship began to conceptualize empathy as a multifaceted process that includes counselor communication of intellectual understanding and affective experience to the client (Barrett-Lennard, 1981; Rogers, 1975). This reflected the deepening understanding among researchers and theorists of the complex nature of empathy. For instance, when Rogers (1957) initially wrote about empathy, he conceptualized it as a cognitive-affective state. In 1975, however, he described it as a cognitive-affective process. Rogers (1975) made this shift in understanding explicit when he stated, “I would no longer be terming it a ‘state of empathy,’ because I believe it to be a process, rather than a state” (p. 4). Barrett-Lennard (1981) stressed that empathy is first and foremost an inner experience of “responsive experiential resonance” (p. 93) and that empathy can occur without the other’s knowledge. He refers to this as *observational empathy*. *Relational empathy*, in contrast, involves a communicative component, which is considered instrumental to effective use of empathy in a counseling relationship (Barrett-Lennard, 1981; Rogers, 1975; Truax & Carkhuff, 1967).

Barrett-Lennard’s (1981) model of relational empathy identified three components of empathy, which he termed the *empathy cycle*: the therapist’s experience (*empathic resonance*), the therapist’s communication of this experience (*expressed empathy*), and the client’s experience (*received empathy*). He returned to the original

Greek meaning of the term in suggesting that empathy means a “going into a strong feeling-connection with another” and “entering the lived worlds of others, with felt awareness of their experience” (1981, p. 91). Truax and Carkhuff (1969) stated that empathy involves “...both the therapist’s sensitivity to current feelings and his (sic) verbal facility to communicate this understanding in a language attuned to the client’s current feelings” (p. 46).

Rogers’ (1975) revised definition of empathy stated that empathy was a way of being that involved:

entering the private perceptual world of the other and becoming thoroughly at home in it. It involves being sensitive ... to the changing felt meanings which flow in this other person.... It means temporarily living in his/her life, moving about in it delicately without making judgments, sensing meanings of which he/she is scarcely aware.... It includes communicating your sensing of his/her world as you look with fresh and unfrightened eyes at elements of which the individual is fearful. It means frequently checking with him/her as to accuracy of your sensing, and being guided by the responses you receive.... To be with another in this way means that for the time being you lay aside the views and values you hold for yourself in order to enter another world without prejudice. (p. 4).

In the social work literature, Keefe (1976) suggested that empathy involves “perceiving, feeling, thinking, and communicating” (p. 11). In Keefe’s model, the first phase of empathy in a helping relationship involves perceiving or attending to the verbal and non-verbal cues of the other. These perceptions elicit both cognitive and affective responses in the counselor, which marks phase two in the empathy process. In this phase, the counselor must be aware of bias in cognitive and affective responses stemming from such things as stereotypes, value judgments, or problem-solving. Phase three involves

separating feelings held by the counselor alone from those sensed and shared with the client. Keefe stated that this requires openness to experience as well as the ability to attend to and label one's own feelings. In the final phase, the counselor must transmit awareness of the client's experience back to the client.

A common theme in all three descriptions of empathy in the counseling relationship is the need for a non-judging attitude. In fact, many theorists have observed that it is unlikely that someone could be empathic if he or she were judgmental of that person (Bohart & Greenberg, 1997; Egan, 2002; Ivey & Ivey, 2003; Keefe, 1976; Rogers, 1957, 1965, 1975; Watson, 2001). Rogers (1975) stated that to be with a client in an empathic way, the counselor must "lay aside the views and values you hold for yourself in order to enter another's world without prejudice" (p. 4). This type of presence has been called unconditional positive regard (Rogers, 1957), non-threatening context (Hogan, 1975), a value-neutral mode of observation (Kohut, 1984), and the process of holding qualifying or distorting cognitive processes in abeyance (Keefe, 1976).

Over the years, empathy has been variously defined as a cognitive and affective trait, state, and skill. Empathy in the counseling relationship is now considered a multidimensional construct that involves both cognitive and affective processes as well as an open, non-judging attitude toward the other. Long before this general consensus was reached, Rogers (1957) proposed that empathy is a core condition for effective counseling. Empirical research bears this out (Bohart & Greenberg, 1997; Duan & Hill, 1996; Greenberg et al., 2001; Lambert & Bergin, 1994; Luborsky, Crits-Christoph, Mintz, & Auerbach, 1988; Orlinsky et al., 1994; Patterson, 1984; Sexton & Whiston,

1994; Wampold, 2001; Watson, 2001). The section that follows provides a review of the empirical research on empathy and counseling outcomes.

Empathy and Counseling Outcomes

Despite the confusion over a definition of what empathy is and the processes involved in experiencing empathy, empirical research suggests that empathy is an important factor in the counseling relationship. After Rogers' (1957) proposal that empathy, unconditional positive regard, and congruence were necessary conditions for effective counseling, researchers showed a flurry of interest in the role of empathy in the change process. Unfortunately, despite theoretical suggestions and empirical research from other disciplines (e.g., social psychology, developmental psychology) indicating that affective empathy is an important part of the counseling relationship and the empathy process, counseling researchers have mostly ignored this important variable, focusing instead on cognitive perspective taking or communication of empathy. This section provides an overview of research into the cognitive and affective components of empathy with emphasis on its relationship to outcome in counseling.

Research Evidence. The majority of research into empathy in counseling assesses the relationship between counselor cognitive empathy and client outcomes. Although some studies failed to find significant relationships (Orlinsky et al., 1994; Parloff, Waskow, & Wolfe, 1978), overall, the majority of evidence suggests that empathy is a critical variable in counseling outcomes (Bohart, Elliott, Greenberg, & Watson, 2002; Bohart & Greenberg, 1997; Duan & Hill, 1996; Greenberg et al., 2001; Lambert & Bergin, 1994; Luborsky et al. 1988; Orlinsky et al., 1994; Patterson, 1984; Sexton &

Whiston, 1994; Wampold, 2001; Watson, 2001; Whiston & Sexton, 1994). In their review of 115 research articles on the relationship between outcome and counselor empathy, Orlinsky et al. (1994) found a 54% positive association with outcome. None of those research studies showed a negative relationship. In research studies that examined the client's perspective of counselor empathy ($N = 47$), 72% found a positive relationship between counselor empathy and outcome (Orlinsky et al., 1994).

Watson (2001) reported that three separate meta-analyses of empathy research studies found an overall correlation of .26 between mean empathy scores and outcome. Although this is a relatively small relationship, she suggests that it provides support for the relationship. Similarly, Bohart et al. (2002) conducted a meta-analysis of 47 studies ranging from 1961 to 2000 on the relationship between counselor empathy and client outcome. They found a medium effect size of .32, suggesting that empathy accounted for almost 10% of outcome variance.

As mentioned above, there is little research into the relationship between affective empathy and counseling outcomes. One study, however, showed a positive relationship between affective empathy and client-rated counseling outcome. Ridgway and Sharpley (1990) used a correlational design to examine the power of five variables to predict counselor trainee effectiveness. The predictor variables were cognitive empathy, affective empathy, communicative empathy, purpose in life, and self-efficacy for learning counseling skills. The outcome variables included counseling skill ability as assessed by the client and instructor, counselor behavior as assessed by the client and instructor, and client satisfaction as assessed by the client. The sample for this study consisted of 42

post-graduate level students in a behavioral counselor training program in Australia. Assessments of predictor variables were administered in a counterbalanced order before the first training session. Assessments of outcome variables were based on a simulated counseling session after counselors-in-training had received 15 hours of training over 5 weeks.

A canonical correlation analysis found a significant positive relationship between the set of predictor variables and the set of criterion variables ($F(15, 94) = 2.6, p < .05$). Pearson correlation coefficients were calculated to assess for multicollinearity among the predictor variables. No correlations greater than .33 were found, suggesting the multicollinearity was not problematic. Correlations between the predictor and outcome variables with the first canonical variate pair indicated that affective empathy was the only empathy variable related to counseling outcome variables.

Empirical research into affective empathy comes primarily from the social and developmental psychology fields. Although researchers in these fields have not specifically explored the relationship between counselor affective empathy and client outcomes, they have found evidence that affective empathy is correlated with helping behavior (Batson, Fultz, & Schoenrade, 1987; Eisenberg & Miller, 1987; Hoffman, 1981; Krebs, 1975; Mehrabian & Epstein, 1972; Toi & Batson, 1982). For example, in their study of 81 female undergraduates, Mehrabian and Epstein (1972) found that helping behavior was a function of empathic tendency ($\beta = .31, p < .05$).

Reviews of the social and developmental psychology literature support this relationship between affective empathy and helping behavior. In her review of the

empirical research literature, Rushton (1980) concluded that for people who have internalized a desire to help others in need, the experience of affective empathy results in helping behavior whereas role-taking or cognitive empathy may not. Mehrabian, Young, and Sato (1988) found that individuals who demonstrated high affective empathy “engaged more in altruistic behaviors, were less aggressive, more affiliative, rated positive social traits as more important, scored higher on measures of moral judgment, and volunteered more to help others” (p. 221).

These findings suggest that cognitive empathy is an important factor in counseling outcomes and that affective empathy may be related to increased helping behavior. Several weaknesses, however, in research methodology should be considered.

Weaknesses in Research Methodology. The majority of studies indicate a positive relationship between empathy and counseling outcome. Despite these findings, a number of methodological weaknesses exist stemming from the multitude of ways in which empathy is operationalized and assessed. Researchers have reported inconsistencies in results, and some have questioned the conclusion that empathy is necessary for all clients (Luborsky et al., 1988; Patterson, 1984). These inconsistencies may be related to the way in which empathy has been operationalized and the validity and reliability of the used to assess empathy. These weaknesses are reviewed below.

Researchers have operationalized and assessed empathy in a variety of ways (Parloff et al., 1978; Orlinsky et al., 1994). Researchers developing instruments to assess empathy have defined it as a cognitive skill (e.g., Hogan, 1969; Truax, 1967; Truax & Carkhuff, 1967), an affective state (e.g., Eisenberg, Fabes, Bustamante, & Mathy, 1987;

Feshbach & Roe, 1968; Mehrabian & Epstein, 1972), and as a multidimensional phenomenon (Davis, 1980, 1983, 1996). The most commonly used measures of empathy in counseling and psychotherapy are the Accurate Empathy Scale (Truax, 1967; Truax & Carkhuff, 1967), which measures the communication of empathy, and the Barrett-Lennard, Relationship Inventory (BLRI, Barrett-Lennard, 1962). The BLRI measures three aspects of empathy: (1) the therapist's experience (*resonated experience*), which is assessed from a cognitive standpoint, (2) the observer's view (*expressed empathy*), and (3) the client's experience (*received empathy*). These measures assess only the cognitive and interpersonal dimensions of empathy, leaving affective empathy untapped. Furthermore, these are subjective measures and, therefore, limited by human perception ability.

The reliability of self-reports also may impact the internal validity of outcome research. Some studies have shown that counselors may rate themselves higher in empathy than do clients and observers (Kurtz & Grummon, 1972; Lafferty, Beutler, & Crago, 1989). Furthermore, observers and clients may use different criteria for judging empathy (Watson, 2001). Several authors have concluded that client-perceived empathy is more accurate than counselor self-ratings and that counselor-rated empathy neither predicts outcome nor correlates with client-rated or observer-rated empathy (Barrett-Lennard, 1981; Orlinsky et al., 1994).

Research in the social and development psychology fields is similarly marred by methodological issues such as lack of evidence of validity or reliability in measurement tools and sampling methods. Much of the research in this area uses either a paper-and-

pencil measure of an individual's perception of feeling the other's experience or physiological indices of arousal, such as a measure of sweating in the palms.

Physiological measures are confounded by the inability to distinguish affective empathy from sympathy or general emotional distress. The majority of research studies in these fields rely on student volunteers from psychology classes, thereby limiting external validity.

Despite these obstacles to research on the relationship between counselor empathy and client outcome, the evidence suggests that empathy is a crucial variable in counseling. Patterson (1984) stated in his review of reviews, "the magnitude of the evidence is nothing short of amazing" (p. 437). In her review of the literature, Watson (2001) found research support for empathy as "an essential component of successful therapy in every therapeutic modality" (p. 445). She concluded, "When empathy is operating at all three levels – interpersonal, cognitive, and affective – it is one of the most powerful tools therapists have at their disposal" (p. 464). Gladstein (1983) called for broadening the research agenda in counseling and psychotherapy by incorporating concepts from social and developmental psychology. Likewise, Duan and Hill (1996) argued for increased study of both the cognitive and affective dimensions of empathy as well as the variables that influence it.

Development of Empathy

Given the importance of empathy in the counseling relationship, a key concern for counselor educators is how to cultivate both cognitive and affective empathic capacity in counselors-in-training (Hackney, 1978). This section will provide a review of theory and

research related to the development of empathy and how empathy is currently taught in counselor education. The literature on gender differences also will be reviewed.

Models of Empathy Development. Other than models of the interpersonal process of experiencing empathy, the counseling literature offers little guidance regarding the development of empathy. Developmental psychologists and Buddhist psychology, however, offer several models of how empathy develops. Two important multidimensional models from the developmental literature are those of Hoffman (1975) and Feshbach (1975). Tenets from Buddhist psychology have successfully been integrated into a number of current counseling approaches (Hayes, Strosahl, & Wilson, 1999; Kabat-Zinn, 1990; Linehan, 1993a, 1993b; Segal et al., 2002), and theorists propose that continued integration of Eastern philosophy with Western practice is an appropriate next step in the development of the profession (Andersen, 2005; Atwood & Maltin, 1991; Bien, 2006; Bogart, 1991; Epstein, 1995; Germer, 2005; Hayes, 2002; Magid, 2002; Walsh & Shapiro, 2006). A brief overview of these three models follows.

Hoffman's model: Hoffman (1975) defined empathy in terms of the affective emotional response. In his model, cognitive role-taking is secondary to affective emotional experience. Hoffman identified six ways in which vicarious emotional response to another's feelings is activated. Goldstein and Michaels (1985) referred to these as information processing channels. These channels or modes track with the developmental progression of the child.

The first mode is the *reactive newborn cry*, which occurs when a baby is exposed to the sound of another person in distress. The second channel through which emotions

are aroused is through classical conditioning. In this mode, affective empathy occurs when an infant observes another person in distress and at the same time also is experiencing emotional distress. Through stimulus recognition, the child begins to react emotionally to the distress of others. The third mode requires that the child already have memories of distress. In this mode, when a child sees another in distress, he or she associates that distress with her or his own memories of distress. Hoffman suggests that this mode may be the way adults experience the distress of others, suggesting that the ability to feel one's own distress is necessary for feeling the distress of others.

Hoffman's fourth channel through which the distress of others arouses distress in the observer is motor mimicry. When a child mimics the facial signs of distress, this causes innate kinesthetic cues to be activated that help the child experience and understand the feeling. The fifth mode is called *symbolic association*, and it involves exposure to symbolic cues of distress rather than the actual stimulus person. For instance, a visit to a Holocaust museum would evoke emotional arousal and empathy due to its symbolic cues. The sixth mode involves more cognitive, role-taking capacity. In this mode, the child takes the perspective of the person in distress. Like previous modes, this mode elicits associations with past experiences, but in this mode the cues come about by the child forming a mental picture of herself or himself in the same situation as the distressed person.

Hoffman also outlined a developmental progression through which a child's increasing differentiation between self and other changes empathic awareness. In the first year of life, the child experiences empathy globally. There is no differentiation between

self and other. The second stage is egocentric empathy. At this stage, the child appropriately recognizes that the situation must be changed to relieve distress in the other. The child approaches change, however, from an egocentric point of view. Hoffman uses the example of a child who sees another child crying and takes that child to his own mother. The next stage begins around age 2 or 3 when the child can engage in role-taking. This stage continues through adult development and is influenced by the child's capacity for language, awareness of past and future dimensions of existence, and ability to contemplate the other's situation. The ability to extend empathy to a group of people is considered a high level empathy.

Feshbach's three-factor model: Feshbach (1975) outlined a three-factor model that includes two cognitive factors and one affective factor. The first factor is the child's cognitive ability to discriminate the emotional distress of another. The second factor is the child's ability to assume a role-taking perspective in relation to the other. This involves a cognitive capacity for understanding the other person's viewpoint. The third component is emotional responsiveness. In order to share in another's experience, the child must be able to experience the emotion of the other.

Buddhist psychology model: In Buddhist psychology, empathy is considered a cohesive factor (Salzberg, 1995) that connects the individual to others. Buddhist psychology adopts a view of empathic capacity similar to that of Rogers. Rather than a fixed trait that cannot be cultivated, the capacity for empathy is available to all. Empathy is thought to develop out of a deepening acceptance of the reality of our lives and

understanding of the connectedness of all beings because of that reality (Epstein, 1995; Morgan & Morgan, 2005; Walsh, 2000).

Greater insight into the sources of one's own suffering and the illusion of permanence and separateness is posited to deepen compassion and empathy. From this perspective, it is not until a person can look deeply at the self with compassion and acceptance that he or she can effectively do the same for another. Specific awareness exercises to enhance compassion for the self and others help to develop this capacity (Morgan & Morgan, 2005; Walsh, 2000). These practices are a means of gaining insight into the nature of the self, others, and the relation between the self and the world (Wallace, 2001). An important tenet of Buddhist psychology's philosophy toward suffering is that in order for change to occur, suffering must be accepted as it is (Rand, 2004). This is in line with Rogers' core condition of non-judgmental acceptance as a basis for change.

Gender Differences in Empathy. Lennon and Eisenberg (1987) noted that much of the research in the area of gender differences in empathy is motivated by the widely held view that females are more empathic than males, particularly in the affective domain. This question has been addressed in several literature reviews, and the results are complex and mixed. Much of this confusion stems from the different ways in which empathy is defined and assessed.

Early reviews of gender differences defined empathy broadly and, therefore, compared studies that measured both cognitive and affective dimensions of empathy (Lennon & Eisenberg, 1987). Not surprisingly, those early authors concluded that there

were no gender differences in empathy. Hoffman (1977) differentiated between cognitive and affective studies and concluded that females are more empathic than males. The majority of the data in his review, however, came from samples of young children, calling into question whether this is true for adults as well. Clearly, controlling for methodological differences is an important consideration in drawing conclusions about gender differences.

In their meta-analysis of research on gender differences in empathy, Eisenberg and Lennon (1983) compared studies with similar definitions of empathy and similar methods of assessing empathy. For studies that used self-report measures, they found a significant difference between females and males ($z = 18.35, p < .0001$) with females consistently scoring higher than males. For picture/story measures of empathy where the participant is exposed to pictures of the affective state of others, the authors found significant differences between females and males ($z = 1.79, 1\text{-tailed } p < .04$). The effect size, however, was small ($d = .1$), implying only a small female advantage. Due to the limited number of studies using physiological measures or facial/gestural measures, meta-analyses were not conducted. The authors concluded, however, that the evidence of gender differences was weak. A follow-up review by the same authors found similar results (Lennon & Eisenberg, 1987).

Three studies were identified that specifically examined the relationship between gender and empathy in therapists and counselors (Hatcher, Favorite, Hardy, Goode, Deshetler, & Thomas, 2005; Trusty, Ng, & Watts, 2006). Hatcher et al. (2005) found significant differences between female and male therapists on a multidimensional

measure of empathy. Female therapists scored significantly higher on a scale of Empathic Concern, which assesses affective empathy ($F(1, 83) = 8.633, p = .004; d = .748$). They did not, however, find significant differences on a scale of Perspective Taking, which assesses cognitive empathy, although female therapists did score higher than males ($F(1, 83) = 3.736, p = .057$).

Similarly, Miville et al., (2006) found significant gender differences on Emotional Concern ($F(1, 173) = 17.85, p < .01$) and Personal Distress ($F(1, 173) = 12.51, p < .01$) subscales of a multidimensional measure of empathy, with females scoring higher on both. Trusty et al. (2006) found that gender was correlated with empathy scores on an affective measure of empathy and that in a structural model, the impact of gender on empathy was significant (critical ratio = $-3.392, p < .05$).

The literature suggests that gender differences in empathy may exist in favor of females, particularly for affective empathy. It is unclear, however, whether differences in cognitive empathy reflect true gender variation. Reported gender differences can be interpreted in several ways. Lennon and Eisenberg (1987) suggested that females and males may respond to self-report measures in accord with gender-role stereotypes, thus inflating the gender differences found in self-report measures. Gender differences may also reflect differences in how empathy is expressed, based on social norms, rather than actual differences in ability.

Several models suggest that empathy development parallels maturation and that it can be cultivated with deepened acceptance and awareness of common humanity. Furthermore, research suggests a trend toward gender differences in empathy in favor of

females. These findings, however, are clouded by possible self-report bias and socialization norms. For counselor educators, an important question is, “What conditions need to be present in order for empathy to develop?” This question is examined below.

Necessary Conditions for Empathy Development. The models presented above suggest several necessary conditions for the development of mature empathy. These include a need for non-judgmental acceptance of one’s own pain and the pain of others; the ability to tolerate distressing thoughts and feelings; and cognitive and affective understanding of the relationship between thoughts, feelings, and behaviors. Theorists have termed this later condition *emotional intelligence* (Goleman, 1995). It is defined as the capacity to reflect upon the meaning of thoughts, feelings, and emotions of the self and others and to monitor and separate the emotions of the self from the emotions of others (Goleman, 1995; Salovey & Mayer, 1990). Although counseling and psychotherapy theorists do not outline a specific developmental path for cultivating empathy, their writings suggest that they would be in agreement with these developmental requirements. For instance, Rogers (1975) wrote, “The better integrated the therapist is within himself [sic], the higher degree of empathy he [sic] exhibits” (p. 5). These three conditions and relevant counseling research are presented below.

Non-judgmental acceptance: The models presented above suggest that the first step in cultivating the capacity to be empathic is the ability to be aware of and accepting of one’s own thoughts and feelings. Other researchers and theorists support this premise (Hulnick, 1977; Jennings & Skovholt, 1999; Morgan & Morgan, 2005; Rogers, 1975). In their qualitative study of master therapists, Jennings and Skovholt (1999) found that a key

component of expert functioning in counselors is the ability to accept the self. Rogers' (1975) writes that in order to set aside personal values the counselor must be "secure enough in himself (sic) that he (sic) knows he (sic) will not get lost in what may turn out to be the strange or bizarre world of the other, and can comfortably return to his (sic) own world when he (sic) wishes" (p. 4).

Empirical research into the relationship between non-judgmental acceptance of the self and empathy has focused primarily on how unconditional positive regard for the other in tandem with cognitive empathy affects counseling outcomes (Lambert & Barley, 2001; Lambert & Bergin, 1994; Norcross, 2001; Sexton & Whiston, 1994; Wampold, 2001; Whiston & Sexton, 1993). Some studies have found a relationship between counselor ability to deal with childhood pain and counseling effectiveness (Watts, Trusty, Canada, & Harvill, 1995; Wilcoxon, Walker, & Hovestadt, 1989; Wolgien & Coady, 1997) and a relationship between attachment styles and focus on the emotions of others (Bartholomew & Horowitz, 1991; Searle & Meara, 1999). Empirical research into the specific relationship between counselor self-acceptance and empathy for others, however, is limited. Two studies were found that suggest that the counselor's ability to approach and accept her or his own pain is related to the ability to have an affective empathic response to others (Ridgway & Sharpley, 1990; Trusty, et al., 2005).

Trusty et al. (2005) used structural equation modeling to examine a model of the effects of adult attachment on affective empathy in master's level counseling students. Participants in the study were 143 counseling students from one university. Data were collected over four consecutive semesters. The authors used the Emotional Empathic

Tendency Scale (EETS; Mehrabian & Epstein, 1972) to measure emotional empathy and the Attachment Style Questionnaire (ASQ; Feeney, Noller, & Hanrahan, 1994) to measure adult attachment. The authors found that the effect of the latent variable of avoidance on empathy was negative and significant (critical ratio = -2.476, $p < .05$). They also found that the effect of the latent anxiety variable on empathy was positive and significant (critical ratio = 3.687, $p < .001$). Students with high anxiety and low avoidance had the highest levels of emotional empathy.

Although this finding was inconsistent with attachment theory, which would suggest that individuals with low anxiety and low avoidance (secure attachment) would have the highest levels of emotional empathy, the authors hypothesized that it was consistent with previous research. They cited research from the attachment literature providing evidence that anxiety about relationships is related to interpersonal warmth and a concentrated focus on the emotions of others (e.g., Bartholomew & Horowitz, 1991; Searle & Meara, 1999). They also suggested that the wounded healer theory may help explain the findings. The wounded healer theory suggests that sensitivity and awareness of one's own suffering sensitizes people to the needs of others. Counseling students who do not avoid their own emotions (including their anxiety) may be more sensitive to the emotions of their clients. They cited studies from family-of-origin research among counselors that provide evidence of a relationship between the ability to deal with painful childhood memories and counseling effectiveness (Wolgien & Coady, 1997).

In a separate study, Ridgway and Sharpley (1990) found that of five predictor variables (cognitive empathy, affective empathy, communication of empathy, purpose in

life, and self-efficacy for learning counseling skills), affective empathy was the only variable related to counseling effectiveness ($r = .611, p < .05$). Interestingly, this relationship between affective empathy and counseling effectiveness was only present when combined with low purpose-in-life scores. The authors did not speculate about why this may have occurred. As Trusty et al. (2005) suggested in their research, however, these findings might be understood as support for the wounded healer theory that the ability to approach one's own pain is related to more effective counseling. Perhaps those counseling trainees who scored high on the purpose-in-life scale also were those who could not acknowledge their own struggles and suffering around meaning and purpose. Lacking the ability to accept their own pain, they could not acknowledge those same struggles in others.

Distress Tolerance: Developmental theorists have suggested that the relationship between affective empathy and helping behavior may be moderated by how much distress the observer feels. This idea is echoed in the counseling literature. In their review of the struggles facing novice counselors, Skovholt and Ronnestad (2003) described the ways in which counselors may handle an overload of cognitive or emotional data from a session. They define *premature closure* as the inability to stay with the client's strong negative affect and *insufficient closure* as the inability to stop feeling the disturbing emotions of the session long after the session is over. *Functional closure* represents an ability to attend to the cognitive and affective aspects of the client's experience in a way that is therapeutic. They suggested that being able to emotionally attach to a client and withdraw appropriately is a very demanding skill for novice counselors to learn. In a

more recent article, Skovholt (2005) stated that a problem for many entering the field is caring too much to the point of becoming “engulfed by the other’s pain” (p. 88). This suggests that training methods to help new counselors learn to identify and work with their own feelings may help them be more empathic and, therefore, better counselors while at the same time avoiding tendencies to become over-involved that may increase the risk of burnout.

Empirical research with counselors supports this notion. In their study of variables that predict multicultural counseling knowledge and awareness, Constantine and Gainor (2001) found that experiencing significant personal distress in relation to the distress of others was negatively related to self-reported multicultural knowledge ($r = -.30, p < .01$). The authors suggested that being overly reactive in terms of personal distress to the point of becoming overly anxious and unsettled may make it difficult for counselors to effectively work with the client. These findings suggest that helping counselors learn to tolerate the difficult emotions of clients may help them stay with the client in the distress rather than pulling away from the client.

Emotional intelligence: Another important condition for empathy is the ability to see relationships between thoughts, feelings, and behaviors and be able to distinguish between the emotions of the self and the emotions of others. This ability has been termed *emotional intelligence* (Goleman, 1995). Others have used the term *psychological mindedness* (Farber, 1985). Goleman (1995) considered emotional intelligence to be the capacity to recognize the feelings of the self and others, which implies both cognitive and

affective awareness. He proposed that it involves the perception, assimilation, expression, regulation, and management of emotion.

A number of researchers have examined emotional intelligence and empathy (e.g., Beitel et al., 2004; Ciarrochi, Chan, & Caputi, 2000; Geher, Warner, & Brown, 2001; Miville et al., 2006; Munro et al., 2005; Singh, 2004). Some used measures of empathy to examine the predictive validity of new measures of emotional intelligence (Geher et al., 2001; Muncer & Ling, 2006; Singh, 2004). Others looked specifically at the relationship between the emotional intelligence and empathy. Those studies found positive relationships between emotional intelligence and both cognitive and affective aspects of empathy (Beitel et al., 2004; Ciarrochi et al. 2000; Munro et al., 2005). Only two studies, however, were found that examined the relationship between empathy and emotional intelligence in counselors.

Miville et al. (2006) examined how emotional intelligence might be related to both cognitive and affective aspects of empathy. Using a sample of 211 graduate-level counseling students, they found that emotional intelligence along with gender and a universal-diverse orientation (i.e., awareness and acceptance of similarities and differences between self and others) significantly explained the variance in empathy, specifically the subscales of perspective-taking ($F(1, 206) = 23.26, p < .01$), and emotional concern ($F(1, 206) = 10.71, p < .01$). These two components represent cognitive and affective empathy, respectively, suggesting that both aspects of empathy are important in the relationship to emotional intelligence.

Constantine and Gainor (2001) examined emotional intelligence in relationship to empathy and multicultural competence in a sample of 106 school counselors. Using the Interpersonal Reactivity Index (IRI, Davis, 1980) to measure multidimensional empathy and the Emotional Intelligence Scale (Schutte, Malouff, Hall, Haggerty, Cooper, Golden, & Dornheim, 1998, as cited in Davis, 1980) to measure emotional intelligence, the researchers found positive correlations between emotional intelligence and three of the four subscales, including perspective taking ($r = .45, p < .001$), fantasy ($r = .26, p < .01$), empathic concern ($r = .34, p < .001$). They found a negative correlation between emotional intelligence and personal distress ($r = -.31, p < .01$).

Researchers are unclear about the causal relationship between empathy and emotional intelligence. In their analysis of the Empathy Quotient Scale, Muncer and Ling (2006) suggest that there is much overlap between empathy and emotional intelligence. Many of the leading measures of emotional intelligence include empathy as one of the subscales of emotional intelligence, suggesting that empathy is a component of emotional intelligence rather than emotional intelligence being a component of empathy. In their definition of empathy, both Goleman (1995) and Salovey and Mayer (1990) included empathy as a component of emotional intelligence. Of more significance, however, is that there does seem to be a relationship between the two that is supported by empirical research. Therefore, training programs designed to cultivate empathy should also pay attention to the emotional intelligence of trainees.

Research and theory suggest that the cultivation of empathy in counselors-in-training is an important goal for counselor educators and that prerequisites to empathy

(i.e., non-judgmental acceptance, distress tolerance, emotional intelligence) should also be attended to in training. Issues related to training counselors to be empathic are outlined below.

Empathy Training

The review above suggests that both cognitive and affective aspects of empathy need to be cultivated in order to promote effective counseling. Researchers and critics, however, have suggested that counseling programs may not be doing enough to cultivate multidimensional empathic capacity (Bath & Calhoun, 1977; Bergin, 1997; Gallaher & Hargie, 1992; Kurtz, Marshall, & Banspach, 1985; Mahoney, 1986; Miller, 1989). Most empathy training focuses on behavioral techniques associated with empathy (e.g., communication of empathy), rather than on empathy as a way of being as recommended by Rogers (1975).

Counselor educators need a better understanding of how to train students in the empathy as a way of being. The review above suggests that the needs of counselors-in-training are two-fold. First, counselors-in-training need to be able to identify, accept, and tolerate their own pain and suffering in order to genuinely connect with others. Second, they need to recognize when they are overly identifying with the client to the point of being ineffective. Trusty et al. (2005) stated that this first need may be more important. They stated that in their experience as counselor educators it was easier to temper strong emotional reaction than it was to promote the type of affective sensitivity necessary for genuine empathy in those students who emotionally distance themselves from client pain. Therefore, although both capacities are important, the more urgent need in counselor

education is to teach counselors-in-training how to “avoid avoiding” and come close to the pain of others.

Several models for empathy training exist. These are presented below along with criticisms of current training methods and suggestions for alternative ways of cultivating empathy.

Models for Training. Based on Rogers’ (1975) conceptualization, empathy is a way of being – an attitude that the counselor assumes when he or she is with a client. For a counselor to be genuine and authentic, which are considered necessary conditions for effective counseling (Rogers, 1957), he or she needs to have a resonated experience of empathy toward the client that includes both cognitive and affective components (Barrett-Lennard, 1981; Bodenhorn & Starkey, 2006; Johnson, 1990; Keefe, 1976; Morgan & Morgan, 2005; Rogers, 1957, 1965, 1975). Johnson (1990) suggested that counselors who are not motivated to be empathic and who lack empathic skills will appear mechanical, self-conscious, and phony to the client. Training in empathy as a way of being focuses on cultivating the counselor’s awareness of self and the suffering of the self in order to resonate with the suffering of others (Morgan & Morgan, 2005). Rogers (1965) suggested that being in an empathic climate will teach people how to be empathic.

Others suggested teaching empathy as “one teaches the rules of grammar” (Gazda & Evans, 1990, p. 70). Truax and Carkhuff (1967), who were among the first to outline an empathy training program for counselors, focused on the observable-skill aspect of empathy, suggesting that operationalizing empathy would lead to improvement in training. Others followed suit (Carkhuff, 1969; Ivey, 1971; Ivey & Ivey, 1999, 2003;

Kagan, 1984). Today, the majority of counselor training programs follow this model (Cormier & Cormier, 1998; Egan, 2002; Gazda, Asbury, Balzer, Childers, Walters, 1984; Hill, 2004; Ivey & Ivey, 2003). Matarazzo (1978, as cited in Gallagher & Hargie, 1992) made the point that it is much easier to train individuals in the specific behaviors than in the global construct of empathy. From this perspective, whether the counselor is truly empathic or not is irrelevant (Hogan, 1975). What counts is whether the counselor acts as if he or she understands the client's experience.

Although discrete skills may be important, Patterson (1988) suggested that they should be considered just the first step in the development of empathy. He proposed the concept of *counselor automaticity*. This theoretical approach to the cultivation of empathy in counselor trainees suggests that as simpler mental tasks (e.g., clarification, summarization) and physical tasks (i.e., non-verbal attending behaviors) are mastered, the ability to navigate the more difficult task of experiencing the client on a deeper level increases. As basic tasks become more automatic and the mind quiets, the ability to attend improves.

Criticisms of Current Training Methods. Researchers and theorists have criticized the discrete-skills model of empathy training for its inattention to the attitude and way of being of the counselor (Bath & Calhoun, 1977; Bergin, 1997; Gallagher & Hargie, 1992; Kurtz et al., 1985; Mahoney, 1986; Miller, 1989). Miller (1989) raised concerns about teaching a behavioral technique rather than an experience of empathy:

Despite the apparent efficiency of the Carkhuff model, however, confining the helping process to a series of graded steps may negate the importance of the inspirational and humanistic elements of counselors' conditions; thus, techniques

often become an excuse to avoid struggling with one's own sense of striving and resourcefulness.... My sense is that counselor training has increasingly concentrated on teaching specific counseling skills and techniques while missing the essence of a person-centered approach: That the individual is the source of his or her own resources and expertise when empathically understood and unconditionally accepted by a congruent person (p. 350).

Bergin (1997) suggested that this approach represents a larger issue of a bottom-line approach to counseling and therapy that is "alien to the nature of human beings" (p. 84). Furthermore, given the importance of the affective component of empathy in genuine empathy and its general absence in any formal training programs, it is reasonable to assume that current training programs do not do enough to cultivate the deeper levels of empathy necessary for effectiveness in counseling.

Researchers are finding evidence in support of these criticisms. In their research on cognitive development of counselor trainees, Fong, Borders, Ethington, and Pitts (1997) concluded that current training methods do little to cultivate the higher levels of cognitive complexity necessary for effective counseling. Gallaher and Hargie (1992) found that there is a discrepancy between the discrete skills and behaviors thought to communicate empathy and those that actually do. Although a meta-analysis of current helping-skills training programs suggests that these programs are effective in teaching operationalized helping skills (Hill & Lent, 2006), the authors found little evidence that those skills generalized to counseling outcome. Furthermore, methodological problems in reviewed studies limit understanding of the relationship between training and effectiveness in counseling practice.

Alternative Training Methods. Given these criticisms of current training programs, a number of authors have suggested alternative methods for cultivating genuine empathy in counseling students (Andersen, 2005; Bodenhorn & Starkey, 2006; Fulton, 2005; Galantino, Baime, & Maguire, 2005; Goldstein & Michaels, 1985; Keefe, 1976; Lesh, 1970; Leung, 1977; Morgan & Morgan, 2005; Pearl & Carlozzi, 1994; Reiman, 1985; Shapiro, Schwartz, & Bonner, 1998; Sweet & Johnson, 1990). The concept behind each of these methods is to teach counselors-in-training how to attend to and accept the physical and mental manifestations of their own emotions. Once they have cultivated this capacity, students will then be able to stay with and “feel into” the experience of another.

Goldstein and Michaels (1985) suggested a number of somatic techniques for cultivating affective empathy through body awareness. These include rolfing, Reichian therapy, Bioenergetics, Alexander Technique, Feldenkrais training, dance therapy, focusing, and biofeedback. Of these, only biofeedback has been studied in relation to empathy development. Goldstein and Michaels cited three dissertation studies that used biofeedback and a paper-and-pencil measure of empathy. These studies found mixed results. Goldstein and Michaels (1985) suggested that the verbal outcome measures of empathy may not have adequately captured changes in affective sensing.

Bodenhorn and Starkey (2006) examined the impact of theater exercises on the development of cognitive and affective aspects of empathy using the Interpersonal Reactivity Index (Davis, 1980). Their study of 18 counseling students did not find

significant changes in pre- and post-test scores. They suggested, however, that a larger study may have significant results.

A number of theorists have proposed that meditation may be an effective method of cultivating the ability to experience empathy on both a cognitive and affective level (Andersen, 2006; Galantino, Baime, & Maguire, 2005; Goldstein & Michaels, 1985; Keefe, 1974; Lesh, 1970; Leung, 1973; Morgan & Morgan, 2005; Pearl & Carlozzi, 1994; Reiman, 1985; Shapiro, Schwartz, & Bonner, 1998; Sweet & Johnson, 1990). Researchers have conducted empirical studies on the relationship between meditation training and empathy development in health-care professionals (Galantino, Baime, & Maguire, 2005; Shapiro, Schwartz, & Bonner, 1998) and in counselors (Lesh, 1970; Leung, 1973; Reiman, 1985) with positive results (results will be outlined in more detail in the Mindfulness section). Unfortunately, these studies have primarily assessed cognitive empathy, leaving unknown the impact on affective empathy.

Training in empathy requires attention to both cognitive and affective aspects of empathy. Current counselor training models, however, have been criticized for not doing enough to cultivate those qualities in the counselor necessary for effective counseling. Some have suggested that meditation may be a helpful training tool.

Summary

Theorists have long considered empathy to be an important variable in effective counseling, and almost 60 years of empirical research suggests that it is. Unfortunately, researchers have defined empathy in a number of ways and typically have only measured cognitive empathy in the counseling relationship. A number of authors have called for

more attention to affective empathy experience as modern theorists consider genuine empathy to be both a cognitive and affective process. Likewise, counselor education programs focus primarily on cultivating the cognitive aspects of empathy in counselors-in-training rather than the ability to actually feel the other's experience. Critics suggest that this limits the impact of empathy, and they have called for more attention to the cultivation of affective empathic ability. Developmental models and Buddhist psychology provide some insight into how genuine empathy can be cultivated. These models and empirical research suggest that important steps in that process are the ability to sense and accept one's own pain; tolerate distress; to see relationships between thoughts, feelings, and behaviors; and to be able to distinguish between the emotions of the self and the emotions of others.

Theorists have suggested a number of methods for developing empathy, including mindfulness training. An overview of mindfulness and how it relates to key counselor outcomes is presented next.

Mindfulness

In recent years, interest in the clinical use of mindfulness has grown tremendously (Smith, 2004). Mindfulness-based interventions are emerging across the country for the treatment of such challenging issues as chronic pain (Kabat-Zinn, 1982), recurrent depression (Segal et al., 2002), and borderline personality disorder (Linehan, 1993a, 1993b). In addition to clinical benefits, a number of theorists have proposed that mindfulness may be a common factor across all schools of psychotherapy (Germer, 2005; Martin, 1997; Walsh & Vaughn, 1983) and an important practice for therapists and other

health-care professionals (Andersen, 2005; Bien, 2006; Dimidjian & Linehan, 2003; Epstein, 1999; Fritz & Mierzwa, 1983; Fulton, 2005; Germer, 2005; Keefe, 1974; Morgan & Morgan, 2005; Schuster, 1979; Speeth, 1982; Walsh & Shapiro, 2006). This section will provide an overview of the construct of mindfulness, hypothesized mechanisms of action, and theory and research regarding the relationship of mindfulness to key counselor-training outcomes

Defining Mindfulness

Mindfulness is described as a particular type of attention that is non-judgmentally focused on the present moment. It is a process of observing experience without attachment to a particular point of view, resulting in freedom from habitual views of the self and others (Martin, 1997). As Epstein (1999) stated, “The goals of mindful practice are to become more aware of one’s own mental processes, listen more attentively, become flexible, and recognize bias and judgments, and thereby act with principles and compassion” (p. 835). Theorists consider it both a skill and a way of being that allows the individual to be less reactive to life, leading to greater health and well-being (Bishop, Lau, Shapiro, et al., 2004; Germer, 2005). The historical roots of mindfulness and conceptual and operational definitions are outlined below.

Historical Roots of Mindfulness. Mindfulness, the practice and state of attending to present moment experience, is rooted in Eastern contemplative traditions, particularly Buddhism. It has been called the heart of Buddhist meditation (Thera, 1962). Buddhism is an ancient system dedicated to transcending the suffering of human existence, and mindfulness is nested within this larger orientation toward compassion for all things

(Bogart, 1991; Epstein, 1995; Germer, 2005; Kabat-Zinn, 2003; Olendzki, 2005; Walsh, 2000). Buddhism is anchored in the belief that all of life is interconnected and that mindfulness can help free individuals from suffering through enlightenment and compassion for all things. Buddhist training in mindfulness involves focusing attention on as many aspects of current experience as possible (e.g., feelings, thoughts, sensations) without elaborating, judging, or interpreting that experience (Bogart, 1991). This method begins to open awareness to the “chain of mind moments” (Bogart, 1991, p. 384) that result in suffering. Ultimately, the practitioner gains a better understanding of suffering and the impermanent nature of all of life.

The success of Jon Kabat-Zinn’s Mindfulness Based Stress Reduction (MBSR) program at the University of Massachusetts sparked clinical interest in mindfulness. Kabat-Zinn developed MBSR to help patients with chronic pain cope more effectively with their lives (Kabat-Zinn, 1982; Kabat-Zinn, 1990; Kabat-Zinn et al., 1985; Kabat-Zinn, Lipworth, Burney, & Sellers, 1987). Since that time, a number of theorists and researchers have adopted mindfulness as the core skill in other therapeutic interventions such as Dialectical Behavior Therapy (DBT; Linehan, 1993a, 1993b), Acceptance and Commitment Therapy (ACT; Hayes et al., 1999), Mindfulness-Based Cognitive Therapy (MBCT; Segal et al., 2002) for depression, and Roemer and Orsillo’s (2002) treatment for generalized anxiety disorder.

Conceptual Definition. Mindfulness has been broadly conceptualized as present-moment, non-judgmental awareness (Bishop, 2002). It is a state of being attentive to experience that is characterized by an attitude of openness and acceptance of experience

(Brown & Ryan, 2003; Gunaratana, 2002; Kabat-Zinn, 1990, 1994, 2003, 2005; Martin, 1997). Mindfulness involves a freeing of attention that disentangles the individual from habitual or stereotyped cognitive appraisals of various events, providing the opportunity to explore a wider range of perspectives – the figure-ground gestalt (Martin, 1997). Mindfulness practices are a form of mental training designed to cultivate this state of openness and acceptance.

Often, mindfulness is associated with mindfulness meditation. Mindfulness, however, is more than meditation. Kabat-Zinn (2003) refers to meditation as the “launching platform” (p. 147) or scaffolding used to cultivate a mindfulness way of being. In fact, meditation practice is one of a number of techniques or methods used for producing mindfulness, but it is not mindfulness itself (Hayes & Shenk, 2004). Although relaxation may be an outcome of mindfulness practice, mindfulness is not considered relaxation or mood management (Baer, 2003; Bishop et al., 2004). Rather, mindfulness practice is a form of mental training to reduce reactive modes of thinking. The aim is to reduce vulnerability to habitual, unhealthy modes of mind by cultivating the capacity for alternative perspective-taking. This wider perspective enhances “psychological freedom” (Martin, 1997, p. 291) and supports the development of healthy coping skills (Brown & Ryan, 2003; Bishop et al., 2004; Martin, 1997).

Mindfulness represents the opposite of mindlessness, which is characterized by a lack of awareness about current experience and possible preoccupation with the past or the future. Brown and Ryan (2003) outlined several examples of mindlessness, including such things as breaking or spilling things out of carelessness, forgetting a person’s name

as soon as it is uttered, and snacking without being aware of eating. Conceptually, being mindful implies waking up to experience and focusing on the task at hand.

Operational Definitions. Over the years, mindfulness has been broadly defined by both theorists and researchers. Only recently have researchers attempted to systematically establish an operational definition for assessment and research purposes. Unfortunately, some debate exists over exactly how to separate mindfulness from the outcomes or the practice techniques and how mindfulness is similar and different to other psychological constructs. The evolution of an operational definition of mindfulness is presented below.

The seminal definition: Kabat-Zinn (1994) was one of the first in this country to formulate a working definition of mindfulness. He defined mindfulness as “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (p. 4). His more recent definition of mindfulness is very similar: “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 145). From this perspective, mindfulness is the process of directing attention to the present with an attitude of acceptance.

Germer (2005) refined this definition by breaking mindfulness into three parts: (1) awareness, (2) of present experience, (3) with acceptance. He suggested that all three components are intertwined and that the presence of one aspect does not necessarily imply the presence of the others. For instance, premature forgiveness can be explained as acceptance without awareness. Awareness without a present moment focus can occur, for example, when an individual is absorbed in the past.

Likewise, in an attempt to break mindfulness down into its core component parts, Shapiro, Carlson, Astin, and Freedman (2006) identified three interconnected “building blocks” (p. 375) of mindfulness: *intention*, *attention*, and *attitude*. These parallel the core components of Kabat-Zinn’s (1994) mindfulness definition: “on purpose” (intention), “paying attention” (attention), and “in a particular way” (attitude).

In the Shapiro et al. (2006) model, intention refers to the reasons why a person is practicing mindfulness techniques, and the authors suggested that it is crucial to understanding the process of mindfulness. Kabat-Zinn (1990) stated that mindfulness without intention will not lead to growth and change. In his study of the role of intention in long-term meditation practitioners, Shapiro (1992) found that intention is dynamic and shifts as a function of length of practice along a continuum that includes self-regulation, self-exploration, and self-liberation. This shift approached significance ($z = .653, p = .096$). He also found that intentions were related to self-reported outcome ($X^2 = 24.51, df = 6, p = .00042$).

Attention refers to directing attention to present-moment experience, and it is done with a non-judging attitude. This means that the practitioner lays aside interpretations or judgments and simply observes the experience (Epstein, 1995; Gunaratana, 2002; Martin, 1997). This has sometimes been called *bare awareness* (Epstein, 1995), *quiet attention* (Martin, 1997), and *bare witnessing* (West, 1987). It involves the attentional capacities of selective attention (i.e., the ability to tune out distractions), sustained attention (i.e., the ability to hold one’s attention for prolonged periods of time), divided attention (i.e., the ability to simultaneously attend to two or

more objects of attention), and attention switching (i.e., the ability to strategically shift attention from one object to another). It also involves an inhibition of secondary processing of events, which refers to the ability to refrain from getting caught up in elaborative thought patterns about one's experience.

The attitude that the practitioner brings to attention is considered a crucial component of mindfulness (Kabat-Zinn, 1990, 1994). For instance, attention could be harsh and critical, or it could be open and accepting. Kabat-Zinn (1990) made explicit various attitudinal "foundations" of mindfulness, including *non-judgment*, *patience*, *beginner's mind* (i.e., approaching an event with curiosity as if for the first time), *trust*, *non-striving*, *acceptance*, and *letting go*. These attitudes reflect the original Buddhist intention behind mindfulness -- the cultivation of compassion for all beings. In fact, the Japanese characters for mindfulness are two figures representing mind and heart (Santorelli, 1999). Some have proposed that the process of extrapolating mindfulness practices to meet western needs runs the risk of sacrificing or diluting much of this original intent (Dimidjian & Linehan, 2003; Kabat-Zinn, 2003; Shapiro et al., 2006), and Shapiro et al. (2006) suggested that this attitude should be made explicit in mindfulness-training programs.

DBT definition: In her Dialectical Behavior Therapy (DBT; Linehan, 1993a, 1993b) program that teaches mindfulness as the core skill, Linehan defined mindfulness in more concrete terms as a multi-faceted construct comprised of six core skills that are divided into two categories. Her mindfulness *what* skills focus on what the individual does when being mindful. These include *observing*, *describing*, and *participating*. The

how skills describe how a person does the *what* of mindfulness. These include *non-judgmentally*, *one-mindfully*, and *effectively*. A person observes, for example, non-judgmentally, one-mindfully, and effectively.

Definition by committee: In 2004, a committee of prominent researchers, theorists, and clinicians published the results of their efforts to establish a consensus on the construct of mindfulness and develop a testable operational definition (Bishop et al., 2004). They outlined a two-component definition that was explained in terms of specific cognitive and psychological processes. The first component included self-regulated attention that involves sustained attention and attention switching as well as non-elaborative information processing. The authors hypothesized that non-elaboration increases the practitioner's ability to directly observe present experience without the filter of past experiences, beliefs, and assumptions.

Much like Linehan's (1993a, 1993b) earlier two-part definition, the second part of the Bishop et al. definition addressed the quality of attention. The authors suggested that mindful attention is open, curious, and accepting of all experiences that arise. They stated that being mindful is not about trying to create any particular state. Instead, the instruction is to directly experience all aspects of the present moment with an attitude of curiosity.

Criticisms of the Bishop et al. definition focus primarily on nuances in their explanation. Hayes and Shenk (2004) stated that the Bishop et al. definition was a step in the right direction but that it did not clarify whether mindfulness is the practice or the process. They also argued that the definition has limited applicability because of implicit

philosophical orientations as it reflects a cognitive orientation as opposed to a behavioral orientation to psychological processes. For instance, the Bishop et al. definition implies that attention is a mental faculty under the control of the individual. Hayes and Shenk (2004) suggested that a behaviorally oriented researcher instead would view attention as a way of speaking about patterns of stimulus control.

Brown and Ryan (2004) took the debate one step further by expanding the definition of awareness itself. They stated that awareness and attention cannot be used interchangeably, as they are in the Bishop et al. definition. They defined awareness as “the subjective experience of internal and external phenomena; it is the pure apperception and perception of the field of events that encompass our reality at any given moment” (p. 242). In contrast, attention “is a focusing of awareness to highlight selected aspects of that reality” (p. 243).

Definition for assessment tools: Researchers developing assessment tools of mindfulness also struggled with the task of defining mindfulness. Although all the assessment tools conceptualize mindfulness as a set of skills that can be cultivated, they differ in the factor structure of mindfulness they propose and the specific skills or processes that comprise mindfulness.

Brown and Ryan’s (2003) Mindful Attention Awareness Scale has a single-factor structure and measures the general tendency to be attentive to and aware of present-moment experience in daily life. Their first version included both a *presence* factor and an *acceptance* factor. The authors stated that they dropped the *acceptance* factor from their assessment of mindfulness because it did not add any explanatory advantage over

that shown by the *presence* factor alone (Brown & Ryan, 2004). They suggested that individuals who are able to stay present for current moment experience are necessarily able to accept it.

Buchheld, Grossman, and Walach (2001) developed the Freiburg Mindfulness Inventory (FMI) to assess direct and unmediated experience of the present moment, nonjudgmental attitude and acceptance of self and others, openness to both negative and positive experiences, and a process-oriented understanding of experience. Despite the multi-faceted nature of their construct, the factor analysis revealed an unstable factor structure, leading them to propose a unifactor structure.

The Cognitive and Affective Mindfulness Scale (CAMS; Feldman, Hayes, Kumar, & Greeson, unpublished manuscript, as cited in Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006) was developed to measure attention, awareness, present-focus, and acceptance/nonjudgment of daily experience. After factor analytic procedures on the instrument, however, it also was determined to best measure a single total score. Similarly, the Mindfulness Questionnaire (MQ; Chadwick, Hember, Mead, Lilley, & Dagnan, unpublished manuscript, as cited in Baer et al., 2006), which assesses how mindfully the individual approaches negative or distressing thoughts and images, yields a single-factor score. The authors, however, suggested that the MQ measures four aspects of mindfulness: mindful observation, letting go, non-aversion, and nonjudgment.

Two assessments support the Bishop et al. (2004) conceptualization of mindfulness as multidimensional -- The Kentucky Inventory of Mindfulness Skills (KIMS; Baer, Smith, & Allen, 2004) and the Five-Factor Mindfulness Questionnaire

(FFMQ; Baer et al., 2006). The KIMS measures four factors of mindfulness: observing, describing, acting with awareness, and accepting without judgment. These factors were based on Linehan's (1993a) definition of mindfulness as a six-component construct. A second multi-faceted assessment emerged from a factor analysis of the five assessments listed above. This assessment, the FFMQ outlines five facets of mindfulness: *non-reactivity, observing, acting with awareness, describing, and nonjudging*. The fit for the five-factor model was good (CFI = .96, NNFI = .94, RMSEA = .07).

Operationally defining mindfulness for assessment purposes is further complicated by issues of construct validity. Baer et al. (2004) suggested that evaluating construct validity will require a "bootstrapping" technique because it is not clear what other constructs relate to mindfulness. This technique would involve assessing relationships between mindfulness assessments and a number of other measurements of constructs hypothesized to be related to mindfulness. As evidence of those relationships are confirmed or disconfirmed, construct validity will begin to become clear. Mindfulness is hypothesized to be positively related to such psychological constructs as openness, emotional intelligence, absorption, private self-consciousness, and well-being and negatively correlated with such constructs as public self-consciousness, social anxiety, alexithymia, experiential avoidance, and dissociative experiences (Baer et al., 2004; Bishop, 2002; Bishop et al., 2004; Brown & Ryan, 2003). Instrument validation studies have found support for these hypothesized relationships (Baer et al., 2004; Brown & Ryan, 2003).

Langer definition: It is worth mentioning that an additional definition of mindfulness exists in the literature. Langer (1989) took a different approach than Kabat-Zinn when conceptualizing mindfulness. She developed a cognitive model of mindfulness that is similar to the current formulation in that it includes the ability to expand one's perspective, openness to experience, and orientation in the present. Langer's conceptualization of mindfulness, however, emphasizes working primarily with external material and is oriented toward such goals as problem solving, the creation of new categories, and taking multiple perspectives. She defined mindfulness as the "process of drawing novel distinctions" (Langer & Modoveanu, 2000, p. 1). Langer's model was drawn from different historical and cultural roots, and several authors have suggested that it is important to maintain a distinction between the two types of mindfulness (Baer, 2003; Brown & Ryan, 2003; Langer, 1989).

Mindfulness Practices

Although mindfulness practices are designed to help cultivate various states of attention and consciousness, practice in mindfulness literature does not mean preparation for some future performance (Kabat-Zinn, 2003). Rather, the practices themselves are the performance. These practices can take a variety of forms, including both formal and informal techniques.

Formal Practice. Kabat-Zinn (2005) stated that formal meditation is the foundation upon which mindfulness is built. Others propose that mindfulness can be cultivated without formal meditation practice (Linehan, 1993a, 1993b). Formal meditation typically involves sitting practices, where the practitioner maintains an upright

sitting posture either cross-legged on the floor or in a chair, although other formal practices include walking meditations or movement practices such as yoga.

Mindfulness meditation is distinguished from concentrative meditation practices. Concentrative meditation focuses the mind on a single object with a goal of excluding other thoughts from awareness and suppressing ordinary mental processes (Bogart, 1991; Delmonte, 1987; West, 1987). These practices may involve such techniques as recitation of a mantra and are characterized by forcing the mind to stay on one single point (Gunaratana, 2002). Transcendental Meditation (Mahesh, 1963) is a popularized form of this type of meditation. Mindfulness meditation, in contrast, focuses on expanding attention to as many aspects of current experiences as possible.

Beginning practitioners are encouraged to start with concentration practices in order to stabilize the mind and cultivate the ability to sustain attention over time (Bogart, 1991; Brown & Ryan, 2004; Delmonte, 1987; Sayadaw, 1971; West, 1987). Without the power of sustained attention, the mind can easily become lost in thought during the more advanced practices (Brown & Ryan, 2004). Rather than trying to block out other thoughts, as in concentrative meditation practice, the mindfulness practitioner non-judgmentally notices the thoughts that pull her or him away from the object of attention. For instance, the practitioner may decide to focus on the sensation of the breath. When a new thought arises that takes the focus away from the breath, the thought is acknowledged non-judgmentally, and the focus is brought back to the breath. Gunaratana (2002) suggested that mindfulness and concentration work in tandem. Mindfulness brings

sensitivity to the object of attention and notices when attention has wandered.

Concentration provides the mental stability to sustain attention.

As formal practice continues, the emphasis shifts to *choiceless awareness* or free-flowing attention practice. Choiceless awareness is the heart of mindfulness practice and is similar to free association (Speeth 1982). The practitioner attempts to broaden attention to both internal and external stimuli and let attention rest on “all that is here and now” (West, 1987, p. 6). Events are observed with an attitude of curiosity, as if viewed for the first time, and non-judgment that is free from habitual stereotypes or elaborative thinking.

Informal Practice. Informal practice refers to being mindful during regular life activities. For instance, a person could be mindful while washing the dishes, eating, ironing, or talking to a friend. The instruction is to bring full, non-judgmental attention to present moment experience (Hahn, 1975).

Mindfulness can be practiced with varying levels of intensity. For instance, a counselor may intentionally focus attention on the moment to discover what he or she is experiencing in that moment (e.g., what thoughts, what feelings). This “everyday mindfulness” (Germer, 2005, p.8) provides insight into psychological functioning such as habitual thinking patterns and allows the individual to respond more effectively to internal and external events. Those who practice mindfulness with more intensity can actually begin to detect even more subtle shifts in experience (Sayadaw, 1971).

Researchers are finding that practice in mindfulness results in positive change (Baer, 2003; Bishop, 2002, Grossman, Niemann, Schmidt, & Walach, 2004; Lazar, 2005). It is still unclear, however, exactly *how* mindfulness affects change.

Mechanisms of Change

Given the complexity of defining and assessing mindfulness, it is logical that identifying the mechanisms of action in mindfulness-based interventions would be equally complex. The majority of research to date focuses on whether or not mindfulness-based interventions are effective. Although these studies are promising (Baer, 2003; Bishop, 2002; Grossman et al., 2004; Lazar, 2005), authors have criticized these studies for not providing enough insight into the actual mechanisms that affect change (Bishop, 2002; Shapiro et al., 2006). For instance, Bishop (2002) suggested that because of the lack of formal assessment of changes in mindfulness over the course of such trainings, it is impossible to know whether change in mindfulness actually occurred. He stated that reported changes in outcome variables may be related to extraneous factors such as increased self-efficacy, group support, psychoeducation, or cognitive-behavioral skill development.

In an attempt to understand the *how* behind mindfulness-based interventions, Shapiro et al. (2006) proposed a “meta-mechanism of action” (p. 374) called “reperceiving” (p.377) that is a direct outcome of the “internal behaviors” (p. 377) of intentionally and non-judgmentally attending to the present moment. This meta-mechanism overarches other hypothesized mechanisms of change, including exposure, self-regulation and self-management, values clarification, relaxation, and acceptance (Baer, 2003; Shapiro et al., 2006). Reperceiving and other mechanisms of change are reviewed below.

Reperceiving. Reperceiving refers to a shift in perspective where the individual experiences internal and external events in an objective, exploratory manner while remaining intimately connected to the experience. This shift involves “dis-identifying” (Shapiro et al., 2006, p. 378) with the contents of thought and observing them from a neutral position. This is called a “rotation in consciousness” (Shapiro, et al., 2006, p. 378) where what was subject now is object.

Other theorists have proposed different terms to describe this same phenomenon. For example, some have called it *decentering* (Safran & Segal, 1990), *participant observation* (Germer, 2005), *deautomatization* (Deikman, 1982), the *observing self* (Deikman, 1982), an expansion of attentional space (Martin, 1997), and *self-as-context* rather than *self-as-content* (Hayes et al., 1999). It is considered the process of observing without bias or attachment (Martin, 1997) and changing one’s relationship to experience (Hayes et al., 1999; Segal et al., 2002). For instance, a person who is experiencing chronic pain initially may feel as if they *are* their pain. Through mindful awareness, the person may still feel pain but can view it as one part of a larger self. By adopting a curious witness stance, the individual gains control over the pain instead of being controlled by it. This process may help people disengage from trying to marshal evidence for or against a particular thought. Rather, the individual could simply see the thought as a thought and not a fact to be supported or refuted (Segal et al., 2002).

Developmental psychologists consider this ability to shift from a self-centered perspective to a self-other perspective to be a key developmental task (Hoffman, 1975, 1977; Kegan, 1982). For instance, a small child does not differentiate herself or himself

from the other. The thinking is, “I am you, and you are me.” As the child develops, he or she begins to see the other as separate. Shapiro et al. (2006) suggested that mindfulness practice accelerates and extends this natural developmental process. Through reperceiving – observing from a meta-perspective, the individual cultivates an increasing capacity to simply be with whatever arises rather than over-identifying with it.

Although reperceiving does create more distance from experience in terms of clarity, it is not to be confused with detaching, disconnecting, or dissociating. By not over-identifying or clinging to an event and allowing it to rise and fall naturally, the individual actually experiences it more deeply (Germer, 2005; Kabat-Zinn, 2005; Shapiro et al., 2006). Kabat-Zinn (2003) referred to this as “deep, penetrative non-conceptual seeing” (p. 379). The individual is aware that he or she is separate from the event *and* is able to experience the event deeply and fully.

Reperceiving is hypothesized to be the primary mechanism at work in mindfulness practice. It may lead to additional mechanisms of change, including exposure, self-management and self-regulation, values clarification, relaxation, and acceptance.

Exposure. In mindfulness practices, individuals are taught to approach difficult or disowned parts of themselves or their external experience with non-judgmental acceptance. Just as in systematic desensitization (Wolpe, 1958), the process is one of slowly increasing tolerance (Kabat-Zinn, 2005). Eventually, as the individual begins to realize that nothing catastrophic happens, he or she is able to stay with those feelings for longer periods of time.

Kabat-Zinn explained this process in the first published study of the effects of MBSR (Kabat-Zinn, 1982). In that article, Kabat-Zinn theorized that traditional meditation practices may help patients learn to approach their pain rather than run from it. In those practices, individuals are asked to sit for extended periods of time. This can sometimes lead to muscle stiffness or achy joints. MBSR instructors encourage patients to observe the sensations of pain and stiffness and the concomitant thoughts (e.g., “I can’t stand this,” “I can’t believe they are making me sit like this”) with the same non-judgmental attitude that they approach other aspects of their experience. Kabat-Zinn (1982) suggested that as participants sit with their difficult experience for extended periods of time, they come to realize that they can stand the experience, thus desensitizing them to the pain. Participants also realize that the pain ebbs and flows, opening up the possibility that they may *not* be in pain some of the time. This process of desensitization and realization results in expanded tolerance of pain.

This may be the same mechanism that is at work with depression, anxiety, and panic as well as in symptoms of borderline personality disorder (Linehan, 1993a, 1993b; Roemer & Orsillo, 2002; Segal et al., 2002). For instance, Roemer and Orsillo (2002) conceptualized worry as a form of avoidance. Worriers believe that their worry will help them avoid the negative event they fear by helping them problem solve. The authors suggest that an intervention that emphasizes approaching experience will likely reduce the spiral of negative thinking that characterizes generalized anxiety.

Similarly, Linehan (1993a, 1993b) suggested that the behaviors of individuals diagnosed with borderline personality are a result of an inability to tolerate difficult affect

and a desire to avoid such events. She described such individuals as emotion phobic and suggested that cultivating the ability to observe negative states nonjudgmentally should lead to an extinction of fear responses and avoidance. Sagula and Rice (2004) suggested that this ability to approach present-moment experience may be the first stage in healthy grieving. Once cognitive defenses are bypassed by mindfulness, the individual is able to more fully approach the subject of the grief.

Self-Regulation and Self-Management. A much cited improvement resulting from mindfulness training is the ability to cope more effectively with life stressors. Several authors have suggested that mindfulness helps individuals develop an expanded awareness of options while also breaking typical patterns of responding (e.g., Kabat-Zinn, 1990; Linehan, 1993a, 1993b; Marlatt, 1994; Martin, 1997; Segal et al., 2002). Through the mechanism of re-perceiving, the individual gains a wider perspective on the event (either internal or external) and may even have access to information that was previously too difficult to examine (Shapiro et al., 2006). With greater clarity due to increased knowledge, the individual can respond more flexibly to various stimuli, making informed decisions rather than acting out of habit.

Several theorists have integrated this concept into their treatment programs. For example, Segal et al. (2002) suggested that mindfulness may help depressed people disengage from habitually trying to marshal evidence for or against a particular thought. Rather, the individual could simply see the thought as a thought and not a fact to be supported or refuted. Marlatt (1994) suggested that patients recovering from addiction may benefit from mindfulness in a similar way. Rather than regulating anxiety by

drinking or using drugs, the individual can step back and observe the anxiety from a curious, witness stance, noting that anxiety ebbs and flows. In her DBT program, Linehan uses mindfulness to help patients notice urges to behave in self-destructive ways as well as become more aware of the consequences of these behaviors. Once they become aware of the urge and the outcomes, they can respond from a place of clarity and make a decision about how to behave (Linehan, 1993a).

Values Clarification. This ability to step back and examine the whole may help people reflect on what is really important in their lives (Shapiro et al., 2006). Rather than passively or automatically accepting the values of those around them (e.g., family, friends), the individual can choose behaviors that are more congruent with personal values. Mindfulness fosters the mental space necessary to reflect on values more objectively.

Relaxation. Researchers have shown that meditation, such as Transcendental Meditation, Zen Buddhist mediation, and Herbert Benson's Relaxation Response (1975), may be related to physiological changes in heart rate, blood pressure, and muscle tension, resulting in more relaxed states (Murphy & Donovan, 1999). Although relaxation may be a welcome side effect, the practice of mindfulness is not intended to produce a relaxed state. The goal of mindfulness is to cultivate the ability to approach all experience with an open and non-judgmental attitude. This may mean that mindfulness practices may actually open people up to aspects of themselves that had previously been walled off and may result in more agitation as the practitioner approaches difficult or unwanted

experiences (Bohart, 1991). This may not be a particularly pleasant or relaxing experience, but it is one that can be tolerated through the lens of mindfulness.

Acceptance. Implicit in all of the above-mentioned mechanisms of change is the concept of acceptance (Baer, 2003; Brown & Ryan, 2004). In fact, the essence of mindfulness is acceptance of all of experience. Rather than fighting against the reality of what is, denying it, or avoiding it, the individual is instructed to observe experience as it is non-judgmentally. Without acceptance, the individual cannot look directly at experience or desensitize to negative emotions or thoughts. Acceptance, however, does not imply condoning the experience. In fact, acceptance is the first step in change (Brach, 2003; Neff, 2003b). Acceptance is required in order to psychologically “see” internal and external events. One must accept what is happening in order to acknowledge its existence.

In recent years, acceptance has become the focus of considerable attention among theorists who suggest that acceptance may be a core ingredient for successful therapy (Brach, 2003; Hayes et al., 1999; Linehan, 1993a, 1993b; Marlatt, 1994). Linehan (1993a, 1993b) teaches *radical acceptance* in her DBT program as a way of helping clients learn to live life on life’s terms because non-acceptance can lead to maladaptive behaviors. For instance, the person suffering from panic attacks may avoid important tasks (e.g., shopping) in an effort to keep panic attacks in abeyance. Accepting that panic attacks may occur, are time-limited, and not so fearsome that they need to be avoided at all costs actually increases tolerance and decreases maladaptive reactions (Baer, 2003).

Whether through these hypothesized mechanisms of action or some other means, mindfulness training does appear to affect positive change. Some of the outcomes identified in the literature are relevant for counselors. Those outcomes are highlighted here.

Counselor-Specific Outcomes

Scientific interest in various meditation practices has grown significantly over the past 30 years (Murphy & Donovan, 1999; Smith, 2004). Early studies into the impact of meditation practices on various outcome measures explored concentration meditation, such as Transcendental Meditation (TM) and Benson's (1975) relaxation response. More recently, researchers have shifted the focus to mindfulness meditation. Smith (2004) stated that as of 2002 there were 140 articles on mindfulness compared to 75 for TM. He predicted an explosion in public and scientific interest in mindfulness. The use of mindfulness in counselor training is one of many possibilities.

Many theorists suggest that mindfulness may be an important tool in the training of counselors and other health-care providers (Andersen 2006; Dimidjian & Linehan, 2003; Epstein, 1999; Fulton, 2005; Fritz & Mierzwa, 1983; Germer, 2005; Keefe, 1974; Martin, 1997; Morgan & Morgan, 2005; Speeth, 1982). Keefe (1974) suggested that meditation, in general, may facilitate awareness of personal feelings and filters, allowing for enhanced perception of the client, as well as increased attentional capacity and focus on the here-and-now. In a groundbreaking article in the medical field, Epstein (1999) highlighted the role of mindfulness for physicians and suggested that it may increase physician competence. For counselors, mindfulness practice has been called the "antidote

to the wandering mind” (Fulton, 2005, p. 59), a vehicle for deepening self-compassion and compassion for others (Fulton, 2005; Neff, 2003b), and a powerful tool for enhancing counselor well-being and reducing anxiety (Fritz & Mierzwa, 1983). The theorized impact of mindfulness on attention, affect tolerance, self-compassion, empathy, and counselor well-being is highlighted below along with a review of relevant research.

Attention. As mentioned in the previous section on attention, a counselor’s ability to be alert and focused during the counseling session is a foundational counseling skill. Mindfulness practice is mental training in noticing when attention has strayed from the present moment, sustaining attention on all aspects of the here-and-now, and quieting the mental noise of subjective analysis, elaboration, or negative self-talk. Furthermore, because all present moment events are viewed with an attitude of openness and curiosity, even unwanted events such as boredom or anxiety become interesting objects of attention (Fulton, 2005). This cultivates the ability to be sensitive to even the smallest details in the counseling session (Sayadaw, 1971).

The majority of mindfulness-training interventions do not specifically measure changes in attention capacity. Two published studies (Bogels et al., 2006; Valentine & Sweet, 1999) and one unpublished doctoral dissertation (Reiman, 1985) were identified that did assess changes in attentional capacity as a result of mindfulness training. Although the published studies were not conducted with counselors, it can be inferred that mindfulness interventions with counselors may have similar results.

In a study that specifically measured changes in self-focused attention, Bogels et al. (2006) found that after a combination of mindfulness training and task concentration

training, individuals with social phobia improved significantly on a measure of self-focused attention from pre- to post-test ($t(8) = 2.3, p < .05$). The effects were maintained at a 2-month retest with further improvement noted during this period. The authors stated that despite the rigorous nature of the program, withdrawal was low (1 participant), suggesting that the intervention was well-accepted by the participants. This study used two interventions, so it is difficult to determine whether mindfulness training or task-concentration training had the impact on outcome measures. The authors, however, suggested that because the mindfulness component emphasizes continued meditation practice, it could be inferred that mindfulness practice accounted for the continued improvement in the participants.

Reiman (1985) studied the impact of a mindfulness-based intervention on counselors-in-training. In a control-group, quasi-experimental design, he assessed the effect of 30 hours of meditation practice over 5 weeks on six dimensions of attention. Using the Test of Attentional and Interpersonal Style (TAIS; Nideffer, 1976b), he found significant pre- to post-treatment changes in two types of attention in the experimental group ($n = 22$) and no significant differences in scores for the control group ($n = 15$). The two attentional changes were in the Narrow Attention scale (i.e., the ability to narrow attention when necessary, $t = -2.25, p = .036$) and Overloaded By Internal Stimuli scale (i.e., making mistakes due to focusing on too many things at once, $t = 2.56, p = .018$). Reiman did not find significant differences between groups.

In a study to explore the impact of different types of meditation on sustained attention, Valentine and Sweet (1999) compared concentrative meditators ($n = 11$) to

mindfulness meditators ($n = 8$) and a control group ($n = 24$). They found that both groups of meditators had significantly higher mean scores on a test of sustained attention than did controls ($t = 9.41$, $df = 38$, $p < .001$). Long-term meditators demonstrated significantly higher means than short-term meditators ($t = 2.94$, $df = 38$, $p < .01$). Differences in sustained attention between concentrative and mindfulness meditators were not significant. The researchers found, however, that when the stimulus was unexpected, mindfulness meditators demonstrated significantly higher scores than concentrative meditators, as hypothesized ($t = 4.84$, $df = 17$, $p < .001$). An incidental observation was that many in the control group remarked about how boring the attention task was whereas none of the meditators made such comments. The authors suggested that this was due to the meditative instruction to adopt a curious attitude toward all experience.

A limited number of studies have assessed the impact of concentrative meditation practices on attention with positive results. In their review of meditation research, Murphy and Donovan (1999) found 17 studies that examined the impact of meditation on the capacity to attend. For instance, Linden (1973) found that school children who practiced a breathing exercise and visual fixation twice weekly were better able to focus and refocus their attention and ignore distracting stimuli as assessed using a measure of field independence ($F = 4.58$; $df = 2/80$; $p < .05$). Because this study used children, expectancy effects, which have been cited as possible confounding variable in meditation studies (Shapiro, 1997) were minimized.

Murphy and Donovan (2002) concluded that meditation increases the capacity to attend, to be intentionally involved in the present moment, and to be able to ignore distractions. Similarly, in their literature review, Valentine and Sweet (1999) concluded that the practice of various meditative techniques leads to increased concentration and sensitivity and decreased susceptibility to distractions. Furthermore, it is reasonable to assume that in other mindfulness studies (e.g., studies of MBSR), changes in other outcome measures reflect changes in attentional control (Gopher, 1993).

In another review, Bogart (1991) compared two studies using EEG activity as an outcome measure. He found that different types of meditation are associated with different patterns of brain activity and different forms of attention. These studies found that yogis in meditation were oblivious to the external world, and Zen meditators became more attuned to the external environment. He concluded that different types of meditation may be appropriate for different types of goals.

These findings suggest that mindfulness may be an important tool for cultivating attentional competencies. Mindfulness practices may help counselors attend completely even when the session feels tedious or boring. Furthermore, because counselors need to pay attention to both internal and external stimuli, broad awareness techniques such as mindfulness may be more helpful in cultivating this attentional capacity than strict concentrative practices.

Affect Tolerance. To pay wholehearted attention to a client requires approaching the client's experiences and emotions rather than avoiding them (e.g., changing the subject, problem-solving). Without strong affect-tolerance skills, the counselor may

appear distant, uncaring, or invalidating (Fulton, 2005). Validation of emotions is crucial for effective counseling and a critical component in relational empathy (Barrett-Lennard, 1981; Keefe, 1976; Linehan, 1997; Rogers, 1975).

Researchers have typically explored the impact of mindfulness on affect tolerance in the context of mindfulness interventions where non-avoidance is a primary goal. Among the physical and psychological issues that have been examined are chronic pain (Kabat-Zinn, 1982; Kabat-Zinn et al., 1985; Sagula & Rice, 2004), recurrent depression (Ma & Teasdale, 2004; Ramel et al., 2004; Teasdale et al., 2000; Williams et al., 2000), borderline personality disorder (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Linehan et al., 1994), anxiety (Miller, Fletcher, & Kabat-Zinn, 1995; Semple et al., 2005; Tacon et al., 2003), binge-eating disorder (Kristeller & Hallett, 1999), addiction (Marlatt, 1994), psychological distress (Rosenzweig et al., 2003; Shapiro et al., 1998; Speca et al., 2000), psoriasis (Kabat-Zinn et al., 1998), and fibromyalgia (Weissbecker et al., 2002).

The ability to approach the pain of other people starts with openness to and acceptance of one's own pain and suffering (Ridgway & Sharpley, 1990; Trusty et al., 2005; Wolgast & Coady, 1997). Neff (2003b) referred to this as self-compassion.

Self-Compassion. Self-compassion is a relatively new concept in western psychology (Neff, 2003b). It refers to the capacity to acknowledge that “suffering, failure, and inadequacies are part of the human condition, and that all people – oneself included – are worthy of compassion” (Neff, 2003a, p. 224). Self-compassion does not imply condoning various aspects of the self or passivity. Rather, it is considered essential for change. Without self-compassion, unhealthy behaviors are denied or disowned in

order to protect the ego (Horney, 1950). With self-compassion, the individual can acknowledge and approach these behaviors without shame and take steps to rectify them.

To be self-compassionate, the individual must first step back and observe personal experience from an objective stance, a process described earlier in this chapter as *reperceiving* (Shapiro et al., 2006). Bringing a non-avoidant, compassionate attitude toward personal experience increases tolerance for those experiences and tends to enhance the capacity to feel compassion for others (Neff, 2003b). Because the individual is not over-identifying with her or his emotions, there is more “mental space” in which to recognize that all suffering is part of the larger human condition (Goldstein & Michaels, 1985; Neff, 2003b).

Neff (2003a) hypothesized that mindfulness is a primary component of self-compassion along with self-kindness and a sense of common humanity. She investigated the relationship between mindfulness and self-compassion in the development of her Self-Compassion Scale. She found that a six-factor model that included the three components and their hypothesized opposites (i.e., overidentification, self-judgment, isolation) fit the data well (NNFI = .90; CFI = .91). Furthermore, she found that scores on mindfulness items (e.g., “When something upsets me, I try to keep my emotions in balance”) were negatively correlated ($r = -.77$) with scores on over-identification items (e.g., “When something painful happens I tend to blow the incident out of proportion”).

In their study examining the impact of MBSR on self-compassion among health-care providers, Shapiro et al. (2005) found significant differences ($F(2, 24) = 9.85; p = .004$) in self-compassion between MBSR participants ($n = 10$) and the wait-list control

group ($n = 18$). A separate regression analysis found that changes in self-compassion significantly predicted positive changes in perceived stress, although the authors did not report the regression statistics. Due to the small sample size, this study should be interpreted with caution. It does, however, lend supporting evidence for the relationship between self-compassion and mindfulness.

This research suggests that mindfulness practices may lead to greater self-compassion and affect tolerance, both of which are theorized to be important in the cultivation of emotional intelligence and empathy (Fulton, 2005; Goldstein & Michaels, 1985; Morgan & Morgan, 2005).

Empathy. As discussed more fully in an earlier section of Chapter II, empathy is a key ingredient in the therapeutic relationship. Empathy toward others is considered a natural extension of compassion toward the self, and a number of authors have suggested that mindfulness may be a powerful tool for cultivating therapeutic empathy (Fritz & Mierzwa, 1983; Fulton, 2005; Martin, 1997; Morgan & Morgan, 2005; Schuster, 1979; Speeth, 1982).

Several studies have examined the relationship between mindfulness and empathy. In three published studies (Beitel et al., 2004; Galantino et al., 2005; Shapiro et al., 1998) and one unpublished doctoral dissertation (Reiman, 1985), researchers examined the relationship between mindfulness training and empathy. Others have examined the relationship between concentrative practices and empathy (Andersen, 2000; Lesh, 1970; Leung, 1973; Pearl & Carlozzi, 1994). Lesh (1970) and Leung (1973)

specifically examined the impact of training in concentrative meditation on empathy in counselors.

In two studies, researchers examined the impact of mindfulness-based training on empathy level in health-care professionals (Galantino et al., 2005; Shapiro et al., 1998). Using an adapted version of the Empathy Construct Rating Scale (ECRS; La Monica, 1981, as cited in Shapiro et al., 1998) and MBSR as the intervention, Shapiro et al. (1998) found a significant increase ($F(1, 69) = 4.3, p < .05$) in empathy in the intervention group ($n = 36$) compared to the control group ($n = 37$). Galantino et al. (2005) used the Interpersonal Reactivity Index (IRI; Davis, 1980) to measure multidimensional empathy and an adapted version of the MBSR program. They did not find significant changes in empathy, which they suggested may have been due to scale sensitivity.

Beitel et al. (2004) examined the relationship between mindfulness and empathy in 103 undergraduate students. The authors also examined the relationship between mindfulness and psychological mindedness, operationalized as the ability to see relationships between thoughts, feelings, and actions. Psychological mindedness is hypothesized to be correlated with both empathy and mindfulness. Using the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003) to measure mindfulness and the IRI for empathy, the authors found significant positive relationships between the MAAS and two subscales of the IRI (Perspective Taking, $r = .41, p = < .01$; Empathic Concern, $r = .28, p = < .05$) and a significant negative relationship between mindfulness and the personal distress subscale ($r = -.49; p = < .01$). This finding is supported by the literature suggesting that too much affective response to the pain of another may hinder

empathic tendencies (Bohart & Greenberg, 1997). The authors also found a positive correlation between psychological mindedness and mindfulness ($r = .41; p < .01$).

In his doctoral dissertation, Reiman (1985) examined the impact of concentration and mindfulness meditation practice compared to no practice on levels of cognitive empathy using the client-perceived empathy scale of the Barrett-Lennard Relationship Inventory (BLRI; Barrett-Lennard, 1962). A total sample of 37 master's level counseling students were studied. Only 10 client reports for the experimental group and 9 for the control group were completed. Deaf clients, middle and high school clients, and developmentally delayed clients did not complete the forms due to the complexity and abstract nature of the questions on the BLRI. The author found no significant difference between mean scores on perceived empathy between the experimental and control groups. He hypothesized that the small number of client ratings may have affected the results.

In a quasi-experimental study, Lesh (1970) examined the impact of Zen meditation on the development of empathy in counselors. Three groups were studied: (1) a group of 16 students who were taught Zen meditation, (2) a group of 12 students interested in learning Zen meditation but not actually taught, and (3) a group of 11 students who had no interest in learning meditation. The intervention group practiced meditation for 30 minutes each week for four weeks. The Affective Sensitivity Scale (Kagan, 1965) was used to assess empathy. The measure uses videotaped counseling sessions to measure ability to recognize feelings in another person. The researcher found that the group practicing Zen meditation improved significantly ($t = 7.23, p < .001$) on

empathy and that those who started out low in this ability demonstrated the greatest improvement.

Leung (1973) studied the effects of Zen concentrative meditation and deep breathing on counseling students' empathic understanding and ability to respond selectively to client statements. The treatment lasted a total of 14 hours with 7 hours devoted to concentration practice and 7 hours devoted to breathing. Empathy was operationalized in terms of predictive ability and measured by matching the predictions with testimony of the individual being observed. The researcher found that the intervention group had statistically significant increases on the empathy measure whereas the control group did not. (F statistics ranged from 2.90-11.10; $p < .05$). Because of the methodology used, however, it is impossible to discern the distinct effects of the concentration practice versus the breathing practice.

In another dissertation study, Andersen (2000) investigated the influence of meditation on cognitive empathy. In a causal-comparative study, he explored the differences between meditators ($n = 85$) and non-meditators ($n = 48$) on two measures of empathy – the Hogan Empathy Scale (Hogan, 1969), which measures cognitive empathy, and the Balanced Emotional Empathy Scale (BEES; Mehrabian, 1996), which measures affective empathy. The author found that meditators reported higher scores on cognitive empathy than non-meditators ($F(1,132) = 8.54, p < .004$). Scores on the measure of affective empathy did not differ significantly between the two groups. The author suggests that this finding may be due to the fact that meditation tends to temper affective

arousal and that the BEES measures emotional arousal. The author concludes that people who meditate tend to be more empathic.

Not all researchers have found significant results, however. Pearl and Carlozzi (1994) found that practicing a meditation technique for eight weeks had no impact on cognitive empathy measured by the Affective Sensitivity Scale (Kagan & Schneider, 1977, as cited in Pearl and Carlozzi, 1994) with volunteers from a southwestern university. The meditation group in this study was small ($n = 24$), and the authors do not indicate how much time was spent each week in meditation practice, so it is difficult to consider the context of these results.

These findings suggest that mindfulness and other types of meditation may be important tools for the cultivation of empathy in counselors. Only one study, however, has assessed mindfulness in counselors and the empathy measure used in that study assessed cognitive empathy only and was conducted with a small sample (Reiman, 1985). These findings also suggest that high emotional arousal may be negatively related to mindfulness. The decrease in emotional arousal suggested by Andersen (2000) as an outcome of meditation practice supports the hypothesis that mindfulness practice can help with counselor well-being.

Well-Being. Due to the nature of the work, counselors are at particular risk for burnout (Skovholt, 2001; Valente & Marotta, 2005). Counselors-in-training are also at risk due to high performance anxiety and academic demands (Bischoff & Barton, 2002). Empirical research suggests that the emotional well-being of the counselor impacts client outcomes. In their review of the literature, Beutler et al., (1994) found that high

emotional distress in the counselor may inhibit client growth and even foster negative change. Therefore, some have suggested that counselor education programs should include training in self-care (Aponte & Winter, 2000).

Research indicates that mindfulness training is related to an increase in a variety of well-being outcomes. For example, mindfulness training is hypothesized to foster disengagement from negative patterns in thinking and behaving, nurturing informed self-regulation and enhanced well-being (Brown & Ryan, 2003; Kabat-Zinn, 1990; Linehan, 1993a; Martin, 1997; Segal et al., 2002; Shapiro et al., 2006). In a correlational study examining convergent and discriminant validity of the MAAS, for instance, Brown and Ryan (2003) found that their scale of mindfulness was significantly positively related to a number of measures of well-being (e.g., self-esteem, $r = .36, p < .0001$; self-actualization, $r = .43, p < .0001$), suggesting that well-being may be an important correlate to mindfulness.

The majority of intervention studies examining the impact of mindfulness-based training use some form of psychological well-being as an outcome measure (e.g., anxiety, depression, self-control). Researchers have found significant positive change in these measures (Baer, 2003; Bishop, 2002; Grossman et al., 2004; Lazar, 2005). Although researchers have not examined the impact of mindfulness-based training specifically on counselors, researchers have focused on the impact of mindfulness training among health-care professionals (Galantino et al., 2005; Rosenzweig et al., 2003; Shapiro et al., 1998; Shapiro et al., 2005).

In one of the first studies on the effect of the MBSR program on stress in medical students, Shapiro et al. (1998) found significant changes in a number of well-being measures. Students were randomly assigned to one of two intervention groups ($n = 36$) or the wait-list control group ($n = 37$). The intervention lasted seven weeks. A MANOVA found significant differences between the two groups post-intervention (Wilks' Lambda (6, 64) = .8005, $p < .03$). Follow-up univariate ANOVA revealed that the intervention group reported less depression ($F(1, 69) = 8.18, p < .006$), less state anxiety ($F(1, 69) = 4.11, p < .05$), less trait anxiety ($F(1, 69)$ not reported, $p < .002$), increases in spirituality ($F(1, 69) = 5.62, p < .02$), and increases in empathy, as mentioned above.

In a follow-up study, Shapiro et al. (2005) examined the impact of an MBSR program on working health-care professionals, including physicians, nurses, social workers, physical therapists, and psychologists. In a randomized pretest-posttest design, the researchers hypothesized that the program would result in decreases in measures of psychological distress, burnout, perceived stress and increases in life satisfaction and self-compassion. A total of 10 participants did not complete the study due to such things as family problems, resignation from job, and insufficient time, resulting in a total sample size of 28 (intervention: $n = 10$; wait-list control: $n = 18$). After 8 weeks of training, the researchers found significant differences in perceived stress ($F(2, 24) = 4.4, p = .04$), satisfaction with life ($F(2, 25) = 3.84, p = .06$), and self-compassion (as mentioned above in the section on self-compassion).

Similarly, Rosenzweig et al. (2003) examined the impact of a 10-week version of the program on 140 medical students compared to 162 students in the control group.

Students in the control group participated in a seminar course that focused on complementary and alternative medicine. The authors used the Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1992, as cited in Rosenzweig et al., 2003) to assess changes in psychological distress. They found a significant interaction effect in POMS subscale scores based on group and time (Wilks' Lambda = .85, $p < .01$). Total mood disturbance scores were significantly lower at the completion of the training in the intervention group compared to the control group.

Galantino et al. (2005) assessed changes in physiological and psychological measures of stress after an 8-week, mindfulness-based meditation program. The intervention group ($n = 69$) consisted of health-care professionals at a university hospital. The researchers did not include a control group. No changes were found on a physiological measure of stress (i.e., salivary cortisol). Significant pre- to post-intervention changes were found, however, on the total score of the POMS (Mean change = 12.4, $p = .02$). Significant improvements also were found on all subscales of the POMS ($p < .01$).

Researchers also have demonstrated that mindfulness practices can have an impact on brain activity and other physiological measures of well-being. In a study using EEG measures of brain electrical activity and antibody levels as outcome measures, researchers found significant differences between those who had undergone MBSR training and the wait-list (Davidson, Kabat-Zinn, Schumacher, Rosenkranz, Muller, Santorelli, Urbanowski, Harrington, Bonus, Sheridan, 2003). The researchers found significant increases in both left-brain activation ($F(1, 33) = 4.57, p .04$), which is

associated with positive emotional expression, and antibody measures in response to an influenza vaccine ($t(33) = 2.05, p < .05$).

These studies suggest that training in mindfulness may help counseling students deal more effectively with the anxiety and stress of being a graduate student and a counselor-in-training. Also, it may give them the tools to effectively handle the stress of being a professional counselor once they graduate. Despite these encouraging results, many studies in this area are marked by methodological flaws. These weaknesses are highlighted below.

Critiques of Mindfulness-Based Intervention Research

Empirical research suggests that mindfulness-based interventions hold promise for a variety of outcome objectives, including counselor training. Several authors, however, have suggested that more rigorous examination is necessary (Baer, 2002; Bishop, 2002; Grossman et al., 2004; Lazar, 2005; Smith, 2004). A review of the concerns about mindfulness research and areas for future research is presented below.

Methodological Issues. As already noted, research studies on mindfulness suffer from methodological flaws, primarily around issues of internal validity. The majority of the mindfulness-based research examines Kabat-Zinn's MBSR program. As Smith (2004) and Bishop (2002) pointed out, this program includes an assortment of interventions (e.g., mindfulness meditation, autogenic training, and imagery), making it difficult to determine what aspects of mindfulness training actually affect change. Measures of mindfulness have only recently appeared in the literature. Therefore, to date, these studies have not assessed whether mindfulness-based programs actually result in changes in

mindfulness. In fact, the only empirical research that actually measures mindfulness are those studies related to the development of mindfulness assessment tools (Baer et al., 2003; Baer et al., 2006; Brown & Ryan, 2003). Bishop (2002) suggested that MBSR may result in change due to other variables such as group support or increased self-efficacy.

The lack of actual assessment of mindfulness itself means very little is known about the relationship between mindfulness and demographic variables. Only one study was found that examined the relationship between demographic variables and mindfulness, as mindfulness itself is rarely assessed in the empirical literature. Baer et al., (2006) found no differences in mindfulness based on age, gender, or race.

The lack of adequate control groups represents an additional threat to the internal validity of mindfulness research. Many of the pre-post design studies lack adequate controls. Those that used between-groups designs often did not specify what treatment as usual (TAU) approaches were used, making it difficult to compare mindfulness to TAU. Moreover, Lazar (2005) suggests that it may be difficult to create a control group that adequately matches the key elements of the mindfulness intervention. “To make a controlled study of MBSR, we would require an 8-week group format, with 40 minutes of daily homework that is compelling enough to get the participants to comply, but has no therapeutic value” (Lazar, 2005, p. 222).

In addition to issues around the mechanisms of action and the lack of controls, many of the mindfulness studies report small sample sizes, and they do not explicitly address clinical significance. Given the encouraging initial results of mindfulness

research, however, more research is recommended to determine why, how, and for whom mindfulness works (Baer, 2003; Bishop, 2002; Grossman et al., 2004; Lazar, 2005).

Areas for Future Research. Despite the methodological flaws, all the reviewers of mindfulness-based research suggest that it is an intervention worthy of continued research (Baer, 2003; Bishop, 2002; Grossman et al., 2004; Lazar, 2005). For instance, Grossman et al. (2004) found consistent and relatively strong effects sizes of approximately 0.5 ($p < .0001$) across a variety of populations. Baer (2003) conducted a slightly more extensive meta-analysis that included studies of both MBSR and MBCT. She examined 21 studies and found post-treatment effect sizes ranging from 0.15 to 1.65. The overall mean effect size was 0.59. She also found that patient reactions to treatment were positive, although she cautioned against interpretation of these findings, citing possible population differences in those who complete the program and those who drop out. She stated that MBSR is *probably efficacious* based on the standards of the American Psychological Association Division 12 Task Force on Promotion and Dissemination of Psychological Procedures. She added that a similar program, MBCT, which is designed specifically to treat recurrent depression, will likely reach the probably efficacious designation as more studies with independent investigators are conducted.

These findings suggest that future research is warranted and should address the methodological flaws of current research. Larger sample sizes and independent researchers will help make detection of medium-to-large treatment effects possible and help mindfulness-based programs reach “probably efficacious” status. The development

of treatment protocols and training manuals will ensure integrity of treatment, and increased attention to clinical significance would help increase confidence in the findings.

Although some evidence exists of changes in physical and psychological variables due to mindfulness, the door is just opening on this area of inquiry. Research on how mindfulness effects change is clearly needed. Although several authors have suggested that mindfulness may be an important component of clinical training (Fulton, 2005; Germer, 2005; Martin, 1997; Morgan & Morgan, 2005; Speeth, 1982), there is very little evidence to recommend implementation of such training at this point. Very little is known about the effect of mindfulness practice on the counseling process and the counseling relationship. More research into the relationship between mindfulness and key counselor-training outcomes is needed.

Summary

Mindfulness-based interventions are generating significant discussion and attention among both theorists and researchers. The evidence in support of mindfulness-based interventions is clear, although it is less clear exactly how mindfulness works or even what mindfulness is. The generally accepted definition is that mindfulness is present-moment, non-judgmental awareness. Mindfulness is considered a way of being that can be cultivated through various formal and informal practices. Mindfulness may affect change through a meta-mechanism called *reperceiving*. Additional hypothesized mechanisms of change include exposure, self-management and self-regulation, values clarification, relaxation, and acceptance.

A number of theorists have suggested that mindfulness training may be an important tool for training counselors in core counseling skills. Research suggests that mindfulness may be influential in the cultivation of attention, affect tolerance, self-compassion, and empathy. Furthermore, mindfulness-based interventions appear to positively influence various aspects of well-being (e.g., anxiety, perceived stress), suggesting that mindfulness training may be helpful in enhancing the well-being of counselors-in-training. Due to methodological flaws in current research and the lack of research with counselors-in-training, more rigorous research is needed. Specifically, counselor educators need more information about the relationship between mindfulness and core counseling skills and counselor-training outcomes.

CHAPTER III

METHODOLOGY

In Chapters I and II, the rationale and literature review for the study of the relationship between mindfulness skills and counseling self-efficacy were presented. The review of the literature supports the hypothesis that a relationship exists between mindfulness skills and counseling self-efficacy and that this relationship may be mediated by attention and empathy, suggesting that further research in this area is warranted. In this chapter, the methodology for examining these relationships and the hypothesized path model are explained. Participants and instrumentation are described, and data collection and statistical procedures are outlined. Additionally, the design and implications of the pilot study are discussed.

Research Questions and Hypotheses

The present study seeks to examine the relationship between mindfulness skills and counseling self-efficacy among counselors-in-training by examining a hypothesized path model. The model, developed by the researcher based on an extensive review of the literature, posits that mindfulness has both a direct effect on counseling self-efficacy and an indirect effect on counseling self-efficacy mediated by attention and empathy. To test the fit of this model, four primary research questions are addressed. Additionally, six hypotheses were developed to test the research questions.

Research Question 1: What are the relationships between mean scores of mindfulness, attention, empathy, and counseling self-efficacy among master's-level counseling interns and doctoral students?

Hypothesis 1: There will be a statistically significant relationship between pairwise mean scores on measures of mindfulness, attention, empathy, and counseling self-efficacy among master's-level counseling interns and doctoral students.

Research Question 2: What are the differences in mean scores of mindfulness, attention, empathy, and counseling self-efficacy between master's level counseling interns and doctoral students and males and females?

Hypothesis 2: There will be a statistically significant mean difference among mean scores of mindfulness, attention, empathy, and counseling self-efficacy between master's-level counseling interns and doctoral students.

Hypothesis 3: There will be a statistically significant mean difference between males and females on mean scores of empathy

Research Question 3: What are the relationships between mindfulness, attention, empathy, and counseling self-efficacy within a path model that specifies a relationship between mindfulness skills and self-efficacy mediated by attention and empathy?

Hypothesis 4: The hypothesized path model specifying a relationship between mindfulness and counseling self-efficacy mediated by attention and empathy will account for a statistically significant portion of the variance in counseling self-efficacy.

Research Question 4: How does the fit of the specified hypothesized path model differ for master's level counseling interns, doctoral students, males and females?

Hypothesis 5: The proposed path model will account for a statistically significant portion of the variance in counseling self-efficacy for both master's interns and doctoral students.

Hypothesis 6: The proposed path model will account for a statistically significant portion of the variance in counseling self-efficacy for both females and males.

Participants

The population of interest for this study included master's-level counseling interns and doctoral students. A power analysis suggested that a sample size of 128 was necessary for a detectable beta of .25 and power of .80 for a linear regression with three predictors (Lenth, 2006). The researcher aimed for a sample size of 200 in order to obtain reproducible results (Norman & Streiner, 2003). Participants were obtained by contacting professors who work with master's interns and doctoral students at 15 counselor-education programs across the country and requesting their help in recruiting participants and administering the instruments.

Instrumentation

Participants completed a packet of six instruments: the Five-Factor Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006), the Counselor Attention Scale (Bentley, 2006), the Everyday Attention Questionnaire (EAQ; Martin, 1986; Martin & Jones, 1984), the Interpersonal Reactivity Index (IRI; Davis, 1980), the Counselor Activity Self-Efficacy Scales (CASES; Lent, Hill, & Hoffman,

2003), and a demographic questionnaire created by the author for this study. This compilation of instruments can be found in Appendix B. In this section, each instrument is described and psychometric properties are examined. Although total scores for each instrument were used, Table 1 below outlines the number of items for each instrument, subscales, published alpha coefficients, and score ranges.

TABLE 1
Instrumentation Subscales, Published Alpha Coefficients, Score Range

Instrument	# of Items	Subscales	Alphas	Range
Five-Factor Mindfulness Questionnaire	39	Observe	.83	1-5
		Describe	.91	
		Act With Awareness	.87	
		Non-Judge	.87	
		Non-React	.75	
		Total	.96	
Everyday Attention Questionnaire	18	Total	Unpublished	1-5
Counselor Attention Scale	22	Divided	Unknown	1-5
		Sustained		
		Total		
Interpersonal Reactivity Index	28	Empathic Concern	.80	0-4
		Perspective Taking	.79	
		Fantasy	.82	
		Personal Distress	.75	
		PT & EC for total	.89	
Counseling Self-Efficacy Scale	41	Exploration	.79	0-9
		Insight	.85	
		Action	.83	
		Session Management	.94	
		Client Distress	.94	
		Total Generic Skills	Unpublished	
		Total Negotiating Difficulty	Unpublished	
Demographic Questionnaire	6	N/A	N/A	N/A

Mindfulness – Five Factor Mindfulness Questionnaire (FFMQ)

The Five Factor Mindfulness Questionnaire (FFMQ) is a synthesis of a number of self-report mindfulness questionnaires that have appeared in the literature in recent years. Consequently, it represents the collective understanding among scholars of what

mindfulness is and how it should be operationalized. The FFMQ is intended to provide a better understanding of the specific skills that have been found to be components of an overall mindfulness construct. As such, it can be used by professionals to identify baseline strengths and weaknesses in mindfulness skills and can be used to evaluate whether mindfulness training results in acquisition of or improvement in these skills.

The FFMQ measures five factors of mindfulness: *observing* (noticing or attending to a variety of stimuli), *describing* (applying words to observed phenomena), *acting with awareness* (engaging attention fully on the current activity), *nonjudging* (refraining from evaluative labels about various observed phenomena), and *nonreacting* (noticing phenomena without having a reaction to it). The five factors form a total mindfulness score, which reflects a global measure of mindfulness. It is this total score that serves as the unit of analysis in this study. The FFMQ uses a 5-point Likert-type scale (1 = never or very rarely true, 5 = very often or always true). Sample questions include “When I’m walking, I deliberately notice the sensations of my body moving” and “In difficult situations, I can pause without immediately reacting.” Participants answer each question in the way that best describes what is generally true for them. The estimated time to complete the instrument is 5-10 minutes.

The FFMQ was developed as an outgrowth of research into the factor structure of the mindfulness construct. Baer et al. (2006) examined the psychometric properties of five recently developed mindfulness questionnaires, including 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 (CAMS; Feldman, Hayes, Kumar & Greeson, unpublished manuscript, as cited in Baer et al., 2006), and the Mindfulness Questionnaire (MQ; Chadwick, Hember, Mead, Lilley, & Dagnan, unpublished manuscript, as cited in Baer et al., 2006). The researchers investigated the instruments' internal consistency, convergent and divergent validity, and correlations with each other and with meditation experience. They also examined the factor structure of the combined pool of items from all five mindfulness questionnaires.

The researchers administered the combined pool of mindfulness items along with measures of other constructs to 613 undergraduate psychology students. The researchers used 10 assessments to examine convergent and divergent validity (e.g., *Brief Symptom Inventory*, BSI, Derogatis, 1992, as cited in Baer et al., 2006; *NEO-Five Factor Inventory*, NEO-FFI; Costa & McCrae, 1992, as cited in Baer et al., 2006). The authors found evidence of good internal consistency for the five mindfulness questionnaires and moderate to large correlations in the expected directions with measures of other constructs except for one. Exploratory factor analysis suggested a five-factor solution that accounted for 33% of the variance after factor extraction. The five factors were only modestly correlated with each other, suggesting that they measure separate but related components of mindfulness.

To further examine the factor structure of mindfulness, the researchers used confirmatory factor analysis to investigate whether the five-factor structure could be derived in an independent sample. They also examined convergent and divergent validity at the factor level. For this study, the researchers developed a new instrument, the FFMQ,

by reducing the original total item pool from 115 items to 39 items. In order to strengthen internal consistency and create an instrument of manageable length, the FFMQ includes only those items that had the highest loadings on the five factors and that loaded on a single factor. The instrument was administered to a new sample of 268 undergraduate students.

Results of this study provided confirmatory evidence of the five-factor structure of mindfulness. A hierarchical model examined whether the five factors were indicators of an overall mindfulness construct or were better understood as individual constructs. This examination revealed that the *describe*, *act with awareness*, *nonjudge*, and *nonreact* factors all loaded significantly onto an overall mindfulness factor. Surprisingly, the *observe* factor did not load significantly, which the researchers suggested was related to the *observe* factor's differential correlations with the other four factors, particularly the nonsignificant and negative correlation with *nonjudge*. Previous researchers suggested that individuals with no meditation experience might observe their experience judgmentally while those with meditation experience might observe experience nonjudgmentally (Baer, Smith, & Allen, 2004; Brown & Ryan, 2003). To further investigate this possibility, the authors examined the correlation between the *observe* and *nonjudge scores* for participants with meditation experience and found a significant, positive relationship. The researchers then examined the five-factor, hierarchical model with this population and found that it fit the data well (CFI = .96, NNFI = .94, RMSEA = .07). Examination of differential relationships with other constructs revealed relationships

consistent with predictions. These findings suggest that the five-factor structure is useful for understanding how the overall mindfulness construct relates to other constructs.

Psychometric properties of the FFMQ have been investigated in administrations with college undergraduate students, although the instruments from which the FFMQ is derived have been validated using additional populations, including cancer patients (Carlson & Brown, 2005), individuals with a diagnosis of borderline personality disorder (Baer et al., 2004), and experienced meditators (Buchheld et al., 2001). Researchers indicated that the FFMQ is measuring distinct aspects of mindfulness and that the factors have strong internal consistency. The following alpha coefficients were obtained: *observing* = 0.83, *describing* = 0.91, *acting with awareness* = 0.87, *nonjudging* = 0.87, and *nonreacting* = 0.75 (Baer et al., 2006). The composite estimate of reliability was 0.96. Inter-factor correlations ranged from 0.15 to 0.34, providing evidence that each factor is distinct from the other four.

Attention – Counselor Attention Scale (CAS)

After an extensive review of the literature, the researcher in this study found that the majority of paper-and-pencil attention assessment tools are proprietary diagnostic tools (e.g., Conner's Adult ADHD Diagnostic Interview for DSM-IV; Epstein, John, & Conners, 2001) or required technology for administration (e.g., Watson-Barker Listening Test; Watson & Barker, 1984). The researcher found no paper-and-pencil instruments that measure the ability to control attention during the counseling session.

In order to accurately measure attention as defined by this study, the researcher developed The Counseling Attention Scale (CAS; see Appendix A). A preliminary

version of the scale consisted of 14 questions designed to assess four primary attentional competencies (i.e., sustain, select, switch, and divide). Pilot testing of that version suggested that it needed to be modified to more precisely assess counseling attention skills (see the Pilot Study section for more information).

The assessment of attention is a difficult task with a self-report measure. The aspects of attention that theoretically should be assessed on such a measure, including the ability to sustain attention despite distractions and the ability to simultaneously attend to several things at once, theoretically may be negatively related to each other. It is unclear whether high scores on various attention tasks indicate healthy overall attention. For instance, a person who is able to sustain attention to the point of becoming hyper-focused may miss important cues from the environment, and a person who tends to divide attention may become overwhelmed by the wide variety of stimuli. Healthy attention control capability suggests a balance of both (Nideffer, 1979).

Given these difficulties, the CAS was redesigned to more accurately assess two dimensions of attention – sustained attention and divided attention – and better discriminate between individuals with high and low levels of these attentional competencies. More information on the revisions made to the CAS is detailed in the Pilot Study section of this chapter. The CAS consists of 22 questions with a 1-5 response range.

Everyday Attention Questionnaire (EAQ)

Due to the low reliability estimates obtained for the CAS in the pilot study, the Everyday Attention Questionnaire (EAQ; Martin, 1986; Martin & Jones, 1984) was

added in case the revised version of the CAS also had low reliability estimates. The EAQ was the only non-proprietary or non-clinical paper-and-pencil assessment of attention identified in the literature. Martin (1986) referred to the EAQ as “the only relevant questionnaire currently extant” (p. 64). The EAQ is designed to assess sustained, selective, and divided attention in everyday life and yields a total attention score.

The EAQ consists of 18 questions that assess ease in performing various daily attentional tasks. Responses are made on a 5-point, Likert-type scale. For the first 12 questions, respondents are asked to rate the impact of various distractions on ability to complete a task on a scale ranging from 1 = very distracting to 5 = very helpful. This section may be assessing an individual’s preference for distractions rather than ability to sustain attention when distractions are present. For questions 13-18, respondents are asked to rate their ability to perform various attentional tasks on a scale ranging from 1 = very poor to 5 = very good. An example of a question is, “Imagine that you are carrying out some task you find easy (perhaps something at work or peeling potatoes). What is the effect of humming or whistling to yourself on your ability to do this sort of task?” The estimated time to complete the instrument is 5 minutes.

Although no psychometric data is available on the reliability of the EAQ, it has been studied in relation to objective measures of attention and shown to correlate significantly (Martin & Jones, 1984). In their examination of a self-report measure of cognitive failures, Martin and Jones (1984) found that the EAQ was negatively related to objective ability to attend to words in one ear while ignoring those on the other. Using earphones, participants listened to pairs of words where one word of each pair was

presented in each ear. Participants were instructed to concentrate on only one side. They were then asked to recall either the attended words followed by the unattended ones or vice versa. The authors found a significant negative correlation between scores on this dichotic listening test and high scores on the EAQ (attended words first: $r = -.46, p < .05$; attended words second: $r = -.83, p < .05$). The authors hypothesized that the EAQ may be assessing the degree to which individuals prefer to divide their attention and that this may be negatively correlated with their ability to focus attention. These findings suggest that the EAQ may be a valid measure of a preference for divided attention. It is less clear, though, whether it is a valid measure of sustained attention.

In the same study, Martin and Jones (1984) examined the correlation between the EAQ and the Cognitive Failures Questionnaire (CFQ; Broadbent, Cooper, Fitzgerald, & Parkes, 1982, as cited in Martin & Jones, 1984). The CFQ was designed to assess various failures in perception, memory, and action in daily life. Questions include such things as “Do you fail to notice signposts on the road?” and “Do you bump into people?” Martin and Jones (1984) found generally negative but non-significant relationships between the EAQ and various subscales of the CFQ (range = $-.47$ to $.37$). Only one of the *Remembering* subscale components of the CFQ was significantly correlated with the EAQ ($r = -.47, p < .05$). The authors suggested that the EAQ measures a different aspect of cognitive performance than the CFQ. This finding provides evidence of discriminant validity for the EAQ.

Perhaps in part because of the difficulty in parsing out various aspects of attention in a self-report questionnaire, the majority of studies assessing attention use objective

measures of attention such as dichotic listening tests or dual-task performance tests. The few researchers using the EAQ have examined clinical populations (López-Luengo & Vázquez, 2003; Ray, Phillips, & Weir, 1993), older adults (Martin, 1986), and unnamed populations (Martin, 1983; Martin & Jones, 1984). The EAQ has not been studied with counseling students.

Empathy – Interpersonal Reactivity Index (IRI)

The Interpersonal Reactivity Index (IRI; Davis, 1980, 1996) is designed to assess multidimensional empathy in social situations. Rather than operationalizing empathy as either a cognitive or affective construct, Davis (1980) operationalized empathy as a set of related constructs that assess both cognitive and affective aspects of empathy. The IRI has been used widely in social psychological research, but not as much in psychotherapy research. The IRI is based, in part, on Hoffman's (1977) theoretical model of the development of pro-social tendencies and empathy. That model contends that the capacity for perspective-taking, which is considered instrumental in empathy, parallels the developmental shift from a self-orientation to other-orientation. Prior to this shift, children are unable to distinguish between the distress of others and the distress of self. Witnessing others in distress arouses their own fear and anxiety. As perspective-taking ability increases, however, personal distress in the face of another's pain decreases.

The IRI is a 28-item self-report measure that asks such questions as, "When I'm upset at someone, I usually try to 'put myself in his shoes' for a while," and "I am often quite touched by things that I see happen." The measure consists of four subscales each tapping different aspects of global empathy. Each subscale consists of seven items rated

on a Likert-type scale ranging from 0 (does not describe me well) to 4 (describes me very well). The *Perspective Taking* subscale assesses the tendency to adopt the point of view of others (“I sometimes try to understand my friends better by imagining how things look from their perspective”). The *Empathic Concern* subscale assesses the tendency to respond to distress in others with an affective experience of sympathy and compassion (“I often have tender, concerned feelings for people less fortunate than me”). Davis (1980) considered these two subscales to reflect the most advanced levels of empathy.

The *Personal Distress* and *Fantasy* subscales represent lower and intermediate levels of empathy, respectively (Davis, 1980). In fact, Davis (1980) advised that the Personal Distress scale correlates negatively with the other subscales. The Personal Distress subscale measures the tendency to become personally anxious and uneasy in the presence of distressing feelings of others (“I sometimes feel helpless when I am in the middle of a very emotional situation”). It indicates susceptibility to overidentification with the issues of another. The Fantasy subscale taps the tendency to imaginatively transpose into the feelings and actions of characters in books, movies, and plays (“When I watch a good movie, I can very easily put myself in the place of a leading character”). Some have suggested that this subscale may be associated with the intermediate developmental level of empathy commonly expressed by adolescents (Hatcher, Favorite, Hardy, Goode, Deshetler, & Thomas, 2005).

A recent analysis of the hierarchical structure of the IRI found two second-order factors (Pulos, Elison, & Lennon, 2004). The first factor, *General Empathy*, was associated with Empathic Concern (factor loading = .79), Fantasy (factor loading = .61),

and Perspective Taking (factor loading =.51). Personal distress loaded minimally on this factor (factor loading =.04). The finding that Personal Distress does not load on the General Empathy factor supports the theoretical position that adult empathy and personal distress are separate constructs (Hoffman, 1977; Lennon & Eisenberg, 1987). The second factor, *Emotional Control*, was positively associated with Perspective Taking (.42) and negatively with Personal Distress (-.50). The authors concluded that a sum score of the Empathic Concern, Perspective Taking, and Fantasy scales may be a useful measure of general empathy.

The IRI subscales have been shown to be reliable and stable measures of these four aspects of empathy (Carey, Fox, & Spraggins, 1988; Cliffordson, 2002; Davis, 1980, 1983; Pulos et al., 2004). Davis (1980) found internal consistency reliabilities of the four subscales ranging from .70 to .78. Pulos et al. (2004) found similar reliabilities for the subscales (Fantasy, alpha = .82; Empathic Concern, alpha = .80; Personal Distress, alpha = .75; Perspective Taking, alpha = .79). Internal consistency for a total empathy score has not been reported. Test-retest reliabilities range from .62 to .71 over a two month period (Davis, 1980) and .50 to .62 over a two-year period (Davis & Franzoi, 1991).

Construct validity of the IRI was assessed by comparing it with the Hogan Empathy Scale (Hogan, 1969), which measures cognitive empathy, and the Emotional Empathy Scale (EETS; Mehrabian & Epstein, 1972), which measures affective empathy. The Perspective Taking subscale, as predicted, was most highly associated with the Hogan Empathy Scale ($r = .40$) and was the least correlated of all four subscales with the EETS ($r = .20$). The Personal Distress scale was significantly and negative associated

with the Hogan scale ($r = -.33$) and positively correlated with the EETS ($r = .24$). The Empathic Concern and Fantasy scales showed greater associations with the EETS, as expected ($r_s = .60$ and $.52$, respectively). These results support the multidimensional nature of the IRI.

Researchers have assessed the construct validity of the IRI in a number of settings with a variety of populations, including undergraduate students (Beitel, Ferrer, Cecero, 2004; Davis, 1980, 1983; Joireman, Needham, & Cummings, 2001; Joireman, Parrott, & Hammersla, 2002), medical personnel (Bellini & Shea, 2005; Galantino et al., 2005; Shanafelt, West, Zhao, Novotny, Kolars, Habermann, Sloan, 2005), and therapists and counselors (Constantine & Gainor, 2001; Hatcher, Favorite, Hardy, Goode, Deshetler, & Thomas, 2005). These studies have demonstrated a variety of correlations between the subscales of the IRI and other constructs. For instance, Davis (1983) found that Perspective Taking was negatively correlated with various measures of social dysfunction and positively correlated with sensitivity to others. Personal Distress generally has been found to be positively correlated with social dysfunction and negatively correlated to sensitivity to others. The Empathic Concern and Fantasy scales also differentially correlated at a significant level with various measures of social functioning and sensitivity. For example, Fantasy has been found to be positively and significantly related to shyness ($r = .21, p < .05$), loneliness ($r = .22, p < .05$), and social anxiety ($r = .22, p < .05$), but only in males.

Similarly, in two studies by Joireman and colleagues, the subscales of the IRI were found to vary in their correlations with other constructs. Joireman et al., (2002)

found Perspective Taking and Empathic Concern to be positively correlated to self-reflection ($r_s = .26$ and $.27, p < .01$, respectively) and self-esteem ($r = .34, p < .01; r = .14, p < .10$, respectively). Personal Distress was found to be non-significantly and negatively correlated with self-reflection, significantly and positively related to self-rumination ($r = .45, p < .01$), and significantly and negatively related to self-esteem ($r = -.40, p < .01$). In another study, Joireman et al. (2001) found that Personal Distress was significantly correlated to anxiety ($r = .44, p < .01$). Also, they found that both greater trust and comfort with closeness were positively associated with Empathic Concern ($r = .21, p < .05; r = .31, p < .01$, respectively) and Perspective Taking ($r = .21, p < .05; r = .31, p < .05$) and negatively associated with Personal Distress ($r = -.27, p < .01; r = -.14, p > .05$).

These findings support a multidimensional view of empathy and provide evidence that the various subscales of the IRI are measuring separate aspects of empathic tendencies. Given the evidence that the Personal Distress scale may not be related to a global measure of empathy (Pulos et al., 2004) and suggestions that the Fantasy scale measures more intermediate empathy (Davis, 1980; Hatcher et al., 2005), only the Empathic Concern scale and the Perspective Taking scales will be used to measure global empathy in this study.

The assessment of empathy in this study may be limited by the fact that the IRI does not assess empathy in the counseling session. Some have suggested that empathy in the counseling relationship may be different than empathy in social settings as it requires a communication of understanding to the other person (Barrett-Lennar, 1981; Keefe,

1976; Rogers, 1975). The IRI, however, is the most widely researched and comprehensive multidimensional assessment of empathy available (Cliffordson, 2002).

Counseling Self-Efficacy – Counselor Activity Self-Efficacy Scales (CASES)

The Counselor Activity Self-Efficacy Scales (CASES; Lent, Hill, & Hoffman, 2003) are designed to assess counseling self-efficacy in three general areas: performing helping skills, managing the counseling process, and handling challenging counseling situations. This instrument is intended to address criticisms of earlier measures of counseling self efficacy, specifically that those instruments presuppose knowledge that is beyond the level of new counselors-in-training, measure constructs other than self-efficacy (e.g., values), do not measure more advanced skills or role requirements, and are not grounded in counselor-development theory (Lent, Hackett, & Brown, 1998). The CASES was developed to address these criticisms and provide an expanded understanding of counseling self-efficacy.

The CASES is a self-report instrument that is based on the authors' synthesis of the Hill and O'Brien (1999) helping skills model. It consists of 31 questions, and participants answer how confident they are in their abilities to perform various tasks with most clients in the next week and to rate their confidence on a Likert-type scale that ranges from 0-9 (0 = No confidence at all, 9 = Complete confidence). The authors conceptualized counseling self-efficacy as encompassing three broad domains, including perceived ability to perform discrete helping skills (e.g., reflection of feeling), manage routine session tasks (e.g., conceptualizing the client), and handle challenging clinical situations (e.g., a severely depressed client). The authors named these broad domains

Helping Self-Efficacy, *Session Management Self-Efficacy*, and *Counseling Challenges Self-Efficacy*, respectively. Factor analysis of each domain revealed six subscales to overall counseling self-efficacy. Analysis of the Helping Self-Efficacy domain indicated a three-factor structure, including (1) *Insight Skills* (e.g., offering interpretations and using self-involving immediacy statements), (2) *Exploration Skills* (e.g., attending, reflecting feelings), and (3) *Action Skills* (e.g., providing relatively structured interventions).

Analysis of the Session Management Self-Efficacy domain revealed a single-factor solution, and analysis of the Counseling Challenges Self-Efficacy revealed a two-factor structure, including (1) *Relationship Conflict* (e.g., working with a client who has core values or beliefs that are different from the counselor) and (2) *Client Distress* (e.g., working with a client who has experienced a traumatic event). Composite scores are derived for each of the three primary domains and domain subscales by summing item responses and dividing by the number of items on each domain. An overall counseling self-efficacy scale is derived using the same method. Because this study is examining general self-efficacy for counseling, the overall self-efficacy score will be used.

Psychometric properties of the CASES were examined using a sample of students from five universities who were enrolled in either helping skills classes for undergraduates, master's level counseling practica, or various levels of doctoral training, primarily in counseling psychology ($n = 393$) (Lent et al., 2003). The students ranged in age from 20 to 57 years ($M = 26.32$, $SD = 7.46$). Reliability estimates for the individual subscales ranged from .79 (Exploration Skills) to .94 (Session Management and Client

Distress), providing evidence of internal consistency. The total CSE score for the CASES had an alpha coefficient of .97. Intercorrelations among the individual subscales were medium to large, ranging from .44 (Exploration Skills and Client Distress) to .72 (Client Distress and Relationship Conflict, Session Management and Exploration Skills, and Session Management and Insight Skills). These results provide support for the findings that the scales represent distinct, yet somewhat overlapping, components of counseling self-efficacy. Test-retest reliability over a two-week period revealed consistency coefficients similar to the estimates of internal consistency (Exploration Skills = .81; Insight Skills = .85; Action Skills = .78; Session Management = .93; Client Distress = .91; Relationship Conflict = .94; CASES total = .96). Test-retest correlations indicated that the scale scores were reasonably stable over a 2-week period and that scores were more stable for doctoral students than undergraduates. Correlations of the CASES scales with a social desirability measure suggested that the CASES scales are not substantially affected by social desirability bias.

Demographic Questionnaire

A demographic questionnaire was designed by the author to provide descriptive information about the participant's age, gender, and race/ethnicity. This questionnaire is included in Appendix B.

Procedures

For this study, a convenience sample of counseling interns was recruited by contacting professors who teach master's-level counseling interns at counselor-education programs across the country. Initially, these professors were contacted via e-mail by the

principal investigator. The purpose, goals, and procedures of the study were explained, and the professors were asked to participate in the study by administering the questionnaires during supervision or class. The professors who agreed to participate received a packet in the mail containing an overview letter addressed to the administrator describing the purpose, goals, and procedures of the study; instructions for administering the questionnaires (see Appendix A); informed consent forms (see Appendix A); 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 their overview letter and in the administration instructions. Three weeks after distribution, the 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, CAS, EAQ, IRI, and CASES) to provide a profile of the participants and a foundation for testing the six hypotheses of the study. Additionally, Cronbach's alpha coefficients were computed to examine the reliability of each instrument for this sample.

Hypothesis 1

To test hypothesis 1, that there will be a statistically significant relationship between pairwise mean scores on measures of mindfulness, attention, empathy, and counseling self-efficacy among master's-level counseling interns and doctoral students,

correlations among all the observed variables were examined using the Pearson Product-Moment Correlation Coefficient.

Hypothesis 2

To test hypothesis 2, that there will be a statistically significant mean difference among scores of mindfulness, attention, empathy, and counseling self-efficacy between master's-level and doctoral level counseling students, a multivariate analysis of variance (MANOVA) was used to examine differences on mean scores on the FFMQ, EAQ, CAS, IRI, and CASES. Post-hoc univariate analyses were conducted as warranted.

Hypothesis 3

To test hypothesis 3 that there will be a statistically significant mean difference between males and females on empathy scores, a one-way analysis of variance (ANOVA) was used.

Hypothesis 4

To test hypothesis 4, that the hypothesized path model specifying a relationship between mindfulness and counseling self-efficacy mediated by attention and empathy will account for a statistically significant portion of the variance in counseling self-efficacy, a causal step analysis was conducted with follow-up bootstrapping to examine total, direct and indirect paths in the model, as recommended by Preacher and Hayes (2006).

Hypothesis 5

To test hypothesis 5, that the path model will account for a statistically significant portion of the variance in counseling self-efficacy for both master's interns and doctoral

students, separate causal steps analysis with bootstrapping was used with level in program as the grouping variable.

Hypothesis 6

To test hypothesis 6, that the path model will account for a statistically significant portion of the variance in counseling self-efficacy for both females and males, a separate causal steps analysis with bootstrapping with gender as the grouping variable was initially proposed for data analysis. Due to the limited number of males in the study, however, this hypothesis was not tested.

The research questions, hypotheses, variables of interest, and analyses are presented in *Table 2* below:

TABLE 2:
Research Questions, Hypotheses, Variables of Interest, Data Analysis

Research Question 1: What are the relationships between mean scores of mindfulness, attention, empathy, and counseling self-efficacy among master's-level counseling interns and doctoral students?

Hypothesis	Variables	Analysis
Hypothesis 1: There will be a statistically significant relationship between pairwise mean scores on measures of mindfulness, attention, empathy, and counseling self-efficacy among master's-level counseling interns and doctoral students.	Mindfulness (interval) Attention (interval) Empathy (interval) Counseling self-efficacy (interval)	Pearson Product-Moment Correlation Coefficient

Continued

Research Question 2: What are the differences in mean scores of mindfulness, attention, empathy, and counseling self-efficacy between master's level counseling interns and doctoral students and males and females?

Hypothesis 2: There will be a statistically significant mean difference among mean scores of mindfulness, attention, empathy, and counseling self-efficacy between master's-level counseling interns and doctoral students.

Dependent:

Mindfulness (interval)
Attention (interval)
Empathy (interval)
Counseling self-efficacy (interval)

MANOVA
with post hoc
univariate
analyses

Independent

Level in school (nominal)

Hypothesis 3: There will be a statistically significant mean difference between males and females on mean scores of empathy.

Dependent:

Mindfulness (interval)
Attention (interval)
Empathy (interval)
Counseling self-efficacy (interval)

ANOVA

Independent

Gender (nominal)

Research Question 3: What are the relationships between mindfulness, attention, empathy, and counseling self-efficacy within a path model that specifies a relationship between mindfulness skills and self-efficacy mediated by attention and empathy?

Hypothesis	Variables	Analysis
<p><u>Hypothesis 4:</u> The hypothesized path model specifying a relationship between mindfulness and counseling self-efficacy mediated by attention and empathy will account for a statistically significant portion of the variance in counseling self-efficacy.</p>	<p><u>Predictor:</u> Mindfulness (interval)</p> <p><u>Mediators:</u> Attention (interval) Empathy (interval)</p> <p><u>Criterion:</u> Counseling self-efficacy (interval)</p>	<p>Causal Steps Analysis with follow-up Bootstrapping Analysis</p>

Continued

Research Question 4: How does the fit of the specified hypothesized path model differ for master's level counseling interns, doctoral students, males and females?

Hypothesis	Variables	Analysis
<p><u>Hypothesis 5:</u> The proposed path model will account for a statistically significant portion of the variance in counseling self-efficacy for both master's interns and doctoral students.</p>	<p>Predictor: Mindfulness (interval)</p> <p>Mediators: Attention (interval) Empathy (interval)</p> <p>Criterion: Counseling self-efficacy (interval)</p> <p>Grouping variable: Level in school (nominal)</p>	<p>Causal Steps Analysis with follow-up Bootstrapping Analysis</p>
<p><u>Hypothesis 6:</u> The proposed path model will account for a statistically significant portion of the variance in counseling self-efficacy for both females and males.</p>	<p>Predictor: Mindfulness (interval)</p> <p>Mediators: Attention (interval) Empathy (interval)</p> <p>Criterion: Counseling self-efficacy (interval)</p> <p>Grouping variable: Gender (nominal)</p>	<p>Causal Steps Analysis with follow-up Bootstrapping Analysis</p>

Pilot Study

A pilot study was conducted to test the reliability and validity of the instruments, determine the time needed to complete the instruments, and obtain qualitative feedback about the clarity and validity of an instrument created by the author to assess counselor attention. The lack of research addressing mindfulness in counselor education provided a rationale for examining the relationship between mindfulness and key counselor training outcomes in this study. Prior to the pilot study, no researchers had explored the

relationship between mindfulness and counselor self-efficacy. The pilot study, therefore, was designed as a preliminary exploration of the research need. Additionally, the pilot study informed decisions about procedures and instrumentation for the larger study. This section provides an overview of the pilot-study research questions and hypotheses, methodology, and impact on the larger study.

Research Questions and Hypotheses

The pilot study was designed to explore the relationship between mindfulness and counselor self-efficacy and the mediating effects of attention and empathy. In addition, the pilot study served as a preliminary examination of the reliability and factor structure of the Counselor Attention Scale, an instrument created by the author to measure counselor attention. The following research questions along with corresponding hypotheses were examined.

Research Question 1: What are the relationships between mean scores of mindfulness, attention, empathy, and counseling self-efficacy among master's-level counseling interns?

Hypothesis 1: There will be a statistically significant relationship between pairwise mean scores on measures of mindfulness, attention, empathy, and counseling self-efficacy among master's-level counseling interns.

Research Question 2: What are the relationships between mindfulness, attention, empathy, and counseling self-efficacy within a path model that specifies a relationship between mindfulness skills and self-efficacy mediated by attention and empathy?

Hypothesis 2: The hypothesized path model specifying a relationship between mindfulness skills and counseling self-efficacy mediated by attention and empathy will account for a statistically significant portion of the variance in counseling self-efficacy.

Research Question 3: What is the factorial validity of the Counselor Attention Scale?

Hypothesis 3: The items on the Counselor Attention Scale will group into four distinct factors: sustained attention, divided attention, selective attention, and attention switching.

Additionally, test-retest reliability of the Counselor Attention Scale and internal consistencies of all the instruments were examined.

Participants

Participants were 31 master's-level counseling students with internship experience from a medium-size public university in the Southeast. Participants completed assessments during the first or last 10-15 minutes of class time. The majority of the participants were female ($n = 27$; 90%). More detailed demographic information is located in Appendix D in Table 13. One person did not complete the demographic questionnaire. Missing information is noted in the table.

Instrumentation

Participants were asked to complete a packet of assessments that included the Counselor Attention Scale (CAS), which was created by the author for this pilot study, the Five Factor Mindfulness Questionnaire (FFMQ), the Emotional Empathic Tendency Scale (EETS; Mehrabian & Epstein, 1972), and the Counselor Activity Self-Efficacy

Scales (CASES). Additionally, participants completed a demographic questionnaire and a feedback form on the CAS. Because the CAS was modified for the larger study and the EETS was replaced for the larger study based on pilot-study data, information on these two instruments is provided below.

Counselor Attention Scale (Bentley, 2006). In order to accurately measure attention as defined by this study, the author developed The Counseling Attention Scale (CAS; see Appendix C). The initial design of the instrument consisted of 14 questions based on the four primary attentional competencies (i.e., sustain, select, switch, and divide). Questions were developed by reviewing existing paper-and-pencil assessments used for diagnosing Attention Deficit/Hyperactivity Disorder and the literature on attention. This earlier version of the CAS used a 7-point Likert scale ranging from 1 = Very strong disagreement to 7 = Very strong agreement.

Content validity was assessed using ratings by experts. Experts included three Ph.D.-level counselor educators and two full-time practicing counselors with a combined total of 87 years of experience in the field. Experts were provided with the 14-item version of the CAS and brief descriptions of the four components of attention. They were first asked to classify each item according to the component or components of attention it best represented (Sustained, Selective, Switching, Divided). They then rated how well the item fit with the component using a 4-point Likert-type scale ranging from 1 = poor to 4 = excellent. Finally, using the same 4-point scale, they rated the quality of each item based on overall clarity. The percentage of raters who assigned each item to the competency category for which it was written was assessed across the 14 items. Eight

items had 80-100% agreement with the intended category. (See Table 17 in Appendix D for a complete listing of the percentages).

Emotional Empathic Tendency Scale (EETS; Mehrabian & Epstein, 1972). The Emotional Empathic Tendency Scale, which was originally called the *Questionnaire Measure of Emotional Empathy*, is a self-report instrument designed to measure emotional empathy as a trait by assessing an individual's tendency to recognize the feelings of others and vicariously feel the emotions of others. Unlike other measures of empathy, the EETS does not measure "cognitive empathy," the ability to intellectually assume the perspective of another person. According to a literature review, the EETS is one of the most widely used measures of emotional empathy (Chlopan, McCain, Carbonell, & Hagen, 1985).

The EETS comprises 33 items that are answered using a 9-point format that ranges from - 4 for "very strong disagreement" to + 4 for "very strong agreement." Items include such questions as "It makes me sad to see a lonely stranger in a group," "Sometimes at movies I am amused by the amount of crying and sniffing around me," and "I am annoyed by unhappy people who are just sorry for themselves." A total score is computed by subtracting the sum of the negatively worded items from the sum of the positively worded items. Items for the final instrument were chosen from a larger pool of items based on insignificant correlations with a scale of social desirability ($r = 0.06$), statistically significant ($p=0.01$) correlations with the total score, and content validity determined partially by factor analysis of the total item pool. Although the EETS measures seven subscales (i.e., *Susceptibility to Emotional Contagion*, *Appreciation of*

the Feelings of Unfamiliar and Distant Others, Extreme Emotional Responsiveness, Tendency to be Moved by Others' Positive Emotional Experiences, Sympathetic Tendency, Willingness to be in Contact with Others Who Have Problems), a total score is typically reported in the literature (Davis, 1996). Psychometric properties of the instrument suggest that it has strong evidence of reliability and validity. Reliability coefficients of .84 and .85 on the total scale have been reported (Mehrabian, 1997; Mehrabian & Epstein, 1972).

To test the validity of the measure, Mehrabian and Epstein (1972) conducted two studies. They found that participants with high levels of emotional empathy were more affected by immediacy conditions, less likely to demonstrate aggressive behavior, and more likely to engage in helping behavior. Other studies indicate that individuals with high scores on the EETS are more socially aware (Van Ornum, Foley, Burns, DeWolfe, & Kennedy, 1981) and volunteer more to help others (Barnett, Howard, King, & Dino, 1981; Eisenberg-Berg & Mussen, 1978) than those with low scores.

A number of additional studies have been conducted that provide additional evidence of the content validity of the measure. Researchers found significant correlations between the EETS and altruism (Ruston, Chrisjohn, & Fekken, 1981), arousability (Mehrabian, 1977), neuroticism (Eysenck & Eysenck, 1978; Eysenck & McGurk, 1980), and social interest (Crandall, 1980; Crandall & Harris, 1976). Because the EETS assesses a number of different affective responses, some have suggested that high scores may reflect chronic emotional arousability to the environment in general

rather than a specific affective response in relation to other people (Davis, 1996; Mehrabian, Young, & Sato, 1988).

Procedures

Following approval from the Human Subjects Review Board at The University of North Carolina at Greensboro, the researcher recruited the assistance of several professors in the counseling department of the target university. The professors allowed the researcher to enter their classrooms on two separate occasions to collect data. After explaining the purpose of the study and reviewing the informed consent form, the researcher invited students who were currently in internship or who had already completed internship to participate in the study.

During the first round of data collection, students completed the CAS only. This took approximately 5 minutes to complete. During the second round, students completed the full packet with the CAS on top. This took approximately 15 minutes to complete. To assess the test-retest reliability of the CAS, students were asked to put an anonymous hint word (e.g., the name of their first pet) at the top of their assessments, so that the first round and second round of assessments could be linked.

Data Analysis and Overview of Results

An overview of the analyses used and the results are presented here. The complete results of the pilot study are in Appendix D. Frequencies were computed for the demographic items, and descriptive statistics and alpha coefficients were computed for the four instruments. An alpha coefficient comparing mean total scores for both

administrations of the CAS was computed to assess test-retest reliability for the CAS ($r = 0.80$).

Hypothesis 1. To test hypothesis 1 that there will be a statistically significant relationship between pairwise mean scores on measures of mindfulness, attention, empathy, and counseling self-efficacy among master's level counseling interns, bivariate correlations were assessed using the Pearson Product-Moment Correlation Coefficient (Table 15). Intercorrelations between mindfulness, attention, and counseling self-efficacy were all positive, and two were significant even with such a limited sample. Significant correlations were found between mindfulness and counseling self-efficacy ($r = .49$; $p = .01$) and between mindfulness and attention ($r = .54$; $p = .00$). Contrary to the hypothesis, the measure of empathy had negligible relationships with the other variables.

Hypothesis 2. Although all of the bivariate relationships in the model were not significant as required for causal steps analysis (Baron & Kenny, 1986), a path analysis was conducted to explore the mediating relationships per hypothesis two for heuristic purposes. As predicted, the total variance in counseling self-efficacy explained by the full model was significant ($Adj. R^2 = .16$, $F(3, 27) = 2.97$, $p = .05$). The full path model is shown below. Furthermore, mindfulness significantly predicted attention, as hypothesized (Standardized $\beta = .54$; $t = 3.14$; $p = .00$), accounting for 26% of the variance in attention.

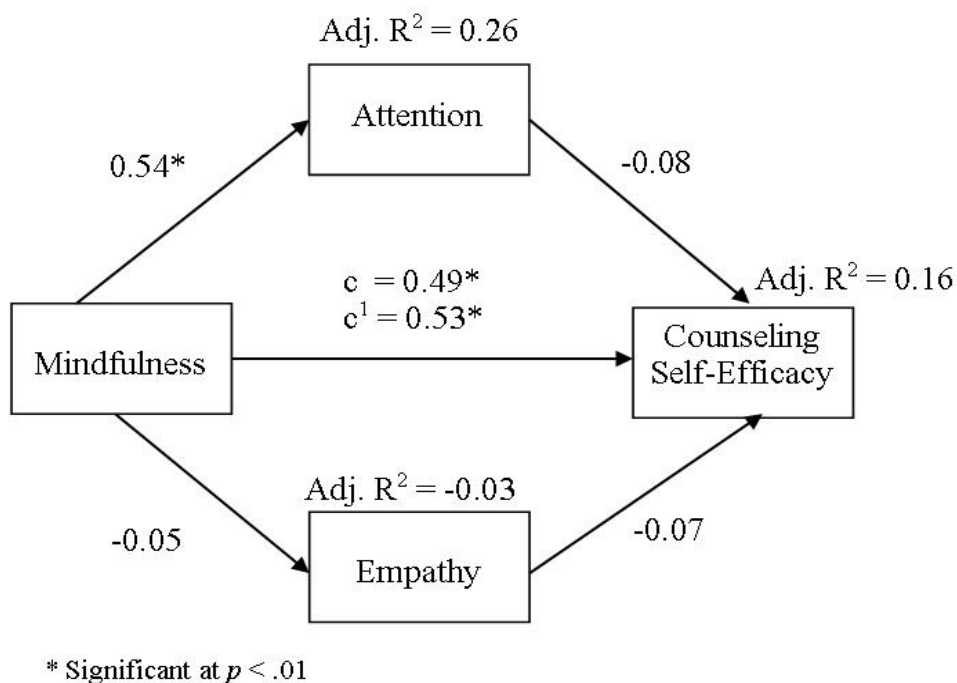


Figure 2: Path model of mediating effect of attention and empathy on the relationship between mindfulness and counseling self-efficacy

Hypothesis 3. To test the factor structure of the CAS, an exploratory factor analysis using principal components analysis with direct oblimin rotation was conducted. Additionally, descriptive statistics were computed for each item (Table 19), and Cronbach's alphas were calculated for each of the four scales (Table 20). Intercorrelations between the construct scales (Table 21) were computed along with intercorrelations between the items (Table 22). The exploratory factor analysis pattern matrix and the item loadings as well as the eigenvalues for each factor are presented in Table 23. Factor loadings with values less than .30 were excluded from the table.

Based on a review of the intercorrelations between the items, it was clear that the items were not correlated with each other in the hypothesized manner and did not

discriminate between the constructs well. Only eight intercorrelations were greater than or equal to an absolute value of .4. In general, the items appeared to be ambiguous in their relationships to each other.

A review of the item descriptive statistics provided further cause for concern. The majority of the items had a min-max range of 4 and were negatively skewed with means near 5. Six of the items had reasonable variability ($SD = 1.26-1.43$), although the remainder of the items had low variability. These findings suggest that the item responses were not normally distributed and that most participants were not using the entire scale. Furthermore, the items did not discriminate between those with high, medium, and low attentional capacities.

The intercorrelations between the construct scales were in the hypothesized directions. Attention switching is theorized to be related to divided attention. Selective attention, on the other hand, is theorized to be related to sustained attention. Divided attention and sustained attention represent two ends of the attention spectrum, and attention switching and selective attention are the mechanisms by which attention is held or divided. The inter-scale correlations provided evidence of these hypothesized relationships.

An examination of the scree plot revealed a four-factor solution, as expected, although the items that were expected to comprise the four factors did not load together. This solution accounted for 66% of the variance. Six of the 14 items loaded across multiple factors, suggesting that these items are factorially complex. Smith, Fischer, and

Fister (2003) suggested that such items may obscure the factor structure of the instrument, even if they are reasonable representations of the overall construct.

Interpretation of these findings is complicated by the fact that high scores on some of the questions could be indicative of both positive and negative attention ability. For instance, item 5, “When my client talks to me, I find myself distracted by my own thoughts and ideas,” could reflect difficulty with selective attention. It could also suggest strong attention-switching skills if the counselor is able to notice the distracting thoughts and bring attention back to the client. One participant stated that her responses seemed to “counteract each other.”

Discussion and Implications for Larger Study

Data obtained from the pilot study informed several modifications to the main dissertation study. The findings of the pilot study suggested that some measurement issues may be confounding the results, particularly measurement issues related to the assessment of empathy and attention. This section will examine those issues and implications for the larger study.

The empathy variable had minimal negative correlations with mindfulness and self-efficacy and a negligible positive correlation with attention. Some have suggested that the measure of empathy used in the pilot study, the EETS, may be assessing chronic emotional arousability rather than empathy in relation to another person (Chlopan, McCain, Carbonell, & Hagen, 1985; Davis, 1996; Mehriabian, et al., 1988). This could mean that high scores on the EETS are associated with personal distress and possible

over-identification with the distress of others rather than with the type of affective emotional response considered necessary for genuine empathy in the counseling session.

In a study examining the relationship between a multidimensional measure of empathy and the EETS, significant and positive correlations were found between the EETS and four dimensions of empathy, including personal distress (Davis, 1983). Personal distress, however, was found to be negatively related to the other three aspects of empathy (Davis, 1983) and to a second-order General Empathy construct (Pulos et al., 2004). These findings suggested that the EETS may be tapping a variety of constructs that are both positively and negatively related to global empathy.

Theorists in the field of psychotherapy and counseling have suggested that overidentification with the client's negative emotional affect could be counter-productive and even dangerous (Bohart & Greenberg, 1994; Skovholt & Ronnestad, 2003). Skovholt and Ronnestad (2003) referred to it as "insufficient closure" (p. 49) and suggested that it can result in a variety of inappropriate and counter-therapeutic behaviors. The pilot study findings provided support for the theorized negative relationship between affective over-identification and counseling skills. These findings suggested that the EETS, which appears to measure over-identification and arousability, may not be the most appropriate measure of counselor empathy.

A second measure of empathy was identified for the full study that has slightly lower reliability than the EETS but appears to distinguish between affective resonance and over-identification. The Interpersonal Reactivity Index (Davis, 1980) measures multidimensional empathy. It examines two aspects of affective empathy – personal

distress and the ability to feel emotional concern for another. Separating affective empathy into two components allows for a more accurate assessment of the type of empathy considered necessary for effective counseling (Barrett-Lennard, 1981; Keefe, 1976; Rogers, 1975).

The findings from the pilot study suggested that the CAS in the form used in the pilot study may not be an appropriate measure of counselor attention. Although expert review and comments from participants suggested that the instrument made intuitive sense, the exploratory factor analysis indicated that many of the items were assessing more than one aspect of attention. Some items even may have been measuring other constructs related to attention (e.g., working memory). Interpretation of the four factors that emerged from the exploratory factor analysis was difficult. Even though the pilot study had a small sample, items loadings did not correspond to the hypothesized loadings and did not make intuitive sense.

Based on this data, the Counselor Attention Scale was significantly modified to better discriminate between individuals with high and low attention and between the attentional competencies themselves. Given the theorized overlapping nature of the original four competencies, these four competencies were collapsed into two – sustained attention and divided attention. The literature suggests that the underlying mechanism in the ability to divide attention may be the ability to switch attention from one object to another and that selective attention capability (e.g., the ability to avoid distractions) may be the mechanism enabling sustained attention (Leclercq, 2002). Construct maps were developed for each construct (Table 24). Items were re-written to more clearly assess

each construct, reduce response error, and aid in stimulating recall. Homogenous items for each level of each construct were developed with at least three questions for each level. Finally, the range of responses was reduced from a 1-7 scale to a 1-5 scale. In addition, a new measure of attention, the EAQ (described earlier in this chapter), was identified for use in the larger study in case the revised version of the CAS had similarly low evidence of internal consistency with a larger sample.

Summary

Counselor educators need more information on the factors that contribute to the development of attention skill, empathy, and counseling self-efficacy. Mindfulness may be such a factor. This study examined a hypothesized path model that proposed that mindfulness, attention, and empathy would account for a significant portion of the variance in counseling self-efficacy and that attention and empathy would mediate the direct relationship between mindfulness and counseling self-efficacy.

The pilot study provided useful information for tailoring the larger study. The data suggested that the measure of empathy originally chosen for the study may be assessing emotional arousability and personal distress rather than the type of affective empathy necessary in the counseling session. Based on this finding, the instrument was replaced with one that better captures the cognitive and affective aspects of empathy. In addition, although the attention instrument created by the author had intuitive appeal, a factor analysis suggested that the items may be measuring several different constructs. This instrument was modified to more precisely assess two aspects of attention (i.e., sustained attention and divided attention). In addition, a paper-and-pencil measure of

attention was added in case the revised attention measure demonstrates low internal consistency.

CHAPTER IV

RESULTS

The purpose of this study was to explore the relationship between mindfulness and counseling self-efficacy, with consideration to the mediating roles of attention and empathy. In this chapter, the results of the study are presented. Demographic data describing the sample, descriptive statistics, and reliability coefficients for all the scales are provided. Finally, results of the analyses used to test the research hypotheses are presented.

Description of the Sample

Participants were recruited by contacting counselor educators at programs that require at least a 2-semester internship and obtaining their agreement to distribute instrument packets to their master's level interns and doctoral students (where applicable). Professors were encouraged to pass the instruments out during class time or in supervision groups. A total of 421 packets of instruments along with administrator instructions, consent forms, and self-addressed stamped envelopes were mailed to 15 schools that agreed to participate, and 187 were returned from 10 schools for a return rate of 44%. One survey was removed from the dataset because the participant left one full page of the survey blank. Seven others were deleted because they came from a master's program that required that all 600 hours of internship be completed in one semester rather than spread over two semesters. This left a total of 179 participants. A power analysis

suggested that a sample size of 128 was necessary for a detectable beta of .25 and power of .80 (Lenth, 2006) for a linear regression with three predictors.

In addition to data collection from the instrumentation used in this study (the Five-Factor Mindfulness Questionnaire, Everyday Attention Questionnaire, Counselor Attention Scale, Interpersonal Reactivity Index, and the Counselor Activity Self-Efficacy Scales), various demographic data were collected, including age, gender, level of training, semester of internship (collected on master's interns only), number of graduate credit hours completed, CACREP status of program, and race/ethnicity. (See Appendix B for full demographic questionnaire). Demographics were calculated for the total sample and separately for master's and doctoral student groups. The results are summarized in Table 3.

Of the 179 total participants, 129 (72.1%) were master's interns and 50 (27.9%) were doctoral students. In addition, 153 (85.5%) were female, and only 26 (14.5%) were male. The average age of participants was 29.86 ($SD = 6.94$). Master's student average age was 28.36 ($SD = 7.33$), and doctoral student average age was 31.16 ($SD = 5.67$). Master's level students had an average of 1.88 semesters of internship ($SD = .99$). Semester of internship was not assessed for doctoral students. The sample as a whole had taken an average of 55.2 graduate credit hours ($SD = 23.29$) with master's interns taking an average of 45.13 hours ($SD = 7.91$) and doctoral students taking an average of 84.90 hours ($SD = 28.00$). Only six (3.4%) of the 179 participants came from non-CACREP accredited schools. One of those students was a doctoral student.

The majority of participants identified as Caucasian ($n = 142$, 79.3%), with a small percentage who indicated ethnic minority status, most of whom were African-American ($n = 20$, 11.2%). Other identified races/ethnicities were Asian ($n = 4$, 2.2%), Asian-American ($n = 2$, 1.1%), Hispanic/Latino ($n = 4$, 2.2%), and multiracial ($n = 7$, 3.9%).

TABLE 3
Demographic Description of Sample by Level (N = 179)

Variable	Master's (n = 129)		Doctoral (n = 50)		Total (N = 179)		
	n	%	n	%	n	%	
Gender							
Female	110	85.3	43	86	153	85.5	
Male	19	14.7	7	14	26	14.5	
Level							
Master's					129	72.1	
Doctoral					50	27.9	
CACREP status							
CACREP	124	96.1	49	98	173	96.6	
Non-CACREP	5	3.9	1	2	6	3.4	
Race/Ethnicity							
African-American	13	10.1	7	14	20	11.2	
Asian	1	.8	3	6	4	2.2	
Asian-American	2	1.6			2	1.1	
Caucasian	105	81.4	37	74	142	79.3	
Hispanic/Latino	2	1.6	2	4	4	2.2	
Multiracial	6	4.7	1	2	7	3.9	
<i>Demographic averages</i>							
Variable	Total Range	Master's		Doctoral		Total	
		M	SD	M	SD	M	SD
Age	22-57	28.36	7.33	31.16	5.67	29.86	6.94
Semester of Internship	1-7	1.88	.99	NA		1.89	.98
Graduate Credit Hours	5-145	45.13	7.91	84.90	28.00	55.20	23.29

Descriptive Statistics for Instrumentation

Means and standard deviations for total scores and subscales on the Five-Factor Mindfulness Questionnaire (FFMQ), the Everyday Attention Questionnaire (EAQ), the Counselor Attention Scale (CAS), the Interpersonal Reactivity Index (IRI), and the Counselor Activity Self-Efficacy Scales were calculated for the total sample and compared to published norms. Norms for the FFMQ are from the Baer, Smith, Hopkins, Krietemeyer, and Toney (2006) study of the psychometric properties of the FFMQ and are based on a sample of 613 undergraduate students. Norms for the EAQ came from a study by the author of the instrument (Martin, 1986) and are based on a sample of 60 women ages 18-78. Norms for men on the EAQ were not published. Norms for the IRI were based on norms published in the Bellini and Shea (2005) study. Because norms for the IRI are typically published separately for each gender, the authors weighted and combined those norms. Norms for the CASES are based on a sample of 345 undergraduate to doctoral-level students ranging in age from 20-57 (Lent, Hill & Hoffman, 2003). Results of these calculations are presented in Table 4 below. Means and standard deviations for groups (i.e., master's interns, doctoral students, males, females) are provided under Research Question 2 / Hypothesis 2.

TABLE 4
Total Sample Score Ranges, Means, Standard Deviations, & Norms (N = 179)

Instrument	Possible Range	Sample Range	Sample		Norm	
			Mean Item Scores	SD	M	SD
Five-Factor Mindfulness Questionnaire						
TOTAL	1 - 5	2.49 - 4.67	3.55	.37	unpublished	
Observe	1 - 5	1.75 - 4.88	3.39	.60	3.06	.62
Describe	1 - 5	1.50 - 5.00	3.87	.64	3.31	.74
Act with awareness	1 - 5	1.38 - 4.75	3.50	.61	3.15	.73
Non-judge	1 - 5	1.25 - 5.00	3.74	.65	3.78	.74
Non-react	1 - 5	2.00 - 4.71	3.24	.53	2.92	.54
Everyday Attention Questionnaire	1 - 5	1.39 - 4.00	2.70	.49	2.52	.45
Counselor Attention Scale	1 - 5	2.36 - 4.95	3.60	.49	Not Available	
Interpersonal Reactivity Index						
TOTAL (EC + PT)	1 - 5	2.43 - 4.93	4.14	.47	unpublished	
Empathic concern	1 - 5	2.86 - 5.00	4.26	.50	2.91	.57
Perspective Taking	1 - 5	1.57 - 5.00	4.01	.58	2.48	.69
Fantasy	1 - 5	1.86 - 5.00	3.58	.76	2.46	.77
Personal Distress	1 - 5	1.00 - 4.71	2.31	.65	1.56	.69
Counselor Activity Self Efficacy Scales						
TOTAL CASES	0 - 9	3.76 - 8.63	6.71	.99	6.05	1.16
TOTAL Generic Skills	0 - 9	4.08 - 9.00	6.97	.97	unpublished	
TOTAL Nego. Difficult	0 - 9	2.85 - 8.75	6.33	1.20	unpublished	
Exploration Skills	0 - 9	5.20 - 9.00	7.61	.81	7.27	.95
Insight	0 - 9	3.17 - 9.00	6.63	1.42	6.02	1.40
Action	0 - 9	1.50 - 9.00	6.62	1.43	6.13	1.46
Session Management	0 - 9	3.30 - 9.00	7.03	1.05	6.39	1.20
Client Distress		2.33 - 9.00	6.37	1.45	1.97	.94
Relationship Conflict	0 - 9	3.00 - 8.90	6.28	1.20	5.70	1.45

* Bold items are scores that were used in analyses

In order to assess the reliability of the various instruments used in this study, Cronbach's α was computed as a measure of internal consistency for each total scale and subscale. The total sample was used to compute α coefficients, and Table 5 below compares those coefficients with published α coefficients for each instrument. Based on

these reliability estimates, the researcher chose to use the CAS as the measure of attention in this study. The CAS had a higher α coefficient than the EAQ (CAS $\alpha = .88$ compared to EAQ $\alpha = .82$) and specifically addressed attention in the counseling session. The other three scales used in the study demonstrated good evidence of reliability (FFMQ $\alpha = .88$; IRI $\alpha = .84$; CASES $\alpha = .96$).

TABLE 5
Instrument Scale Reliabilities*

Instrument/Scale	α	α in Other Studies
Five-Factor Mindfulness Questionnaire		
TOTAL	.88	.96
Observe	.77	.83
Describe	.89	.91
Act w/ Awareness	.87	.87
Non-judge	.90	.87
Non-React	.77	.75
Everyday Attention Questionnaire	.82	Unpublished
Counselor Attention Scale	.88	N/A
Interpersonal Reactivity Index		
TOTAL (EC + PT)	.84	.89
Empathic Concern	.74	.80
Perspective Taking	.80	.79
Fantasy	.78	.82
Personal Distress	.76	.75
Counselor Activity Self Efficacy Scales		
TOTAL Self-Efficacy	.96	.97
TOTAL Generic Skills	.95	Unpublished
TOTAL Nego. Difficult	.93	Unpublished
Exploration	.80	.79
Insight	.83	.85
Action	.81	.83
Session Management	.94	.94
Client Distress	.90	.94
Relationship Conflict	.90	.92

*Bold indicates scale used for study analyses.

Research Questions and Hypotheses

The primary research question of this study was: What is the relationship between mindfulness and counseling self-efficacy and how do attention and empathy impact that relationship? To answer this general question, four research questions and six hypotheses were developed. The results of the statistical analyses used to examine these questions and hypotheses are presented here.

Research Question 1 / Hypothesis 1

Research question 1 explored the relationships between scores of mindfulness, attention, empathy, and counseling self-efficacy in the full sample that included master's- and doctoral-level students. To test this question, hypothesis 1 proposed that there would be a statistically significant relationship between pairwise mean scores on measures of mindfulness, attention, empathy, and counseling self-efficacy.

As hypothesized, Pearson product-moment correlations between pairwise mean scores were all statistically significant. All of the correlations were significant at $p = .01$. Mindfulness was strongly correlated with attention ($r = .53$), and moderately correlated with empathy ($r = .27$) and counseling self-efficacy ($r = .34$). Attention was strongly correlated with counseling self-efficacy ($r = .59$) and moderately correlated with empathy ($r = .25$). The smallest correlation, although still significant, was between empathy and counseling self-efficacy ($r = .21$). Although the correlations were statistically significant, they were not so related as to suspect that they are measuring the same thing. There were no extreme correlations between predictor variables, suggesting that multicollinearity

may not be an issue (Mansfield & Helms, 1982). The correlations and reliability coefficients are presented in Table 6 below.

TABLE 6
*Pearson Product-Moment Correlations & Reliability Coefficients**

	Mindfulness	Attention	Empathy	Self-Efficacy
Mindfulness	(.88)			
Attention	.53**	(.88)		
Empathy	.27**	.25**	(.84)	
Self-Efficacy	.34**	.59**	.21**	(.96)

* Reliability coefficients are on the diagonal.

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

Research Question 2 / Hypothesis 2

Research question 2 examined the differences in mean scores of mindfulness, attention, empathy, and counseling self-efficacy between master's level counseling interns and doctoral students and between males and females. Table 7 presents mean scores and standard deviations based on level and gender.

TABLE 7
Means and Standard Deviations of Instrument Scores by Group

Instrument	Level				Gender			
	Master's (n = 129)		Doctoral (n = 50)		Females (n = 153)		Males (n = 26)	
	M	SD	M	SD	M	SD	M	SD
Five-Factor Mindfulness Questionnaire	3.52	.34	3.66	.40	3.55	.37	3.58	.32
Counselor Attention Scale	3.55	.46	3.72	.56	3.59	.49	3.64	.50
Interpersonal Reactivity Index	4.11	.48	4.21	.45	4.17	.47	3.95	.44
Counselor Activity Self Efficacy Scales	6.58	.98	7.05	.92	6.69	1.01	6.89	.84

One of two hypotheses used to test this question proposed that there would be a statistically significant mean difference among total scores of mindfulness, attention, empathy, and counseling self-efficacy between master's-level counseling interns and doctoral students. To test this hypothesis, a multivariate analysis of variance (MANOVA) was conducted with level (i.e., master's, doctoral) as the independent variable and attention, empathy, and counseling self-efficacy as the multiple dependent variables. As hypothesized, significant multivariate differences were found based on level in program (Wilks' Lambda $F = 2.69, p < .05$). Follow-up univariate F tests of between subjects effects found statistically significant differences between master's and doctoral students on mean scores of mindfulness ($F = 5.11, p < .05$), attention ($F = 4.36, p < .05$), and counseling self-efficacy ($F = 8.72, p < .01$). The effect sizes for all of these, however,

were below practical significance (*partial eta*² range = .01 - .05). These results are presented in Table 8 below.

TABLE 8
Multivariate Analysis of Variance and Univariate F Tests

<i>Multivariate Analysis of Variance</i>			
Source	Wilk's Λ	F	Partial η^2
Level	.94	2.67*	.06
<i>Univariate Analysis of Variance</i>			
Source	Sum of Squares	F	Partial η^2
Level X Mindfulness	.68	5.11*	.03
Level X Attention	1.03	4.36*	.02
Level X Empathy	.40	1.78	.01
Level X Counseling Self-Efficacy	8.12	8.72**	.05

* Significant at $p < .05$

** Significant at $p < .01$

Research Question 2 / Hypothesis 3

The second hypothesis used to test research question 2 proposed that there would be a statistically significant mean difference between males and females on empathy scores. Although the sample sizes for each group were not equivalent (female: $n = 153$; male $n = 26$), a one-way analysis of variance was conducted with empathy as the dependent variable and gender as the independent variable for heuristic purposes. As hypothesized, statistically significant differences in mean empathy scores between males and females were found (female $M = 4.17$; male $M = 3.96$; $F(1,177) = 4.41$, $p < .05$). Because this mean score was a combination of both the cognitive and affective empathy scores, a follow-up t -test was conducted to determine the source of the differences. That

analyses found significant differences between females and males on mean scores of affective empathy ($F(1, 177) = 10.37, p < .01$; female $M = 4.31$; male $M = 3.97$), but not on cognitive empathy ($F(1, 177) = .48, p = .49$; female $M = 4.03$; male $M = 3.94$). The effect size, however, is below practical significance. Results are presented in Table 9 below.

TABLE 9
Group Statistics & Univariate ANOVA for Gender Differences in Empathy

<i>Group Statistics</i>				
Source	M	Std. Dev.	Std. Error	
Total Empathy				
Female	4.17	.47	.04	
Male	3.96	.44	.09	
Perspective Taking (Cognitive)				
Female	4.03	.59	.05	
Male	3.94	.51	.10	
Empathic Concern (Affective)				
Female	4.31	.48	.04	
Male	3.98	.52	.10	
<i>Univariate Analysis of Variance</i>				
Source	df	F	Mean Difference	Partial η^2
Total empathy	1/177	4.41*	.21	.02
Perspective Taking (Cognitive)	1/177	.48	.09	.00
Empathic Concern (Affective)	1/177	10.37**	.33	.06

* Significant at $p < .05$

** Significant at $p < .01$

Research Question 3 & 4 / Hypothesis 4-6

For purposes of comparison, research question 3 and 4 and the accompanying hypotheses are presented together. Research question 3 asked about the relationships between mindfulness, attention, empathy, and counseling self-efficacy within a path

model that specifies a relationship between mindfulness skills and self-efficacy mediated by attention and empathy. Research question 4 asked how the fit of the proposed path model differed for master's level interns, doctoral students, males and females. The hypotheses used to test these questions proposed that the path model would account for a statistically significant portion of the variance in counseling self-efficacy in the total sample, in master's interns and doctoral students, and in females and males.

To test these multiple mediator hypotheses, a path analysis was conducted according to causal steps criteria outlined by Baron and Kenny (1986). Using this method, several requirements must be met for mediation. As in single mediator mediation, the total effect (c path) from the independent variable (i.e., mindfulness) to the dependent variable (i.e., counseling self-efficacy) must be significant. The direct path (a path) from the independent variable to the mediators (i.e., attention and empathy) must be significant. Finally, the mediators must be significant predictors of the dependent variable when both the independent variable and the mediators simultaneously predict the dependent variable (b path). If the direct effect (c' path) of the independent variable on the dependent variable controlling for the mediators is no longer significant, it can be claimed that the effect of the independent variable on the dependent variable is completely mediated. If c' remains significant but is smaller than the c path, evidence of partial mediation can be claimed. The indirect effect of the independent variable on the dependent variable through the mediators is quantified as the product of the unstandardized regression weights for the a and b paths.

Researchers have criticized the causal steps method because it does not directly address the indirect effect, which is the question of interest (Preacher & Hayes, 2006). The causal steps method does not take into account the estimate of the indirect effect or provide a way of testing the statistical significance of this effect. An alternative strategy, the product of coefficients (i.e., Sobel's z test), does test whether the indirect effect is significantly different from zero. Preacher and Hayes (2006) suggested, however, that this method assumes multivariate normal distribution of the sample, which is rare with smaller samples. They suggested that the bootstrapping method, which empirically generates a normal sample distribution by conducting a sampling process k times, provides a superior test of mediation and indirect effects. Using this method, mediation is occurring if the confidence interval for the indirect effect point estimate does not contain zero. Therefore, in addition to the causal steps method, bootstrapping point estimates of the indirect effects and 95% confidence intervals for those estimates were calculated.

The model hypothesized that mindfulness would be a significant predictor of counseling self-efficacy when attention and empathy were entered in the model as mediators. This model was tested for significance based on the total sample, master's interns, and doctoral students. The model was not tested for males and females due to the limited number of males in the sample. The figures below detail the results of the path analysis for the total sample, master's interns, and doctoral students. Standardized regression weights for the total, direct, and indirect paths are presented as are the *Adjusted R²* values. A narrative of these findings is presented following the figures.

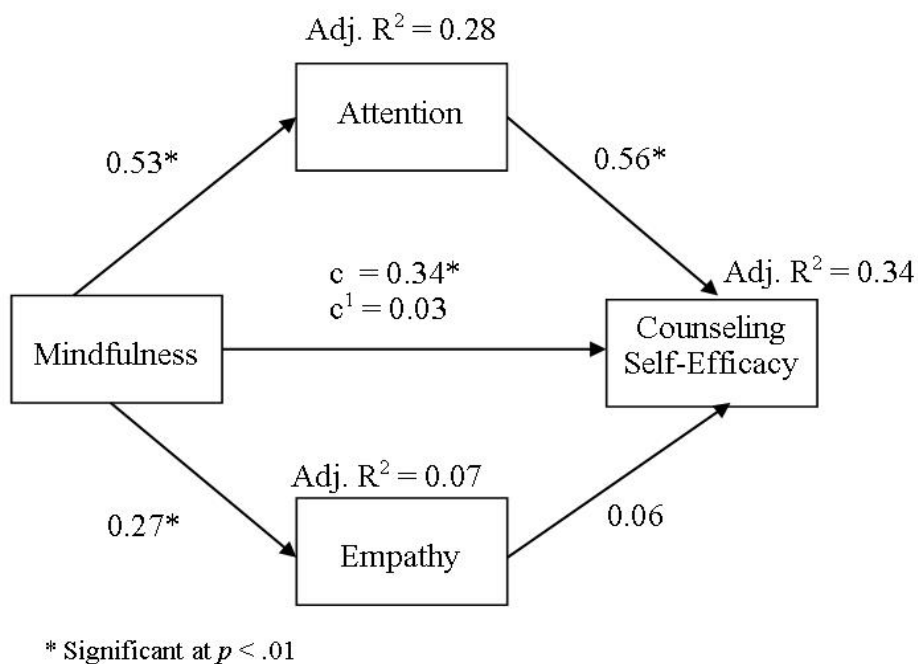


Figure 3: Path analysis in the total sample.

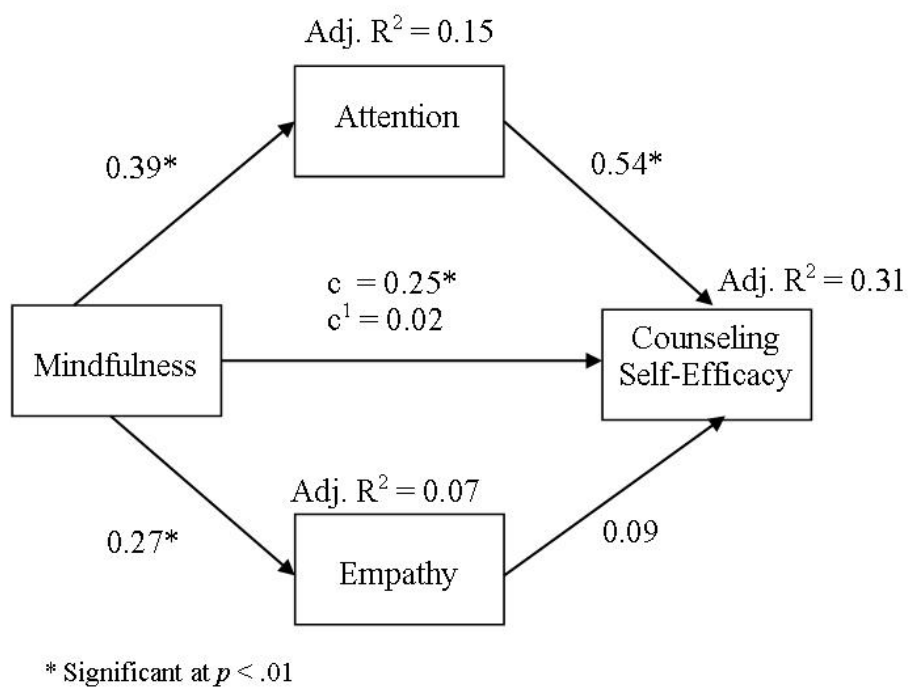


Figure 4: Path analysis for sample of master's level counseling interns.

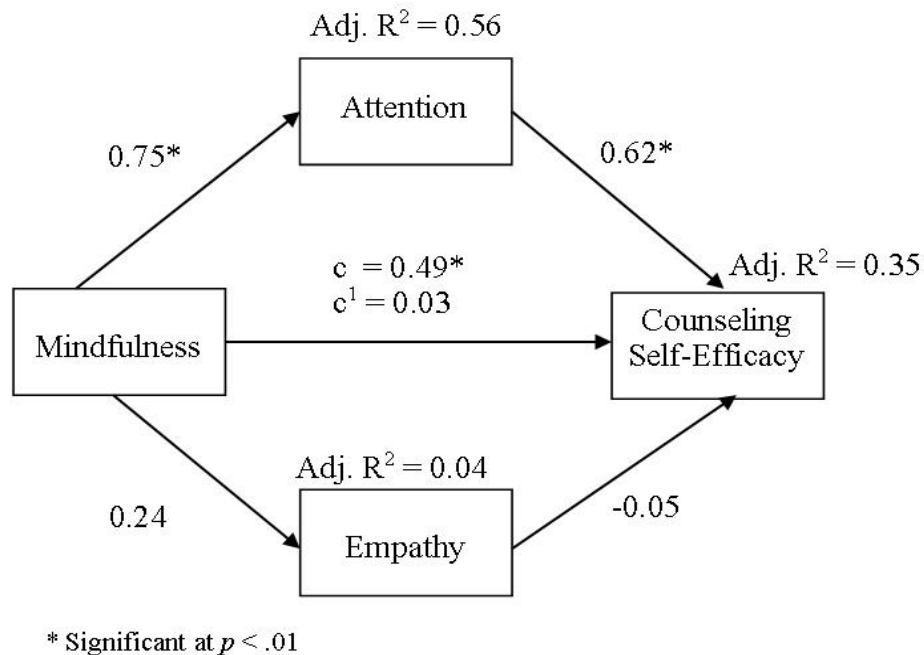


Figure 5: Path analysis for sample of doctoral students.

Using the causal steps method, mindfulness was found to be a significant predictor of attention in all three samples. For the total sample, mindfulness predicted attention at $\beta = .53$ and accounted for 28% of the variance in mean attention scores ($t = 8.41, p = .00$). For master's interns, mindfulness predicted attention at $\beta = .39$ and accounted for 15% of the variance in mean attention scores ($t = 4.80, p < .01$). For doctoral students, mindfulness predicted attention at $\beta = .75$ and accounted for 56% of the variance in mean attention scores ($t = 7.96, p < .01$).

Mindfulness also significantly predicted empathy in all groups except doctoral students. For the total sample and for master's interns, mindfulness predicted empathy at $\beta = .27$ and accounted for 7% of the variance in mean empathy scores (total: $t = 3.77, p < .01$; master's interns: $t = 3.16, p < .01$). For doctoral students, mindfulness did not

significantly predict empathy at $\beta = .24$ and accounted for just 4% of the variance in mean empathy scores ($t = 1.74, p < .05$).

As hypothesized, when entered into the model as the sole predictor, mindfulness significantly predicted counseling self-efficacy in all the groups. For the total sample ($N = 179$), mindfulness significantly predicted counseling self-efficacy at $\beta = .34$ and accounted for 11% of the variance in mean counseling self-efficacy scores ($t = 4.88, p < .01$). For master's interns ($n = 129$), mindfulness significantly predicted counseling self-efficacy at $\beta = .25$ and accounted for 6% of the variance in mean counseling self-efficacy scores ($t = 2.94, p < .01$). For doctoral students ($n = 50$), mindfulness significantly predicted counseling self-efficacy at $\beta = .49$ and accounted for 22% of the variance in mean counseling self-efficacy scores ($t = 3.85, p < .01$).

To test for mediation, mindfulness, attention, and empathy were all entered into a regression model to predict counseling self-efficacy. The *adjusted* R^2 of this model using with the full sample was .34, suggesting that mindfulness, attention, and multi-dimensional empathy account for 34% of the variance in counseling self-efficacy ($F = 32.11, p < .01$). Despite smaller sample sizes, similar results were found when the model was tested for master's and doctoral students. The *adjusted* R^2 for the master's level students was .31 ($n = 129, F = 20.52, p < .01$) and .35 for doctoral students ($n = 50, F = 9.83, p < .01$). Collinearity diagnostics for the full sample and master's interns ranged from .71-.93, suggesting that collinearity was a minimal issue. With doctoral students, a tolerance of .43 was detected for mindfulness and attention, suggesting that the

coefficient may be inflated by multicollinearity. A tolerance close to 1 suggests that there is little multicollinearity (Williams, 2005).

The causal steps analyses demonstrated evidence of full mediation of the relationship between mindfulness and counseling self-efficacy, as hypothesized. In all groups, the significance of the direct relationship between mindfulness and counseling self-efficacy dropped to a non-significant level when both attention and empathy were added to the model, indicating full mediation (full sample: $t = .37, p = .71$; master's interns: $t = .18, p = .88$; doctoral students: $t = .18, p = .86$).

An examination of the direct and indirect effects of the proposed mediators revealed that attention was the only mediator in the model. Per the Baron and Kenny (1986) requirements for mediation, only attention was a significant predictor of counseling self-efficacy when entered with mindfulness and empathy into the regression model (total sample: $\beta = .56, t = 7.76; p < .01$; master's interns: $\beta = .54, t = 6.80; p < .01$; doctoral students: $\beta = .62, t = 3.38; p < .01$). Empathy, on the other hand, did not have a significant direct effect on counseling self-efficacy in any of the groups (total sample: $\beta = .06, t = .95; p = .35$; master's interns: $\beta = .09, t = 1.20; p = .23$; doctoral students: $\beta = -.05, t = -.42; p = .68$). Bootstrapping analyses of indirect effects of the paths between attention and counseling self-efficacy as well as empathy and counseling self-efficacy confirmed that empathy was not a mediator of the relationship. Based on these analyses, it can be claimed the multi-dimensional empathy was not a mediator of the relationship between mindfulness and counseling self-efficacy in this study.

The following tables outline the causal steps and bootstrapping analyses for each group. Point estimates are the estimates of the indirect effect of the proposed mediator on the dependent variable.

TABLE 10
Path Analysis of Mediating Role of Attention and Empathy -- Total Sample (N = 179)

Variable	Adj. R²	Unstand. β	se	Stand. β	t
Mindfulness to mediators (a paths)					
Attention	.28	.71	.09	.53	8.41**
Empathy	.07	.35	.09	.27	3.77**
Direct Effect of Mediators on Self-Efficacy (b paths)					
Attention	.34 [§]	1.13	.15	.56	7.76**
Empathy	.34 [§]	.13	.13	.06	.95
Total Effect of Mindfulness on Self-Efficacy (c path)					
Mindfulness	.11	.92	.19	.34	4.88**
Direct Effect of Mindfulness on Self-Efficacy (c ¹ path)					
Mindfulness	.34 [§]	.07	.20	.03	.37

*Comparison of Causal Steps and Bootstrapped Point Estimates
& Confidence Intervals for Total and Specific Indirect Effects*

Variable	Causal Steps	Bootstrapping			
	ab path Point Estimate	ab Path Point Estimate	Bias Corrected 95% Confidence Interval		Mediation
			Lower	Upper	
Attention	.80	.81	.57	1.09	yes
Empathy	.05	.04	-.03	.17	no

[§] $F(3, 175) = 32.11, p = .00$

** Significant at $p < .01$

TABLE 11
 Path Analysis of Mediating Role of Attention and Empathy – Master's Interns (n = 129)

Variable	Adj. R ²	Unstand. β	se	Stand. β	t
Mindfulness to mediators (a paths)					
Attention	.15	.52	.11	.39	4.80**
Empathy	.07	.38	.12	.27	3.16**
Direct Effect of Mediators on Self-Efficacy (b paths)					
Attention	.31 [§]	1.18	.17	.54	6.80**
Empathy	.31 [§]	.19	.16	.09	1.20
Total Effect of Mindfulness on Self-Efficacy (c path)					
Mindfulness	.06	.72	.25	.25	2.94**
Direct Effect of Mindfulness on Self-Efficacy (c ¹ path)					
Mindfulness	.31 [§]	.04	.23	.02	.18

*Comparison of Causal Steps and Bootstrapped Point Estimates
 & Confidence Intervals for Total and Specific Indirect Effects*

Variable	Causal Steps	Bootstrapping			Mediation
	ab path Point Estimate	ab Path Point Estimate	Bias Corrected 95% Confidence Interval		
			Lower	Upper	
Attention	.61	.61	.35	.88	yes
Empathy	.07	.07	-.03	.24	no

[§]F(3, 125) = 20.52, p = .00

** Significant at p < .01

TABLE 12
Path Analysis of Mediating Role of Attention and Empathy – Doctoral Students (n = 50)

Variable	Adj. R ²	Unstand. β	se	Stand. β	t
Mindfulness to mediators (a paths)					
Attention	.56	1.03	.13	.75	7.96**
Empathy	.04	.27	.16	.24	1.74*
Direct Effect of Mediators on Self-Efficacy (b paths)					
Attention	.35 [§]	1.01	.30	.62	3.38**
Empathy	.35 [§]	-.10	.25	-.05	-.42
Total Effect of Mindfulness on Self-Efficacy (c path)					
Mindfulness	.22	1.09	.28	.49	3.85**
Direct Effect of Mindfulness on Self-Efficacy (c ¹ path)					
Mindfulness	.35 [§]	.07	.39	.03	.18

Comparison of Causal Steps and Bootstrapped Point Estimates & Confidence Intervals for Total and Specific Indirect Effects

Variable	Causal Steps		Bootstrapping		
	ab path Point Estimate	ab Path Point Estimate	Bias Corrected 95% Confidence Interval		Mediation
			Lower	Upper	
Attention	1.04	1.04	.12	1.64	yes
Empathy	-.03	-.03	-.29	.06	no

[§] $F(3, 46) = 9.83, p = .00$

*Significant at $p < .05$

** Significant at $p < .01$

Summary

The results of this study were presented by providing a description of the sample and descriptive statistics as well as reliability coefficients for each instrument. Based on these findings, it was determined that the CAS was a better assessment of counselor attention than the EAQ and, therefore, the CAS was used in analyses of the research question. Initial correlations between the four instruments supported the hypothesis that

the instruments used in this study to assess mindfulness, attention, empathy, and counseling self-efficacy would demonstrate statistically significant pairwise correlations. A MANOVA found statistically significant differences in the four dependent variables based on training level, as expected. Follow-up univariate analyses of between subjects effects revealed significant differences in mean scores of mindfulness, attention, and counseling self-efficacy with doctoral students scoring higher on all three. Differences based on training level were not found in mean scores of empathy. Despite the low number of males in the sample, a *t*-test was conducted for heuristic purposes and found support for the hypothesis that there would be significant differences between males and females on mean scores of empathy with males scoring significantly lower on the affective component of empathy. Mindfulness was found to be a significant predictor of attention for all groups and of empathy for all groups except doctoral students. Finally, the path analysis demonstrated that mindfulness is a significant predictor of counseling self-efficacy and that attention significantly mediates this relationship. In Chapter V, the results are discussed, potential limitations are outlined, and implications for counselor educators and recommendations for future research are presented.

CHAPTER V

DISCUSSION

In Chapter IV, the results of the study exploring the relationship between mindfulness and counseling self-efficacy with consideration to the mediating roles of attention and empathy were presented. In this chapter, a brief overview of the study is provided, the results are discussed, and limitations of the study are outlined. In addition, implications for counselor education and counseling practice and areas for future research are discussed.

Overview of the Study

Skill development is an important contributing factor to the cultivation of counseling self-efficacy in counselors-in-training (Bandura, 1986b, 1989, 1992; Larson & Daniels, 1998; Leach, Stoltenberg, McNeill, & Eichenfield, 1997; Loganbill, Hardy, & Delworth, 1982; Skovholt & Ronnestad, 1992a, 1992b). Among the skills that are fundamental to being an effective counselor are the abilities to strategically control attention during the session and to have both a cognitive and affective empathic response to the client (Greenberg, Elliott, Watson, & Bohart, 2001; Lambert & Barley, 2001; Norcross, 2001; Orlinsky, Grawe, & Parks, 1994; Pope & Kline, 1999; Rogers, 1957, 1975; Wampold, 2001; Watson, 2001). Although counselor education programs do a good job of teaching discrete, external counseling skills (e.g., mirroring, paraphrasing), currently, the counselor education literature provides very little direction in how to

cultivate the internal skills necessary for controlling attention and for having a genuine empathic response.

A number of theorists have suggested the mindfulness training may be an important tool for bridging this gap (Andersen, 2005; Bien, 2006; Dimidjian & Linehan, 2003; Epstein, 1999; Fritz & Mierzwa, 1983; Fulton, 2005; Germer, 2005; Keefe, 1974; Martin, 1997; Morgan & Morgan, 2005; Schuster, 1979; Speeth, 1982; Walsh & Shapiro, 2006). Researchers have found that mindfulness may be associated with attention control in counselors (Bogels, Sijbers, & Voncken, 2006; Reiman, 1985; Valentine & Sweet, 1999) and with the development of empathy (Beitel, Ferrer, & Cecero, 2004; Shapiro, Schwartz, & Bonner, 1998). No researchers, however, have examined the relationship between mindfulness and counseling self-efficacy or the role of attention control and empathy in cultivating counseling self-efficacy. Thus, the purpose of this study was to contribute a further understanding of the relationship between mindfulness and counseling self-efficacy.

This study was designed to explore the relationship between mindfulness and counseling self-efficacy and the potential mediating roles of attention and empathy on that relationship. It also was designed to explore the differences in those relationships based on level of counselor training and gender. Participants were master's level counseling interns and counseling doctoral students at 10 schools across the country. A total of 187 students participated, and 179 surveys were used in the analyses. Participants completed five instruments in order to assess the four variables of interest: mindfulness, attention, cognitive and affective empathy, and counseling self-efficacy. These

instruments included the Five Factor Mindfulness Inventory (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006) to assess mindfulness in everyday life, the Counselor Attention Scale (CAS; Bentley, 2006) and the Everyday Attention Questionnaire (EAQ; Martin, 1986) to assess attention ability, the Interpersonal Reactivity Index (IRI; Davis, 1980) to assess cognitive and affective empathy, and the Counselor Activity Self-Efficacy Scales (CASES; Lent, Hill, & Hoffman, 2003) to assess self-efficacy for counseling. In addition, participants completed a demographic questionnaire. The Everyday Attention Questionnaire was added to the instrumentation due to initial low estimates of reliability for the CAS in the pilot study. In the full study, however, the revised CAS had higher estimates of reliability than the EAQ. The CAS, therefore, was used in the statistical analyses for the full study.

After data collection, the results of the study were analyzed using the full sample and, in some cases, by classifying individuals into subgroups based on level of training (i.e., master's or doctoral) and gender. Mean scores for each instrument were calculated for the total sample and for the subgroups. Pearson product-moment correlations were calculated between mean scores on the four primary scales using the total sample, and Cronbach's α was computed as a measure of internal consistency for each total scale and subscale. To determine if any differences existed based on group, a MANOVA was conducted with level as the independent variable and mean scores on the FFMQ, CAS, IRI, and CASES as the dependent variables. To test the hypothesis that differences would exist in scores of empathy based on gender, a *t*-test was conducted comparing mean empathy scores for females and males. Finally, a path analysis was conducted to test the

extent to which mindfulness predicted counseling self-efficacy and to examine the possible mediating role of attention and empathy. The hypothesized path model also was tested separately for master's interns and doctoral students. Due to the low number of male participants, the path model was not tested for differences based on gender.

Overall, the results of the statistical analyses supported the hypothesis that mindfulness is a predictor of counseling self-efficacy. Further, the study found that attention was a mediator of that relationship. Although empathy did not predict counseling self-efficacy as hypothesized, empathy itself was significantly predicted by mindfulness in both the total sample and in the master's group sample. The analysis of the mediation model based on level revealed that the model explained a significant portion of the variance in counseling self-efficacy for both master's and doctoral students. Significant differences in mean scores of mindfulness, attention, and counseling self-efficacy were found based on level with doctoral students having higher mean scores. Also, significant differences in empathy were found based on gender with females scoring higher than males, as hypothesized. A discussion of the results of specific hypotheses follows.

Discussion of the Results

It was hypothesized that mindfulness would account for a significant percentage of the variance in counseling self-efficacy and that attention and empathy would mediate that relationship. The results of the study supported the hypothesis of a significant predictive relationship between mindfulness and counseling self-efficacy and the

hypothesis that attention mediates this relationship. The results of the hypotheses are discussed below.

Preliminary Hypotheses

Before examining the full path model, an examination of the correlations between the four variables of interest -- mindfulness, attention, empathy, and counseling self-efficacy -- was conducted. Although a number of researchers have examined the impact of mindfulness-based interventions on various populations (Baer, 2003; Bishop, 2002; Grossman, Niemann, Schmidt, & Walach, 2004; Lazar, 2005), no research has examined the relationship between mindfulness and counseling self-efficacy. Furthermore, the ability to sustain attention and empathize with the client theoretically should be related to counseling self-efficacy. Very little research, however, has been conducted on those relationships. Therefore, an examination of these relationships was necessary. As hypothesized, all four variables in the study were significantly related to each other. These findings support previous research that mindfulness is related to attention (Bogels et al., 2006; Reiman, 1985; Valentine & Sweet, 1999) and empathy (Beitel et al., Shapiro et al., 1998). These findings supported further exploration of the predictive nature of mindfulness, attention, and empathy on counseling self-efficacy.

To determine whether separate tests of the path model should be made based on level of training, analyses of the differences in mean scores between master's and doctoral students were conducted. These analyses found significant differences in mean scores of mindfulness, attention, and counseling self-efficacy with doctoral students scoring higher on all three variables. Although the literature on the relationship between

counselor training level and counseling self-efficacy is inconsistent, a number of researchers have concluded that counselor training can positively influence self-efficacy over time (Larson & Daniels, 19989), suggesting that doctoral students would be more likely to have higher self-efficacy and higher perceived skill levels than master's interns. Similarly, although Stoltenberg and Delworth's (1987) model of counselor development describes periods of wavering confidence in counseling ability across training experience, their model also suggests that confidence in counseling abilities should increase as students gain more experience.

An unexpected finding was the non-significant difference in mean scores of empathy between master's and doctoral students. This is inconsistent with the literature on the development of empathy in counseling students. In his theory of counselor automaticity, Patterson (1988) suggested that as counselor trainees mastered simpler mental and physical tasks in the session (e.g., clarification, summarization non-verbal attending behavior) they would be more able to fully empathize with the client. The ability to attend and experience the client on a deeper level would improve as the basic tasks become automatic. The findings in the current study are concerning for counselor educators as the ability to empathize with the client is associated with positive client outcomes (Greenberg, Elliott, Watson, & Bohart, 2001; Lambert & Barley, 2001; Norcross, 2001; Orlinsky, Grawe, & Parks, 1994; Watson, 2001). If levels of empathy are not increasing with more training, this suggests that counselor educators may need to examine current methods of training in empathy as has been suggested by a number of scholars (Bath & Calhoun, 1977; Bergin, 1997; Gallaher & Hargie, 1992; Kurtz,

Marshall, & Banspach, 1985; Mahoney, 1986; Miller, 1989). This finding will be discussed in more detail in the path model section below.

The test of differences in empathy based on gender was significant, as expected, with females having higher mean scores than males. Specifically, females scored higher on the subscale assessing affective empathy (i.e., empathic concern scale), although scores on the subscale of cognitive empathy (i.e., perspective taking scale) were not significantly different between females and males. Other researchers have found similar gender differences in empathy among counselors (Hatcher, Favorite, Hardy, Goode, Deshetler, & Thomas, 2005; Miville, Carlozzi, Gushue, Schara, & Ueda, 2006; Trusty, Ng, & Watts, 2006). Some authors, however, have suggested that differences in empathy based on gender may reflect societal norms and not actual differences in ability (Lennon & Eisenberg, 1987). Therefore, these findings should be interpreted cautiously and considered for heuristic purposes only.

The results of these preliminary analyses supported the decision to test the full path model on the total sample and on subgroups based on level. The decision was made not to test the model based on gender due to the low number of males in the sample. The findings of the path analyses are discussed more fully below.

Path Analyses

Although significant relationships were found between pairwise mean scores on mindfulness, attention, empathy, and counseling self-efficacy, a path analysis of a hypothesized model was conducted to examine more explicitly the predictive relationships and the direct and indirect effects of the predictor variables on counseling

self-efficacy. As hypothesized, in both the total sample and in the models run for master's interns and doctoral students, mindfulness, attention, and empathy accounted for a significant portion of the variance in counseling self-efficacy. In the total sample, the full model accounted for 34% of the variance. Among master's interns, the amount of variance explained dropped slightly to 31%, and among the doctoral student group, the amount of variance increased slightly to 35%. The changes in variance explained based on level of training are consistent with counselor developmental theory and self-efficacy theory (Bandura, 1986b, 1992; Leach et al., 1997; Loganbill et al., 1982; Skovholt & Ronnestad, 1992a, 1992b; Stoltenberg & Delworth, 1987). As counselors in training become more proficient in the skills necessary for success as counselors, they are more likely to feel task-specific confidence in their ability to perform counseling tasks.

As hypothesized, attention was found to be a mediator of the relationship between mindfulness and counseling self-efficacy. Mindfulness accounted for 28% of the variance in attention in the total sample. This suggests that those students who are more mindful of their everyday experiences also are more able to strategically control their attention during the counseling session and not get distracted by such things as internal dialogue. The significant predictive relationship between mindfulness and attention is consistent with other empirical studies in which researchers have found improvements in various measures of attention among individuals trained in mindfulness (Bogels et al., 2006, Valentine & Sweet, 1999; Reiman, 1985).

These findings make sense as mindfulness also has been found to be related to increases in affect tolerance (Baer, 2003). Counseling students who are able to tolerate

affective distress in themselves and in their clients may be more likely to maintain non-judgmental attention during the session. Rather than focusing their attention on how to fix the “problem,” they would be able to simply stay with the client’s narrative, thus really hearing the client. Bogels et al. (2006) suggested that the mindfulness intervention in their study may have helped participants shift from a *doing* mode to a *being* mode because the attentional focus of mindfulness practice is on accepting and allowing rather than trying to change current experience. Likewise, the predictive relationship between mindfulness and attention in the counseling students in this study likely may be indicative of differences in the ability to *be* rather than *do*. Those students who can accept current experience without reacting to it and not judging it may be more likely to stay focused on the present moment in the counseling session rather than getting lost in cognitive exploration of what to *do* in the session. These findings suggest that mindfulness may be an important tool not only for cultivating attentional capacities in counseling students, but also for helping students learn to *be* with clients.

A surprising finding was the difference in variance accounted for based on level in the program. The model accounted for 15% of the variance in master’s interns and 56% of the variance in doctoral students. These findings fit with models of counselor development (Loganbill et al., 1982; Stoltenberg & Delworth, 1987). In fact, the characteristics of the “integration” developmental level in the Loganbill et al. (1982) counselor development model parallel the characteristics of a mindful person, suggesting that as students develop as counselors they may naturally become more mindful and better able to pay attention in the session. For example, counselors at the integration stage

have a wide-angle lens approach to client issues rather than a restricted view of possible responses and are aware that there are a variety of ways in which a client issue may be resolved. They are able to accept their own strengths and weaknesses and have reasonable expectations of their supervisors. Likewise, mindful individuals are able to look at various internal and external events objectively from a variety of angles and are able to accept their experience for what it is (Neff, 2003; Shapiro, Carlson, Astin, & Freedman, 2006).

It also is possible the doctoral students adopt a more mindful approach to life as a coping strategy for handling the challenges of being a doctoral student. Concomitant with their numerous responsibilities, doctoral students in counselor education programs experience fluctuating emotions that vary from self-doubt to self-confidence, anxiety to certainty (Hughes & Kleist, 2005). Adopting a mindful approach to their experience may help doctoral students navigate the vicissitudes of this part of their journey with more equanimity. Being able to step back and observe, for instance, rather than reacting immediately to various situations may allow doctoral students the mental space necessary to make healthy choices rather than automatic ones.

The study demonstrated evidence of a significant predictive relationship between mindfulness and empathy in the total sample and in the subgroup of master's interns. In both cases, mindfulness accounted for 7% of the variance in empathy. Although the amount of variance predicted by mindfulness in the total sample and for the master's student group was small, the findings were consistent with previous research and theory on empathy development in counselors (Constantine & Gainor, 2001; Hulnick, 1977;

Jennings & Skovholt, 1999; Miville et al., 2006; Morgan & Morgan, 2005; Ridgway & Sharpley, 1990; Rogers, 1975; Skovholt & Ronnestad, 2003; Trusty, Ng, & Watts, 2006). According to theory and research, three conditions are necessary for the development of empathy in counselors: non-judgmental acceptance of one's own experience and the experience of others, the ability to tolerate distressing thoughts and feelings without over-identifying with them, and cognitive and affective understanding of the relationship between thoughts, feelings, and behaviors. Researchers have demonstrated that mindfulness practice is not only related specifically to empathy (Beitel et al., 2004; Shapiro et al., 1998), but also to these core conditions for empathy (Baer, 2003; Lazar, 2005; Neff, 2003a; Shapiro, Astin, Bishop, Cordova, 2005). The findings in the current study lend further evidence of a relationship between mindfulness and empathy.

An unexpected finding was the non-significant predictive weight of empathy on counseling self-efficacy for any group. This finding was contrary to existing theory suggesting that empathic skill would be related to counseling self-efficacy (Bandura, 1986b, 1992; Barrett-Lennard, 1981; Keefe, 1976; Rogers, 1957, 1975). According to self-efficacy theory, students who perceive themselves to have empathic skills should also feel more self-efficacy for using those skills in the counseling session. Although very little empirical research exists on the specific relationship between empathy and counselor self-efficacy, researchers have found that emotional intelligence, which is considered a necessary condition for empathic understanding (Hoffman, 1981) and has been found to be significantly related to empathy (Beitel et al., 2004; Constantine & Gainor, 2001), is a significant predictor of counseling self-efficacy. Further, researchers

in the social and developmental psychology fields have found evidence that affective empathy is correlated with helping behavior (Batson, Fultz, & Schoenrade, 1987; Eisenberg & Miller, 1987; Hoffman, 1981; Krebs, 1975; Mehrabian & Epstein, 1972; Toi & Batson, 1982). Performance of skills is a function of knowledge and confidence in those skills (Bandura, 1986b). Therefore, previous findings of a relationship between affective empathy and helping behavior supports the theorized relationship between empathy and self-efficacy. The findings of the current study, however, did not support this conclusion.

Another unexpected finding was the non-significant predictive relationship between mindfulness and empathy among doctoral students. This finding is inconsistent with research that mindfulness is related to empathy (Beitel et al., 2005; Shapiro et al., 1998). As a group, doctoral students had significantly higher mindfulness scores than master's interns, but their empathy scores were not significantly different. Mindfulness has been associated with increased self-management (Baer, 2003). One possible explanation for this non-significant relationship is that an increase in mindfulness is related to more awareness of the need for emotional boundaries. Valente and Marotta (2005) found that psychotherapists who practiced yoga, which is a mindfulness exercise, were better able to monitor their emotional reactivity to clients. Doctoral students, in particular, are limited in the amount of time they have for others. This lack of free time may be reflected in a tendency to be more self-protective and guarded in their emotional responses to others, resulting in lower empathic tendency.

These inconsistent findings in the relationship between empathy and counseling self-efficacy and mindfulness and empathy in doctoral students also may be reflective of measurement issues. Although the attention instrument used in this study specifically assessed attention ability in the counseling session, the empathy assessment was not counseling specific. Rather, it assessed empathic tendency in everyday life. It is possible that the way in which counseling students respond in the counseling session is different from the way in which they respond to people in general. Other researchers who have used the IRI have suggested that non-significant effects may be due to scale sensitivity (Galantino, Baime, Maguire, Szapary, & Farrar, 2005).

Another explanation of these findings may lie in the messages counseling students receive about what it means to be empathic and the need to have strong boundaries with clients. The emphasis in counselor training is typically on cognitive understanding rather than affective empathy (Bohart & Greenberg, 1997). Counseling students are warned that too much affective responding may be dangerous and are cautioned not to over-identify with the client (Bohart & Greenberg, 1997; Egan, 1998; Skovholt & Ronnestad, 2003). Ronnestad and Skovholt (2003) found that as counselors become more experienced with negotiating boundaries with clients, they are able to apply concepts learned in school in a more flexible and personalized way rather than in a rigid or mechanical manner. Although the measure used in this study examined both cognitive and affective empathy, the questions may have been interpreted as assessing more affective empathic responding. It is possible that participants in this study answered in ways that were

consistent with how they thought counselors *should* relate to others. Therefore, their answers may not reflect their true empathic tendencies.

Overall, the results of this study provide evidence of a predictive relationship between mindfulness and key counselor training outcomes, particularly the ability to pay attention in the counseling session and counseling self-efficacy. These results, however, should be examined within the context of the current study's limitations.

Limitations

The results of the current study provide insight into the relationship between mindfulness and counselor training variables. The results, however, should be viewed in light of limitations in the research design and of the current sample.

The current study was based on a survey design. Survey designs have several limitations, the most obvious of which is related to non-responders (Groves, Fowler, Couper, Lepkowski, Singer, & Tourangeau, 2004). Although the response rate for this study was better than average for survey designs (44%), it is possible that those individuals who chose to participate may systematically differ from those who chose not to participate. An attempt was made in the research design to limit this threat to internal validity. Counselor educators who agreed to distribute the surveys were asked to do so during class or supervision where possible. Although many did follow this instruction, some reported having students complete the surveys outside of class time. This may have resulted in some bias in the survey sample. Those students who felt more efficacious about their own counseling skills or who already had an interest in mindfulness may have been more inclined to participate in a study examining self-efficacy of counselors in

training and mindfulness than those with less counseling self-efficacy or interest in mindfulness. The variance of mean scores on the variables of interest, however, suggests that this was not a major limitation in this study.

There are also a few important considerations of the measures themselves. Because the surveys are based on self-report, they are limited by the self-knowledge of the respondents and subject to social desirability bias (Groves et al., 2004; Heppner, Kivlighan, & Wampold, 1999). Those who are more mindful in this study may actually have lower scores on attention, empathy, and counseling self-efficacy than those who are less mindful. For example, those respondents who are more aware of their current state in the counseling session may report lower scores on the measure of in-session attention because they are actually more aware of times when their minds drift. Those who are less self-aware may think they are paying attention when, in fact, they are not. Similarly, a confounding variable may be the instruction – or lack of instruction – participants may have received in their counseling classes on such things as mindfulness, the role of affective empathy in the counseling process, strategic attention control in session, and the effects of mental-practice techniques.

In an effort to present themselves in a favorable light, survey respondents may have over-reported responses that were perceived to be “correct.” Because a measure of social desirability was not included in the instrumentation, it is unclear how much social desirability affected the results. The variance in mean scores, however, suggests that social desirability was not a major limitation of the current study. Confidence in the

results of this study will be increased when comparable findings emerge from studies that use measures other than simple self-reports.

Finally, a word of caution is warranted regarding generalizability of the results. The sample used in this study is one of convenience. The majority of schools that participated were located in the southeastern part of the United States and were CACREP accredited. While the inclusion of primarily CACREP accredited schools may have limited a potentially confounding variable, the results may not generalize to those students in non-CACREP schools. Further, national estimates of counselor-in-training demographics are not available, so it is unclear how well the sample matched the national counselor-in-training population. According to U. S. Census data (2000), however, the sample was similar to the U.S. population, particularly relative to Caucasian and African-American populations (U. S. Caucasian population = 77%; U. S. African-American population = 12.9%). The inability to know the demographics of counselors in training, however, suggests that the results should be cautiously generalized to the national population of master's level and doctoral level counseling students.

Implications

The current study provides empirical support for the theorized relationship between mindfulness and key counselor training and development outcomes. The results provide evidence that a sizable portion of the variance in counseling self-efficacy can be explained by a student's ability to be mindful in everyday life and strategically control attention in the counseling session. Further, the results suggest that those students who are more mindful are also more likely to have a higher tendency to be cognitively and

affectively empathic. These results have implications for counselors in terms of counselor-training admissions, counselor education, and counseling practice.

Counselor-Training Admissions

For decades, counselor educators have been examining admissions processes in order to identify criteria that will best predict success in learning counseling skills (Markert & Monke, 1990). Markert and Monke (1990) suggested that counselor educators need to examine innovative approaches to program admissions. An informal assessment of mindfulness tendencies may offer just such an innovative approach.

This study provides some evidence that mindfulness may be predictive of counseling skill and counseling self-efficacy. Counselor trainees who enter their training programs with higher mindfulness may be more likely to succeed not only in their counseling programs, but also as counselors after graduation. Based on these findings, it is recommended that counselor educators informally gauge mindfulness tendencies in applicants by paying attention to the ways in which they approach their life experiences. Some possible indicators of mindfulness include the ability to discuss personal strengths and weaknesses without over-identifying with either, the willingness to let go of attachment to a particular idea or point of view and consider alternatives, a tendency to respond to situations rather than react out of habit, an ability to attend to the present moment, an appreciation for the “everyday,” and a commitment to self-care. These things could be assessed in an admissions interview, for example, by asking such questions as, “Tell me about a time when you discovered you were wrong,” “Describe your drive over here today,” “How do you handle stress?” “How do you typically solve problems?”

“Describe a client with whom you might have a difficult time working.” Applicants who are able to describe the other side of the story, provide details of their drive to the interview, identify self-care tactics, respond to problems creatively rather than from a habitual framework, and honestly and non-defensively assess their own limitations may have a strong tendency for approaching life with mindfulness.

Clearly, these are just some examples of ways in which counselor educators could identify mindful applicants to counseling programs. The personal development implications of mindfulness are far-reaching and unique to each individual. Having personal experience with mindfulness will further inform counselors’ understanding of what to look for in applicants. Given the need for admissions criteria with strong predictive validity, more research in this area is warranted.

Counselor Education

Although the counselor education literature offers much in the way of empirically validated processes and protocols for teaching discrete, external counseling skills, the literature is less clear about how to train students in the way of being espoused by Rogers (1975) and others as fundamental to the counseling relationship. Among the skills necessary for this way of being are the ability to hold non-judgmental attention on the present moment experience with the client and to have an affective empathic response. The current study suggests that mindfulness may be an important tool for cultivating these internal skills.

Counselor educators should consider incorporating mastery-based experiences in the five core mindfulness skills into counselor training programs. Trainees should be

encouraged to practice non-judgmentally, observing and describing their present-moment experience, non-reacting to experience, and acting with awareness rather than acting on automatic pilot (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). These experiences could be infused into existing courses, or a course dedicated specifically to mindfulness training could be developed (Kabat-Zinn, 1990; Segal, Williams, & Teasdale, 2002). Counselor educators should note, however, that the literature on mindfulness training clearly recommends that instructors of mindfulness have their own practice (Kabat-Zinn, 2003; Segal et al., 2002). Without grounding in their own practice, instructors would be ill-equipped to respond to student's questions or struggles (Kabat-Zinn, 2003).

One benefit of incorporating mindfulness training into counselor education is that it is portable (Teasdale, Segal, & Williams, 1995). Whereas many other training techniques designed to increase counselor development require the presence of an instructor or supervisor and that the trainee actually "do" counseling, mindfulness practices can be done anywhere, at anytime, with any present moment experience. This flexibility means that students could be cultivating their skills even when they aren't in class or in session.

In addition to the outcomes explored in the current study, empirical research suggests that the inclusion of mindfulness training into counselor education may have additional benefits. Mindfulness training has been shown to reduce anxiety and increase well-being in a number of populations including health-care professionals (Galantino et al., 2005; Shapiro et al., 1998, Shapiro, Astin, Bishop, & Cordova, 2005; Rosenzweig, Reibel, Greeson, & Brainard, 2003). Anxiety is a serious issue among counselor trainees,

and it may reduce their ability to hear feedback from their supervisors about their counseling performance (Bischoff & Barton, 2002; Skovholt & Ronnestadt, 2003; Larson & Daniels, 1998). Mindfulness may give counseling students skills that can help them more effectively handle the stress of being a graduate student and, ultimately, more effectively learn the lessons of graduate school. Furthermore, mindfulness may help students learn to tolerate their own distress (Baer, 2003) and care for themselves (Neff, 2003a; Shapiro et al., 2005). By introducing counselors-in-training to mindfulness skills, counselor educators would be giving them tools that may help them better handle the stressors of being a counselor.

Counseling Practice

Based on the findings of this study, it can be concluded that counselors with strong mindfulness practices will be better able to pay attention to clients and the experience of the session and will have higher counseling self-efficacy. Although not specifically addressed in this study, research suggests that higher counseling self-efficacy may be related to client outcomes as counselor confidence, in general, is associated with positive client outcomes (Orlinsky et al., 1994). These practices also may lead to increased capacity for self-care, which is extremely important for counselors, who, due to the nature of the work, are at risk for burnout (Skovholt, 2001; Valente & Marotta, 2005). Being able to notice when boundaries are becoming too fluid, for example, can help counselors take care of themselves. Counselors should explore ways in which they can incorporate mindfulness practices into their lives. These could include such things as sitting meditation practice, yoga, walking meditations, or mindfulness of everyday life.

Making time to simply *be* rather than *do* may go far to ensuring that counselors are showing up mentally and emotionally for their clients.

Future Research

This study provided the first empirical examination of the potential relationship between mindfulness and counseling self-efficacy and the mediating roles of attention and empathy. Additional research is needed to further understand the impact of mindfulness on counselor training and counseling practice.

The current study suggests that mindfulness, attention, and counseling self-efficacy may increase as students continue in their training. Although counseling self-efficacy seems to be stronger for those counselors with more years of experience as a counselor (Larson & Daniels, 1998), experience was not taken into account in this study. Replicating the current study to include counselors with more experience (e.g., counseling practitioners and counselor supervisors) would shed light on the developmental component of mindfulness in counselors.

An additional area of needed research is in the relationship between mindfulness and affective empathy. The current study examined a global rating of multi-dimensional empathy. According to theorists, the first step in the development of empathy is the ability to have an affective response to the other (Hoffman, 1975). Although theorists have proposed that mindfulness may be related to the cultivation of empathy in general (Morgan & Morgan, 2005), it is not clear which aspect of empathy (i.e., cognitive or affective) mindfulness would influence. Exploring the relationships between mindfulness

and affective and cognitive empathy may provide important information for counselor educators looking to cultivate empathy in students.

Case studies, qualitative research designs, and intervention studies would facilitate greater dialogue among counselor educators and practitioners about the role of mindfulness in counseling. Given that much of the theorized impact of mindfulness is speculative at this point, case studies and qualitative research would provide more insight into the overall impact of mindfulness on counselor development. Because the cross-sectional design of the current study limits the ability to make causal interpretations, an intervention study with counselors-in-training would provide more causal data regarding the impact of mindfulness on training outcomes, including attention, empathy, and counseling self-efficacy. Such studies would lend greater credence to the predictive relationship between mindfulness and key counselor training outcomes found in this study.

Future studies should also consider different forms of data collection. The current study relied exclusively on self-report data. The use of other forms of data collection such as ratings by supervisors or clients, behavioral observations, and performance assessments would reduce the likelihood of self-report bias. Furthermore, although the current measure of empathy was chosen because it measures multi-dimensional empathy as supported by current literature, including a measure of clinical empathy rather than social empathy would strengthen the understanding of the relationship between mindfulness and empathy in the counseling session.

Other researchers have linked mindfulness to a number of important outcome variables that were not examined in this study but that are relevant for counselors. These include affect tolerance (Baer, 2003), self-compassion (Neff, 2003b, Shapiro et al., 2005), and psychological mindedness (Beitel et al., 2004). Ultimately, researchers should examine the critically important relationship between mindfulness in the counselor and client outcomes. Clearly, this research could take a variety of forms, including comparison studies, intervention studies, even survey designs using client ratings as the outcome measure. If positive relationships are found between mindfulness in counselors and client outcomes, counselor educators will have a strong empirical foundation for incorporating mindfulness into the counselor-training curriculum.

Conclusion

This study examined the relationship between mindfulness and counseling self-efficacy with consideration to the mediating roles of attention and empathy. One-hundred, seventy-nine counseling students were recruited from 15 universities to participate in the study. The data were analyzed using correlations, multivariate analysis of variance, *t*-tests, and path analysis with bootstrapping. The results supported the hypothesis that the variables of interest would be significantly correlated and that differences would exist in mean scores based on level of training. It also supported the hypothesis that the mediating model would account for a significant portion of the variance in counseling self-efficacy.

The findings suggest that mindfulness ability on the part of the counselor may influence counselor capacity to stay present and empathize with the client and, ultimately,

feel higher self-efficacy for counseling. Implications for counselor educators include the possible inclusion of informal mindfulness assessment in the admissions process and the need to instruct counselors-in-training in the five core mindfulness skills. For counselors, the study suggests that intentionally cultivating mindfulness skills may increase foundational counseling skills and counseling self-efficacy. Although not examined specifically in this study, mindfulness training may have other positive impacts on counselors, including decreased anxiety, increased affect tolerance and emotional intelligence, improved self-awareness and self-compassion, and a better general sense of well-being.

The current study supports further inquiry into the relationship between mindfulness, attention, empathy, and counseling-self-efficacy. Using a variety of research designs and data collection methods and exploring the relationship to client outcomes will strengthen understanding of mindfulness in counselor training and practice. Although there are still questions to be explored, it appears that mindfulness may be an important component in helping counselors-in-training shift from a *doing* mode to a *being* mode, ensuring that they are both mentally and emotionally present for their clients.

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APPENDIX A
INSTRUCTIONS & CONSENT FORMS

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Administrator 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 are in a two-semester internship and doctoral-level students (if applicable).
- **Time/Location:** Please administer these assessments at the beginning of class or supervision, if possible. The assessments should take approximately 20-25 minutes to complete.
- **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 on 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 the role of mindfulness in counselor training. It is being conducted by a doctoral student The University of North Carolina at Greensboro. Results will be used to inform the future development of counselor training programs designed to increase counseling self-efficacy. 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 20-25 minutes for you to complete. If you choose not to participate, you may use the time to work on class work.

“There are no risks for participation. This 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 seven 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 their assessment packets in the enclosed envelope. Place all the informed consents in the envelope, as well. Seal the envelope once all students have finished.
- **Returning assessments:** Please return the assessments to the researcher by **XX, 2007**.

Thank you for your help with this research project.

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

Project Title: Pilot Study of Counselor Attention Scale & Mindfulness in Counseling

Project Director: D. Paige Bentley, MA.Ed., LPC, NCC

Participant's Name:

DESCRIPTION AND EXPLANATION OF PROCEDURES:

This project will examine the psychometric properties and factor structure of the Counselor Attention Scale (CAS), which was created by the principal investigator to measure attention abilities in counselors. This project will also examine the relationships between inherent mindfulness and key counselor-training outcomes. Participants are second-year master's level and/or doctoral students enrolled in the Counselor Education program at The University of North Carolina at Greensboro. They will be asked to complete a 14-item assessment of attention and a follow-up questionnaire about their reactions to the assessment. They will also be asked to complete the 41-item Counselor Activities Self-Efficacy Scale, the 33-item Emotional Empathic Tendency Scale, the 39-item 5-Factor Mindfulness Questionnaire, and a demographic questionnaire. All materials will be stored in a locked office and reviewed by study investigators only. Data generated from these results will be kept in electronic format for seven years and destroyed thereafter.

RISKS AND DISCOMFORTS:

There are no risks or discomforts associated with participation. The cost of participation is 15 minutes of regularly scheduled class time and 25 minutes of personal time outside of class.

POTENTIAL BENEFITS:

Participation in this study will stimulate dialogue among participants about the challenges of paying attention during counseling sessions and will add to the general understanding of the attention-training and empathy-development needs of counseling students at UNC-G. Furthermore, these findings will improve the measurement of attention skills in counselors-in-training and will inform both counselor-education practices and future research.

By signing this consent form, you agree that you understand the procedures and any risks and benefits involved in this research. You are free to decline to participate or to withdraw your consent to participate in this research at any time without penalty or prejudice. Your participation is entirely voluntary. Your privacy will be protected because you will not be identified by name as a participant in this project and all study materials will be kept in a secure place.

The University of North Carolina at Greensboro Institutional Review Board, which insures that research involving people follows federal regulations, has approved the research and this consent form. Questions regarding your rights as a participant in this project can be answered by calling Mr. Eric Allen at 336-256-1482. Questions regarding the research itself will be answered by D. Paige Bentley at 336-723-6369 or Dr. Craig S. Cashwell at 336-334-3427. Any new information that develops during the project will be provided to you if the information might affect your willingness to continue participation in the project.

By signing this form, you are agreeing to participate in this project.

Participant Name

Date

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

Project Title: Mindfulness & counseling self-efficacy: The mediating role of attention and empathy

Project Director: D. Paige Bentley, MA.Ed., LPC, NCC

Participant's Name:

DESCRIPTION AND EXPLANATION OF PROCEDURES:

This project will examine the relationships between innate mindfulness and counseling self-efficacy, attention, and empathy. Participants are master's-level counseling interns and doctoral level counseling students. You will be asked to complete the Five-Factor Mindfulness Questionnaire, the Everyday Attention Questionnaire, the Counselor Attention Scale, the Counselor Activities Self-Efficacy Scales, and the Interpersonal Reactivity Index. All forms will be stored in a locked office and reviewed by study investigators only. Data will be kept for seven years after completion of the study and destroyed thereafter. Paper data will be stored in a locked filing cabinet in the Principal Investigator's locked office and will be shredded seven years after completion of study. Electronic data stored on the hard drive will be password protected and destroyed by deleting it from the hard disc. Electronic data on a disc will be stored in a locked filing cabinet in the PI's office and destroyed by breaking the CD.

RISKS AND DISCOMFORTS:

There are no risks or discomforts associated with participation. The cost of participation is 20-25 minutes of regularly scheduled class time.

POTENTIAL BENEFITS:

Participation in this study will stimulate dialogue among participants about the challenges of paying attention and empathizing during counseling sessions and will add to the general understanding of the relationship between mindfulness and key counselor training outcomes. Furthermore, these findings will inform both counselor-education practices and future research.

By signing this consent form, you agree that you understand the procedures and any risks and benefits involved in this research. You are free to decline to participate or to withdraw your consent to participate in this research at any time without penalty or prejudice. Your participation is entirely voluntary. 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.

The University of North Carolina at Greensboro Institutional Review Board, which insures that research involving people follows federal regulations, has approved the research and this consent form. Questions regarding your rights as a participant in this project can be answered by calling Mr. Eric Allen at 336-256-1482. Questions regarding the research itself will be answered by D. Paige Bentley at 336-723-6369 or Dr. Craig S. Cashwell at 336-334-3427. Any new information that develops during the project will be provided to you if the information might affect your willingness to continue participation in the project.

Participant Name

Date

APPENDIX B
INSTRUMENTS

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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.

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

- _____ 23. It seems I am “running on automatic” without much awareness of what I’m doing.
- _____ 24. When I have distressing thoughts or images, I feel calm soon after.
- _____ 25. I tell myself that I shouldn’t be thinking the way I’m thinking.
- _____ 26. I notice the smells and aromas of things.
- _____ 27. Even when I’m feeling terribly upset, I can find a way to put it into words.
- _____ 28. I rush through activities without being really attentive to them.
- _____ 29. When I have distressing thoughts or images I am able just to notice them without reacting.
- _____ 30. I think some of my emotions are bad or inappropriate and I shouldn’t feel them.
- _____ 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
- _____ 32. My natural tendency is to put my experiences into words.
- _____ 33. When I have distressing thoughts or images, I just notice them and let them go.
- _____ 34. I do jobs or tasks automatically without being aware of what I’m doing.
- _____ 35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.
- _____ 36. I pay attention to how my emotions affect my thoughts and behavior.
- _____ 37. I can usually describe how I feel at the moment in considerable detail.
- _____ 38. I find myself doing things without paying attention.
- _____ 39. I disapprove of myself when I have irrational ideas.

EAQ

These questions are all about how easy you find it to pay attention in different everyday situations. Please write in the number that best describes your experience beside the question.

For questions 1-6, imagine that you are carrying out some task you find easy (perhaps something at work/school or something like peeling potatoes or brushing your teeth). What is the effect of each of the following on your ability to do this sort of task?

1	2	3	4	5
Very distracting	A little distracting	No effect	A little helpful	Very helpful

- _____ 1. Humming or whistling to yourself
- _____ 2. Television
- _____ 3. Speech on the radio
- _____ 4. Singing with words to yourself
- _____ 5. Someone talking to you
- _____ 6. Music from radio/CD/i-pod

For questions 7-12, imagine that you are carrying out some task you find difficult (perhaps something else at work/school, studying, or playing chess or a video game). What is the effect of each of the following on your ability to do this sort of task?

1	2	3	4	5
Very distracting	A little distracting	No effect	A little helpful	Very helpful

- _____ 7. Humming or whistling to yourself
- _____ 8. Television
- _____ 9. Speech on the radio
- _____ 10. Singing with words to yourself
- _____ 11. Someone talking to you
- _____ 12. Music from radio/CD/i-pod

For questions 13-15, compared to doing one thing at a time, how good do you think you are in general at doing the following pairs of things at the same time?

1	2	3	4	5
Very poor	Poor	Average	Good	Very good

_____ 13. Two tasks you find individually fairly easy

_____ 14. Two fairly difficult tasks

_____ 15. One fairly easy and one fairly difficult task.

For questions 16-18, how good do you think you are at the following?

1	2	3	4	5
Very poor	Poor	Average	Good	Very good

_____ 16. Listening to a single speaker when other people are talking all around

_____ 17. Hearing a nearby conversation while continuing with your own conversation

_____ 18. Reading while listening to the radio.

CAS

Directions: Please think about your experiences during the past two weeks when you were counseling a client. Use the scale below and circle the number that best describes how easy it was for you to do the following tasks during a typical session.

Very Difficult	Somewhat Difficult	Neutral	Somewhat Easy	Very Easy	
1	2	3	4	5	
1. Keep extraneous thoughts from interfering with my focus	1	2	3	4	5
2. Quickly pull my thoughts together before responding to the client	1	2	3	4	5
3. Maintain focus on ALL the details of the client's narrative	1	2	3	4	5
4. Keep my mind focused on what the client is saying or doing	1	2	3	4	5
5. Avoid being distracted by irrelevant aspects of the session (e.g., miscellaneous thoughts, extraneous sounds outside the office)	1	2	3	4	5
6. Sustain attention throughout the entire session	1	2	3	4	5
7. Switch my attention to notice the client's nonverbals	1	2	3	4	5
8. Focus on a number of things during the session at the same time (e.g., what the client is saying AND what I am feeling)	1	2	3	4	5
9. Quickly analyze the complexity of the client's situation	1	2	3	4	5
10. Direct my attention inward to my own experience in the session	1	2	3	4	5
11. Notice discrepancies between what the client is saying and the client's non-verbals	1	2	3	4	5
12. Simultaneously attend to what the client is saying and to other relevant aspects of the session	1	2	3	4	5

Directions: Please think about your experiences during the past two weeks when you were counseling a client. For questions 12-21 below, circle the number that corresponds to how often these things typically happen to you during a typical counseling session.

Occurs at least once in most all sessions 1	Occurs occasionally 2	Neutral 3	Almost never occurs 4	Never occurs 5	
13. Get distracted by irrelevant sights or sounds around me	1	2	3	4	5
14. Become distracted by my own thoughts and ideas	1	2	3	4	5
15. Unable to fully summarize the client's narrative because I am missing key information	1	2	3	4	5
16. Need the client to repeat what they have just said because I didn't hear it all	1	2	3	4	5
17. Get confused trying to keep track of all the things that are happening in the session at the same time	1	2	3	4	5
18. Irrelevant aspects of the session (e.g., miscellaneous thoughts) grab my attention	1	2	3	4	5
19. Lose track of the client's narrative	1	2	3	4	5
20. Become oblivious to what is going on around me	1	2	3	4	5
21. Fail to catch on immediately when clients are joking with me	1	2	3	4	5
22. Focus on one part of what the client says and miss the total message	1	2	3	4	5

IRI

Please indicate the degree to which the items describe you. Use the scale below and place the appropriate number beside each question.

1	2	3	4	5
Does not describe me	Mostly doesn't describe me	Neutral	Describes me a little	Describes me 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 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 a movie, I have felt as though I were one of the characters.

1	2	3	4	5
Does not describe me	Mostly doesn't describe me	Neutral	Describes me a little	Describes me well

- _____ 17. Being in tense emotional situations 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.
- _____ 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.

CASES - G

General Instructions: The following questionnaire consists of three parts. Each part asks about your beliefs about your ability to perform various counselor behaviors or to deal with particular issues in counseling. We are looking for your honest, candid responses that reflect your beliefs about your current capabilities, rather than how you would like to be seen or how you might look in the future. There are no right or wrong answers to the following questions. Using a dark pen or pencil, please fill in the number that best reflects your response to each question.

Part I. Instructions: Please indicate how confident you are in your ability to use each of the following helping skills effectively, over the next week, in counseling **most** clients.

	No Confidence at all			Some Confidence			Complete Confidence			
	0	1	2	3	4	5	6	7	8	9
How confident are you that you could use these general skills effectively with <u>most</u> clients over the next week?										
1. Attending (orient yourself physically toward the client).	0	1	2	3	4	5	6	7	8	9
2. Listening (capture and understand the messages that clients communicate).	0	1	2	3	4	5	6	7	8	9
3. Restatements (repeat or rephrase what the client has said, in a way that is succinct, concrete, and clear).	0	1	2	3	4	5	6	7	8	9
4. Open questions (ask questions that help clients to clarify or explore their thoughts or feelings).	0	1	2	3	4	5	6	7	8	9
5. Reflection of feelings (repeat or rephrase the client's statements with an emphasis on his or her feelings).	0	1	2	3	4	5	6	7	8	9
6. Self-disclosure for exploration (reveal personal information about your history, credentials, or feelings).	0	1	2	3	4	5	6	7	8	9
7. Intentional silence (use silence to allow clients to get in touch with their thoughts or feelings).	0	1	2	3	4	5	6	7	8	9
8. Challenges (point out discrepancies, contradictions, defenses, or irrational beliefs of which the client is unaware or that he or she is unwilling or unable to change).	0	1	2	3	4	5	6	7	8	9
9. Interpretations (make statements that go beyond what the client has overtly stated and that give the client a new way of seeing his or her behavior, thoughts, or feelings).	0	1	2	3	4	5	6	7	8	9
10. Self-disclosures for insight (disclose <i>past</i> experiences in which you gained some personal insight).	0	1	2	3	4	5	6	7	8	9
11. Immediacy (disclose <i>immediate</i> feelings you have about the client, the therapeutic relationship, or yourself in relation to the client).	0	1	2	3	4	5	6	7	8	9
12. Information-giving (teach or provide the client with data, opinions, facts, resources, or answers to questions).	0	1	2	3	4	5	6	7	8	9

Part I (cont'd)

	No Confidence at all			Some Confidence			Complete Confidence		
	0	1	2	3	4	5	6	7	8

How confident are you that you could use these general skills effectively with most clients over the next week?

13. Direct guidance (give the client suggestions, directives, or advice that imply actions for the client to take).	0	1	2	3	4	5	6	7	8	9
14. Role play and behavior rehearsal (assist the client to role-play or rehearse behaviors in-session).	0	1	2	3	4	5	6	7	8	9
15. Homework (develop and prescribe therapeutic assignments for clients to try out between sessions).	0	1	2	3	4	5	6	7	8	9

Part II. Instructions: Please indicate how confident you are in your ability to do each of the following tasks effectively, over the next week, in counseling **most** clients.

	No Confidence at all			Some Confidence			Complete Confidence		
	0	1	2	3	4	5	6	7	8

How confident are you that you could do these specific tasks effectively with most clients over the next week?

1. Keep sessions "on track" and focused.	0	1	2	3	4	5	6	7	8	9
2. Respond with the best helping skill, depending on what your client needs at a given moment.	0	1	2	3	4	5	6	7	8	9
3. Help your client to explore his or her thoughts, feelings, and actions.	0	1	2	3	4	5	6	7	8	9
4. Help your client to talk about his or her concerns at a "deep" level.	0	1	2	3	4	5	6	7	8	9
5. Know what to do or say next after your client talks.	0	1	2	3	4	5	6	7	8	9
6. Help your client to set realistic counseling goals.	0	1	2	3	4	5	6	7	8	9
7. Help your client to understand his or her thoughts, feelings, and actions.	0	1	2	3	4	5	6	7	8	9
8. Build a clear conceptualization of your client and his or her counseling issues.	0	1	2	3	4	5	6	7	8	9
9. Remain aware of your intentions (i.e., the purposes of your interventions) during sessions.	0	1	2	3	4	5	6	7	8	9
10. Help your client to decide what actions to take regarding his or her problems).	0	1	2	3	4	5	6	7	8	9

Part III. Instructions: Please indicate how confident you are in your ability to work effectively, over the next week, with each of the following client types, issues, or scenarios. (By "work effectively," we are referring to your ability to develop successful treatment plans, to come up with polished in-session responses, to maintain your poise during difficult interactions and, ultimately, to help the client to resolve his or her issues.)

	No Confidence at all			Some Confidence			Complete Confidence			
	0	1	2	3	4	5	6	7	8	9
How confident are you that you could work effectively over the next week with a client who ...										
1. ... is clinically depressed.	0	1	2	3	4	5	6	7	8	9
2. ... has been sexually abused.	0	1	2	3	4	5	6	7	8	9
3. ... is suicidal.	0	1	2	3	4	5	6	7	8	9
4. ... has experienced a recent traumatic life event (e.g., physical or psychological injury or abuse).	0	1	2	3	4	5	6	7	8	9
5. ... is extremely anxious.	0	1	2	3	4	5	6	7	8	9
6. ... shows signs of severely disturbed thinking.	0	1	2	3	4	5	6	7	8	9
7. ... you find sexually attractive.	0	1	2	3	4	5	6	7	8	9
8. ... is dealing with issues that you personally find difficult to handle.	0	1	2	3	4	5	6	7	8	9
9. ... has core values or beliefs that conflict with your own (e.g., regarding religion, gender roles).	0	1	2	3	4	5	6	7	8	9
10. ... differs from you in a major way or ways (e.g., race, ethnicity, gender, age, social class).	0	1	2	3	4	5	6	7	8	9
11. ... is not "psychologically-minded" or introspective.	0	1	2	3	4	5	6	7	8	9
12. ... is sexually attracted to you.	0	1	2	3	4	5	6	7	8	9
13. ... you have negative reactions toward (e.g., boredom, annoyance).	0	1	2	3	4	5	6	7	8	9
14. ... is at an impasse in therapy	0	1	2	3	4	5	6	7	8	9
15. ... wants more from you than you are willing to give (e.g., in terms of frequency of contacts or problem-solving prescriptions).	0	1	2	3	4	5	6	7	8	9
16. ... demonstrates manipulative behaviors in-session.	0	1	2	3	4	5	6	7	8	9

Demographic Questionnaire

Please answer the following by either writing or circling an answer:

1. What is your age? _____
2. What is your gender? Male Female
3. What level of training are you? Master's student Doctoral student
 If a master's student, what semester of internship are you in
 (e.g., first, second, third)? _____
4. How many graduate-level, course-credit hours have you completed? _____
5. Is your program _____ CACREP _____ Non-CACREP?
6. What is your race/ethnicity (indicate all that apply)?
 African-American
 American Indian
 Asian
 Asian-American
 Caucasian
 Hispanic/Latino
 Multiracial
 Native Alaskan/Inuit
 Pacific Islander
 Other: _____

Thank you for completing this survey.

APPENDIX C

ADDITIONAL PILOT STUDY INSTRUMENTS

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Hint: _____

Counselor Attention Scale

Directions: Please think about your experiences when you are in a counseling session with a client. Use the scale below and circle the number that corresponds to how true each statement is for you.

	Very Strong Disagreement		Neutral			Very Strong Agreement	
	1	2	3	4	5	6	7
1. I find it difficult to stay focused on what's happening in the present moment during counseling sessions.	1	2	3	4	5	6	7
2. I forget my client's name almost as soon as I've been told it.	1	2	3	4	5	6	7
3. I am able to sustain my attention on relevant cues during the entire counseling session.	1	2	3	4	5	6	7
4. Even when I am listening to a client, my mind is going a mile a minute.	1	2	3	4	5	6	7
5. When my client talks to me, I find myself distracted by my own thoughts and ideas.	1	2	3	4	5	6	7
6. I find that I have difficulty remembering what my client has told me.	1	2	3	4	5	6	7
7. I daydream during sessions with clients.	1	2	3	4	5	6	7
8. I can simultaneously attend to what the client is saying and to other relevant aspects of the session.	1	2	3	4	5	6	7
9. During a session, I find that I am easily distracted by events around me (e.g., noise, movement, clutter).	1	2	3	4	5	6	7
10. I sometimes have a hard time getting my mind to stay focused during a session.	1	2	3	4	5	6	7
11. I am able to focus on what the client is saying despite other distractions in the session (e.g., smells, noise, my own thoughts).	1	2	3	4	5	6	7
12. I sometimes miss what the client is saying because I am not paying attention or thinking of something else.	1	2	3	4	5	6	7
13. I shift my attention during the session from the client to other cues.	1	2	3	4	5	6	7
14. I rarely take my attention off the client during the session.	1	2	3	4	5	6	7

Emotional Empathic Tendency Scale

Please circle the number that corresponds to how true each statement is for you in general.

	Very Strong Disagreement		Neutral					Very Strong Agreement	
	-4	-3	-2	-1	0	1	2	3	4
1. It makes me sad to see a lonely stranger in a group.	-4	-3	-2	-1	0	1	2	3	4
2. People make too much of the feelings and sensitivity of animals.	-4	-3	-2	-1	0	1	2	3	4
3. I often find public displays of affection annoying.	-4	-3	-2	-1	0	1	2	3	4
4. I am annoyed by unhappy people who are just sorry for themselves.	-4	-3	-2	-1	0	1	2	3	4
5. I become nervous if others around me seem to be nervous.	-4	-3	-2	-1	0	1	2	3	4
6. I find it silly for people to cry out of happiness.	-4	-3	-2	-1	0	1	2	3	4
7. I tend to get emotionally involved with a friend's problems.	-4	-3	-2	-1	0	1	2	3	4
8. Sometimes the words of a love song can move me deeply.	-4	-3	-2	-1	0	1	2	3	4
9. I tend to lose control when I am bringing bad news to people.	-4	-3	-2	-1	0	1	2	3	4
10. The people around me have a great influence on my moods.	-4	-3	-2	-1	0	1	2	3	4
11. Most people I have met from other countries seem cool and unemotional.	-4	-3	-2	-1	0	1	2	3	4
12. I would rather be a social worker than work in a job training center.	-4	-3	-2	-1	0	1	2	3	4
13. I don't get upset just because a friend is acting upset.	-4	-3	-2	-1	0	1	2	3	4
14. I like to watch people open presents.	-4	-3	-2	-1	0	1	2	3	4
15. Lonely people are probably unfriendly.	-4	-3	-2	-1	0	1	2	3	4
16. Seeing people cry upsets me.	-4	-3	-2	-1	0	1	2	3	4
17. Some songs make me happy.	-4	-3	-2	-1	0	1	2	3	4
18. I really get involved with the feelings of the characters in a novel.	-4	-3	-2	-1	0	1	2	3	4
19. I get very angry when I see someone being ill-treated.	-4	-3	-2	-1	0	1	2	3	4
20. I am able to remain calm even though those around me worry.	-4	-3	-2	-1	0	1	2	3	4

Very Strong Disagreement	Neutral							Very Strong Agreement	
-4	-3	-2	-1	0	1	2	3	4	
21. When a friend starts to talk about his problems, I try to steer the conversation to something else.	-4	-3	-2	-1	0	1	2	3	4
22. Another's laughter is not catching for me.	-4	-3	-2	-1	0	1	2	3	4
23. Sometimes at the movies I am amused by the amount of crying and sniffing around me.	-4	-3	-2	-1	0	1	2	3	4
24. I am able to make decisions without being influenced by people's feelings.	-4	-3	-2	-1	0	1	2	3	4
15. I cannot continue to feel OK if people around me are depressed.	-4	-3	-2	-1	0	1	2	3	4
26. It is hard for me to see how some things upset people so much.	-4	-3	-2	-1	0	1	2	3	4
27. I am very upset when I see an animal in pain.	-4	-3	-2	-1	0	1	2	3	4
28. Becoming involved in books or movies is a little silly.	-4	-3	-2	-1	0	1	2	3	4
29. It upsets me to see struggling older people.	-4	-3	-2	-1	0	1	2	3	4
30. I become more irritated than sympathetic when I see someone's tears.	-4	-3	-2	-1	0	1	2	3	4
31. I become very involved when I watch a movie.	-4	-3	-2	-1	0	1	2	3	4
32. I often find that I can remain cool in spite of the excitement around me.	-4	-3	-2	-1	0	1	2	3	4
33. Little children sometimes cry for no apparent reason.	-4	-3	-2	-1	0	1	2	3	4

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. Was the length of the questionnaires just right, too long, too short?

3. Which items were unclear to you? Why?

4. Which parts of the process did not make sense to you? 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 D

PILOT STUDY RESULTS

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TABLE 13
Demographic Description of the Pilot Study Sample (N =31)

Variable	Mean/Mode	n	%
Age (1 non-respondent)	M = 26; Mode = 24 (N = 11)	30	96
Sex			
Female		27	90
Male		3	10
No response		1	1
Race			
Caucasian		26	86.7
African-American		1	3.3
American Indian		0	0
Alaskan		0	0
Asian		1	3.3
Hispanic/Latino		1	3.3
Pacific Island		0	0
Multiracial		1	3.3
Other		0	0
No response		1	1

TABLE 14
Pilot Study Instrument Descriptive Statistics (N=31)

Instrument	M	SD	# of Items
Five-Factor Mindfulness Questionnaire	3.46	.37	39
Counselor Attention Scale	4.99	.38	14
Emotional Empathic Tendency Scale	1.75	.54	33
Counseling Self-Efficacy Scale	8.17	6.42	41

TABLE 15
*Pilot Study Pearson Product-Moment Correlations, Significance, and Internal Consistency Alpha Coefficients**

	Mindfulness	Attention	Empathy	Self-Efficacy
Mindfulness	.90			
Significance				
Attention	.54**	.45		
Significance	.00			
Empathy	-.05	.01	.72	
Significance	.80	.98		
Counseling Self-Efficacy	.49**	.21	-.09	.94
Significance	.01	.27	.63	

* Alpha coefficients are on the diagonal

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

TABLE 16
Path Analysis of Mediating Role of Attention and Empathy – Pilot Study (N = 31)

Variable	Adj. R²	Unstand. β	se	Stand. β	t	Sig.
Mindfulness to mediators (a paths)						
Attention	.26	.55	.16	.54	3.42	.00
Empathy	-.03	-.07	.27	-.05	-.26	.80
Direct Effect of Mediators on Self-Efficacy (b paths)						
Attention	.16*	-.17	.43	-.08	-.39	.70
Empathy	.16*	-.10	.26	-.07	-.39	.70
Total Effect of Mindfulness on Self-Efficacy (c path)						
Mindfulness	.21	1.09	.36	.49	3.02	.01
Direct Effect of Mindfulness on Self-Efficacy (c ¹ path)						
Mindfulness	.16*	1.17	.44	.53	2.67	.01

* $F = 2.97, p = .05$

TABLE 17
Percentage of Raters Who Categorized CAS Items in Intended Category (N = 5)

Item	Intended Category	n	%
1	Sustain	3	60
2	Sustain	1	20
3	Divided	3	60
4	Divided	2	40
5	Selective	1	20
6	Sustain	4	80
7	Sustain	5	100
8	Divided	5	100
9	Selective	4	80
10	Sustain	5	100
11	Selective	4	80
12	Selective	0	0
13	Attentional Shift	5	100
14	Sustain	5	80

TABLE 18
Test Retest Reliability of CAS (N = 30)

Instrument	N of items	Cronbach's Alpha
Counselor Attention Scale	14	.80

TABLE 19
Item Means, Standard Deviations, Minimums, Maximums, Skewness and Kurtosis
for the Counselor Attention Scale (N = 31)

	Mean	SD	Min	Max	Skewness	Kurtosis
1. I find it difficult to stay focused on what's happening in the present moment during counseling sessions.	5.42	.81	3	7	-.94	1.54
2. I forget my client's name almost as soon as I've been told it.*	5.61	1.43	1	7	-1.74	3.50
3. I am able to sustain my attention on relevant cues during the entire counseling session.	5.32	.75	3	7	-.62	2.22
4. Even when I am listening to a client, my mind is going a mile a minute.	3.29	1.40	1	7	.78	.27
5. When my client talks to me, I find myself distracted by my own thoughts and ideas.*	4.55	.96	2	6	-.63	.43
6. I find that I have difficulty remembering what my client has told me.*	5.77	.88	3	7	-.76	1.78
7. I daydream during sessions with clients.*	6.03	.80	4	7	-.49	-.09
8. I can simultaneously attend to what the client is saying and to other relevant aspects of the session.	5.10	.83	3	7	-.19	.52
9. During a session, I find that I am easily distracted by my own thoughts and ideas.*	5.00	1.32	2	7	-.84	.15
10. Sometimes have a hard time getting my mind to stay focused during a session.*	5.06	.89	3	7	-.13	1.31
11. I am able to focus on what the client is saying despite other distractions in the session (e.g., smells, noise, my own thoughts).	4.39	1.28	2	6	-.69	-.61
12. I sometimes miss what the client is saying because I am not paying attention or thinking of something else.*	5.26	.89	3	7	-.85	1.15
13. I shift my attention during the session from the client to other cues.	3.97	1.33	2	6	.06	-1.06
14. I rarely take my attention off the client during the session.	5.06	1.26	1	7	-1.61	3.17

* Indicates reverse-scored item

TABLE 20
Scale Reliabilities of CAS (N = 31)

Scale	# of items	Cronbach's alpha
Sustained	6	.336
Selective	4	.545
Divided	3	-.289
Attention Switching	1	Cannot be calculated

TABLE 21
Intercorrelations Between Construct Scales (N = 31)

	Sustain	Divide	Selective	Attention Switch
Sustain	1			
Divide	.113	1		
Selective	.541**	-.244	1	
Attention Switch	.058	.287	-.451*	1

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

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

TABLE 22

Intercorrelations and Significance Between Items of the Counselor Attention Scale (N = 31)

	1	2	6	7	10	14	3	4	8	5	9	11	12	13
1	1													
2	-.057	1												
6	-.003	.140	1											
7	.290	-.106	.058	1										
10	.332	-.058	.569**	.091	1									
14	-.027	.217	.252	-.168	-.093	1								
3	.155	-.222	.316	.374(*)	.567**	-.270	1							
4	-.437*	.275	-.134	.081	-.444*	.254	-.412*	1						
8	.087	-.024	.167	.399(*)	.306	-.356(*)	.592**	-.169	1					
5	.295	.330	.151	.194	.230	.217	.395*	-.197	.391*	1				
9	.220	.443*	.258	.159	.142	.080	-.135	-.073	-.030	.422(*)	1			
11	.257	.084	-.156	.085	-.197	.190	-.204	-.195	-.287	.065	.316	1		
12	.169	.107	.372*	-.153	.397*	.310	.270	-.383*	-.080	.296	.113	.201	1	
13	-.267	.169	.107	-.062	.058	.041	-.157	.311	.184	-.247	-.248	-.344	-.358*	1

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

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

TABLE 23
Rotated Pattern Matrix and Eigenvalues for the Counselor Attention Scale

Factor Item	Factors			
	1	2	3	4
10. Sometimes have a hard time getting my mind to stay focused during a session.*	.831			
6. I find that I have difficulty remembering what my client has told me.*	.763			
12. I sometimes miss what the client is saying because I am not paying attention or thinking of something else.*	.668		-.360	-.407
3. I am able to sustain my attention on relevant cues during the entire counseling session.	.607			.519
2. I forget my client's name almost as soon as I've been told it.*		.801		
9. During a session, I find that I am easily distracted by my own thoughts and ideas.*		.722	-.303	
5. When my client talks to me, I find myself distracted by my own thoughts and ideas.*		.575		.349
13. I shift my attention during the session from the client to other cues.			.781	
11. I am able to focus on what the client is saying despite other distractions in the session (e.g., smells, noise, my own thoughts).			-.696	
1. I find it difficult to stay focused on what's happening in the present moment during counseling sessions.			-.606	
4. Even when I am listening to a client, my mind is going a mile a minute.	-.480	.351	.574	
8. I can simultaneously attend to what the client is saying and to other relevant aspects of the session.				.779
7. I daydream during sessions with clients.*				.748
14. I rarely take my attention off the client during the session.		.451		-.558
Eigenvalues	2.03	1.715	1.209	1.033

Note: Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization. Factor loads less than .30 were not included in this table.

* Indicates reverse-scored item.

TABLE 24
Construct Maps for Revised Counselor Attention Scale

Factor 1: Sustained attention

High:

Not distracted by irrelevant stimuli
Sustains attention over time
Doesn't miss any aspect of the client's narrative
Can attend to internal processes long enough to make coherent process comments
Can maintain focus in highly distracting environments

Medium:

Can maintain focus for much of the session
Is sometimes distracted by irrelevant stimuli
Gets confused occasionally by variety of stimuli
Can maintain focus in moderately distracting environments

Low:

Easily distracted
Tries to pay attention to too many things at once
Easily confused in the session
Unable to summarize client's narrative because missing key elements
Unable to hold attention on internal processes long enough to make coherent process statements

Factor 2: Divided Attention

High:

Able to direct attention to relevant stimuli
Able to direct attention both internally & externally
Can simultaneously attend to more than one thing at the same time.
Aware of discrepancies between client narrative and nonverbals
Aware of personal feelings and experiences in the session

Medium:

Tends to focus externally the majority of the time
Occasionally notices discrepancies between client narrative and nonverbals
Sometimes gets lost in client's narrative

Low:

Loses important information because hyperfocused on something else
Becomes oblivious to what is going on around them
Never pays attention to internal experience during session or hyperaware of internal experience to the exclusion of focus on client
