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Professional counselors have the task of helping individuals cope with a vast range of mental health and developmental issues. In 2015, approximately 43 million Americans over the age of 18 had experienced a mental health issue within the past year (SAMHSA, 2015). Recognizing that there are a growing number of mental health counselors entering the field each year (CACREP, 2016; U.S. Department of Labor, 2017), it is important that counselor training programs take steps to ensure that trainees are prepared to provide competent counseling services. Researchers and scholars (Auxier, Hughes, & Kline, 2003; Greason & Cashwell, 2009; Skovholt & McCarthy, 1988; Skovholt & Ronnestad, 2003) have determined many factors that influence counselor development. One such factor, counselor self-efficacy (CSE), seems imperative to counselor development (Goreczny, Hamilton, Lubinski, & Pasquinelli, 2015; Kozina, Grabovari, De Stefano, & Drapeau, 2010; Larson & Daniels, 1998; Lent et al., 2009; Lent, Hill, & Hoffman, 2003). Further, attachment anxiety and avoidance may be important in the development of CSE. Accordingly, it is important to understand the influence of attachment anxiety and avoidance on trainee's counselor self-efficacy during training because trainees with elevated attachment-related anxiety and/or avoidance may experience negative consequences on their development as counselors.

Mindfulness training however, may be key to increasing CSE and buffering the effects of attachment anxiety and/or avoidance. Researchers have examined the

relationship between attachment and counselor self-efficacy (Marmarosh et al., 2013; Smothers, 2009), mindfulness and counselor self-efficacy (Greason & Cashwell, 2009), and attachment strategies and mindfulness (Caldwell & Shaver, 2013; Davis, Morris, & Drake, 2016; Walsh, Balint, Smolira, Fredericksen, & Madsen, 2009). To date, however, researchers had not considered how the three may interact.

The purpose of this study was to address an important gap in the counselor training literature by examining whether mindfulness moderates the relationships between attachment-related anxiety and avoidance and CSE among trainees. The researcher implemented a correlational design, using multiple regression and multiple regression with the interaction term in order to explore the relationships among attachment anxiety, attachment avoidance, mindfulness, and counselor self-efficacy. Bivariate correlations were found among several of the variables including mindfulness and CSE, attachment avoidance and CSE, mindfulness and attachment anxiety, and mindfulness and attachment avoidance. Although mindfulness did not emerge as a predicted moderator variable findings from this study support previous researchers' findings that mindfulness is related to CSE. Implications for counselor educators and counselor trainees are discussed.

ATTACHMENT ANXIETY AND AVOIDANCE AND COUNSELING SELF-
EFFICACY AMONG COUNSELING STUDENTS: EXAMINING THE
MODERATING ROLE OF MINDFULNESS

by

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CHAPTER I

INTRODUCTION

Professional counselors have the task of helping individuals cope with a vast range of mental health and developmental issues. In 2015, approximately 43 million Americans over the age of 18 had experienced a mental health issue within the past year (SAMHSA, 2015). Counselors also work with those who struggle with normal developmental issues that may or may not cause or be caused by diagnosable mental health issues. Given that mental health and developmental issues are prominent in our society and often entail various factors (e.g., type, severity, duration), it is important that counselors be well trained and ready to enter the field in a variety of settings (e.g., community agencies, schools, hospitals, private practices).

With the substantive number of Americans living with mental health and developmental issues, it comes as no surprise that mental health professions are expected to continue growing in the future. According to the U.S. Department of Labor, there were 168,200 mental health counselors and therapists in 2014 and that number is expected to increase by 19% by the year 2024, which is almost 32,000 additional counselors entering the field (U.S. Department of Labor, 2017). Furthermore, in 2015, the Council for Accreditation of Counseling and Related Educational Programs (CACREP), who accredits master's-level and doctoral-level degrees in counseling, had over 684 accredited

programs with 12,257 graduates, nearly 1000 more graduates than in the previous year (CACREP, 2016). Recognizing the impact counselor educators and training programs can have on preparing future professionals to be effective counselors is an important and yet challenging task.

One challenge that impacts both counselor educators and trainees is that trainees enter programs with different life experiences, different backgrounds and upbringings, and different levels of self-awareness, among other things. Given that trainees enter their programs with such differences, fostering effective counselor development is an essential part of the training experience. Counselors entering the field must not only be prepared to understand and address their client's needs, but they must also hold a level of self-awareness that allows them to understand and care for themselves throughout their careers. This includes aspects of the self such as core beliefs, interpersonal skills, confidence, and understanding and setting limits. Recognizing that counselor development is crucial, it is important for counselor educators to understand the nuances that affect counselor trainee development. Although researchers have examined many aspects of counselor development (Auxier, Hughes, & Kline, 2003; Greason & Cashwell, 2009; Skovholt & McCarthy, 1988; Skovholt & Ronnestad, 2003), three aspects of counselor development that have garnered research attention are counselor self-efficacy, attachment strategies, and mindfulness.

Counselor self-efficacy (CSE) has been shown to be an essential part of counselor development (Barbee, Scherer, & Combs, 2003; Greason & Cashwell, 2009; Kozina, Grabovari, De Stefano, & Drapeau, 2010; Larson & Daniel, 1998; Lent et al., 2003).

With roots in Bandura's (1986, 1989, 1991) theories of self-efficacy, self-efficacy relates to how individuals view themselves and judge their ability to take on tasks as well as accomplish tasks. Stemming from self-efficacy theory is counselor self-efficacy, that is, counselors' beliefs about whether they can perform counseling related tasks (Larson & Daniels, 1998).

Bandura (1989, 1993) stated that self-efficacy can be increased through four main processes:

1. performing the skill to build mastery,
2. watching someone else perform the skill (vicarious learning),
3. receiving social support and encouragement, and
4. managing emotional arousal.

Commonly, counselor training programs include these processes to increase counselor self-efficacy (Barbee et al., 2003; Clark, 2006; Daniels & Larson, 2001; Fulton & Cashwell, 2015; Greason & Cashwell, 2009; Johnson et al., 1989; Larson et al, 1992; Larson, et al., 1999; Levitt, 2001; Urbani et al., 2002).

Although CSE can increase when fostered throughout training programs, certain factors such as trainee anxiety can hinder CSE (Goreczny et al., 2015). Although anxiety is complex and multi-faceted (Lehrer & Woolfolk, 1982), attachment has been demonstrated to be a vital contributor to anxiety (Schore & Schore, 2008). Attachment theory was originally developed to understand and address the affective bonds children make with others early on in life and how those bonds can impact psychological functioning throughout the lifespan (Ainsworth 1989; Bowlby, 1989). When expanded to

adults, however, attachment theory offers a framework for exploring how different attachment systems effect the development of individuals and how they interact with others. Childhood attachment styles remain consistent with adult attachment styles (Hazan & Shaver, 1994). Adult attachment strategies and internal working models are two products of the attachment system that stem from attachment theory.

Adult attachment strategies refer to individuals' relationship behaviors based on a two-dimensional range of anxiety and avoidance. Historically, ranges of anxiety and avoidance indicated whether a person had a secure or an insecure attachment style. Insecure adult attachment strategies have been categorized as either preoccupied, fearful, or dismissive, and are a combination of either high anxiety and low avoidance (preoccupied), high avoidance and low anxiety (dismissive), or both high anxiety and high avoidance (fearful), while a secure attachment strategy is a combination of low anxiety and low avoidance (Bartholomew & Horowitz, 1991).

Although attachment styles have historically been categorized as one of four types, researchers are increasingly moving away from this categorization and looking at measuring attachment-related anxiety and avoidance as continuous constructs (Fraley & Waller, 1998; Roisman, Fraley, & Belsky, 2007). This shift seems important because broad categorization of attachment anxiety and avoidance loses much of the nuance of *levels* of anxiety and avoidance (Roisman et al., 2007), which has implications for attachment-related behaviors germane to establishing therapeutic relationships.

Along with attachment-related anxiety and avoidance, understanding internal working models, or the cognitive schemas that are borne out of early attachment

challenges, are essential to better understand the attachment system and the effects it can later have on counselor self-efficacy. Internal working models allow individuals to predict caregiver's availability when one is in need, and shape both how individuals view themselves in relation to others and how they view others, commonly referred to as view of self and view of other (Ainsworth & Bowlby, 1991; Bowlby, 1988; Hazan & Shaver, 1994). These two parts (i.e., view of self and view of others) are informed by early caregiver responses and influence how people process social information throughout the lifespan (Bartholomew & Horowitz, 1991; Bowlby, 1988; Dykas & Cassidy, 2011; Hazan & Shaver, 1994; Pietromonaco & Barrett, 2000). Internal working models are a vital aspect of attachment because internal working models are mental representations that impact the way counselor trainees view themselves and others (such as professors, supervisors, and peers) and may impact self-efficacy. Specifically, a positive view of self and others impacts the ability to venture out and try new tasks, accept imperfections, and remain open to feedback from others (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1994; Wright, Perrone-McGovern, Boo, & White, 2014), which may ultimately impact self-efficacy.

It is possible, however, that other factors may moderate the impact of attachment anxiety and avoidance on counselor self-efficacy. In particular, mindfulness may be a key moderating factor. Mindfulness is the ability to utilize intentional attention in the present moment and acknowledge all aspects of one's current experience without judgement (Kabat-Zinn, 1990; Linehan, 1993; 2014). By practicing mindfulness, individuals increase their ability to be present in the moment, acknowledge all aspects of their current

experience (e.g., physical, mental, emotional), and actively choose to exist in the present moment (The Linehan Institute, 2015). Thus, cultivating mindfulness, (e.g., awareness and attention skills) among counselor trainees may allow them to choose more effective responses (in contrast to automatic reactions driven by high anxiety or high avoidance) that increase their CSE throughout their training programs. These effective responses may allow students to improve their ability to tolerate attachment related anxiety and avoidance while increasing their willingness to embrace challenging tasks in the present moment.

Researchers have connected mindfulness to both counselor self-efficacy and attachment anxiety and avoidance. Mastery experiences are an important process to increase self-efficacy (Bandura 1982; 1989) and they are an important justification for training requirements that lead to higher levels of counselor self-efficacy (Greason & Cashwell, 2009; Larson & Daniels, 1998). Cultivating mindfulness is a skill that encompasses building mastery (Linehan, 2014). Strategically controlling attention is an important part of mindfulness and a skill that trainees need because it is essential to the counseling process. Through building mastery of attention, trainees increase their counselor self-efficacy (Greason & Cashwell, 2009). Although there appears to be limited research addressing the links between mindfulness and counselor self-efficacy, Greason and Cashwell (2009) found that mindfulness was a significant predictor of counselor self-efficacy and this study aims to expand on those findings.

Additionally, researchers have explored the links between attachment anxiety and avoidance and mindfulness and have found that both attachment anxiety and avoidance

are negatively related to mindfulness (Caldwell & Shaver, 2015; Davis et al., 2016; Walsh, et al., 2009). Mindfulness also encourages individuals to become more aware and conscious of their mental representations (e.g., internal working models). Accordingly, mindfulness seems to be an important area to explore further, as improving mindfulness skills may help increase counselor self-efficacy and aid in buffering negative effects on training experiences influenced by high levels of attachment anxiety and/or avoidance.

Statement of the Problem

Recognizing that there are a growing number of mental health counselors entering the field each year (CACREP, 2016; U.S. Department of Labor, 2017), it is important that counselor training programs take steps to ensure that trainees are prepared to provide competent counseling services. Researchers and scholars (Auxier, Hughes, & Kline, 2003; Greason & Cashwell, 2009; Skovholt & McCarthy, 1988; Skovholt & Ronnestad, 2003) have determined many factors that influence counselor development. One such factor, counselor self-efficacy (CSE), seems imperative to counselor development (Goreczny et al., 2015; Kozina et al., 2010; Larson & Daniels, 1998; Lent et al., 2009; Lent, Hill, & Hoffman, 2003). Increasing CSE is important during counselor training programs because it is the mechanism by which counselors effectively act to help clients rather than just knowing potential ways to help clients (Larson & Daniels, 1998). Further, CSE is a predictor of counseling outcomes (Kotz, Huibers, West, Wesseling, & van Schayck, 2009) and negatively correlated with counselor anxiety (Barbee, Scherer, & Combs, 2003; Daniels and Larson, 2001; Larson & Daniels, 1998). Although CSE tends to increase over the course of training experiences (Barbee et al., 2003), aided by

“mastery experiences in core counseling skills” (Greason & Cashwell, 2009, p. 3), trainees’ anxiety during their programs can hinder the development of CSE (Goreczny et al., 2015).

Further, attachment anxiety and avoidance may be important in the development of CSE. According to Larson and Daniels (1998), anxiety negatively predicts counselor self-efficacy. Accordingly, it is important to understand the influence of attachment anxiety on trainees’ counselor self-efficacy during training because trainees with elevated attachment-related anxiety and negative internal working models may experience negative consequences on their development as counselors.

Similarly, elevated attachment-related avoidance may be problematic. For example, Wright and Perrone (2008) described how attachment strategies occasion approach-avoidance behaviors. Depending on an individual’s attachment style, these approach-avoidance behaviors may affect their future learning experiences which, in turn, could impact their self-efficacy. This also may indicate that avoidant attachment strategies negatively impact trainees’ counselor self-efficacy which, in turn, may hinder counselor development.

Mindfulness training may be key, however, to increasing CSE and changing the approach-avoidance behaviors in trainees with insecure attachment strategies.

Researchers have examined the relationship between attachment and counselor self-efficacy (Marmarosh et al., 2013; Smothers, 2009), mindfulness and counselor self-efficacy (Greason & Cashwell, 2009), and attachment strategies and mindfulness (Caldwell & Shaver, 2013; Davis et al., 2016; Walsh et al., 2009). To date, however,

researchers have not considered how the three may interact, with one possibility being that mindfulness may moderate the relationship between both attachment anxiety and avoidance and counselor self-efficacy. Examining the moderating relationship of mindfulness on CSE and trainees' attachment styles may provide future direction for ways to implement intervention studies that investigate the effects of mindfulness training on counselor development, particularly as it is related to decreasing attachment-related anxiety and avoidance and enhancing counselor self-efficacy.

Purpose of the Study

The purpose of this study is to address an important gap in the counselor training literature by examining whether mindfulness moderates the relationship between attachment anxiety and avoidance and CSE among trainees. Although the relationships among these constructs have been examined dyadically, researchers to date have not examined all together within a specified moderating model. This study aimed to explore this gap and examine how mindfulness moderates the relationship between attachment anxiety and avoidance and counselor self-efficacy. It was predicted that those who have higher levels of mindfulness will have weaker relationships between anxiety and/or avoidance and CSE whereas those who have lower levels of mindfulness will have lower levels of CSE and higher levels of attachment anxiety and/or avoidance. Understanding these relationships help us gain insight into how these variables impact counselor development, specifically whether mindfulness similarly moderates attachment anxiety and avoidance related to CSE. Additionally, results from this study potentially help

counselor educators better understand how mindfulness training can be used to improve CSE and enhance counselor development.

Research Questions

This study examined the relationships between attachment related anxiety and attachment related avoidance and counselor self-efficacy, and the potential moderating effect of mindfulness (i.e., awareness and attention aspects). To this end, the following research questions were addressed:

Research Question 1: What are the relationships between counselor self-efficacy and attachment-related anxiety and avoidance?

Research Question 2: How does mindfulness moderate the relationship between counselor self-efficacy and attachment anxiety and avoidance?

Figures 1 and 2 represent the two models examined to answer Research Question 2.

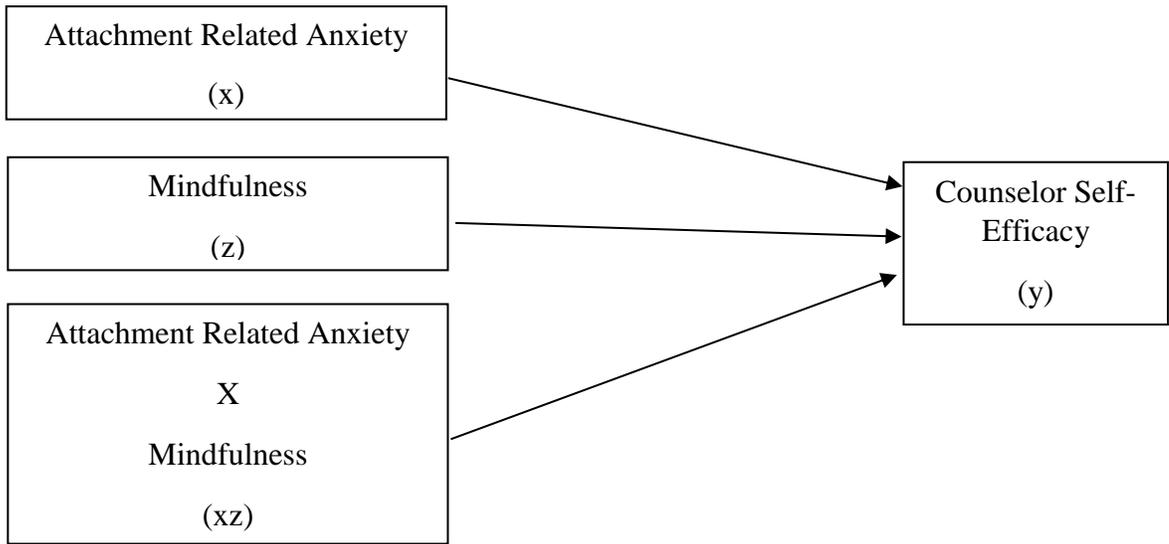


Figure 1. Hypothesized Moderating Model

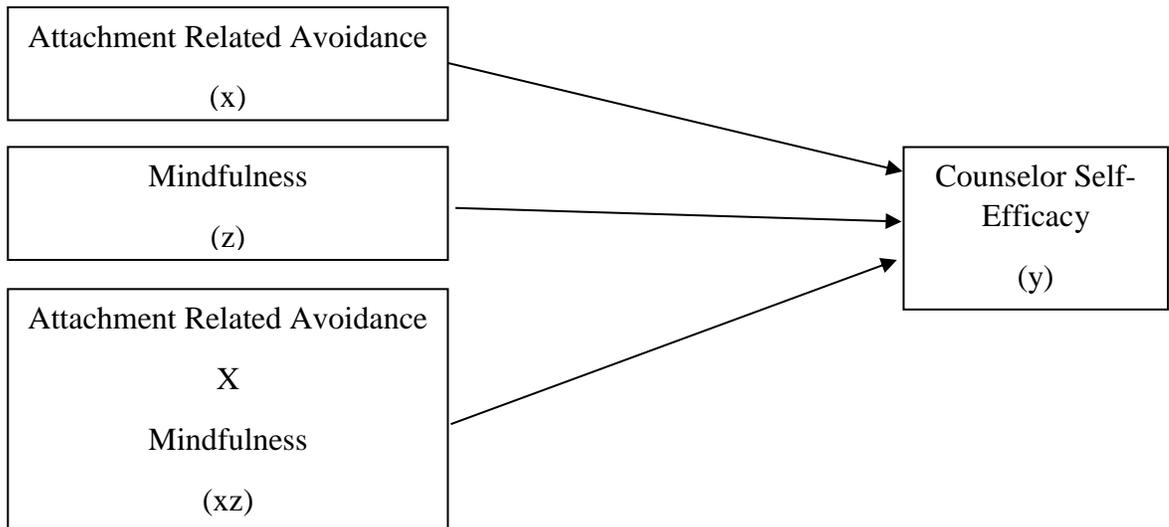


Figure 2. Hypothesized Moderating Model

Need for the Study

The importance of increasing counselor self-efficacy during trainees' time in their programs seems clear (Barbee et al., 2003; Greason & Cashwell, 2009; Kozina et al., 2010; Larson & Daniel, 1998; Lent et al., 2003). Similarly, the fact that anxiety can hinder trainee development of CSE also has been established (Bartholomew & Horowitz; 1991; Goreczny et al., 2015). Less is known empirically, however, about the relationship between attachment-related avoidance and CSE, though anecdotally it seems logical that attachment avoidance could lead trainees to minimize their developmental struggles and resist supervisor feedback, ultimately stunting their development as professional counselors.

Students enter counseling programs with varying degrees of attachment-related anxiety and avoidance, and it is likely that students with extremely high levels of anxiety, avoidance, or both will struggle to be successful as counselors. For many with elevated anxiety or avoidance, though, we may be able to implement better training interventions that buffer the effects of anxiety and avoidance on CSE. Given that CSE is an important factor for counselor development (Larson & Daniels, 1998; Lent et al., 2009) and that mindfulness can improve counselor self-efficacy (Greason & Cashwell, 2009) and decrease the negative effects of attachment strategies among the general population (Caldwell & Shaver, 2015), this study seemed important for counselors-in-training, practicing counselors, and counselor educators to better understand the training needs of students with differing attachment anxiety and avoidance. The findings from this study

may help counselor educators to provide helpful resources, interventions, and courses for trainees to increase CSE and, by extension, enhance services to clients.

Definition of Terms

Trainee is defined as any master's-level counselor-in-training currently enrolled in a CACREP-accredited counselor training program.

Attachment strategy is defined as an individual's relationship behaviors and tendencies based on the range of the dimensions of anxiety and avoidance. Attachment anxiety and avoidance will be measured using *The Experiences in Close Relationships-Revised (ECR-R*: Fraley, Waller, & Brennan, 2000).

Attachment-Related Anxiety is an attachment strategy with high anxiety that is defined by “a lack of attachment security, a strong need for closeness, worries about relationships, and fear of being rejected” (Mikulincer, Shaver, and Pereg, 2003 p. 80).

Attachment-Related Avoidance is an attachment strategy with high avoidance that is defined by “a lack of attachment security, compulsive self-reliance, and preference for emotional distance from others” (Mikulincer et al., 2003 p. 80)

Internal Working Model is defined as a cognitive schema (or set of schemas) that are a product of early childhood interactions with caregivers. Internal working models develop over time and allow individuals to predict whether others will be available for them (Hazan & Shaver, 1994) and shape how individuals view the world around them.

Counselor Self-efficacy is defined as ones' beliefs about how they can perform counseling related tasks (Larson & Daniels, 1998). The *Counselor Activity Self-Efficacy Scales* (CASES: Lent et al., 2003) will be used to measure CSE for this study.

Mindfulness is defined as the ability to utilize intentional attention in the present moment and acknowledge all aspects of one's current experience without judgement (Kabat-Zinn, 1990; Linehan, 1993; 2014). For this study, mindfulness will be measured using The *Five-Facet Mindfulness Questionnaire (FFMQ)*: Baer, Smith, Hopkins, Krietemeyer, & Toney 2006).

Mindfulness practice is when one intentionally chooses to pay attention and engage with the task, at hand, while utilizing and focusing on sensory information in a nonjudgmental manner. The practice can include various daily activities such as, but not limited to, walking, eating, yoga, meditation, body scans, deep breathing, and guided imagery.

Organization of the Study

This study is organized into five chapters. In Chapter I, counselor self-efficacy, attachment anxiety, attachment avoidance, and mindfulness are defined. Chapter I also includes the statement of the problem, explanation of the purpose and need for the study as well as the research questions. Chapter II offers a critical review of the literature related to counselor self-efficacy, attachment strategies, and mindfulness. Chapter III contains an overview of the research methodology, hypotheses, procedures, and data analysis as well as the participants, instruments, and results from the pilot study. The results of the study are presented in Chapter IV. Finally, in Chapter V, a discussion is offered, including limitations of the study, implications for counseling and counselor education, and suggestions for future research.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

The rationale for studying relationships among attachment anxiety and attachment avoidance, mindfulness, and counselor self-efficacy was established in chapter I. In this chapter, the literature pertinent to this study is presented. The relevant literature is organized into three sections: (a) self-efficacy, (b) attachment theory, and (c) mindfulness.

Self-efficacy

Self-efficacy Theory, first proposed by Bandura in 1977 (Bandura, 1977), stemmed from his Social Learning Theory. Self-efficacy Theory assumes that belief in one's ability to achieve an outcome influences her or his ability to achieve the outcome (Bandura, 1977). Bandura (1977) defined efficacy as, "the conviction that one can successfully execute the behavior required to produce the outcomes" (p. 193). According to Bandura (1977), self-efficacy is different from an outcome expectancy, which is based on an individual's given behavior achieving an outcome, in the sense that one's belief in their ability is more influential than their behavior itself.

Self-efficacy impacts individuals in a variety of ways, including the work settings individuals choose to enter, the activities and tasks in which they are willing to engage, and the energy they are willing to put forth in the face of obstacles within various situations (Bandera 1977; 1991; 1993). Additionally, self-efficacy influences how

individuals view themselves and judge their ability to take on tasks and accomplish tasks (Bandera, 1986:1991).

According to Self-efficacy Theory (Bandura, 1977), self-efficacy consists of three dimensions that impact individuals' performances:

1. Magnitude: Self-efficacy influences an individual's willingness to take on tasks of varying difficulty, i.e., whether they embrace only simple tasks, or whether they are willing to take on moderately difficult or extremely difficult tasks.
2. Generality: efficacy related to ones' experiences either stay specific to a task or are generalized to new areas.
3. Strength: individuals with weak efficacy are easily discouraged while others with strong efficacy persist in the face of difficulty.

As mentioned above, self-efficacy influences the settings individuals choose to embrace (e.g., relationships, careers) and the tasks in which they are willing to engage (Bandura, 1977). Thus, individuals are more likely to gravitate toward areas such as career fields they believe they can succeed in and avoid situations in which they think they are likely to end up as failures. Bandura (1977; 1989; 1993) stated that self-efficacy can be increased through four main processes:

1. performing the skill to build mastery,
2. watching someone else perform the skill (vicarious learning),
3. receiving social support and encouragement, and
4. managing emotional arousal.

Therefore, as self-efficacy increases through these four main processes, individuals are more likely to engage in difficult tasks and continue to increase their efficacy. Bandura (1989) also posited that self-efficacy has self-generating influences, which means that self-efficacy continues to build based on one's accomplishments and willingness to embrace difficult tasks. While self-efficacy is applicable to many tasks and career choices, the current study was primarily interested in the developmental process of becoming a professional counselor. Accordingly, a detailed review of the scholarly literature on counselor self-efficacy seemed warranted.

Counselor Self-efficacy

One outgrowth of Self-Efficacy Theory has been a growing body of literature on counselor self-efficacy (CSE). Becoming a professional counselor is both mentally and emotionally challenging (Skovholt & Ronnestad, 2003). Many students struggle with CSE, defined as their beliefs about how they can perform counseling related tasks (Larson & Daniels, 1998). Just as self-efficacy affects one's thought patterns and impacts her or his course of action (Bandura, 1989), counseling self-efficacy impacts counselors' courses of action (Larson et al., 1992; Larson & Daniels, 1998). Larson and Daniels (1998) stated that "self-efficacy beliefs are expected to affect counseling actions through the mediating influences of affective processes, motivational processes, and other cognitive processes" (p.181). These effects can have both positive and negative influences on counselors and counselor trainees. This is critical because CSE appears to be essential to the mastery of counseling skills (Kozina et al., 2010).

Recognizing the importance of CSE on counselor development, counselor training programs appear to include the four main processes (i.e., performing the skill for mastery, vicarious learning, social support and encouragement, and managing emotional arousal) essential to increasing counselor self-efficacy and fostering counselor development. Researchers have shown that the level [mastery] of training and the amount of clinical experience one has significantly predicts CSE (Barbee et al., 2003; Lent et al., 2003). Similarly, behavioral rehearsal is important as having trainees watch role-plays [vicarious learning] and engage in role-playing [performing] tends to have a positive impact on CSE (Barbee et al., 2003). Additionally, trainee CSE tends to increase through watching effective models [vicarious learning] and by receiving supportive feedback [social support and encouragement] (Lent & Brown, 2006). Overall, trainees with higher levels of CSE demonstrate an increase in their acquisition and use of microskills [mastery] (i.e., rapport building, paraphrasing, reflection of feeling) (Kozina et al., 2010; Larson et al., 1992), and CSE is connected to critical counseling skills such as strategically controlling attention, empathy, and the ability to be mindful [mastery] (Greason & Cashwell, 2009). Finally, researchers have shown that an inverse relationship exists between CSE and trainees anxiety [emotional arousal] (Larson & Daniels, 1998).

While some trainees embrace the developmental challenges of becoming a counselor and believe in themselves, others appear to struggle and lack belief in their abilities to be effective counselors. A growing body of empirical evidence highlights the factors that influence CSE.

Factors that Influence CSE

Counseling self-efficacy can be a catalyst for both self-aiding and self-doubting thoughts for counselor trainees (Larson & Daniels, 1998). Researchers have found that CSE is related to important areas relevant to counselor trainee development such as supervision (Cashwell and Dooley, 2001; Larson et al., 1992), clinical experiences (e.g., practicum and internship) (Barbee et al., 2003; Daniels & Larson, 2001; Kozina et al., 2010; Larson et al., 1992), and counselor anxiety (Barbee et al., 2003; Daniels & Larson, 2001; Goreczny et al., 2015; Larson & Daniels, 1998; Larson et al., 1992), and these factors impact trainees beliefs about their ability to be effective counselors (Daniels & Larson, 2001; Johnson, et al., 1989; Kozina et al., 2010; Larson & Daniels, 1998; Larson et al., 1992; Ridgway & Sharpley, 1990; Sipps, Sugden, & Faiver, 1988).

Supervision. Supervision is an area in counselor training that has been shown to influence trainees' CSE. Cashwell and Dooley (2001) found that receiving clinical supervision positively influenced counseling self-efficacy. Using a sample of 33 participants, 29 community counselors and four doctoral-level students from CACREP-accredited counselor education programs, Cashwell and Dooley (2001) compared 11 participants who were not receiving supervision and 22 who were receiving clinical supervision. Using an independent *t*-test with an alpha level of .05, the researchers found that there was a significant difference between the counselors who received clinical supervision and those who did not receive supervision at $p = .024$, with those receiving supervision having higher CSE. A limitation of this study as stated by the authors is the sample size. Using a sample size larger than 33 participants may help to increase the

power of the study. Further, although the researchers examined the impact of clinical supervision on CSE, they did not investigate attachment strategies people utilize or their ability to be mindful and receptive to feedback in regards to CSE, factors hypothesized to be important for the current study.

Prior to the Cashwell and Dooley (2001) study, Larson et al., (1992) reviewed five different studies in the development of the *Counselor Self-Estimate Inventory (COSE)*. The third study in their set of five utilized three subsets of participants, (1) 213 beginning counselor trainees, (2) 52 master's-level counselors who were counseling psychology graduates, and (3) 57 counseling psychologists. Using post-hoc comparisons with Tukey's HSD test, they found that trainees who received supervision throughout their programs reported higher levels of counseling self-efficacy than participants who reported they did not receive supervision (Larson et al., 1992). Although this study utilized a larger sample size than Cashwell and Dooley (2001), the researchers did not account for other aspects of trainees (e.g., attachment strategies and ability to be mindful) that may impact their levels of CSE throughout their supervision experience.

In contrast, Marmarosh et al. (2013) did take into consideration trainees' attachment styles when investigating how supervision impacts trainees CSE. Using 57 graduate level psychology students, 24 of whom reported having previous clinical experience and 32 who indicated no previous clinical experience, the researchers set out to explore how adult attachment and supervision impact trainee CSE. Using four assessments, the *Working Alliance Inventory-Short Form* (Tracey & Kokotovic, 1989) to measure the alliance between student clinicians and the supervisors, the *Experience in*

Close Relationships Scale (Brennan, Clark, & Shaver, 1998) to assess trainees adult attachment styles, the *Counselor Self-Estimate Inventory-Short Form* (COSE-S; Larson et al., 1992) to measure trainees level of CSE, and the *Therapist Attachment to Supervisor Scale* adapted from the *Client Attachment to Therapist Scale* (CATS; Mallinckrodt, Gantt, & Coble, 1995) by the researchers, to assess trainees attachment to their supervisors, the researchers examined how attachment and the supervision relationship impact trainee CSE. Using bivariate correlations and hierarchal regression, Marmarosh et al. (2013) found that trainee adult attachment avoidance was negatively correlated to CSE ($r = -.30, p < .05$), that is, supervisees who endorsed higher levels of attachment avoidance tended to have lower levels of CSE. Similarly, trainees with more fearful attachments to their supervisors tended to have lower CSE ($r = -.30, p < .05$). Although this study examined how supervision impacts trainees CSE while accounting for their attachment style, it did not take into consideration other factors such as trainees' capacity for mindfulness throughout the supervision process.

Additionally, the type of supervision feedback given (i.e., positive or negative) is an important factor to consider when looking at the impact of supervision on CSE with positive feedback during supervision linked to higher levels of CSE (Daniels & Larson, 2001). Daniels and Larson (2001) used an experimental design with 45 trainees to examine the impact of supervision feedback (positive versus negative) on CSE. By administering a pre-test and post-test of the COSE (Larson et al., 1992) before and after the supervisors gave feedback, Daniels and Larson (2001) gathered the information they need to conduct an ANOVA test. After running the statistical analysis, the researchers

found a significant effect of performance feedback on CSE, $F(1, 43) = 20.78, p < .001$, with positive feedback associated with gains in CSE and negative feedback associated with diminished CSE.

Although the researchers of this study considered the type of feedback given, they acknowledged that a limitation they faced was the exaggerated way in which supervisors gave the positive and negative feedback. Although the exaggeration may seem like a minor limitation, recognizing trainees' abilities to be aware of feedback that is accurate, slightly accurate, inaccurate, and clearly false may impact how the feedback affects their CSE. Additionally there are instances where supervisors must provide negative feedback to supervisees, although the way in which it is presented (e.g., demeaning/critical versus encouraging) might affect how CSE is influenced.

It seems important, then, to recognize that there are several elements of the supervision experience that impact trainee CSE. As mentioned throughout the above section, whether trainees receive or do not receive supervision (Cashwell & Dooley, 2001; Larson et al., 1992), trainee attachment styles and alliance with their supervisors throughout the supervisory process (Marmarosh et al., 2013), and the types of feedback given throughout supervision (Daniels & Larson, 2001) all impact supervisee CSE. Beyond the effect of supervision, however, level of clinical experience also appears to impact CSE.

Clinical experience. There is some limited evidence that clinical experience may positively influence self-efficacy. For example, Kozina et al. (2010) collected pre-post data (over 8 weeks) among a sample of 20 practicum students (16 women and 4 men)

using a demographics questionnaire and the COSE (Larson et al., 1992). After the second set of assessments were completed, the researchers found that 75% of the participants showed an increase in their levels of self-efficacy. These results were indicated by using a paired two-tailed *t*-test. Overall, the COSE scores were significantly higher at the second assessment period, 2 [$t(19) = 2.36, p = .03$] with a Cohen's $d = 0.35$ with a small effect size. There were two major limitations to this study, however. First, there were no control groups, so it is unknown how testing effects may have influenced the results. Second, although 75% of the participants reported increased self-efficacy at post-test, it is unknown what factors influenced the lack of increase among the other 25% of participants.

In their study of factors that impact trainee CSE, Barbee et al. (2003) examined how service learning experiences impact trainees' levels of CSE and anxiety. Using 113 participants from two universities, 39 participated in service learning activities while 74 had no such experiences. More than half of the participants, however, reported having done some type of prior counseling work. Barbee et al. (2003) used the CSES (Melchert, Hays, Wiljanen, & Kolocek, 1996), the State Trait Anxiety Inventory (STAI; Spielberger, Gorusch, & Lushene, 1970), and a demographics questionnaire to gather data on participant's level of counselor training and experience. An independent *t*-test indicated that participants who participated in service learning activities reported higher levels of CSE than those who did not.

The researchers also conducted multiple regression analyses to explore the effects of service learning activities, previous counseling experiences, and level of counselor

training on participants CSE. From this, the researchers found an overall significant positive relationship, $F(3,107) = 16.75, p < .001$, where previous counseling experiences and level of training accounted for 37% of the variance, suggesting that clinical experience positively impacts trainee CSE. Major limitations indicated in this study were the number of participants who completed service learning activities (only 39 out of the 77 participants from the university that offered the activities engaged in them), the type of service learning activities participants engaged in, and the time frame that participants engaged in the service learning activity (as it may have been too difficult or too easy for their developmental level). Further, acknowledging that there is an ebb and flow to CSE, it may be important to assess CSE at a specific developmental marker, such as during internships, that is similar for all participants.

To understand how counselor self-efficacy looks across various training points, Goreczny et al. (2015) used a cross-sectional design with 97 participants, which included 21 undergraduate psychology students to gather data on participants prior to counselor training, 31 master's-level counseling psychology students at the start of their training (before beginning practicum or internship), 16 master's-level counseling psychology students participating in their first field experience (practicum), and 29 counseling psychology students in their second and final field experience (internship). The researchers used an experience questionnaire to account for previous levels of counseling experience as well as to assess their levels of anxiety, the *CASES* (Lent et al., 2003) and the *COSE* (Larson et al., 1992) to measure CSE, and three other assessments that

measured participants' happiness, satisfaction with life, and self-esteem (i.e., *Subjective Happiness Scale*, the *Satisfaction with Life Scale*, *Rosenberg Self-Esteem Scale*).

Using correlation analyses, the researchers found significant correlations between participants' scores on the CASES (subscales and total score) and reported counseling experience. Using MANOVA with the dependent variables being CSE, self-esteem, life satisfaction, and happiness, the researchers found that there was a significant difference across various levels of training, $F(42, 241) = 1.502, p = .032$. From Univariate ANOVAs and Tukey's post hoc test, the researchers also discovered that there was a curvilinear relationship among trainees and CSE. The findings indicated that undergraduates with no clinical training had higher scores on the CSE measures than the first-semester graduate students, and CSE continued to increase overtime with the amount of training participants had being that the master's-level participants in their final field experience had the highest levels of reported CSE. This likely suggests that prior to training, individuals believe they will be effective as counselors, but learn early in their training program the complexities and nuances of being an effective counselor, which decreases their CSE.

Although Goreczny et al. (2015) identified that CSE has a curvilinear relationship with amount of training experience, which suggests that CSE improves with counselor training and development (perhaps after an initial decline in CSE at the outset of training), a limitation of this study is the sampling pool. The researcher's report that almost 100% of their participants were Caucasian and female. Being that counselor training programs enroll students of different genders, ethnicities, and races (among other

important factors), having a more diverse sample may make the results of future studies more generalizable. One nuance of the Goreczny et al. (2015) study is that the researchers did consider the role of anxiety, which seems an important contextual variable.

Counselor anxiety. As defined by the American Psychological Association, anxiety is, “an emotion characterized by feelings of tension, worried thoughts and physical changes” (2017, paragraph 1) and it can cause people to avoid situations they find worrisome. Researchers have categorized and defined anxiety as either *state* (i.e., situation specific reactions) or *trait* (i.e., a personality characteristic that effects how one typically responds to stress) (Kaplan & Saccuzzo, 1997). Anxiety is a unique emotion in that it can be both helpful and harmful to individuals. Even though anxiety is associated with fear, can be a difficult emotion to experience, and can be prompted by the unknown or threatening situations, it also can motivate individuals to act (Linehan, 2014). Researchers have found that anxiety can be both a warning sign that helps to keep people safe (Linehan, 2014) and a hindrance that impairs counseling self-efficacy (Daniels & Larson, 2001; Larson & Daniels, 1998).

There is evidence that hindering and negative anxiety can be buffered by CSE. This was originally posited by Bandura (1982) who stated that higher levels of self-efficacy can decrease anxiety by increasing performance skills. Larson and Daniels (1998) posited that CSE affects the amount of anxiety trainees experience and whether they will acquire the skills needed to become effective counselors. Higher levels of CSE allow counselors to "view their anxiety as challenging; to set realistic, moderately challenging goals; and to have thoughts that are self-aiding" (Larson & Daniel, 1998 p.

181). Higher amounts of anxiety can lead to impaired clinical judgement and poor performance but CSE, fostered through mastery of counseling skills, modeling, social persuasion, and affect arousal, can reduce anxiety (Larson & Daniels, 1998).

When examining factors that impact trainees CSE, Barbee et al. (2003) also found an inverse relationship between CSE and anxiety. Using a demographics questionnaire, the CSES (Melchert et al., 1996), and the State-Trait Anxiety Inventory (STAI; Spielberger et al., 1970), the researchers found that there was a negative correlation (-.298) between CSE and state anxiety. They also found that participants who engaged in service learning activities had lower levels of state anxiety than participants who did not have the opportunity to engage in the service learning activities. The results indicated significant positive results ($p < .038$) between lower state anxiety and service-learning activities. Although the study accounted for anxiety, it did not take into consideration how participants' attachment related behaviors and strategies may have affected their STAI scores or how their level of training may have factored into their CSES scores.

To better account for how participant's CSE and anxiety interact at different levels of training, Goreczny et al. (2015) also looked at ways in which anxiety impacts CSE. Using the *CASES* (Ient et al., 2003), the *COSE* (Larson et al., 1992), and a questionnaire with a Likert-like scale (ranging from 0-10) that assessed three global anxiety questions (i.e., anxiety working with clients, how much they were looking forward to working with clients, and how well they felt prepared to work with clients), the researchers collected data from 97 participants. Goreczny et al. (2015) then used the data they collected to compute correlations between the *CASES*, *COSE*, and the three

anxiety questions. The researchers found that there were significant correlations among the anxiety questions, most subscales of the *CASES* and *COSE*, and total scores of the *CASES* and *COSE*. The findings indicated significant negative correlations between anxiety and several of the subscales that assessed CSE (i.e., *CASES: insight, exploration, session management, and client distress* and the *COSE: microskills, process, and difficult behaviors*) and the total scores of both the *CASES* and *COSE* with *p*-values ranging from *p* = .000-.030. A limitation of this study is that it is cross-sectional study and does not account for how a large sample of participants at the same training point may report CSE. Additionally, the use of a self-constructed measure of anxiety without psychometric data is a further limitation of this study.

Because the research on anxiety and CSE to date has been correlational, one compelling question that remains is the direction of the effect, that is, does anxiety decrease CSE or is it the other way around? Bandura (1982) originally posited that self-efficacy decreases anxiety, but it also seems likely that pervasive levels of anxiety could diminish self-efficacy, including CSE (Barbee et al., 2003; Goreczny et al., 2015; Larson & Daniels, 1998). For example, researchers have examined attachment related anxiety as a predictor of CSE, suggesting this direction of prediction. In fact, there is some evidence that attachment anxiety and avoidance both negatively impact CSE.

CSE and attachment. Attachment has been demonstrated to be a vital contributor to anxiety (Schore & Schore, 2008) and anxiety negatively impacts counselor self-efficacy (Barbee et al., 2003; Goreczny et al., 2015; Larson & Daniels, 1998). Accordingly, it is important to understand attachment anxiety and how it might impact

counselor self-efficacy. Though there is a dearth in the counseling literature pertaining to CSE and attachment, Marmarosh et al. (2013) found that trainees with fearful attachment tended to have lower CSE ($r = -.30, p < .05$). Being that fearful attachments are a combination of both high anxiety and high avoidance, the researchers indicated that both attachment anxiety and attachment avoidance may impact CSE, yet little is known about the unique contributions of attachment anxiety and avoidance to CSE.

In their literature review pertaining to the impact attachment has on career-related variables, Wright and Perrone (2008) discussed the influence attachment can have on self-efficacy among undergraduates. By comparing Social Cognitive Career Theory to Attachment Theory, Wright and Perrone (2008) depicted how individuals who have more secure attachment styles are more likely to venture out and try new, challenging tasks that can increase their self-efficacy. Conversely, individuals who display more anxious or avoidant behaviors are less likely to venture out of their comfort zones (Bowlby, 1973)

Wright and Perrone (2008) also described how attachment strategies occasion approach-avoidance behaviors. These approach-avoidance behaviors can impact self-efficacy as individuals who are more secure are more willing to approach efficacy building opportunities while those who are less secure are more likely to avoid them. This also may indicate that insecure attachment strategies negatively impact trainees' counselor self-efficacy which, in turn, may hinder counselor development.

The approach-avoidance behaviors that correspond with attachment inform internal working models (or core cognitive schemas), which also can impact trainees' development of counselor self-efficacy. Children who have a positive sense of self-worth

are more likely to portray secure attachment behaviors in adulthood (Bartholomew & Horowitz, 1991) and individuals with secure attachment behaviors have positive internal working models that do not exhibit anxious or avoidant behaviors (Brennan et al., 1998; Fraley et al., 2000). Individuals with secure attachment behaviors are more likely to engage in activities that lead to a higher level of self-efficacy (Wright & Perrone, 2008; Wright et al., 2014). Being that CSE also has self-generating aspects and attachment related behaviors and internal working models are more stagnant, finding new or more effective ways to increase CSE when trainees struggle with anxious or avoidant attachment strategies or negative internal working models is important. Mindfulness is one possible mechanism that may be beneficial to increasing CSE regardless of attachment strategies.

CSE and mindfulness. Trainees increase their counselor self-efficacy through mastery of attention (Greason & Cashwell, 2009) and mindfulness practice can help individuals strengthen their ability to control their attention (Linehan, 2014; The Linehan Institute, 2015). Greason and Cashwell (2009) found that mindfulness was a significant predictor of counselor self-efficacy. Using a sample of 179 students (129 master's-level interns and 50 doctoral students) from CACREP-accredited programs, Greason and Cashwell (2009) explored factors that impact mindfulness and counseling self-efficacy.

Using the *Five Factor Mindfulness Questionnaire (FFMQ: Baer et al., 2006)* to measure mindful attention and awareness, the *Counselor Activity Self-Efficacy Scales (CASES: Lent et al., 2003)* to measure CSE, a demographics questionnaire, and three other assessments that measured other variables (i.e., attention and empathy), Greason

and Cashwell (2009) used path analysis to analyze their data. They found that mindfulness significantly predicted counseling self-efficacy, $\beta = .34$ and accounted for 11% of the variance in the CASES mean scores (adjusted $R^2 = .11$, $t = 4.88$, $p < .01$).

Summary of CSE

Although there appears to be a growing body of research regarding CSE, there still appears to be a need for more empirical studies that investigate additional variables that impact CSE. Researchers have linked supervision, clinical experiences, and counselor anxiety to CSE and some researchers have even begun to link attachment and mindfulness to CSE. Recognizing that counselor development and clinical outcomes also are tied to trainee CSE, a better understanding of what other variables impact CSE warrants empirical attention. Being that anxiety negatively impacts CSE, attachment behaviors contribute to anxiety, and mindfulness can improve CSE, having a better understanding of how attachment anxiety and attachment avoidance impact CSE in conjunction with mindfulness is warranted. A review of the literature on attachment and mindfulness follows.

Attachment Theory

Attachment Theory, first conceived by John Bowlby and expanded through his collaboration with Mary Ainsworth, addresses the affective bonds infants make with caregivers early on in life and how those bonds can impact psychological functioning throughout the lifespan (Ainsworth 1989; Bowlby, 1989). Early in his research, Bowlby (1960; 1961; 1963) posited that attachment was exhibited through biological behaviors (e.g., sucking, smiling, clinging, following) by infants onto the primary caregiver, or

attachment figure, as an active and an essential part of survival. Clinging and following were believed to be the most important attachment behaviors for infants to exhibit onto caregivers (Ainsworth & Bowlby, 1991) because these behaviors were perceived as being vital to the survival of the infants. These attachment behaviors are a part of the attachment system, which is based on a four-part behavioral system (e.g., attachment, caregiving, exploration, and sexuality) that impacts how individuals connect intra and interpersonally throughout their lifespan (Paetzold & Rholes, 2015).

Through her extensive research, Ainsworth expanded on Bowlby's Attachment Theory. One of Ainsworth's early studies (Ainsworth, 1967) involved the study of 28 Ugandan infants and their mothers. Ainsworth was interested in the behaviors the infants exhibited towards their mothers (Ainsworth & Bowlby, 1991). During her time spent observing the Ugandan infants and mothers, Ainsworth discovered what she believed were the early formations of attachment bonds when she noticed infants would cry or actively search for their mothers when scared, hurt, or hungry, positing that mothers were perceived to be a secure base and safe haven for the infants (Ainsworth 1967; Ainsworth & Bowlby, 1991). According to Ainsworth (1967), the infants in the Uganda study could be categorized into three groups:

1. Securely attached: infants who cried minimally when mothers were present and more so when the mothers were about to leave.
2. Insecurely attached: infants who cried a lot even when their mothers were present.
3. Nonattached: infants who appeared nonresponsive when left alone.

The categories Ainsworth created for infants, securely attached or insecurely attached (with insecurely attached children being either anxious or ambivalent) became most observable through her work in the “Strange Situation” study (Ainsworth, Blehar, Waters, & Wall, 1978; Ainsworth & Bowlby, 1991). The attachment categories Ainsworth utilized in the “Strange Situation” were based on infants’ interactions with their primary caregiver and were reflections of how infants learned to respond within the first 12-24 months of their lives when in need, based on how their caregivers responded in return to the infants’ behaviors (e.g., crying, hunger, smiling) (Ainsworth et al., 1978; Ainsworth & Bowlby, 1991). Ainsworth’s research provided important empirical support for Attachment Theory (Ainsworth & Bowlby, 1991). Throughout the years, researchers have expanded on Attachment Theory, especially the attachment categories, which has led to the study of adult attachment.

Adult Attachment

Bowlby’s initial work on Attachment Theory (Bowlby 1960; 1961) posited that early established attachments formed lasting effects through adulthood. Initially, he posited that these early attachments were largely deterministic of adult attachment, and only later in his career did he support the notion that early attachment experiences could be ameliorated through corrective experiences (1973; 1977; 1979; 1988). This led to researchers turning their attention more to adult attachment. For instance, Hazen and Shaver (1987) expanded on Bowlby’s work by studying adult attachment and how attachment behaviors impact romantic relationships. They posited that adult romantic partners build emotional bonds in a similar way to how infants and caregivers form

emotional bonds (e.g., feel safe when the other is near, have close physical contact, feel insecure when the other is unavailable). Unlike children, however, adults form attachment bonds with peers and sexual partners rather than parents (Hazen & Shaver, 1994).

Using the attachment categories for child-infant attachment (i.e., secure, anxious/ambivalent, and avoidant), Hazen and Shaver (1987) had adult participants identify the attachment category they belong to when thinking about their most important romantic relationship. What they found was that 56% of the adult participants classified themselves as secure, 25% classified themselves as avoidant, and 19% classified themselves as anxious/ambivalent which were similar proportions to how infant-mothers were classified by Campos, Barrett, Lamb, Goldsmith, and Stenberg (1983), suggesting that adult attachment works in a similar way as infant-mother attachment (Hazen & Shaver, 1987).

The attachment categories based on the attachment strategies adults' exhibit with their romantic partners led to the further development of adult attachment *styles* (Bartholomew & Horowitz, 1991; Brennan et al., 1998; Hazan & Shaver, 1987; 1994). These styles are attachment strategies that refer to individuals' relationship behaviors and tendencies when activated by a real or perceived threat that can trigger secure, anxious and/or avoidant behaviors (Shaver & Mikulincer, 2006). According to Bartholomew and Horowitz (1991), a secure adult attachment style is a combination of low anxiety and low avoidance whereas an insecure adult attachment strategy is categorized as either preoccupied, fearful, or dismissive attachment *style*. These insecure attachment styles

reflect a combination of either high anxiety and low avoidance (preoccupied), high avoidance and low anxiety (dismissive), or both high anxiety and high avoidance (fearful) (Bartholomew & Horowitz, 1991).

Attachment strategies can be activated after experiencing a real or perceived threat and can impact relationship security. When activated, adults with:

- *secure* attachments exhibit trust in others, are emotionally stable and available, (Shaver & Mikulincer, 2006) and have low attachment-related anxiety and low attachment-related avoidance (Fraley & Brumbaugh, 2007).
- *anxious* attachments question their worth and ability to be loved by others (Shaver & Mikulincer, 2006) and worry that their partner, or attachment figure, will not be responsive when they need them (Fraley & Brumbaugh, 2007).
- *avoidant* attachments pull away from seeking comfort and support in others, depend mostly on themselves (Shaver & Mikulincer, 2006), and withdraw from those closest rather than proximity seeking to help them regulate (Fraley & Brumbaugh, 2007).

Those with an anxious style are uncertain about being loved, worthy of love, or likely to be supported by a partner. Throughout the years, researchers have come to better understand attachment behaviors and recognize that they can vary in different relationships and anxiety and avoidance are better understood as dimensional constructs (Bartholomew & Horowitz, 1991; Brennan, Clark, & Shaver, 1998; Fraley & Waller, 1998). Ranges of anxiety and avoidance on the two-dimensional scale then determine whether a person has a secure or an insecure (i.e., anxious and/or avoidant) attachment

strategy. A secure adult attachment strategy is a combination of low anxiety and low avoidance whereas insecure adult attachment strategies are categorized as either preoccupied, fearful, or dismissive attachment *styles* and are a combination of either high anxiety and low avoidance (preoccupied), high avoidance and low anxiety (dismissive), or both high anxiety and high avoidance (fearful) (Bartholomew & Horowitz, 1991). Depending on the level of anxiety and/or avoidance counselor trainees' manifest and exhibit, their attachment strategies could impact their development and the well-being of clients.

Although attachment strategies originally were categorized as one of the four attachment styles, most contemporary attachment researchers are moving away from this categorization and measuring attachment anxiety and avoidance as continuous constructs (Roisman, Fraley, Belsky, 2007; Fraley & Waller, 1998) using instruments such as the *Experiences in Close Relationships-Revised* (Fraley et al., 2000) to capture a more accurate depiction of attachment. To illustrate this notion, using the raw data from three studies published between 1998-2006, Roisman, et al., (2007) used taxometric methods to better understand if attachment is best measured categorically or dimensionally. The researchers used a sample of 504 participants' data from studies that utilized a well-known and validated measure, the *Adult Attachment Interview* (AAI; George, Kaplan, & Main, 1985; Main, Kaplan, & Cassidy, 1985), that classifies adults into attachment categories (i.e., *secure, dismissing, and preoccupied or unresolved* if the category is unclear). Using the participants AAI data, the researchers used the taxometric method *MAXCOV-HITMAX* (MAXCOV; Meehl, 1973; Meehl & Yonce, 1996) to investigate

whether there are underlying dimensions in the categorical data presented from the three studies that used the AAI.

After using the taxometric technique to compare the categories of secure vs. dismissing, preoccupied vs. not preoccupied, and earned vs. continuous-secure, Roisman et al., (2007) found that the “variability observed in the empirical base rate estimates (.32) was more like a dimensional model (.19) than to a taxonic model (.11)” (p.682), indicating that attachment is more accurately depicted as dimensional than categorical. Therefore, categorizing individual attachment anxiety and avoidance as specific styles loses important nuances and does not take into consideration varying levels of anxiety and avoidance that can be relationship specific (Fraley, Heffernan, Vicary, & Brumbaugh, 2011; Roisman, et al., 2007) and, as mentioned in chapter one, this has implications for attachment-related behaviors relevant to establishing a healthy relationship, including the counselor/client relationship. Although researchers are moving away from categorizing and labeling individuals with specific attachment styles, attachment behaviors are still relevant and observable in individuals such as counselor trainees.

As mentioned earlier, attachment behaviors are a part of a larger attachment system that begins to develop in childhood. These early childhood interactions that lead to attachment behaviors also shape how individuals’ view themselves and others and impact what Bowlby referred to as internal working models (IWM or core cognitive schemas), another important aspect of attachment (Ainsworth & Bowlby, 1991; Bowlby, 1989; Bartholomew & Horowitz, 1991; Hazan & Shaver, 1994; Schore & Schore, 2008).

Internal Working Models

Internal working models are cognitive schemas that form based on caregivers' responsiveness to infants when the infants are in distress and exhibiting attachment behaviors (Ainsworth & Bowlby, 1991). These IWMs lead individuals to predict whether a caregiver will be available when needed, shape how individuals view themselves in relation to others, and shape how individuals view others (Ainsworth & Bowlby, 1991; Bowlby, 1988; Hazan & Shaver, 1994). The internal working model has two parts (e.g., view of self and view of others) that impact how individuals process social information throughout the lifespan and influence their attachment behaviors (Bartholomew & Horowitz, 1991; Bowlby, 1988; Dykas & Cassidy, 2011; Hazen & Shaver, 1994; Pietromonaco & Barrett, 2000). In reference to the current study, attachment anxiety and avoidance may impact counselor trainees' skill development and their intra-and interpersonal relationships, in part to influences these mental representations may have on counselor trainees' view of themselves and others (e.g., professors, supervisors, peers, clients). Although IWMs are not a key variable in this study, understanding the nuances associated with attachment anxiety and avoidance may help to explain how they can affect counselor trainees' development.

IWM and Modern Attachment Theory

According to Modern Attachment Theory, these cognitive schemas (i.e., IWMs) are a direct effect of early attachment situations that became unconsciously imprinted through neuropathways in the right brain and impact attachment strategies and situations in which individuals choose to engage (Schore & Schore, 2008). When individuals have

secure attachment strategies, they have a positive view of self and others, but when they have anxious or avoidant attachment strategies, they have a combination of positive and negative views of both self and other (Bartholomew & Horowitz, 1991). Among counselor trainees, it is likely that these IWMs also impact attachment strategies by influencing the trainee's perception of a situation and choice of action. For example, a secure attachment strategy with a positive IWM can impact individuals' willingness to engage in new tasks, accept inadequacies, and remain open to feedback (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1994; Wright et al., 2014), which are also important elements in developing CSE. Although IWMs develop from the "relationship between the brain/mind/body of both infant and caregiver held within a culture and environment that supports or threatens it" (Schore & Schore, 2008, p.10) and impact how individuals view and interact with themselves and others throughout life, they can be adjusted. Modern Attachment researchers depict that through supportive relationships and environments, insecure IWMs and their brain pathways can be repaired (Schore & Schore, 2008) which is like the notion that through corrective experiences, adults can change their attachment behaviors (Bowlby, 1988).

As Attachment Theory continues to evolve with the integration of interdisciplinary studies, Modern Attachment Theory uses neurobiological support to highlight the important role attachment plays when it comes to developing healthy relationships and positive efficacy. Whereas Attachment Theory originated during a time when behaviorism was emphasized, modern Attachment Theory now uses neurobiological backing to enhance our understanding of attachment and depict how

“affective bodily based attachment processes are nonconsciously interactively regulated within the mother–infant dyad, and how psychobiological attunement and relational stress impact the experience-dependent maturation of early developing brain regulatory systems” (Schore & Schore, 2008 p.10). The affective nature of modern Attachment Theory leads it to be a regulatory theory emphasizing the early interactions between infants and their caregivers, such as separation stress such that “attachment patterns of protest, despair, and detachment impact the development of the right hemisphere” (Schore, 2000 p.35), which indicate that attachment is something that is more than a behavior and is hardwired in the mind, body, and affective regulation system as we develop. Understanding how attachment interactions impact the right side of the brain are important because, the right hemisphere of the brain controls various parts of our existence (e.g., our unconscious, our intuition, how we interpret our interactions with others) that can impact trainees’ ability to be efficacious and effective counselors.

Recognizing that early interactions with our caregivers impact our affect regulation and brain functioning throughout the lifespan is important when it comes to understanding attachment strategies and how trainees learn to self-regulate in different settings (e.g., career, training programs, relationships) and how they develop efficacy. These early interactions (e.g., insecure attachment experience) become hardwired into the brain and impact how individuals interact with others, self-regulate, and develop a sense of self (Schore & Schore, 2008), and these interactions may cause approach-avoidance behaviors that negatively impact self-efficacy (Wright and Perrone, 2008). Despite issues (e.g., approach-avoidance, withdrawal, hyperactivity) caused by attachment behaviors

that have become hardwired in the brain and influence ways trainees may think and act, Schore and Schore (2008) found that corrective experiences can occur in nurturing relationships and environments. To understand ways to foster corrective experiences and enhance trainees' counselor development, training experiences, and by extension client outcomes, researchers in counseling and related fields have been investigating attachment more intentionally.

Attachment and Counseling

For years, researchers have been interested in better understanding how counselor and counseling trainees' attachment strategies impact the supervisor-supervisee relationship (Gnilka, Rice, Ashby, & Moate, 2016; Gunn & Pistole, 2012; Pistole & Fitch 2008; Pistole & Watkins, 1995; Renfro-Michel & Sheperis, 2009; Marmarosh et al., 2013), counselor development (Greggo & Becker, 2010), and the counselor-client therapeutic relationship (Black, Hardy, Turpin, & Parry, 2005; Bucci, Seymour-Hyde, Harris, & Berry, 2016; Gnilka et al., 2016). Recognizing the impact these areas may have on counselors and counselor trainees may be an important area to better understand when it comes to fostering the continued growth of those in the counseling field. The literature in each of these areas will now be reviewed.

Supervision. Attachment strategies have been shown to impact the supervisory working alliance and trainees' supervision outcomes. Although researchers have found mixed results with some researchers finding no or limited connections between attachment strategies and the supervision relationship or outcomes (Dickson, Moberly, Marshall, & Reily, 2011; Riggs & Bretz, 2006), other researchers (Gnilka et al., 2016;

Gunn & Pistole, 2012; Marmarosh et al., 2013) have found significant relationships. In particular, researchers have empirically connected both secure and insecure attachment strategies to the supervisory working alliance.

For example, Gunn and Pistole (2012) examined the mediating effect of supervisory alliance on attachment to the supervisor and disclosure within the supervision relationship. They found that secure attachment was positively related to supervisor alliance among counselor trainees using an internet-based survey with a sample of 480 master's and doctoral level participants from CACREP counseling programs, counseling psychology programs, and clinical psychology programs. Specifically, they used the *Experiences in Supervision Scale* (ESS) adapted by the researchers from the *Experiences in Close Relationships Scale* (ECR) to measure trainees' attachment to their supervisor, the *Supervisory Working Alliance Inventory-Trainee Version* (SWAI-T) to measure the supervisory working alliance, a *Disclosure in Supervision Scale* (DSS) developed specifically for the study to measure supervisee disclosure in supervision, and a demographics questionnaire.

Using structural equation modeling to examine the mediating effects of supervisory alliance on attachment to the supervisor and disclosure in supervision relationship, Gunn and Pistole (2012) found that both structural models they tested were a fit for the data. In the first model, attachment security was significantly and positively related to the supervisory alliance with attachment security explaining 75% of the variance in rapport (i.e., bond) ($\beta=.89, p < .01$) and 29% of the variance in client focus ($\beta = .54, p < .01$). In the second model, which was a better fit, attachment security was

significantly and positively related to rapport and client focus, rapport and disclosure were significantly and positively related, and attachment security and disclosure were significantly and positively related, supporting the hypothesis that trainees' secure attachments impact the supervisory relationship (Gunn & Pistole, 2012). Although the researchers found significant results, they indicated that a limitation of this study was the validity of the ESS and the DSS measures they developed. Recognizing the importance of using psychometrically sound assessments to measure attachment anxiety and avoidance, the current study will use the ECR-R to measure attachment anxiety and avoidance.

Similar to Gunn and Pistole (2012), Gnilka et al., (2016) also found that attachment was related to working alliance. Using a sample of 170 participants (148 females and 22 males) from CACREP programs at three training levels: masters-level ($n = 139$), doctoral level ($n = 23$), and educational specialists ($n = 8$), Gnilka et al., (2016) collected data using five measures. To measure attachment, they used the *ECR-R*, to measure supervisory working alliance they used the *Supervisory Working Alliance Inventory-Trainee Version (SWI)*; Efstation, Patton, & Kardash, 1990), to measure counselor-client working alliance they used the *Working Alliance Inventory-Short Form* (Tracy & Kokotovic, 1989), to measure perfectionism they used the *Almost Perfect Scale-Revised* (APS-R; Slaney, Rice, Mobley, Trippi, & Ashby, 2001) and they used a demographic questionnaire to gather additional data relevant to their study. Using a correlational design and multiple regression, Gnilka et al. (2016) found that attachment anxiety and avoidance were both significantly and inversely related to supervisory working alliance, with correlations of $-.21$ ($p < .05$) between anxiety and SWI and $-.23$ (p

< .05) for avoidance and SWI. This suggests that trainees with higher level of anxiety and/or avoidance had lower levels of supervisory working alliance.

These findings are like those of Marmarosh et al. (2013) study in that they found insecure attachments negatively impact the supervisory working alliance. Using the *Working Alliance Inventory-Short Form* to measure the alliance between student clinicians and the supervisors, the *Experience in Close Relationships Scale* to assess trainees' adult attachment styles, the *Therapist Attachment to Supervisor Scale* adapted from the *Client Attachment to Therapist Scale*, and the *Counselor Self-Estimate Inventory-Short Form* to measure trainees level of CSE, Marmarosh et al. (2013) analyzed the findings using bivariate correlations and hierarchical regression. They found a positive correlation between trainees with secure supervisory attachments and supervisory working alliance ($r = .83, p < .01$) and a negative correlation between trainees with fearful supervisor attachments and supervisory working alliance ($r = -.75, p < .01$). They also found a significantly positive correlation between trainees with avoidant attachments also having fearful attachments to their supervisor ($r = .33, p < .01$) (Marmarosh, et al., 2013). The results of this study depict ways in which attachment can impact trainees throughout their supervisory experiences.

Although this study examined how attachment can impact supervision and the working alliance, as mentioned earlier, it did not take into consideration other factors that impact trainees throughout their supervision experience, such as trainees' ability to be mindful in their supervision sessions. Staying focused, aware, and nondefensive in supervision is important because supervision has been shown to be a catalyst for

counselor trainee development (Bernard & Goodyear, 2004; Cashwell & Dooley, 2001; Pistole & Watkin, 1995; Stoltenberg, 1981). Marmarosh, et al. (2013) did take into consideration, however, how attachment relates to counselor development, specifically trainee's counseling self-efficacy, and having a better understanding of variables that impact counselor development is important to the counseling field and this study.

Counselor development. Despite the vastness of attachment research, there appears to be limited research regarding the impact attachment behaviors can have on counselor development, aside from the supervisory relationship (Gunn & Pistole, 2012; Pistole & Fitch 2008; Pistole & Watkins, 1995; Renfro-Michel & Sheperis, 2009; Marmarosh et al., 2013) and counselor-client working alliance (Black, et al., 2005; Gnilka, et al., 2016) literature. However, when examining empathy, an important skill in counselor development, and attachment, Trusty, Ng, and Watts, (2005) found that trainees' attachment anxiety and avoidance impact their development of empathy. In their study examining the effects of attachment on master's level counselor trainees' emotional empathy, a skill essential to being an effective counselor, Trusty et al. (2005) used structural equation modeling with a sample of 143 first year counseling trainees from a CACREP-accredited program. They used two measures, a measure of emotional empathy developed by Mehrabian and Epstein (1972) and the *Attachment Style Questionnaire* (ASQ; Feeney, Noller, & Hanrahan, 1994).

After running multiple statistical analysis, the researchers found that their initial model was not a fit due to the variable attachment avoidance, but given what the literature reflected regarding attachment anxiety, they modified their model to eliminate

avoidance from their interaction model. After modifying the model, they found that the chi-square equation indicated a model fit $\chi^2 (7, N= 143) = 6.61, p = .471$). The correlation between avoidance and anxiety for the population of interest was .58, suggesting that although anxiety and avoidance are separate constructs they may be moderately correlated among counselor trainees (Trusty et al., 2005). In addition, anxiety and avoidance both relate significantly to empathy, with anxiety having a positive effect (critical ratio = 3.687, $p < .001$) and avoidance having a negative effect (critical ratio = -2.476, $p < .05$) (Trusty et al., 2005).

Somewhat surprisingly, the results from the Trusty et al. (2005) study indicated a positive relationship between attachment anxiety and empathy (i.e., as attachment anxiety increases, empathy tends to increase). The authors had hypothesized that trainees with secure attachments (i.e., low anxiety and avoidance) would have the highest levels of empathy but found that trainees with higher levels of attachment anxiety tended to have higher levels of empathy.

This finding is important to note since in the current study, I hypothesize a significant negative relationship between attachment anxiety and avoidance with CSE, with the assumption that participants with lower levels of attachment anxiety and attachment avoidance will have higher levels of CSE. A limitation of the Trusty et al. (2005) study is that the researchers used the ASQ, which uses categorical data. More recently, researchers have suggested that continuous measures of attachment are more accurate (Roisman, et al., 2007; Fraley & Waller, 1998).

When it comes to trainees' counselor development and trainees' intra- and interpersonal issues, Greggo and Becker (2010) argued that attachment anxiety and avoidance should be addressed. Counselor educators should be addressing attachment anxiety and avoidance when counselor development is not going as it should be and trainees are struggling, either academically or personally (Greggo & Becker, 2010). Helping trainees to gain more insight into how their attachment strategies are impacting their development may help them to improve their counselor development, including counseling self-efficacy, among other critical skills. Providing short-term counseling to trainees that is focused on trainees' attachment may help them gain insight into how their attachment behaviors impact their professional development (Greggo & Becker, 2010). Trainees who have better insight into their attachment patterns may begin to monitor their reactivity to those around them, seek out additional counseling for themselves, and continue to use attachment education to increase their professional development (Greggo & Becker, 2010). Trainees' attachment anxiety and avoidance can impact not only the development of critical counselor skills, but also the counselor-client relationship and therapeutic alliance.

Counselor-client therapeutic relationship. The counselor-client relationship, or client working alliance, is an important part of counseling. Researchers have begun the process of clarifying the connection between attachment and the working alliance. For example, researchers have established that attachment anxiety and avoidance impact the working alliance (Black et al., 2005; Diener & Monroe, 2011; Gnilka et al., 2016) and that working alliance positively predicts counseling outcomes (Orlinsky, Ronnestad, &

Willutzki, 2004). Further, beginning trainees often lack the skills needed to buffer anxiety that interferes with their ability to engage in the complex work needed to be an effective counselor (Skovholt & Ronnestad, 2003).

Although attachment and the counselor-client alliance have been measured extensively, most researchers utilize clients' attachment styles or strategies to better understand the working alliance. For example, in their meta-analysis of adult attachment and the therapeutic alliance in individual therapy, Dierner and Monrie (2011) examined 17 published studies that assessed adult attachment in client's close relationships and the working alliance with their therapist. The results of their study indicated that securely attached adults endorse stronger working alliances and those with insecure attachments have weaker working alliances (Dierner & Monrie, 2011). Although this indicates that attachment styles are related to the therapeutic relationship, it does not take into consideration how the counselor or counselor trainees' attachment strategies impact the therapeutic alliance.

Other researchers have considered counselor and trainees' attachment strategies and the therapeutic alliance. In their study of therapists' self-reported attachment styles, theoretical orientations, therapeutic working alliance, and reported problems in therapy, Black et al., (2005) used surveys to sample 491 therapists. There were both male ($N=146$) and female ($N=345$) participants and they ranged from 1 year post-degree experience to over 10 years post-degree experience. Using the *Attachment Style Questionnaire* (ASQ; Feeney et al., 1994) to measure attachment behaviors, the *Agnew Relationship Measure* (ARM; Agnew-Davies et al., 1998) to measure therapeutic

alliance, the *Therapist Problem Checklist* (PCL; Shroder, personal communication, 1999) to assess problems in therapy and the *Brief Eysenck Personality Questionnaire* (EPQ; Eysenck & Eysenck, 1969) to measure general personality features, Black et al. (2005) used correlational statistics to examine the variables. They found that there was a significantly positive correlation between secure attachment styles (based on the ASQ confidence scale) and the mean ARM score (i.e., therapeutic alliance) ($r = .441, p < .001$) and a significantly negative correlation between insecure attachment styles based on four of the subscales of the ASQ (i.e., discomfort with closeness, relationships as secondary, need for approval, and preoccupation with relationships) and therapeutic alliance with correlations ranging from $r = -.315 (p < .001)$ to $r = -.182 (p < .001)$ (Black et al., 2005).

These results suggest that therapists with more secure attachments tend to have stronger working alliances with clients. Black et al. (2005) also found that therapists reporting insecure attachments reported having more problems in their therapy sessions. A limitation of this study however, is that the researchers used post-degree therapists rather than trainees, which limits the generalizability of the study and possibly makes it harder for the therapists to gain access to resources that could help buffer the effects of their attachment strategies.

Similarly assessing experienced therapists and counselors, Bucci et al. (2016) also examined how attachment impacts the therapeutic alliance. Using the *Relationship Questionnaire* (RQ; Bartholomew & Horowitz, 1991) to assess attachment and the *Working Alliance Inventory* (WAI; Horvath & Greenberg, 1989) to assess the working

alliance among a sample of 30 therapist-client dyads. Bucci et al. (2016) found that therapists with fearful attachment styles had a negative correlation to working alliance ($r = -0.63, p = 0.016$), therapists with preoccupied attachment styles reported poorer working alliance ($r = 0.80, p = 0.001$), and therapists with dismissing attachment styles actually reported higher alliances when working with more symptomatic clients ($r = 0.75, p = 0.002$). The results from this study indicate that therapists' attachment behaviors impact the therapeutic relationship. Although the results of this study provide empirical support for how counselors' attachment behaviors impact the counselor-client working alliance, a limitation of this study is the measurement used to assess attachment. The RQ measures attachment categorically and, as aforementioned, researchers are increasingly measuring attachment anxiety and avoidance as continuous variables rather than measuring attachment categorically. While this study did take into consideration how therapist attachment can impact the therapeutic relationship, it only used experienced therapists and not trainees and did not consider the role counselor mindfulness might play.

Gnilka et al. (2016), however, recognized the importance of understanding how trainees' attachment anxiety and avoidance impact the counselor-client relationship. They investigated counselor supervisee attachment styles and the counselor-client working alliance. Using a correlational design and multiple regression, they found that anxiety and avoidance were significantly and inversely related to counselor-client working alliance, with anxiety and working alliance correlations ($r = .36, p < .05$) and avoidance and working alliance correlations ($r = .25, p < .05$) indicating that attachment anxiety and

avoidance can have negative effects on the counselor-client working alliance. Although this study examined how trainees' levels of attachment anxiety and avoidance can impact both the supervisory and counselor-client working alliance, it did not examine how trainee attachment can impact their CSE or take into consideration how interventions such as mindfulness may buffer the impact of attachment on relationships (i.e. intra-and interpersonal).

Summary of Attachment

Although Attachment Theory continues to grow, there still appears a need to better understand how it impacts counselor trainee development. As counselor trainees begin to develop their skills, their actions are most likely a result of their previous experiences and unconscious action motivated by the attachment experiences that have been integrated into the right hemisphere of their brain. As trainees are learning to self-regulate in new environments, they are also called upon to use their nonconscious, nonverbal, affectively associated communication skills that lead to clinical sensitivity, empathy, and affect regulation (Schore & Schore, 2008). It appears that attachment anxiety and avoidance may impact trainees' development of critical counselor skills (e.g., CSE), the supervisory relationship, and the counselor-client relationship, yet one possible way to decrease the negative effects of attachment related strategies is through mindfulness training if, in fact, mindfulness is found to provide a buffer. Mindfulness may help to increase awareness of unconscious processes (i.e., thoughts and actions) associated with attachment anxiety and avoidance in counselor trainees. A review of mindfulness literature follows.

Mindfulness

Mindfulness practice, although a relatively new topic in the counseling literature, has existed for centuries. *Mindfulness*, or the ability to utilize intentional attention in the present moment and acknowledge all aspects of one's current experience without judgment (Kabat-Zinn, 1990; Linehan, 1993; 2014), has its roots in Buddhism, yet is not tied specifically to one culture (Bruce, Shapiro, Constantino, & Manber, 2010). Often, Jon Kabat-Zinn is credited for integrating this Eastern practice in the Western medical world and igniting interest within therapeutic settings. Kabat-Zinn (1990) highlighted the therapeutic benefits of cultivating awareness through mindfulness practice and developed the Mindfulness-Based Stress Reduction (MBSR) program that will be discussed in detail later in this chapter.

Although mindfulness may seem abstract, it has been shown to have both cognitive components (e.g., awareness) and heart qualities (e.g., compassion) (Schmidt, 2004), and there are specific *what* skills (i.e., *observe, describe, participate*) and *how* skills (i.e., nonjudgmentally, one-mindfully, and effectively) used to help individuals understand, practice, and utilize mindfulness more intentionally (Linehan, 1993; 2014). Similar to Linehan (1993; 2014), Williams, Teasdale, Segal, and Kabat-Zinn (2007) described mindfulness as intentional, experiential, and non-judgmental and as a way to experience things through the body and senses. Mindfulness is rooted in the consciousness and utilizes *awareness* (i.e. when stimulated through the senses, awareness is registered in consciousness) and *attention* (i.e., the focal point of the awareness) (Brown, Ryan, & Creswell, 2007).

Definition

Mindfulness is complex. Although Western definitions of mindfulness have varied, they often incorporate similar elements. For example, Kabat-Zinn and colleagues have defined mindfulness as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally” (Kabat-Zinn, 2003 p.145; Williams et al, 2007 p. 47), while Bishop et al (2004) posited an operational definition that describes mindfulness as having two-components: 1. Self-regulation of attention that allows for present moment living (i.e., awareness of thoughts, feelings, sensations) and 2. An orientation to the present moment experiences that allows for observation, curiosity, and acceptance. These researchers acknowledge the importance of present moment living, awareness, attention, and a nonjudgmental stance as aspects of mindfulness. Mindfulness also has been operationalized into five facets (i.e., observing, describing, acting with awareness, nonjudgmental, and nonreactivity) to make measuring aspects of mindfulness more precise (Baer et al., 2006). In order to cultivate these mindfulness facets, practice is a necessity.

Mindfulness Practice and History

Practicing mindfulness can be challenging, yet it is an essential component to achieving present moment living. By practicing mindfulness, individuals increase their ability to be present in the moment, acknowledge all aspects of their current experience (i.e., physical, mental, and emotional), including those that are unpleasant, and actively choose to exist in the present moment (Linehan, 1993; 2014; The Linehan Institute, 2017; Williams et al., 2007). Mindfulness practice can be either formal or informal. Formal

practice can include activities like yoga and sitting meditations and informal practice can happen in any moment when the conscious choice to be nonjudgmental and aware of what you are doing in the present moment (e.g., eating, walking, listening) (Germer, Siegel, & Fulton 2013; Greason & Welfare, 2013). According to Fulton (2016) “mindfulness training typically includes both mindfulness practices that produce awareness and insight, and loving kindness and compassion practices that foster compassion for both self and others”(p. 361). Although present moment living can have both pleasant and unpleasant experiences, mindfulness practice may help individuals accept their experiences without judgment and, by extension, help individuals to accept and care for others.

Although working towards accepting painful situations rather than trying to avoid them may be difficult, it is an essential aspect of mindfulness. Mindful awareness is centered on a Buddhist philosophy that suffering is inevitable. Buddha taught that ignoring or distracting oneself from suffering does not eliminate it, rather it causes more suffering (Geller & Greenberg, 2012). Thus, cultivating nonjudgmental attention and awareness that allows individuals to engage in present moment living may be vital to overcoming difficult situations, distractions, thoughts, emotions, and behaviors, among other things.

The notion that moving nonjudgmentally towards ones’ experiences (pleasant or unpleasant), with attention and awareness is fundamental to mindfulness. According to Thera (1973), in Buddhism *sati* (mindfulness) is associated with *sampajañña* (clear comprehension) and utilized to make purposeful actions without reacting to them. By

increasing their nonjudgmental present moment awareness, individuals who cultivate mindfulness may learn to focus on their current experiences, let go of ruminating thoughts or fears about the future, and begin to alleviate their personal suffering (Linehan 1993, 2014; Williams et al., 2007) which can, in turn, help them to become more open, empathetic, and nonjudgmental towards others (Fulton, 2016; Fulton & Cashwell, 2015; Greason & Cashwell, 2009; Greason & Welfare, 2013). Moving towards difficult experiences without judging or reacting to them is important to eradicate suffering. According to Geller and Greenberg (2012), “The main idea behind mindfulness is that if we have less reactivity to our experience, whether it be positive, negative, or neutral, our suffering will be reduced” (p. 181). Because cultivating mindfulness is associated with the reduction or elimination of suffering, mindfulness-based treatment programs and practice have gained the attention of scholarly researchers.

Mindfulness-Based Treatment Programs

Although mindfulness practice has existed for centuries, it is a relatively new topic in the counseling field. In fact, mindfulness practice, treatment, and research has exploded in the past two decades. Mindfulness-based treatments have been utilized and studied for effectiveness with a range of issues (e.g., ADHD, depression, anxiety, chronic pain, mood disorders) across different populations (e.g., adults, children, therapists) (Hayes, Villatte, Levin, & Hildebrandt, 2011). In 2005, a search among the psychological literature found 365 peer-reviewed mindfulness-based articles and by 2013 there were more than six times that amount, with over 2,000 peer-reviewed articles (Germer, et al., 2013). As mindfulness research and literature has grown throughout the years,

empirically supported treatment programs that intentionally focus on teaching mindfulness have emerged. For instance, Mindfulness Based Stress Reduction Program (Kabat-Zinn, 1990), Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002), Dialectical Behavior Therapy (DBT; Linehan, 1993), and Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson 1999) are all well-known theories that employ mindfulness as an essential element to treatment (Germer, 2005; 2013). Each program focuses on cultivating mindfulness skills to help individuals' increase the quality of their lives.

1. The Mindfulness Based Stress Reduction (MBSR) Program was created by Kabat-Zinn (1990) as a way for individuals to reduce chronic pain and cultivate healthier coping skills while learning to let go of past thoughts and/or fears about the future (Raab, 2014; Shapiro, Brown, & Biegel, 2007). MBSR typically lasts 8-10 weeks, consists of classes that last about 2-2.5 hours, teaches participants various mindfulness and meditation practices to help them engage more fully in the present moment (e.g., meditation, breathing, body sensation awareness, yoga), and utilizes informal and formal mindfulness practice (Raab, 2014; Shapiro, Astin, Bishop, & Cordova, 2005; Shapiro et al., 2007).
2. Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002) was created by Segal et al. (2002), after being inspired by the success of the MBSR program (Kabat-Zinn, 1990) and utilizes a similar treatment approach (i.e., 8-week duration with two-hour sessions). MBCT differs from MBSR in that it was developed as a relapse-prevention program to target and treat those suffering

with depression (Seligman & Reichenberg, 2014) and utilizes Cognitive Behavioral Therapy (CBT) principles. Similar to MBSR program, MBCT relies on teaching mindfulness to participants in order to raise their awareness of thoughts and foster nonjudgmental acceptance of their experiences. The goal of MBCT is to help clients become aware of their typical reactions to automatic thoughts and help them to step back and recognize them as thoughts, not facts, in which they can choose how they want to respond to them in order to create more effective responses (Felder, Dimidjian, & Segal, 2012)

3. Dialectical Behavior Therapy (DBT; Linehan, 1993) was created by Marsha Linehan (1993) to treat individuals struggling with Borderline Personality Disorder (BPD) and chronic suicidal ideation (Linehan, 1993; The Linehan Institute, 2017) and is also an outgrowth of CBT. DBT differs from CBT, however, in that it integrates and centers mindfulness practice as a foundational element to the theory and treatment. Over the years, DBT has been shown to be effective in treating individuals struggling with an array of issues (e.g., depression, anxiety, addictions, self-harm, personality disorders, co-occurring disorders) (Linehan, 2014). DBT counselors and therapists teach individuals to use a dialectical approach to life with a view of both *acceptance* and *change*, view mindfulness as a core module essential to the other three modules in which DBT is based (i.e., distress tolerance, emotion regulation, and interpersonal effectiveness), and aim to help individuals learn how to regulate emotions and cognitions to create a more meaningful life (Cannon & Umstead, in press;

Linehan 1993, 2014). Similar to MBSR, MBCT, and ACT, DBT utilizes mindfulness as a treatment intervention to help clients increase the quality of their lives.

4. Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) is also considered a third-wave CBT theory and stemmed from Relational Frame Theory (RFT) (Hayes & Berens, 2004). ACT differs from CBT in that the teachings do not focus on having individuals stop or eliminate difficult thoughts and feelings. Instead, ACT counselors and therapists teach mindfulness and acceptance based strategies to help clients notice, accept, and be present with those thoughts and feelings as they learn to choose more effective value driven behaviors (Hayes, Strosahl, & Wilson, 2012). ACT utilizes six core principles (i.e., cognitive defusion, acceptance, present moment contact, observing the self, values, and committed action) to help individuals struggling with things such as experiential avoidance in order to help them learn to achieve cognitive flexibility and embrace a more value driven life (Harris, 2006).

Although other mindfulness-based treatment programs exist, these well-known programs highlight the effectiveness of mindfulness-based treatment programs throughout the past two decades. Mindfulness-based treatment programs and practice also have been influential within the counseling field. For instance, when counselors practice mindfulness, they increase important skills such as empathy, compassion, and acceptance and they learn to be present within themselves and with their clients (Campbell & Christopher, 2012; Geller & Greenberg, 2012). Being that mindfulness may

produce awareness and insight as well as foster compassion for self and others, among other benefits, mindfulness appears to be an important topic to continue exploring related to counselors-in-training, counseling professionals and, by extension, clients.

Mindfulness and Counseling

Due to the fact that increased mindfulness tends to increase an individual's ability to be aware of their attention and intentionally engage internally and externally in the present moment (Kabat-Zinn, 1990; Linehan, 1993; 2014), can be cultivated over time (Kabat-Zinn, 1990, Linehan, 1993; 2014), is linked to lower levels of anxiety in counselors (Fulton & Cashwell, 2015; Shapiro, et al., 2007), improves mental health (Baer, 2003; Shapiro et al., 2007), and is linked to counselor development and critical counselor skills (Christopher, Christopher, Dunnagan, & Schure, 2006; Fulton, 2016; Geller & Greenberg, 2012; Greason & Cashwell, 2009; Grepmaier et al., 2007; Schure, Christopher, & Christopher, 2008; Shapiro et al., 2007), the therapeutic relationship (Buser, Buser, Petersonm & Seraydarian, 2012; Campbell & Christopher, 2012; Fulton, 2005; Greason & Welfare, 2013; Shapiro & Carlson, 2009) and therapeutic outcomes (Grepmaier et al., 2007), researchers in the counseling field have continued to show interest in understanding how mindfulness can aid counselors and counselor trainees. A more in-depth view of how mindfulness impacts some of these key factors is presented next.

Mindfulness and Anxiety

In their study examining mindfulness, compassion, empathy and anxiety, Fulton and Cashwell (2015) found that mindful awareness and mindful compassion both have a

significant negative relationship with anxiety among counselors in training. Further, the cognitive awareness portion was a stronger predictor of anxiety than was compassion. Among a sample of 152 counselor trainees (129 females and 23 males), they examined the relationships among mindful awareness, mindful compassion, anxiety, and empathy. They collected data using three assessments. To measure mindfulness, they used the *Five-Facet Mindfulness Questionnaire* (FFMQ; Baer et al., 2006) (mindful awareness) and the *Self-Other Four Immeasurables* (SOFI; Kraus & Sears, 2009) (mindful compassion). They used the *Interpersonal Reactivity Index* (IRI; Davis, 1980) to measure counselor empathy and the *Trimodal Anxiety Questionnaire* (TAQ; Lehrer & Woolfolk, 1982) to measure anxiety. Using multiple regression techniques to examine mindful awareness and mindful compassion as predictors of anxiety, they found a significant relationship $F(3, 148) = 26.83, p < .001$, with both predictors being significant, but awareness accounting for the majority of the variance (31.7% of 33.9%).

Similar to Fulton and Cashwell (2015), Shapiro et al. (2007) found that mindfulness training can decrease anxiety in counseling psychology students. Among a sample of 54 master's-level counseling psychology students, of which 56.9% were first year students, 29.4 % were second year students, 11.8 % were third year students, and 2% were in their fourth year, the researchers used a nonrandomized, cohort-controlled design that consisted of students enrolled in three different graduate-level psychology courses (i.e., Stress and Stress Management, Psychological Theory, and Research Methods) to address three research questions. First, Shapiro et al. (2007) wanted to test the efficacy of the MBSR program (Kabat-Zinn, 1990) in developing therapists-in-training. Second, they

wanted to see if MBSR is linked to increased mindfulness among the trainees and if it is also associated with positive outcomes. Finally, they wanted to examine the relationship between mental health outcomes and mindfulness practice among the trainees.

To test their hypotheses, Shapiro et al. (2007) integrated the MBSR program into the Stress and Stress Management course, and used the other two classes as control groups. To test mindfulness they used the *Mindfulness Attention Awareness Scale* (MASS; Brown & Ryan, 2003), to measure distress and well-being aspects (e.g., cognitive and affect dimensions, stress, anxiety, depression, self-compassion) they used the *Positive and Negative Affectivity Schedule* (PANAS; Watson, Clark, & Tellegen, 1988), the *Perceived Stress Scale* (PSS; Cohen, Kamarck, & Mermelstein, 1983), the *State/Trait Anxiety Inventory* (STAI; Spielberger, 1983), the *Reflection Rumination Questionnaire* (RRQ; Trapnell & Campbell, 1999), and the *Self-Compassion Scale* (Neff, 2003). They also had the students enrolled in the Stress and Stress Management course complete daily mindfulness journals throughout the entire 8-week MBSR intervention. The researchers used 2x2 ANOVAS to test the first two hypotheses (whether the MBSR program impacted trainees levels of distress and well-being and whether the MBSR intervention was associated with positive outcomes due to increased mindfulness) and they used simple regression to examine their third hypothesis (whether mindfulness impacted mental health outcomes among the participants).

Preliminary analysis showed that the students in the two control groups did not differ significantly on any of the measures (i.e., psychological and demographic) administered at the first time point so the data from these two groups were combined and

preliminary analysis also indicated that the MBSR intervention group did not vary from the control group at the start of the study in any areas other than year in program (i.e., MBSR group consisted of 38% first years whereas the control group consisted of 70% first year students). The results from their ANOVA tests examining whether mindfulness impacted trainees' levels of distress and well-being suggested that mindfulness had a significant relationship with all outcome variables including state and trait anxiety. The ANOVA test examining whether the MBSR increased mindfulness and positive outcomes overtime between the groups also suggested that mindfulness was significantly increased in the MBSR intervention group versus the control group. Participants in the MBSR intervention group showed significant decreases in state and trait anxiety (past month $p = .0002$ and present $p = .0005$) over the course of the MBSR intervention.

Using simple regression to examine the relationship between mindfulness and changes in trainee mental health outcomes, the researchers found mindfulness increased between the pre-post-intervention and that the participants' results from the MBSR intervention group suggested a significant relationship between mindfulness and lower trait anxiety ($\beta = -.52, p < .01$). Although state and trait anxiety are not the same as attachment anxiety, the results of this study suggest that trainees who intentionally engage in mindfulness practice may be more likely to exhibit decreased levels of anxiety than trainees who do not engage in mindfulness practice. The results also suggest that mindfulness practice may increase trainees overall mental health and well-being.

Mindfulness and Mental Health

Mindfulness (e.g., interventions, practice, treatments) has been linked to increased mental health and well-being in the general population (Baer et al., 2003; Davis et al., 2016; Hayes, et al., 2011; Linehan 2014; The Linehan Institute, 2017) as well as with mental health counselors and trainees (Shapiro et al., 2007; Raab, 2014; Rybak, 2013). According to Rybak (2013), counselors who practice mindfulness may increase their resiliency and practicing loving-kindness meditations may help counselors struggling with difficult issues (e.g., loss, trauma). Recognizing the importance of understanding the impact of mindfulness on trainees' mental health, Shapiro et al. (2007) also examined the impact mindfulness may have on counseling psychology trainees' well-being. Participants in the MBSR intervention group showed significant increases in self-compassion ($p = .0001$) and positive affect ($p = .0002$) and significant decreases in negative affect ($p = .04$), perceived stress ($p = .0001$), and rumination ($p = .0006$) over the course of the MBSR intervention. Using simple regression, the results from MBSR intervention group suggested significant relationships with mindfulness depicting an increase in self-compassion ($\beta = .52, p < .01$) and a decrease in both rumination ($\beta = -.57, p < .01$) and perceived stress ($\beta = -.65, p < .001$).

Using MBSR as a mindfulness intervention appears to suggest a significant impact on counseling psychology trainees' mental health and well-being. Although the results of this study suggest positive outcomes on trainees' mental health when they cultivate mindfulness, the participants used in this study were master's level counseling psychology trainees, which are not the same as counselor trainees. With this in mind, the

proposed study looks to examine counselor trainees enrolled in CACREP-accredited programs.

Mindfulness and Counselor Development

Regarding counselor development and the acquisition of critical counselor skills, mindfulness has been shown to be related to empathy and attention (Christopher et al., 2006; Fulton, 2016; Greason & Cashwell, 2009; Schure et al., 2008), counseling self-efficacy (Greason & Cashwell, 2009), reduced defensiveness (Christopher & Maris, 2010), and global (e.g., therapeutic relationship, managing the session, self-disclosure, tolerating affect) and specific counseling skills (e.g., paraphrasing, summarizing, requesting examples) (Buser et al., 2013). In their qualitative study exploring how teaching mindfulness to counselor trainees impacts their self-care, Christopher et al. (2006) identified positive themes that emerged when integrating mindfulness training into a counseling course. Conducting focus groups among a sample of 11 students (8 females and 3 males) from three counseling tracks (i.e., mental health counseling, school counseling, and marriage and family counseling) the researchers noticed positive themes emerge from students enrolled in the semester long *Mind/Body Medicine and the Art of Self-Care* course (which was loosely based on the MBSR program). Students shared that they noticed an increase in their ability to be aware and conscious with themselves and their clients. Students also endorsed a greater ability to be focused with clients and noticed both personal and professional benefits as a result of the course. The findings from this study suggest that teaching mindfulness to counselor trainees may benefit them both personally and professionally as well as their ability to attend to clients.

To better understand the benefits of teaching the mindfulness-based *Mind/Body Medicine and the Art of Self-Care* course to counselor trainees, Shure et al. (2008) depicted a 4-year qualitative study with data from the *Mind/Body Medicine and the Art of Self-Care* course longitudinally. Using data collected among 33 counseling students [(27 female and 6 males, Caucasian ($N= 30$), Japanese ($N= 2$), and Native American ($N = 1$)] from three counseling tracks (i.e., mental health, school, and marriage and family), the researchers identified a variety of themes. Themes that emerged throughout the study were that students noticed a change in their interpersonal relationships, their physical, emotional, mental states, and spiritual areas in their lives. They also noticed a theme regarding how the course helped trainees to be more comfortable when sitting in silence with clients and how it aided trainees' in being more attentive to the therapeutic process, which are two important counseling skills to master. However, there are limitations to this study and the Christopher et al. (2006) study. For example, both studies are qualitative and it is unclear if the participants from the Christopher et al. (2006) were also included in the Shure et al. (2008) study. Although the researchers and participants provided rich information that supports the idea that mindfulness may be beneficial for counselor trainees, the results from their studies are not generalizable. However, other scholarly researchers have found similar results while utilizing quantitative methods.

In their quantitative study examining the influence mindfulness practice has on counselor trainees counseling skill development, Buser et al. (2012) found that mindfulness practice may impact trainees' skill development. Among a sample of 59 students enrolled in an *Introduction to Counseling* course at a CACREP-accredited

program, the researcher's utilized three sections of the introductory course that were already established and randomly assigned each section into the control or intervention groups. The two intervention groups received the standard curriculum that the control group received and additional mindfulness-based presentations, in-class practice sessions, and discussions. The difference between the two intervention groups were that one group received *brief* mindfulness training (i.e., five weekly mindfulness practice sessions and post mindfulness practice group discussion) and the other intervention group received *extended* mindfulness training (11 weekly mindfulness practice sessions and post mindfulness practice group discussions). The control group did not receive mindfulness training and used the additional time to discuss other issues related to the course.

At the end of the semester, students from all three sections were asked to complete a recorded counseling session, where they served as the counselors and advanced graduate students served as their clients. The data was collected based on these counseling sessions and then analyzed by two raters who were randomly assigned sessions to watch and trained to use a modified version of the *Counseling Skills Scale* (CSS; Eriksen & McAuliffe, 2003). The modified CSS used four of the CSS subscales (Encourages Exploration, Deepens the Session, Develops the Therapeutic Relationship, and Manages the Session) to rate the trainees.

The results of this study suggested that mindfulness practice, whether brief or extended, may impact counselor trainees' development in a variety of ways. Using univariate ANOVA and post hoc comparisons, the brief and extended intervention groups had significantly higher scores than the comparison group on two of the subscales of the

CSS: *Develops Therapeutic Relationship* and *Encourages Exploration*, with the brief group having a medium effect (Cohen's $d = .77$ and $.67$, respectively) and the extended mindfulness training intervention group having a large effect (Cohen's $d = .92$ and $.82$, respectively). Overall, the results of this study suggested that mindfulness practice may increase trainees' counseling skills (e.g., session management, therapeutic relationship, tolerating affect, appropriate self-disclosure, paraphrasing, summarizing) when integrated into counseling courses. A limitation of this study is the modified version of the CSS. Although the researchers reported that the reliability of the modified subscales ranged from $\alpha = .64$ to $.89$, further studies may be needed to further establish the reliability of the modified CSS.

Fulton (2016) also found that mindfulness may impact trainees' counseling skills in her study examining how mindfulness relates to counselor characteristics and session impact. The proposed research questions in this study investigated the relationship among 1. Mindfulness and client perceived empathy, 2. Mindfulness, self-compassion, and session depth, and 3. How mindfulness and self-compassion relate to experiential avoidance and ambiguity tolerance. Using a sample 55 master's-level students (48 women and 7 men) enrolled in a CACREP-accredited counseling program and their clients, the researcher used a variety of assessments to test her hypotheses. Trainees were given: a demographics questionnaire, the *FFMQ* (Baer et al, 2006) to measure mindfulness, the *Self-Compassion Scale* (SCS; Neff, 2003) to measure self-compassion, the *Session Evaluation Questionnaire-Form 5* (SEQ; Stiles & Snow, 1984) to measure depth, to the *Acceptance and Action Questionnaire - II* (AAQ-II; Bond, et al., 2011) to

measure experiential avoidance, the *Multiple Stimulus Types Ambiguity Tolerance Scale-II* (MSTATS; McClain, 2009) to measure ambiguity tolerance, and the *Therapeutic Presence Inventory* (Geller, Greenberg, & Watson, 2010), while their clients were given a demographics questionnaire, the SEQ to measure session depth, and the *Barrett-Lennard Relationship Inventory-Client Form* (BLRI; Barrett-Lennard, 1962) to measure client perceived empathy.

Once participants had completed at least three counseling sessions together (to foster the therapeutic relationship) the assessments were administered and statistical analysis was conducted. Using an alpha level set at .05, Pearson product-moment correlations were used. Results indicated a significant relationship between the FFMQ and BLRI-empathy ($r = .35, p = .01$). The correlation between FFMQ scores and trainee reported SEQ (session depth) scores ($r = .37, p = .007$) and the SCS (self-compassion) and trainee reported SEQ (session depth) scores ($r = .37, p = .006$) also suggested a significant positive relationship with the trainees' reported SEQ (session depth) scores. Interestingly, the correlation between these scores and client reported SEQ scores was not significant. The trainees' FFMQ scores also suggested a significantly negative relationship with their AAQ-II (experiential avoidance) scores. Multiple regression analysis was also conducted and clients self-reported perceived empathy suggested a significant relationship with trainees' scores on the FFMQ subscale *Non-judge* ($b = .32, p = .03$). Overall, the finding in this study indicate that mindfulness may have a positive impact on counselor trainees' development, especially among empathy and emotional tolerance (being that mindfulness scores on the FFMQ suggested a negative relationship

with trainees' levels of experiential avoidance). Although this study investigated these important counselor skills having a better understanding of how mindfulness relates to other critical counselor skills (e.g. CSE) and struggles (e.g., attachment anxiety and avoidance) is warranted. The results of this study also support the notion that intentionally integrating mindfulness practice into counselor training programs may benefit both counselor trainees' and their clients.

Mindfulness and the Therapeutic Relationship

According to Buser et al. (2012), mindfulness practice, whether brief or extended, may impact counselor trainees' therapeutic relationships. The statistical results suggested that the two mindfulness intervention groups (brief and extended) had significantly higher scores than the comparison group on two subscales of the CSS, one being the *Develops Therapeutic Relationship* scale. The results of this study suggest that mindfulness-based interventions may increase the therapeutic relationship for trainees who engage in mindful practice.

Similar to Buser et al. (2012), Greason and Welfare (2013) found that counselors' mindfulness and meditation practice impact clients' perceptions of therapeutic factors. Among a sample of 83 counselor-client dyads, who were selected from college counseling centers identified through the CACREP database, Pearson product-moment correlations and multivariate analysis of variance (MANOVA) were conducted. The counselors completed the FFMQ (Baer et al., 2006) to assess their levels mindfulness and the *College Counselor Information Form* designed by the authors to gather information related to mindfulness practices, graduate studies, supervisory experiences, and

counseling experiences. Clients were asked to complete the *College Student Information Form*, the *Barrett-Lennard Relationship Inventory-Other-to-Self* (ver. 2, BLRI-OS-40 Barrett-Lennard, 1995) to measure unconditionally, empathy, congruence, and level of regard, and the *Working Alliance Inventory- Short Form* (WAI-SF; Horvath & Greenberg, 1989) to measure the therapeutic relationship. Several of the results from the study indicated significant relationships. For instance, the overall counselor scores on the FFMQ as well as the FFMQ subscale *Observe* were significantly correlated to scores on the BLRI-OS-40 and the WAI-SF. Using Pearson product-moment correlations, the FFMQ total score correlated with the BLRI-OS-40 total score ($r = .24, p < .05$) and the BLRI-OS-40 subscales of *Unconditionally* ($r = .26, p < .05$) and *Congruence*, ($r = .23, p < .05$). The FFMQ *Observe* score correlated with the BLRI-OS-40 subscales *Level of Regard*, ($r = .28$), *Unconditionally*, ($r = .23$), and *Congruence*, ($r = .33$), and the total BLRI-OS-40 score ($r = .29$), suggesting that mindfulness may have a positive relationship with critical counselor skills (e.g., unconditional positive regard, empathy) that may lead to a stronger therapeutic relationship. The clients' working alliance scores on the WAI-SF also appeared to suggest a significant relationship with the counselors FFMQ *Observe* scores; (Goal, $r = .24$, Bond, $r = .27$, Task, $r = .29$; $p < .05$) and WAI-SF total ($r = .30, p < .01$).

Because some of the counselors engaged in meditation practice, MANOVA analysis was also conducted to avoid a Type I error (i.e. those who engage in weekly meditation verse those who do not meditate) in relation to levels of mindfulness and client perceptions of the working alliance and counselor core conditions. Although the

practical significance was low, the MANOVA results suggested that there was a difference between the counselors FFMQ Observe scores $F(1,74) = 8.40, p < .01$ and the WAI-SF *Bond* subscale $F(1, 74) = 3.07, p < .05$ (Greason & Welfare, 2013). These findings suggest that mindfulness practice among counselors may increase the therapeutic counselor-client bond. Although this study was conducted using counselors and not counselor trainees, the authors suggest that counselors' levels of mindfulness may impact the counselor-client relationships, including how clients perceive the therapeutic relationship. Aside from mindfulness being a possible predictor for increasing the therapeutic relationship, it also has been linked to client outcomes.

Mindfulness and Counseling Outcomes

Although the literature connecting mindfulness and client outcomes is limited, Grepmaier et al. (2007) found that mindfulness is connected to client outcome among a sample of 18 psychotherapist-in-training and 124 randomly assigned clients at an inpatient facility in Germany. The researchers conducted a double-blind experimental design and provided all trainees with the meditation training (i.e., Zen meditation). The intervention group received the meditation training before their client sessions while the control group (i.e., non-meditation group) received the training later. After every counseling session, clients were asked to rate their experience using the *STEP* assessment with scales assessing clarification, problem solving, and relationship perspectives, and at the beginning and end of treatment they were given the *SCL-90-R* assessment that subjectively measured physical and psychological wellbeing. Additionally, at termination clients were given the *VEV* assessment that measured their levels of pessimism, stoicism,

relaxation, optimism, tension, and insecurity. Using regression techniques, the researchers found that compared to the control group, the clients who had trainees in the meditation training prior to session reported greater symptom reduction (e.g., anxiety, phobic anxiety, obsessiveness, anger) and they had higher ratings on both the problem-solving and clarification scales at termination (Grepmaier et al., 2007).

Although the Grepmaier et al. (2007) study suggests that trainee meditation training may help improve client outcomes, this study is not without limitations. Being that the study was conducted in Germany, the result of the study may not be generalizable to counselor trainees in the U.S. Interestingly though, the study was conducted at an inpatient facility, which may suggest that the clientele being treated suffered from more severe disorders, yet the clients in the intervention group showed reduced symptoms (or better client outcomes) than those in the control group. Recognizing that clients seeking treatment at inpatient facilities may be more difficult to treat, the results of this study appear to be promising for less severe populations such as those treated by counselor trainees in settings such as college campus counseling centers.

Summary of Mindfulness

As identified throughout this chapter, mindfulness has connections to both attachment anxiety and avoidance and counselor self-efficacy. Mindfulness has been linked to improvements in individual's ability to be aware of their attention, may potentially lead to lower high levels of anxiety in counselors, and may improve the mental health of both counselors and clients. Regarding counselor development and the therapeutic relationship, mindfulness appears to be beneficial in these areas as well.

Because mindfulness also can be cultivated, it seems to be an important area to explore further as improving mindfulness skills may improve other critical counselor skills (e.g., CSE, emotion regulation) that may aid counselor trainees in buffering any negative effects influenced by their attachment anxiety and/or avoidance (e.g., preoccupation, experiential avoidance, defensiveness). Although cultivating mindfulness (e.g., awareness skills) among counseling trainees may allow them to choose more effective responses, which could potentially increase CSE throughout their training programs, there is limited research pertaining to this topic which warrants further investigation.

CHAPTER III

METHODOLOGY

In this chapter, the methodology for examining the research variables are addressed, participants, instrumentation, and data collection procedures are explained, and the statistical analysis is described. A full depiction of the pilot study also is discussed.

Research Questions and Hypotheses

This study aimed to explore the relationships between attachment related anxiety and attachment related avoidance, mindfulness, and counselor self-efficacy among counselor trainees. Based on the literature review provided, it was hypothesized that counselor trainees who have higher levels of attachment anxiety and/or attachment avoidance would have lower levels of counselor self-efficacy. Additionally, it was hypothesized that mindfulness would a) have a positive relationship with counselor self-efficacy and an inverse relationship with anxiety and avoidance and b) moderate the relationship between both anxiety and avoidance and counselor self-efficacy. To test these hypotheses, two main research questions were addressed and three hypotheses explored.

Research Question 1: What is the relationship between counselor self-efficacy and attachment-related anxiety and avoidance?

Hypothesis 1: Attachment-related anxiety and avoidance would be negatively and significantly related to counselor self-efficacy.

Research Question 2: Does mindfulness moderate the relationship between counselor self-efficacy and attachment anxiety and avoidance?

Hypothesis 2a: Mindfulness would be a significant moderating variable between attachment related anxiety and counselor self-efficacy such that higher levels of mindfulness would weaken the relationship between attachment related anxiety and CSE.

Hypothesis 2b: Mindfulness would be a significant moderating variable between attachment related avoidance and counselor self-efficacy such that higher levels of mindfulness would weaken the relationship between attachment related avoidance and CSE.

Participants

Master's-level counseling students who are in at least their first semester of internship in a CACREP-accredited counseling program were the population of interest for this study. Per a power analysis (*g*power*), the minimum sample size needed for a moderate effect size and power of .80 with three predictor variables is 85. To ensure that the minimum sample size was met, faculty members at fifteen CACREP-accredited counseling programs were contacted via email for recruitment purposes.

Instrumentation

Participants completed four instruments that can be found in Appendix A: The *Counselor Activity Self-Efficacy Scales (CASES)*; Lent et al., 2003), the *Experiences in Close Relationships-Revised (ECR-R)*; Fraley et al., 2000), the *Five Facet Mindfulness Questionnaire (FFMQ)*; Baer et al., 2006), and a demographic questionnaire created by the author of this study.

Counselor Self-Efficacy- The *Counselor Activity Self-Efficacy Scales (CASES)*

The Counselor Activity Self-Efficacy Scales (CASES) was created by Lent et al. (2003) to assess counselor's self-efficacy in the counseling role. Lent et al. (2003) designed the CASES to address measurement concerns (i.e., prior measurements were not based in counseling literature or were not properly suited for novice trainees) with counselor self-efficacy assessments. The CASES has three domains to assess counselor self-efficacy: 1) Performing basic skills (e.g., reflecting feelings), 2) Managing the counseling session tasks (e.g., helping a client explore concerns on a "deeper" level), and 3) Navigating challenging counseling situations (e.g., clients who have experienced traumatic life events) that the authors have titled, *Helping Skill Self-Efficacy*, *Session Management Self-Efficacy*, and *Counseling Challenges Self-Efficacy* (Lent et al., 2003). The 41-item questionnaire uses a Likert-type scale, ranging from 0 (no confidence) to 9 (complete confidence). Items are summed to establish an overall score that indicates level of counseling self-efficacy.

The CASES was normed using 345 students (i.e., undergraduates $n = 159$, master's level counseling practica $n = 118$ various counseling psychology doctoral

students $n = 68$) from five universities across the United States who ranged in age from 20-57 years old ($M = 26.32$, $SD = 7.46$) and Cronbach's alpha was reported as .97 (Lent et al., 2003). Evidence of convergent validity was established by correlating CASES scores with scores on *The Counselor Self-Estimate Inventory (COSE)*, with a correlation of .76 (Lent et al., 2003). Additionally, factor analysis was used to explore the domains individually and the *Helping Skill Self-Efficacy* domain consisted of three factors (exploration skills, insight skills, and action skills), the *Session Management Self-Efficacy* domain had only one factor (session management), and *Counseling Challenges Self-Efficacy* domain consisted of two factors (client distress and relationship conflict).

When studying mindfulness and counseling self-efficacy, Greason and Cashwell (2009) used the CASES and found reliability of scores to be .96. Lent et al. (2003) showed that internal reliability ranged from .79 (Exploration Skills) to .94 (Session Management and Client Distress) for scores on the individual scales, providing evidence of internal consistency for the CASES. Scale intercorrelations ranged from .44 (exploration skills and client distress) to .72 (exploration skills and session management, insight skills and session management, relationship conflict and client distress) indicating the scales test similar yet different elements of counseling self-efficacy. Furthermore, a sample of 48 students, undergraduates ($n = 32$) and doctoral students ($n = 16$), were used for a two week test-retest and the reliability estimate reported was $r = .75$.

Attachment-Related Anxiety and Avoidance- *The Experiences in Close*

Relationships-Revised (ECR-R)

Attachment anxiety and avoidance was measured using the ECR-R (Fraley et al., 2000), a 36-item, self-report questionnaire designed to assess adult attachment anxiety and avoidance as continuous variables. The use of continuous rather than categorical data has become more commonplace in attachment research (Roisman et al., 2007; Fraley & Waller, 1998). The ECR-R uses a Likert-type scale, ranging from 1 (strongly disagree) to 7 (strongly agree) where higher mean scores indicate higher levels of either anxiety or avoidance, depending on the subscale the item is measuring. The two subscales (18 items per scale) are *anxiety* and *avoidance*. An example of an item under the anxiety subscale is, "I'm afraid that I will lose other's love" and an example of an item under the avoidance subscale is, "I prefer not to show others how I feel deep down" (Fraley et al., 2000).

The ECR-R was derived from the Experiences in Close Relationships (ECR: Brennan et al., 1998), Adult Attachment Scales (AAS: Collins & Read, 1990), Relationship Styles Questionnaire (Griffin & Bartholomew, 1994) and Simpson's (1990) Attachment Scales using Item-Response Theory (IRT), and was created to improve the precision of measuring secure attachment styles, given that the ECR and other attachment measurements were not as precise in that area (Fairchild & Finney, 2006; Fraley et al., 2000). Researchers found good internal reliability with an alpha of .95 for anxiety and an alpha of .93 for avoidance (Fraley et al., 2000; Sibley & Lui, 2004), and test-retest reliability of .90 over a six-week period (Sibley & Lui, 2004) and .90 to .95 over a three

week period (Fraley et al., 2000; Sibley, Fischer, & Liu, 2005). The ECR-R has evidence of strong construct validity (Brennan et al., 1998; Fraley et al., 2000; Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010; Sibley & Lui, 2004; Sibley et al., 2005). Evidence of convergent and discriminant validity was established by correlating the ECR-R and the *Relationship Questionnaire* (Bartholomew & Horowitz, 1991; Sibley et al., 2005). The ECR-R has some identical items to the scale items (e.g., ECR questionnaire; Brennan, et al., 1998) that were used to create the ECR-R items, indicating convergent validity (Fraley et al., 2000; Sibley et al., 2005).

Mindfulness- The *Five-Facet Mindfulness Questionnaire (FFMQ)*

The FFMQ is a 39-item, self-report questionnaire that uses a Likert-type scale that ranges from 0 (never or very rarely true) to 5 (very often or always true) (Baer et al., 2006). The FFMQ is designed to measure mindfulness awareness and mindfulness attention in daily life and includes three subscales for awareness (e.g., observe, describe, and act with awareness) and two for attention (e.g., nonjudgmental and nonreactive). Examples of items on the FFMQ are, “When I’m walking, I deliberately notice the sensations of my body moving” and “When I do things, my mind wanders off and I’m easily distracted.” The FFMQ is scored up to 195 with higher scores indicating higher levels of mindfulness. The unit of analysis for this study was the full scale score.

The FFMQ is a synthesis of five psychometrically sound mindfulness instruments: *The Cognitive and Affective Mindfulness Scale* (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007; Hayes & Feldman, 2004); *The Freiburg Mindfulness Inventory* (Buchheld, Grossman, & Walach, 2001); *The Kentucky Inventory of*

Mindfulness Skills (Baer, Smith, & Allen, 2004); *The Mindful Attention Awareness Scale* (Brown & Ryan, 2003); *The Mindfulness Questionnaire* (Chadwick, Hember, Mead, Lilley, & Dagnan, 2005) that were tested and combined to create an overall assessment of mindfulness, the FFMQ (Baer et al., 2006). Baer et al. (2006) tested the psychometric properties of the FFMQ to acquire internal consistency as well as convergent and discriminant validity. To do so, first they tested the psychometric properties and internal consistency of the five assessments mentioned above on 613 undergraduate psychology students. The results of this study yielded good internal consistency. Next, the authors used exploratory factor analysis and regression on the same sample population using their responses on the five measures mentioned above in order to identify the main factors, from which five factors or facets were derived.

Baer et al., 2006 found evidence of internal consistency for the full FFMQ scale by obtaining the alpha coefficients of the five measures used to create the FFMQ (.81-.87). The five facets that make up the subscales of the FFMQ were shown to have adequate to good internal consistency with alphas that ranged from .75 to .91 (nonreactivity = .75, observing = .83, acting with awareness = .87, nonjudging = .87 and describing = .91) and were moderately related to one another indicating they measure similar yet distinct aspects of mindfulness (Baer et al., 2006). Then, the authors used confirmatory factor analysis on a new norming population of 268 undergraduate students to confirm replicability of the five-factors (i.e., observing, describing, acting with awareness, nonjudging, and nonreactivity), finding that four of the five factors fit well together, with *observing* being the factor with poor fit, especially in relation to

nonjudging. To better understand why the observing and nonjudging factors were such a poor fit with one another, the researchers then compared the meditators to the non-meditators from the sample and found that the observe and nonjudging factors were significantly different between the two groups, indicating that the observe factor may fit better with those who meditate compared to the nonjudging factor. Total internal consistency was reported to have a Cronbach's alpha of .96 indicating strong internal consistency for the FFMQ.

In validation studies, the FFMQ has also shown evidence of construct validity (Baer et al., 2006; Baer et al., 2008). When investigating the construct validity of the FFMQ in a sample of meditating and nonmeditating groups, Baer et al. (2008) found that the FFMQ had adequate to good construct validity and four of the five facets (exception being observing) had good incremental validity in the prediction of psychological wellbeing (Baer et al., 2008).

Demographic Questionnaire

A demographic questionnaire (see Appendix A) was designed to gather participant's age, race, gender, program track, full-time or part-time status, credit hours completed, and prior exposure to mindfulness training. Open-ended questions asking participants to provide an approximation of how many hours a week they practice mindfulness and what they consider to be included in mindfulness practice (e.g., meditation, yoga, mindful eating, or other mindful activities) also were included for descriptive purposes.

Procedures

A convenience sample was utilized for this study by contacting faculty members at fifteen CACREP-accredited counseling programs to recruit current master's-level students who meet the requirements for inclusion. An email was sent by the author of this study that explained the purpose, goal, and procedure of the study to the faculty members upon first contact (see Appendix B). Faculty members who agreed to participate in the study were asked to confirm their commitment with a reply email to the author, and a follow-up email was sent (see Appendix C). Once an agreement to participate was obtained, the author and the faculty member coordinated a time and class for the author to visit and conduct the survey in the Fall 2017 semester or the faculty member sent out an online survey link to their internship students. Once the data was collected in the face-to-face setting, a brief presentation on the benefits of this study was given to the class. Additionally, as an incentive for participating, a random drawing was conducted within each participating class to randomly select a participant to receive a \$25 gift card in the face-to-face setting and four \$25 gift cards were raffled off for the online participants.

Data Analysis

Descriptive statistics were collected through the demographic questionnaire.

Hypothesis 1a: used multiple regression

Hypothesis 2a: used multiple regression with interaction terms

Hypothesis 2b: used multiple regression with interaction terms

Table 1

Data Analysis Summary

Research Questions	Hypothesis	Independent Variables	Dependent Variables	Data Analysis
1. What is the relationship between counselor self-efficacy and attachment-related anxiety and avoidance?	1a: Attachment-related anxiety and avoidance would be negatively and significantly related to counselor self-efficacy.	1a: Attachment anxiety and avoidance (ECR-R)	counselor self-efficacy (CASES)	Multiple Regression Analysis
2. How does mindfulness moderate the relationship between counselor self-efficacy and attachment strategies?	2a: Mindfulness would be a significant moderating variable between attachment related anxiety and counselor self-efficacy such that higher levels of mindfulness would indicate a negative relationship between attachment related anxiety and CSE. 2b: Mindfulness would be a significant moderating variable between attachment related avoidance and counselor self-efficacy such that higher levels of mindfulness would indicate a negative relationship between attachment related avoidance and CSE.	2a: Attachment anxiety (ECR-R) Moderator: Mindfulness (FFMQ) Anxiety (ECR-R) X Mindfulness (FFMQ) 2b: Attachment avoidance (ECR-R) Moderator: Mindfulness (FFMQ) Avoidance (ECR-R) X Mindfulness (FFMQ)	counselor self-efficacy (CASES)	Multiple Regression Analysis with Interaction Terms

Pilot Study

The pilot study was conducted to test the instrumentation (e.g., instruction clarity, clarity of the items, clarity of the consent form) and data collection procedures. Four volunteer participants completed the survey packets while the author timed them. Upon completion, they were asked to reflect on the clarity of the instructions and items, layout of the assessment packets, length of the assessment packets, clarity of the consent form, and encouraged to share any additional information. After completing the packets and reflecting, participants shared their feedback verbally and were given a large chocolate bar at the end of the feedback session. A full write up of the pilot study including the methodology and statistical results can be found in Appendix D. A summary of the qualitative feedback provided by the participants and how it was used to inform the full study is provided below.

Participants provided both general and specific feedback during the verbal feedback portion of the pilot study. Overall, the participants endorsed that they found the survey packets easy to complete, they liked the arrangement of the assessment packet, and they felt that having to circle their responses on the last assessment (CASES) rather than write a numeric value (ECR-R and FFMQ) gave them motivation to continue completing the packets. Three participants finished the packets in under 15 minutes while one participant took 23 minutes to complete the packet.

Specific feedback also was provided related to the instructions and items on the assessments and the demographics questionnaire. Three participants endorsed confusion around the word *close* in the title of the *Experiences in Close Relationships-Revised*

Questionnaire due to the instructions and questions asking that participants provide responses regarding their relationships in general. One participant also found a typo on the ECR-R questionnaire (question two). Regarding the instructions for the CASES, one participant endorsed that she did not realize each section had instructions. No issues were mentioned regarding the instructions on the FFMQ or consent to participate form.

Regarding the demographics questionnaire, all participants struggled with the question asking “Total number of course hours completed in your program to date” and suggested the word “credit” rather than “course” be used and to start the question with “to date” to make it clearer. One participant also endorsed struggling with understanding what *practicum* referred to in the question “Total number of practicum hours completed in your program to date” and suggested that *counseling practicum* be used for clarity. Two of the students also suggested clarifying the question “Does your program offer mindfulness-based classes or practice for you” by also asking if the program integrates mindfulness practice into class or supervision to avoid participants thinking that it only refers to formal classes. Finally, three participants suggested that changing the question, “Do you have prior exposure to mindfulness training” to “Do you have prior exposure to mindfulness training(s), techniques, or practice” would make the question more clear.

As a result of the pilot study, the following changes were made to the full study:

- Due to the difference in length of time for completion of the packets, the consent to participate form was amended to reflect that the packets may take 15-20 minutes to complete rather than the previously stated 15 minutes.

- Due to the confusion related to the title of the ECR-R questionnaire, the titles of all assessments were removed with the exception of the demographics questionnaire.
- The typo was fixed on the ECR-R questionnaire.
- Due to the confusion related to instruction in the CASES, the researcher will verbally inform the participants in the full study to be aware of varying directions throughout the packet.
- All suggestions made regarding the demographics questionnaire were accepted and utilized in the full study, which changed five questions to now reflect: “To date, total number of credit hours completed in your program,” “To date, total number of counseling practicum hours completed in your program,” “Does your program offer mindfulness-based classes or integrate mindfulness practice into class or supervision,” and “practicum” was changed to “counseling practicum” throughout the questionnaire.
- Finally, the question, “Do you have prior exposure to mindfulness training” was changed to “Do you have prior exposure to mindfulness training(s), techniques, or practice?”

Limitations

The results of the current pilot study may provide some insight into the relationships among attachment anxiety, attachment avoidance, mindfulness, and counselor self-efficacy as well as provide counselor educators with support for utilizing

mindfulness-based interventions to help counselor trainees' struggling with attachment related issues that may be impacting their CSE. The results however, must be read with respect to the study's limitations. Due to the sampling population chosen, the results of the study are not generalizable to trainees enrolled in non-CACREP-accredited programs. Another limitation is related to the nature of using a self-report survey design. Self-report measures may be impacted by student biases and issues such as social desirability. Although these limitations cannot be eliminated, the researcher provided information in the informed consent informing participants that the study is completely voluntary and encouraged the participants to answer to the best of their ability. Finally, conducting a survey design also brings forth the issue of non-responders, those who chose to not participate, who's responses may have varied from the responses of those who chose to participate in the research study.

Summary

More information is needed for counselor educators to better understand the training needs of students with differing attachment strategies to help increase their counseling self-efficacy throughout their training programs. Mindfulness may be one factor that helps cultivate CSE throughout their training experience. This study aimed to examine the relationships between attachment related anxiety and attachment related avoidance, mindfulness, and counselor self-efficacy using multiple regression analysis. In this chapter, research questions and hypotheses were clarified, participant recruitment, instrumentation, procedures, and data analysis were delineated, and a description of pilot study and the results of the pilot study were provided.

CHAPTER IV

RESULTS

The purpose of this study was to examine whether mindfulness moderates the relationship between attachment anxiety and avoidance and CSE among counseling trainees. In this chapter, the results from the study are reported. Results include the demographics of the sample, the reliability coefficients of the measures used in the study, and the results of the statistical analyses for each of the research hypothesis.

Description of Sample

Participants were recruited through convenience sampling by contacting counselor educators at CACREP-accredited programs across the United States and requesting their permission to either distribute an online Qualtrics survey link to their master's-level students enrolled in internship or to host the primary researcher on campus to administer the survey packets during class time, in a face-to-face setting, to maximize participation. A total of 15 programs agreed to participate in the online Qualtrics survey option and the survey link was emailed to the counselor educator and forwarded to their students. Students were given the option at the end of the online survey to enter a raffle for a chance at one of four gift cards worth \$25. Two programs agreed to participate in the face-to-face data collection process, where the primary researcher administered the survey packets during their class time and provided them a brief presentation regarding the study once all packets were collected as a thank you for allowing her to administer

her surveys. A raffle for a gift card worth \$25 also was held after each of the face-to-face data collection procedures. A power analysis ($g*power$) indicated that a minimum sample size for a moderate effect size and power of .80 with four predictor variables was 85. The online Qualtrics link was sent to 196 master's-level students enrolled in internship, 51 surveys were started and 43 of the surveys were completed. Eight of the online surveys were eliminated because only the demographics portion of the surveys were attempted. Thirty-six of the 37 surveys administered in the face-to-face settings were returned fully complete while one was returned with only the first few questions answered and that respondent's data was eliminated from the analysis. Therefore, 79 surveys were used for the data analysis (which was six participants short of the original target resulting in a sample power of .77). Descriptive statistics were run to assure values entered were valid. Missing values were assessed and two were found and replaced with zeros. Identified items on the ECR-R and the FFMQ were reverse scored per developers' instructions. Total scores for all three of the measurements (i.e., ECR-R, FFMQ, and CASES) were computed and subscale scores on the ECR-R (i.e., anxiety and avoidance) were computed and used for data analysis. The interaction terms used for testing the moderator affects also were computed.

Demographic data was collected to assess participant's age, race, gender, program track, full-time or part-time status, credit hours completed, and prior exposure to mindfulness training. Additionally, participants were asked to provide an approximation of how many hours a week they practice mindfulness and what they consider to be mindfulness practice. Demographics are summarized in Table 2.

Table 2

Demographic Descriptions for the Study

Variable	Mean	SD	n	%
Age	28.15	6.90	79	100%
Race/Ethnicity				
African Am/Black			9	11.4%
Asian or Pacific Islander			1	1.3%
Caucasian/White			59	74.7%
Hispanic/Latino			4	5.1%
Native American			0	0
Biracial/Multiracial			4	5.1%
Other			1	1.3%
Gender				
Female			66	83.5%
Male			12	15.2%
Trans-Female to Male			1	1.3%
Counseling Track				
Clinical Mental Health			45	57%
School			22	27.8%
Marriage, Couple, and Family			6	7.6%
Other			6	7.6%
Student Status				
Full-time			71	89.9%
Part-time			8	10.1%
Total Credit Hours Complete	42.55	10.44	79	100%
Currently Enrolled in Internship				
Yes			79	100%
No			0	0
Hours of Internship Complete	123.11	81.02	79	100%
Prior Mindfulness				
Yes			68	86.1%
No			11	13.9%
Program Offers Mindfulness				
Yes			46	58.2%
No			33	41.8%
Practice Mindfulness				
Yes			63	79.7%
No			16	20.3%
Mindfulness Practice (Hours/Week)	1.99	1.97	63	100%

All 79 participants were recruited from CACREP-Accredited programs and indicated that they were enrolled in internship, which was required for the inclusion criteria. The average age of participants was 28 ($SD = 7$). The average number of direct internship hours completed was 123 ($SD = 81$) and the average number of total internship hours completed was 286 ($SD = 140$). Average credit hours completed to date was 43 ($SD = 10$). Sixty-three participants (79.7 %) indicated that they practiced mindfulness, and 68 participants (86.1 %) indicated they had been exposed to mindfulness prior to this study, with 11 participants (13.9 %) indicating no prior exposure to mindfulness related activities.

The majority of participants identified as Caucasian ($n = 59, 74.7\%$), with a smaller sample of participants identifying as African American/Black ($n = 9, 11.4\%$), Hispanic/Latino ($n = 4, 5.1\%$), Biracial/Multiracial ($n = 4, 5.1\%$), Other ($n = 4, 5.1\%$), and Asian or Pacific Islander ($n = 1, 1.3\%$). Of the 79, 66 participants (83.5%) were female, 12 participants (15.2 %) were male, and one participant (1.3 %) was trans-female to male.

Descriptive Statistics for Instrumentation

Descriptive statistics were used to determine means and standard deviations using the total scores for the measures, as well as the subscales on the ECR-R. The possible ranges for each of the instruments (i.e., the Five Facet Mindfulness Questionnaire: FFMQ, the Experiences in Close Relationships-Revised: ECR-R, and the Counselor Activity Self-Efficacy Scales: CASES) are listed along with the sample ranges in Table 3. In regards to skewness and kurtosis, the distribution scores on the Five Facet Mindfulness

Questionnaire indicated slight negative skewness and there was no evidence of kurtosis. There was slight evidence of positive skewness on the total score for Experiences in Close Relationships-Revised and the avoidance scale and no evidence of skewness on the anxiety scale and no evidence of kurtosis on any of the ECR-R scales. The scores on the Counselor Activity Self-Efficacy Scales indicated slightly negative skewness and no evidence of kurtosis.

Table 3

Sample Score Ranges, Means, Standard Deviations, and Norms

Instruments	Possible Ranges	Sample Ranges	Scale Mean	Scale SD
The Five Facet Mindfulness Questionnaire Total	39-195	98-169	134.64	16.68
Experiences in Close Relationships-Revised Anxiety Total	18-126	32-96	63.28	15.10
Avoidance Total	18-126	28-95	56.52	18.33
Anx + Avd Total	36-252	69-181	119.80	26.95
Counselor Activity Self-Efficacy Scales Total	0-369	129-336	258.67	41.05

To estimate the internal consistency of the measures for this sample, Cronbach's α was computed for the total scores on all three instruments (i.e., FFMQ, ECR-R, and CASES) and for the anxiety scores and avoidance scores on the ECR-R. All scales for this study reached acceptable alpha levels. The alpha scores are compared to previous published coefficients in Table 4.

Table 4

Instrument Scale Reliabilities

Instrument	Subscales	# of Items	α in previous studies	α in current study
Five Facet Mindfulness Questionnaire		39	.96	.91
Experiences in Close Relationships-Revised	Anxiety	18	.95	.82
	Avoidance	18	.93	.92
Counselor Activity Self-Efficacy Scales		41	.97	.95

Research Questions and Hypotheses

This study aimed to explore the relationship between attachment related anxiety and attachment related avoidance, mindfulness, and counselor self-efficacy among counselor trainees. Therefore, two research questions and three hypotheses were examined. The results are depicted below.

Research Question 1/ Hypothesis 1

Research question one related to the direction and strength of the relationship among attachment anxiety, attachment avoidance, and counselor self-efficacy. Results of the bivariate correlations are provided in Table 5. Scatter plots of the correlations were also used to identify any outliers more than three standard deviations from the mean. No outliers were identified so no participants were eliminated based on these findings.

Table 5

Pearson Product Moment Correlations for Anxiety, Avoidance, Mindfulness, and Counseling Self- Efficacy

	FFMQ	ECR-R (anxiety)	ECR-R (avoidance)	CASES
FFMQ	1	-.460**	-.379**	.322**
ECR-R (anxiety)	-.460**	1	.294**	-.173
ECR-R (avoidance)	-.379**	.294**	1	-.228*
CASES	.322**	-.173	-.228*	1

Test reliabilities are placed along the diagonal

* significant at $p < .05$

**significant at $p < .01$

Hypothesis 1 suggested that attachment anxiety and avoidance would be negatively and significantly related to counselor self-efficacy. To test this hypothesis, Pearson Product Moment Correlations were used and the correlation between attachment anxiety and counselor self-efficacy was not significant. The correlation found between attachment avoidance and counselor self-efficacy was significant and in the anticipated direction ($r = -.228, p < .05$). The direction and statistical significance of these findings partially supported hypothesis 1.

Research Question 2/ Hypothesis 2a-b

Research question two related to the moderating relationship among mindfulness, attachment anxiety and avoidance, and counselor self-efficacy, specifically that mindfulness would moderate the relationships between anxiety and self-efficacy, and avoidance and self-efficacy. To test the associated hypotheses, multiple regression with interaction terms were used.

Hypothesis 2a suggested that mindfulness would be a significant moderating variable between attachment related anxiety and counselor self-efficacy such that higher levels of mindfulness would weaken the relationship between attachment related anxiety and CSE. Hypothesis 2b suggested that mindfulness would be a significant moderating variable between attachment related avoidance and counselor self-efficacy such that higher levels of mindfulness would weaken the relationship between attachment related avoidance and CSE.

Recognizing that using a standardized method for computing the interaction term can lead to issues related to multicollinearity and the effect of one IV influencing the other (Todman & Dugard, 2007), the data was centered. To account for these issues, z scores were computed for the variables and their interaction terms to center the data and address these issues. The z-scores were computed by using SPSS (*Descriptive statistics, save as standardized values*) and then the interaction terms were computed by creating the product term between the centered Z_{anxiety} and the centered Z_{mindfulness} (i.e., Z_{anxiety} X Z_{mindfulness}) and Z_{avoidance} and the centered Z_{mindfulness} (i.e., Z_{avoidance} X Z_{mindfulness}).

The results for the regression analysis with the centered variables minimized multicollinearity and the influence of the initial IV's on their interaction terms. The data analysis with the centered terms suggested that the predicted directions were partially met for both hypotheses 2a and 2b. See Tables 6 and 7 for the regression analysis for centered variables.

Table 6

Multiple Regression (Enter Method) of ZAttachment Anxiety, ZMindfulness, and the ZInteraction Term as Predictors of Counselor Self-Efficacy

Variable	Adj. R ²	Se	Stand β	t
Model summary	.08	.96		
ZAttach Anxiety			-.03	-.26
ZMindfulness			.31	2.52**
Model summary	.07	.97		
ZAttach Anxiety			-.03	-.26
ZMindfulness			.31	2.50*
ZAnxiety X ZMindfulness			.01	.06

*significant at p< .05

**significant at p< .01

Table 7

Multiple Regression (Enter Method) of ZAttachment Avoidance, ZMindfulness, and the ZInteraction Term as Predictors of Counselor Self-Efficacy

Variable	Adj. R ²	Se	Stand β	t
Model summary	.09	.95		
ZAttach Avoidance			-.12	-1.06
ZMindfulness			.28	2.36*
Model summary	.12	.94		
ZAttach Avoidance			-.16	-1.35
ZMindfulness			.23	1.93
ZAvoidance X ZMindfulness			.20	1.80

*significant at p< .05

**significant at p< .01

A multiple regression with the interaction term was calculated to predict counselor trainees CSE based on their relationship among Zattachment anxiety, Zmindfulness, and then the interaction between ZAnxiety X Zmindfulness. Initially, the regression was run with just the two predictors (i.e., without the interaction term) and the

equation was significant ($F(2,76) = 4.43, p < .015$), with an R^2 of .104 and an adjusted R^2 of .081. However, Z anxiety was not significantly related to CSE ($\beta = -.03, t = -.26, p > .05$), not surprising given that the bivariate correlation between attachment anxiety and CSE was not significant. One assumption of a moderating model, not met in this instance, is that the predictor variable (Z anxiety) predicts a significant amount of the variance in the dependent variable (CSE). In this instance, the moderating variable (Z mindfulness) was significantly related to CSE ($\beta = .31, t = 2.52, p < .01$). Although the assumption that the predictor variable accounts for a significant amount of variance in the dependent variable was not met, for heuristic purposes, Z anxiety, Z mindfulness, and their interaction term were entered into the prediction equation, resulting in a significant regression equation ($F(3,75) = 2.92, p < .04$), with an R^2 of .105 and an adjusted R^2 of .069. Participants' predicted CSE is equal to $.003 - .031$ (attachment anxiety) + $.307$ (mindfulness) + $.006$ (anxiety X mindfulness). This model accounted for 6.9% of the variance in CSE with Z anxiety ($\beta = -.31, t = -.26, p > .05$), mindfulness ($\beta = .31, t = 2.5, p < .05$) and the interaction Z anxiety X Z mindfulness ($\beta = .01, t = .06, p > .05$). Although mindfulness appears to have a direct relationship with CSE, both attachment anxiety and the interaction term remained nonsignificant predictors in the model. Accordingly, hypothesis 2a was not supported.

The same series of analyses were then conducted to test hypothesis 2b, examining attachment avoidance as the predictor variable. That is, a multiple regression with interaction term also was calculated to predict counselor trainees' CSE based on the relationship among attachment Z avoidance and Z mindfulness, and then Z avoidance,

Zmindfulness, and the interaction between Zavoidance X Zmindfulness. Initially, the model was tested without the interaction term, resulting in a significant prediction of CSE ($F(2,76) = 5.03, p < .009$), with an R^2 of .117 and an adjusted R^2 of .094. Although avoidance was significantly correlated with CSE in the bivariate assessment, Zavoidance did not have a significant relationship with CSE in the multivariate model ($\beta = -.12, t = -1.06, p > .05$), again violating an assumption of a moderating model. Zmindfulness was a significant predictor of CSE ($\beta = .28, t = 2.36, p < .05$). Although the assumption of a significant predictor variable was not met, for heuristic purposes the interaction term Zavoidance X Zmindfulness was entered into the regression model and the overall model remained significant ($F(3,75) = 4.52, p < .006$), with an R^2 of .153 and an adjusted R^2 of .119. Participants' predicted CSE is equal to $.072 - .157$ (attachment avoidance) + $.227$ (mindfulness) + $.192$ (avoidance X mindfulness). This model accounted for 12% of the variance in CSE. Although the regression equation was significant, attachment avoidance did not significantly impact CSE, Zavoidance ($\beta = -.16, t = -1.35, p > .05$). Interestingly, unlike the multivariate model that included anxiety, in this model Zmindfulness did not significantly impact CSE ($\beta = .23, t = 1.93, p > .05$) nor did the interaction term Zavoidance X Zmindfulness ($\beta = .20, t = 1.80, p > .05$) was also not significantly related to CSE. Accordingly, Hypothesis 2b was not supported.

Summary

In this chapter, the results of the study were provided, descriptions of the sample were specified, and the descriptive statistics for the instruments were provided. Attachment avoidance and mindfulness both related to CSE and in the anticipated

direction, whereas attachment anxiety did not relate to CSE as expected in the initial analysis. The predictor variables appeared to partially relate to the criterion variable as predicted when centered, in that mindfulness was significantly related to CSE in both hypothesis 2a and 2b. In Chapter V, an explanation of these results are discussed, limitations are addressed, implications for counselor educators and counselor trainees are offered, and future research directions are suggested.

CHAPTER V

DISCUSSION

In Chapter IV, the results of the study exploring the relationships among attachment anxiety and avoidance and CSE and the moderating effects of mindfulness among counseling trainees were examined. In this chapter, the results are discussed, limitations of the study are addressed, implications for counselor educators and counselor trainees are suggested, and ideas for future researchers are offered.

Overview of the Study

Although many factors impact the development of counselor trainees throughout their training programs, counseling self-efficacy is a vital aspect of counselor development (Barbee, Scherer, & Combs, 2003; Greason & Cashwell, 2009; Kozina, Grabovari, De Stefano, & Drapeau, 2010; Larson & Daniel, 1998; Lent et al., 2003). Attachment anxiety and attachment avoidance are two factors that have been identified as having a negative impact on counselor trainees' CSE (Marmarosh et al., 2013), supervisory working alliance (Gnilka et al., 2016; Gunn & Pistole, 2012; Marmarosh et al., 2013), and the counselor-client working alliance (Gnilka et al. (2016). Further, attachment avoidance also has been shown to negatively impact counselor trainees' development of empathy (Trusty et al., 2005). In contrast, counselor mindfulness has

been shown to have a positive impact on CSE among trainees (Greason & Cashwell, 2009), and researchers have found that both attachment anxiety and avoidance are inversely related to mindfulness (Caldwell & Shaver, 2015; Davis et al., 2016; Walsh, et al., 2009). Recognizing that these variables (i.e., CSE, attachment anxiety and avoidance, and mindfulness) have not been studied in combination, it was determined that understanding whether mindfulness moderates the relationship between both attachment anxiety and avoidance and counselor self-efficacy could be beneficial for counselor educators and counselor trainees. Thus, this study was designed to contribute to a richer understanding of how attachment anxiety and avoidance relate to counselor self-efficacy and whether mindfulness buffers the effects of attachment anxiety and avoidance on trainees' counselor self-efficacy.

The purpose of this study, then, was to explore the relationship among counselor trainees' attachment anxiety and avoidance and counselor self-efficacy and the potential moderating role of mindfulness. Master's level counseling students from 17 CACREP-accredited programs across the United States completed the survey packet that consisted of the *Counselor Activity Self-Efficacy Scales (CASES)*; Lent et al., 2003), the *Experiences in Close Relationships-Revised (ECR-R)*; Fraley et al., 2000), the *Five Facet Mindfulness Questionnaire (FFMQ)*; Baer et al., 2006), and a demographic questionnaire. For the data analysis, 79 survey packets were used.

The overall results of the statistical analysis supported relationships among mindfulness, attachment avoidance, and counselor self-efficacy that were significant and in the expected directions. Although the bivariate relationship between anxiety and CSE

was in the anticipated direction, the two were not significantly related. In the multivariate models, the amount of variance in CSE explained by mindfulness was modest and, in fact, nonsignificant for the model that included avoidance. A larger issue, however, was that the amount of variance in CSE explained by attachment anxiety and avoidance was not statistically significant, thereby violating an assumption of a moderating model. Additionally, contrary to hypothesis 2a and 2b, mindfulness did not emerge as a statistically significant moderator in the relationships between attachment anxiety and CSE or attachment avoidance and CSE, due at least in part to the nonsignificant relationships between the predictors (anxiety and avoidance) and CSE in the multivariate models. Consistently, mindfulness had the strongest relationship with CSE. A discussion of the hypotheses is addressed below.

Discussion of the Results

Hypothesis 1

Hypothesis 1 suggested there would be a statistically significant negative relationship between attachment anxiety and CSE, and also between attachment avoidance and CSE. This hypothesis was partially supported in that participants with higher levels of attachment avoidance tended to have lower levels of CSE and this negative relationship was statistically significant. In contrast, however, attachment anxiety did not have a statistically significant relationship with CSE. Although hypothesis 1 was only partially supported, there are various ways to contextualize these results.

Although previous researchers have identified attachment as a contributor to anxiety (Shore & Shore, 2008), anxiety as having a negative impact on CSE (Barbee et

al., 2003; Goreczny et al., 2015; Larson & Daniels, 1998), and individuals with fearful attachment styles as having lower CSE (Marmarosh et al., 2013), these researchers did not measure attachment anxiety and avoidance as continuous variables as was done in this study. Although the literature is minimal regarding CSE and attachment, Marmarosh et al. (2013) investigated the relationship between attachment and CSE and found that fearful attachment styles were negatively related to CSE. Being that fearful attachment styles are a combination of high anxiety and high avoidance, it is not surprising that at least one of those factors (i.e., anxiety or avoidance) alone would negatively impact CSE. Although the bivariate correlations in the current study suggest that attachment avoidance (but not attachment anxiety) is negatively related to CSE, it may be important to note that researchers (i.e., Marmarosh et al., 2013) investigating CSE and attachment have measured attachment using categorical assessments rather than attachment anxiety and avoidance as continuous variables. That is, previous researchers have combined attachment anxiety and avoidance to characterize participants as having an attachment *style*, while the two factors (anxiety and avoidance) were examined separately in this study. It is possible that the approach of previous researchers (combining anxiety and avoidance) may lead to the conflation of anxiety and avoidance. That is, it is possible that Marmarosh et al. (2013) had similar findings to the current study, but that it was attachment avoidance that was responsible for the variance in CSE.

Nonetheless, it was somewhat surprising that attachment anxiety was not significantly related to CSE in this study. A possible explanation for this may be related to where trainees are at developmentally in their training programs given that CSE

development is not linear (Goreczny et al., 2015) and higher CSE is linked to lower anxiety in general (Barbee et al., 2003; Larson & Daniels, 1998). For example, data was collected during the Fall semester, so students in full-time programs likely were in their first semester of internship. Because of small sample size, it was not possible to consider the number of clinical hours as a predictive factor in CSE, but it maybe that experience levels matter in the development of CSE. Further, although CACREP-accredited training programs appear to include the four main processes that help counselor trainees develop CSE (i.e., performing the skill for mastery, vicarious learning, social support and encouragement, and managing emotional arousal) and lower their overall anxiety, there is no way to ensure that all trainees sampled covered the same material or had the same experiences that aid in increasing or decreasing anxiety and/or CSE when sampling across multiple programs. Further, there was no attempt to control for quality of clinical supervision, though this may be an important factor in reducing attachment related anxiety and avoidance (Gnilka et al., 2016; Gunn & Pistole, 2012; Marmarosh et al., 2013) and enhancing CSE (Cashwell & Dooley, 2001; Daniels & Larson, 2001; Larson et al., 1992; Marmarosh et al., 2013).

Although CSE is different from empathy, it may also be important to note that empathy, another critical skill for counselors to develop, has related to attachment differently than researchers expected. Trusty et al., (2005) predicted individuals with attachment styles that have high anxiety would have lower levels of empathy. Yet, the results from their study indicated that participants with styles that have high anxiety actually showed higher levels of empathy than those with secure attachment styles (i.e.,

low anxiety and low avoidance). There seems to be some preliminary evidence, then, although additional research is needed, that attachment avoidance is particularly salient as it relates to counselor development, at least regarding the key outcomes of self-efficacy and empathy development. It has been posited that the core fear of an individual high in avoidance is commonly a fear of inadequacy (Johnson, 2004) which could certainly explain, at least in part, decreased CSE among those with higher attachment avoidance. Although limitations exist, these results add to existing literature and may indicate that attachment avoidance and mindfulness are elements to explore further in relation to CSE.

Hypothesis 2a and 2b

Hypothesis 2a suggested that mindfulness would be a significant moderating variable between attachment anxiety and counseling self-efficacy, such that higher levels of mindfulness would significantly weaken the relationship between attachment anxiety and CSE. Similarly, hypothesis 2b proposed that mindfulness would be a significant moderating variable between attachment avoidance and counseling self-efficacy, such that higher levels of mindfulness would significantly weaken the relationship between attachment avoidance and CSE. Regarding the results of these hypotheses, neither was supported. However, the results of 2a did suggest that the proposed moderator variable (i.e. mindfulness) had a significant relationship with CSE. This finding is important because it offers additional empirical evidence that supports previous researchers (e.g., Greason & Cashwell, 2009) findings that mindfulness has a direct connection to counselor self-efficacy.

Overall, the results of this study raise additional questions regarding how attachment avoidance relates to counselor trainees' CSE and whether a larger sample size might support mindfulness as a moderator or partial moderator between attachment avoidance and CSE. More research is needed at this time to better understand the relationships among attachment avoidance, counseling self-efficacy, and mindfulness. As with all studies, these results should be viewed in the context of the limitations of this study.

Limitations of the Study

The results of the current study may offer some insight into the relationships among attachment anxiety, attachment avoidance, mindfulness, and counseling self-efficacy. As with any study, the results should be interpreted in context of the study's design and sample.

This study used a survey design which inherently has limitations, including self-report issues, non-responders, and setting (i.e., face-to-face vs. online format). Limitations associated with the self-report nature of survey designs pertain to participants' self-awareness and personal assessment regarding their responses to the questions. If participants are unsure how to accurately assess themselves or lack personal awareness when trying to answer the survey questions, then their recorded responses may not be accurate. In particular, inasmuch as those with high avoidance scores may tend to minimize problems, it is possible that some with higher avoidance scores may be prone to over-report mindfulness and CSE, which would potentially truncate the bivariate correlations.

Other limitations of this study's design are non-responders (including the biases of those who participated versus those who did not choose to participate) and the settings in which the surveys were administered. Interestingly, 97% of the surveys administered face-to-face (i.e., in intact classrooms) were returned completed while only 6% of the survey's administered via the Qualtrics Survey link were returned completed. When the face-to-face setting was used to administer the surveys, class time as allotted to the primary researcher and the researcher was present throughout the duration of the survey. Because class time was used and the researcher was present, participants may have felt pressure to participate in the study whereas had they been administered the online survey link, they may have chosen to not participate in the study.

Additional limitations associated with this study relate to the sample. To account for variations in participants' developmental levels as a result of their training program sequence, all participants were selected from CACREP-accredited programs and required to be at the internship stage in their training programs. Sampling participants from CACREP-accredited program increased the likelihood that all participants' follow a set of curriculum standards that can help with generalizability to trainees across other CACREP-accredited programs. Although participants in this study were from CACREP-accredited programs across the United States and appear geographically diverse, convenience sampling was used and the results may not be generalizable to counselor trainees from non-CACREP-accredited programs. Additionally, it should be noted that the study was six participants short from the 85 participants established a priori to acquire moderate power for this study's statistical analysis. Finally, sampling participants at the

internship stage also was important because CSE develops in a curvilinear manner (Goreczny et al., 2015) and choosing a specific developmental point in the training process may have limited variation in participants' responses. However, the results may not be generalizable to trainees at other developmental stages (e.g., first year first semester, practicum). To fully assess the relationships between attachment anxiety, attachment avoidance, mindfulness, and CSE, longitudinal research studying trainees over the course of their training and into their early professional lives is needed.

Another limitation of the sample was the variation in trainees' levels of mindfulness. To account for varying levels of mindfulness among participants, the demographic questionnaire assessed participants' prior exposure to mindfulness, whether their programs offer mindfulness training, whether they practice mindfulness, what they consider mindfulness practice, and how often they practice mindfulness. Although participants ranged in what they considered to be mindfulness practice and how often they practiced mindfulness, whether they truly practicing mindfulness in a conscious and accurate manner may be a limitation, given they may believe they are engaging in mindfulness practice, yet are not actually doing so. Finally, the majority of the participants were Caucasian females, which limits the generalizability of the study to other counselor trainees from other demographic backgrounds.

Implications for Counseling

Although mindfulness did not appear to moderate the relationship between attachment anxiety and CSE or attachment avoidance and CSE, the current study offered additional empirical support that mindfulness is positively related to counseling self-

efficacy. It also provided evidence that attachment avoidance is inversely related to CSE. Both of these empirically supported findings may have several implications for counselor educators and counselor trainees.

Counselor Educators and Counselor Trainees

Mindfulness has been shown to be related to the development of critical counseling skills which can promote the development of counselor trainees' counseling self-efficacy (Greason & Cashwell, 2009), empathy and attention skills (Christopher et al., 2006; Fulton 2016; Greason & Cashwell, 2009; Schure et al., 2008) and other important counseling skills (e.g., paraphrasing, summarizing) (Buser et al., 2013), yet not all counselor education programs offer mindfulness training to their trainees. Although more research is needed, the results of this study offer additional support for integrating mindfulness training into counselor education programs. Recognizing that counselor educators may not have the time or the resources to offer formal mindfulness training to their students, consistently integrating informal mindfulness practice (e.g., a mindfulness minute at the start or end of each class) into established classes is one potential way for counselor educators to promote mindfulness practice and foster the development of critical counselor skills such as CSE. Due to its versatility, informal mindfulness practice may offer counselor educators an accessible and timely way to help students become more aware of what is happening in the present moment as informal mindfulness practice is the conscious choice to be nonjudgmental and aware of what one is doing in the present moment (Germer, Siegel, & Fulton 2013; Greason & Welfare, 2013) and increased mindfulness is related to counselor trainees' development (e.g., Buser et al.,

2013; Christopher et al., 2006; Fulton 2016; Greason & Cashwell, 2009; Schure et al., 2008).

Knowing that the results of this study indicated that mindfulness is positively related to CSE and that attachment avoidance is negatively related to CSE, counselor educators also may want to promote mindfulness training for students who struggle with negative behaviors related to their levels of attachment avoidance. As mentioned earlier, Johnson (2004) posited that the core fear of an individual high in avoidance is commonly a fear of inadequacy and although counselor educators cannot change a trainees' feelings of inadequacy, helping trainees' increase their level of awareness surrounding their core fears or even the thoughts associated with them, may help trainees recognize ways in which their attachment related avoidance negatively impacts their relationships (e.g., intrapersonal, professors, supervisors, peers, clients) and help them to regulate emotions more effectively and, by extension, choose more appropriate behaviors. Helping trainees better understand and recognize how their attachment anxiety and avoidance are impacting their behaviors, development, or even their relationships may also help them to seek out early intervention when their attachment related behaviors are negatively impacting their personal and professional development.

Future Research

One potential benefit of the current study is to use the results to guide future research. Although mindfulness did not emerge as a moderator variable between attachment anxiety and CSE or attachment avoidance and CSE, the ANOVA results indicated statistically significant relationships among the variables. The results also

indicated that mindfulness has a statistically significant relationship with CSE and attachment avoidance has a negative and statistically significant relationship with CSE. One possible direction for future researchers to explore is whether additional participants would help mindfulness to emerge as at least a partial moderator between attachment avoidance and CSE, being that the moderator models were close to indicating such results. Another possible direction to explore is whether mindfulness mediates the relationship among the study's variables. Although the current literature review supports the idea that mindfulness may be a moderator variable, future researchers may want to investigate whether mindfulness is actually a mediator variable.

Additionally, future researchers also may want to explore ways in which trainees' levels of attachment anxiety and avoidance impact their levels of counseling self-efficacy overtime and how intervention studies utilizing mindfulness training may impact attachment anxiety, avoidance, and CSE. That is, there seems to be sufficient evidence of relationships between mindfulness, attachment, and CSE to warrant intervention studies among counselors-in-training. Finally, a study investigating these constructs without relying solely on self-report measures may provide further insight and support for integrating mindfulness based training more consistently into counselor training programs, particularly given the theoretical penchant for those with higher attachment avoidance to minimize challenges and problems.

Conclusion

The current study provided an exploration of the relationships among attachment related anxiety and attachment related avoidance, mindfulness, and counselor self-

efficacy among counselor trainees at the internship stage of their training. Survey data was collected and analyzed for 79 participants from CACREP-accredited programs across the United States and results for the hypotheses were explained. Although several bivariate correlations were statistically significant, with significant correlations between CSE and attachment avoidance and CSE and mindfulness, mindfulness did not emerge as a predicted moderator variable nor was attachment anxiety related to CSE as predicted.

Of particular concern were the limited relationships between the attachment dimensions (anxiety and avoidance) and CSE. Mindfulness did not emerge as a significant moderator because of these limited relationships between predictor and outcome variables, but mindfulness nonetheless seems an important consideration in the development of CSE, although additional research is needed to determine causality. Limitations of the study also were discussed along with implications for counselor educators and counselor trainees. Although many questions remain regarding the relationships among attachment anxiety, attachment avoidance, mindfulness, and counselor self-efficacy among counselor trainees, it appears that the relationships between mindfulness, attachment avoidance, and CSE may be important variables for counselor educators, counselor trainees, and future researchers to continue exploring.

REFERENCES

- Agnew-Davies, R., Stiles, W. B., Hardy, G. E., Barkham, M., & Shapiro, D. A. (1998). Alliance structure assessed by the agnew relationship measure (ARM). *British Journal of Clinical Psychology, 37*, 155– 172.
- Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love*. Baltimore: Johns Hopkins Press.
- Ainsworth, M. D. (1989). Attachments beyond infancy. *The American Psychologist, 44*, (4), 709-716.
- Ainsworth, M. D., & Bowlby, J. (1991). An ethological approach to personality development. *The American Psychologist, 46*,(4), 333-341
- Ainsworth, M. D., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.
- American Psychological Association (2017). Visited 08/02/2017. Retrieved from: <http://www.apa.org/topics/anxiety/>
- Auxier, C. R., Hughes, F. R., & Kline, W. B. (2003). Identity development in counselors-in-training. *Counselor Education and Supervision, 43*, (1), 25-38.
- Baer, R. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice, 10*, 125–143.

- Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self report: The kentucky inventory of mindfulness skills. *Assessment, 11*, 191–206
- Baer, R.A., Smith, G.T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*, 27-45.
- Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., Walsh, E., Williams, J. M. (2008). Construct validity of the five facet mindfulness questionnaire in meditating and nonmeditating samples. *Assessment, 15*,(3), 329-42.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.
- Bandura, A. (1982).Self-efficacy mechanism in human agency. *American Psychologist, 37*, 122-147.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology, 4*(3), 359-373.
doi:10.1521/jscp.1986.4.3.359
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*, 1175-1184.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes, 50*, (2), 248-287.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117-148.

- Barbee, P. W., Scherer, D., & Combs, D. C. (2003). Prepracticum service-learning: Examining the relationship with counselor self-efficacy and anxiety. *Counselor Education and Supervision, 43*(2), 108–119.
- Barrett-Lennard, G. T. (1962). Dimensions of therapist response as causal factors in therapeutic change. *Psychological Monographs, 76*(43), 1-36.
doi:10.1037/h0093918
- Barrett-Lennard, G. T. (1995). Barrett-lennard relationship inventory-other-to-self (ver.2). Unpublished Instrument.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*(2), 226-.
- Bernard, J. M., & Goodyear, R. K. (2004). *Fundamentals of clinical supervision*. Boston: Pearson Education.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., (2004). Mindfulness: a proposed operational definition. *Clinical Psychology: Science and Practice, 11*, 230–241.
- Black, S., Hardy, G., Turpin, G., & Parry, G. (2005). Self-reported attachment styles and therapeutic orientation of therapists and their relationship with reported general alliance quality and problems in therapy. *Psychology and Psychotherapy, 78*, 363-377.

- Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K.,...Zettle, R. D. (2011). Preliminary psychometric properties of the acceptance and action questionnaire - II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy*, 42,676-688.
- doi:10.1016/j.beth.2011.03.007
- Bowlby, J. (1960). Grief and mourning in infancy and early childhood. *Psychoanalytic Study of the Child*, 15, 9-52.
- Bowlby, J. (1961). Processes of mourning. *International Journal of Psycho-Analysis*, 42, 317-340.
- Bowlby, J. (1963). Pathological mourning and childhood mourning. *Journal of the American Psychoanalytic Association*, 11, 500-541.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York: Basic Books.
- Bowlby, J. (1977). The making and breaking of affectional bonds. I Aetiology and psychopathology in the light of attachment theory. *The British Journal of Psychiatry: the Journal of Mental Science*, 130, 201-210.
- Bowlby, J. (1979). *The making and breaking of Affectional Bonds*, London: Tavistock Publications
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Bowlby, J. (1989). *The making and breaking of affectional bonds*. London: Routledge.

- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). *Self-report measurement of adult attachment: An integrative overview*. In J. A. Simpson & W. S. Rholes (Eds.), *attachment theory and close relationship* (pp. 46-76). New York: Guilford Press.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, *84*, 822-848.
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, *18*(4), 211-237.
- Bruce, N., Shapiro, S. L., Constantino, M. J., & Manber, R. (2010). Psychotherapist mindfulness and the psychotherapy process. *Psychotherapy*, *47*(1), 83-97.
- Bucci, S., Seymour-Hyde, A., Harris, A., & Berry, K. (2016). Client and therapist attachment styles and working alliance. *Clinical Psychology & Psychotherapy*, *23*(2), 155-165.
- Buchheld, N., Grossman, P., & Walach, H. (2001). Measuring mindfulness in insight meditation (vipassana) and meditation based psychotherapy: The development of the Freiburg Mindfulness Inventory (FMI). *Journal for Meditation and Meditation Research*, *1*, 11–34.
- Buser, T. J., Buser, J. K., Peterson, C. H., & Seraydarian, D. G. (2013). Influence of mindfulness practice on counseling skills development. *The Journal of Counselor Preparation and Supervision*, *4*(2), 20-36.

- Clark, S. L. (2006). The effect of specific versus generalized supervisory feedback on counseling self-efficacy of counselors-in-training. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 66, 6265.
- Caldwell, J. G., & Shaver, P. R., (2013). Mediators of the link between adult attachment and mindfulness. *Interpersona: an International Journal on Personal Relationships*, 7(2), 299-310.
- Caldwell, J. G., & Shaver, P. R. (2015). Promoting Attachment-Related Mindfulness and Compassion: a Wait-List-Controlled Study of Women Who Were Mistreated During Childhood. *Mindfulness*, 6(3), 624-636
- Campos, J. J., Barrett, K., Lamb, M. E., Goldsmith, H. H., & Sternberg, C. (1983). Socioemotional development. In P. H. Mussen (Ed.), *Handbook of child psychology: Vol. 2. Infancy and developmental psychobiology* (pp. 783-915). New York: Wiley.
- Campbell, J. C., & Christopher, J. C. (2012). Teaching mindfulness to create effective counselors. *Journal of Mental Health Counseling*, 34(3), 213-226.
- Cannon, J. L., and Umstead, L. K. [in press]. Applying dbt to self-harm in college men: A case study. *Journal of College Counseling*.
- Cashwell, T. H., & Dooley, K., (2001). The impact of supervision on counselor self-efficacy. *The Clinical Supervisor*, 20(1), 39-47.
- Chadwick, P., Hember, M., Mead, S., Lilley, B., & Dagnan, D. (2005). Responding mindfully to unpleasant thoughts and images: Reliability and validity of the Mindfulness Questionnaire. Manuscript under review.

- Christopher, J. C., Christopher, S. E., Dunnagan, T., & Schure, M. (2006). Teaching self-care through mindfulness practices: The application of yoga, meditation, and qigong to counselor training. *Journal of Humanistic Psychology, 46*, 494-509. doi:10.1177/0022167806290215
- Christopher, J. C., & Maris, J. A. (2010). Integrating mindfulness as self-care into counseling and psychotherapy training. *Counseling and Psychotherapy Research, 10*, 114-125. doi: 10.1080/14733141003750285
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385–396.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*, 4, 644.
- Council for Accreditation of Counseling and Related Educational Programs. (2016). Cacrep 2015 annual report. Retrieved from <http://www.cacrep.org/about-cacrep/publications/cacrep-annual-reports/>
- Daniels, J. A., & Larson, L. M. (2001). The impact of performance feedback on counseling self-efficacy and counselor anxiety. *Counselor Education and Supervision, 41*(2), 120-130
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 1-17.

- Davis, T. J., Morris, M., & Drake, M. M. (2016). The moderation effect of mindfulness on the relationship between adult attachment and wellbeing. *Personality and Individual Differences, 96*, 115-121.
- Dickson, J. M., Moberly, N. J., Marshall, Y., & Reilly, J. (2011). Attachment style and its relationship to working alliance in the supervision of British clinical psychology trainees. *Clinical Psychology and Psychotherapy, 18*, 4, 322.
- Diener, M. J., & Monroe, J. M. (2011). The relationship between adult attachment style and therapeutic alliance in individual psychotherapy: A meta-analytic review. *Psychotherapy, 48*(3), 237-248.
- Dykas, M. J., & Cassidy, J. (2011). Attachment and the processing of social information across the life span: Theory and evidence. *Psychological Bulletin, 137*(1), 19-46.
- Efstation, J., Patton, M., & Kardash, C. (1990). Measuring the working alliance in counselor supervision. *Journal of Counseling Psychology, 37* 322-329. doi: 10.1037/0022-0167.37.3.322
- Eriksen, K., & McAuliffe, G. (2003). A measure of counselor competence. *Counselor Education and Supervision, 43*, 120-133.
- Eysenck, S. B., & Eysenck, H. J. (1969). Scores of three personality variables as a function of age, sex, and social class. *British Journal of Social and Clinical Psychology, 8*, 69-76.
- Fairchild, A. J., & Finney, S. J. (2006). Investigating validity evidence for the experiences in close relationships-revised questionnaire. *Educational and Psychological Measurement, 66*(1), 116-135.

- Feeney, J. A., Noller, P., & Hanrahan, M. (1994). Assessing adult attachment. In M. B. Sperting & W. H. Berman (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 128– 152). New York: Guilford Press
- Felder, J. N., Dimidjian, S., Segal, Z. (2012). Collaboration in mindfulness-based cognitive therapy. *Journal of Clinical Psychology, 68*(2): 179–186.
doi:10.1002/jclp.21832.
- Feldman, G. C., Hayes, A. M., Kumar, S. M., Greeson, J. G., & Laurenceau, J. P. (2007). Mindfulness and emotion regulation: The development and initial validation of the cognitive and affective mindfulness scale–revised (cams-r). *Journal of Psychopathology and Behavioral Assessment, 29*, 177-190.
- Fraley, R. C., & Brumbaugh, C. C. (2007). Adult attachment and preemptive defenses: Converging evidence on the role of defensive exclusion at the level of encoding. *Journal of Personality, 75*(5), 1033-1050.
- Fraley, R. C., & Waller, N. G. (1998). Adult attachment patterns: A test of the typological model. In J. A. Simpson, & W. S. Rholes (Eds.), *Attachment Theory and Close Relationships* (pp. 77-114). New York, NY: Guilford Press.
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item-response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78*, 350-365.

- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The Experiences in Close Relationships-Relationship Structures questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment, 23*, 615-625.
- Fulton, C. L. (2016). Mindfulness, self-compassion, and counselor characteristics and session variables. *Journal of Mental Health Counseling, 38*(4), 360-347. doi: 10.17744/mehc.38.4.06
- Fulton, C. L., & Cashwell, C. S. (2015). Mindfulness-Based awareness and compassion: Predictors of counselor empathy and anxiety. *Counselor Education and Supervision, 54*, (2), 122-133.
- Fulton, P. R. (2005). Mindfulness as clinical training. In Germer, C. K., Siegel R. D., & Fulton, P. R. (Eds.), *Mindfulness and psychotherapy*. New York, NY: Guilford Press.
- Geller, S. & Greenberg, L. (2012). *Therapeutic presence: A mindful approach to effective therapy*. Washington, DC: American Psychological Association.
- Geller, S. M., Greenberg, L. S., & Watson, J. C. (2010). Therapist and client perceptions of therapeutic presence: The development of a measure. *Psychotherapy Research, 20*, 599-610. doi:10.1080/10503307.2010.495957
- George, C., Kaplan, N., & Main, M. (1985). *Adult Attachment Interview*. Unpublished manuscript, University of California, Berkeley.

- Germer, C. K., (2005) *Mindfulness: What is it? What does it matter?* Germer, C. K., Siegel, R. D., & Fulton, P. R. (2005). *Mindfulness and psychotherapy*. New York: Guildford Press.
- Germer, C. K., (2013) *Mindfulness: What is it? What does it matter?* In Germer, C. K., Siegel, R. D., & Fulton, P. R. (2013). *Mindfulness and psychotherapy*. New York: Guildford Press.
- Germer, C. K., Siegel, R. D., & Fulton, P. R. (2013). *Mindfulness and psychotherapy*. New York: Guildford Press.
- Gnilka, P. B., Rice, K. G., Ashby, J. S., & Moate, R. M. (2016). Adult attachment, multidimensional perfectionism, and the alliances among counselor supervisees. *Journal of Counseling and Development, 94*(3), 285-296.
- Goreczny, A. J., Hamilton, D., Lubinski, L., & Pasquinelli, M. (2015). Exploration of counselor self-efficacy across academic training. *Clinical Supervisor, 34*, 78-97.
- Greason, P. B., & Cashwell, C. S. (2009). Mindfulness and counseling self-efficacy: The mediating role of attention and empathy. *Counselor Education and Supervision, 49*, 2-18.
- Greason, P. B., & Welfare, L. E. (2013). The impact of mindfulness and meditation practice on client perceptions of common therapeutic factors. *Journal of Humanistic Counseling, 52*, 235-253. doi:10.1002/j.2161-1939.2013.00045.x
- Greggo, S. P., & Becker, S. P. (2010). The attachment paradigm: A secure base for counselor education? *Journal of Psychology and Christianity, 29*(1), 46-56.

- Grepmaier, L., Mitterlehner, F., Loew, T., Bachlor, E., Rother, W., & Nickel, M. (2007). Promoting mindfulness in psychotherapists in training influences the treatment results of their patients. *Psychotherapy and Psychosomatics*, 76, 332–338.
- Griffin, D. W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships: Vol. 5. Attachment processes in adulthood* (pp. 17-52). London: Jessica Kingsley.
- Gunn, J. E., & Carole, P. M. (2012). Trainee supervisor attachment: Explaining the alliance and disclosure in supervision. *Training and Education in Professional Psychology*, 6(4), 229-237.
- Harris, R., (2006). Embracing your demons: An overview of acceptance and commitment therapy. *Psychotherapy in Australia*, 12(4), 2–8.
- Hayes, S. C., & Berens, N. M. (2004). why relational frame theory alters the relationship between basic and applied behavioral psychology. *International Journal of Psychology and Psychological Therapy*, 4(2), 341-353.
- Hayes, A. M., & Feldman, G. (2004). Clarifying the construct of mindfulness in the context of emotion regulation and the process of change in therapy. *Clinical Psychology: Science and Practice*, 11(3), 255-262.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change*. New York: Guilford Press.

- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2012). *Acceptance and Commitment Therapy: The Process and Practice of Mindful Change* (2ed.). New York: Guilford Press.
- Hayes, S. C., Villatte, M., Levin, M., Hildebrandt, M. (2011). Open, aware, and active: Contextual approaches as an emerging trend in the behavioral and cognitive therapies. *Annual Review of Clinical Psychology*, 7(1) 141–168.
doi:10.1146/annurev-clinpsy-032210-104449.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52(3), 511-524.
- Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, 5(1), 1-22.
- Horvath, A. O., & Greenberg, L. (1989). Development and validation of the working alliance inventory, *Journal of Counseling Psychology*, 36, 223-232.
- Johnson, E., Baker, S. B., Kopala, M., Kiselica, M., S., & Thompson, E. C. (1989). Counseling self-efficacy and counseling competence in prepracticum training. *Counselor Education and Supervision*, 28, 205-218.
- Johnson, S. M. (2004). *The practice of emotionally focused couple therapy: Creating connection*. New York: Brunner-Routledge.
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York: Delta.

- Kabat-Zinn, J. (2003). Mindfulness: The heart of rehabilitation. In E. Leskowitz (Ed.), *Complementary and alternative medicine in rehabilitation* (pp. xi–xv). Saint Louis: Churchill Livingstone.
- Kaplan, R. M. & Saccuzzo, D. P. (1997). *Psychological testing: Principles, applications, and issues* (4th ed.). Pacific Grove, CA: Brooks/Cole.
- Kotz, D., Huibers, M. J. H., West, R. J., Wesseling, G., & van Schayck, O. C. P. (2009). What mediates the effect of confrontational counseling on smoking cessation in smokers with COPD? *Patient Education and Counseling*, *76*,16-24.
doi:10.1016/j.pec.2008.11.017
- Kozina, K., Grabovari, N., De Stefano, J., & Drapeau, M. (2010). Measuring changes in counselor self-efficacy: Further validation and implications for training and supervision. *The Clinical Supervisor*, *29*(2), 117–127.doi:
10.1080/07325223.2010.517483
- Kraus, S., & Sears, S. (2009). Measuring the immeasurables: Development and initial validation of the self-other four immeasurables scale based on buddhist teachings on loving-kindness, compassion, joy, and equanimity. *Social Indicators Research*, *92*, 169-181. doi:10.1007/s11205-008-9300-1
- Larson, L. M., & Daniels, J. A. (1998). Review of the counseling self-efficacy literature. *Counseling Psychologist*, *26*, 179-218.
- Larson, L. M., Suzuki, L. A., Gillespie, K. N., Potenza, M. T., Bechtel, M. A., & Toulouse, A. L. (1992). Development and validation of the counseling self estimate inventory, *Journal of counseling Psychology*, *39*, 105-120.

- Larson, L. M., Clark, M. P., Wesely, L. H., Koraleski, S. Fl., Daniels, J. A., & Smith, P. L. (1999). Videos versus role plays to increase counseling self-efficacy in prepractica trainees. *Counselor Education and Supervision, 38*, 237-248.
- Leach, M. M., Stoltenberg, C. D., Eichenfield, G. A., & McNeill, B. W. (1997). Self-efficacy and counselor development: Testing the integrated development model. *Counselor Education and Supervision, 37*, 115-124.
- Lehrer, P. M., & Woolfolk, R. L. (1982). Self-report assessment of anxiety: Somatic, cognitive, and behavioral modalities. *Behavioral Assessment, 4*, 167-177.
- Lent, R. W., & Brown, S. D. (2006). On conceptualizing and assessing social cognitive constructs in career research: A measurement guide. *Journal of Career Assessment, 14*, 12-35.
- Lent, R. W., Cinamon, R. G., Bryan, N. A., Jezzi, M. M., Martin, H. M., & Lim, R. (2009). Perceived sources of change in trainees' self-efficacy beliefs. *Psychotherapy, 46*, (3), 317-327.
- Lent, R. W., Hill, C. E., & Hoffman, M. A. (2003). Development and validation of the Counselor Activity Self-Efficacy Scales. *Journal of Counseling Psychology, 50*, 97-108.
- Lehrer, P. M., & Woolfolk, R. L. (1982). Self-report assessment of anxiety: Somatic, cognitive, and behavioral modalities. *Behavioral Assessment, 4*, 167-177.
- Levitt, D. H. (2001). Active listening and counselor self-efficacy: Emphasis on one microskill in beginning counselor training. *The Clinical Supervisor, 20*, 101-115.

- Linehan, M. M. (1993). *Skills training manual for treating borderline personality disorder*. New York, NY: Guilford Press.
- Linehan, M. M. (2014). *DBT skills training handouts and worksheets*. New York: The Guilford Press.
- Mallinckrodt, B., Gantt, D. L., & Coble, H. M. (1995). Attachment patterns in the psychotherapy relationship: Development of the client attachment to therapist scale. *Journal of Counseling Psychology, 42*, 307–317.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development, 50*(1–2), 66–104.
- Marmarosh, C. L., Nikityn, M., Moehringer, J., Ferraioli, L., Kahn, S., Cerkevich, A., Choi, J., & Reisch, E. (2013). Adult attachment, attachment to the supervisor, and the supervisory alliance: how they relate to novice therapists' perceived counseling self-efficacy. *Psychotherapy, 50*(2), 178-88.
- McClain, D. L. (2009). Evidence of the properties of an ambiguity tolerance measure: The multiple stimulus types ambiguity tolerance scale-II (MSTAT-II). *Psychological Reports, 105*, 975-988. doi:10.2466/prO.105.3.975-988
- Meehl, P. E. (1973). MAXCOV-HITMAX: A taxonomic search method for loose genetic syndromes. *Psychodiagnosis: Selected papers* (p.200–224). Minneapolis: University of Minnesota Press.

- Meehl, P. E., & Yonce, L. J. (1996). Taxometric analysis: II. Detecting taxonicity using covariance of two quantitative indicators in successive intervals of a third indicator (MAXCOV procedure). *Psychological Reports, 78*, 1091–1227.
- Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality, 40*, 525–543.
- Melchert, T. P., Hays, V. L., Wiljanen, L. M., & Kolocek, A. K. (1996). Testing models of counselor development with a measure of counseling self-efficacy. *Journal of Counseling & Development, 74*, 640-644.
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion, 27*(2), 77-102.
- Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223–250.
- Orlinsky, D., Ronnestad, M., & Willutzki, U. (2004). Fifty years of psychotherapy process–outcome research: Continuity and change. In M. J. Lambert (Ed.), Bergin and Garfield's, *handbook of psychotherapy and behavior change* (5th ed., pp. 307–389). New York, NY: Wiley
- Paetzold, R. L., & Rholes, W. S. (2015). Attachment Theory and Methods for Meanings of Couple Intimacy. *Analyses of Social Issues and Public Policy, 15*(1), 414-417.
- Pietromonaco, P. R., & Barrett, L. F. (2000). The internal working models concept: What do we really know about the self in relation to others?. *Review of General Psychology, 4*(2), 155-175.

- Pistole, M. C., & Fitch, J. C. (2008). Attachment theory in supervision: A critical incident experience. *Counselor Education and Supervision, 47*(3), 193-205.
- Pistole, M. C., & Watkins, C. E. (1995). Attachment theory, counseling process, and supervision. *The Counseling Psychologist, 23*, 457–478.
- Raab, K. (2014). Mindfulness, self-compassion, and empathy among health care professionals: A review of the literature. *Journal of Health Care Chaplaincy, 2014*(3), 95-108. doi:10.1080/08854726.2014.913876
- Ravitz, P., Maunder, R., Hunter, J., Sthankiya, B., & Lancee, W. (2010). Adult attachment measures: A 25-year review. *Journal of Psychosomatic Research, 69*(4), 419-432.
- Renfro-Michel, E. L., & Sheperis, C. J. (2009). The relationship between counseling supervisee attachment orientation and perceived bond with supervisor. *The Clinical Supervisor, 28*(2), 141-154.
- Ridgway, I.R., & Sharpley, C.F (1990). Multiple measures for the prediction of counselor trainee effectiveness. *Canadian Journal of Counseling, 24*, 165-177.
- Riggs, S. A., & Bretz, K. M. (2006). Attachment processes in the supervisory relationship: An exploratory investigation. *Professional Psychology: Research and Practice, 37*, 558–566.
- Roisman, G. I., Fraley, R. C., & Belsky, J. (2007). A taxometric study of the adult attachment interview. *Developmental Psychology, 43*(3), 675-686.

- Rybak, C. (2013). Nurturing positive mental health: mindfulness for wellbeing in counseling. *International Journal for the Advancement of Counselling*, 35(2), 110-119.
- SAMHSA (2015), Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015. Retrieved on June 12, 2017 from <https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.pdf>
- Schmidt, S. (2004). Mindfulness and healing intention: Concepts, practice, and research evaluation. *Journal of Alternative and Complementary Medicine* 10, 7-14.
- Schore, A. N. (2000). Attachment and the regulation of the right brain. *Attachment & Human Development*, 2(1), 23-47.
- Schore, J. R., & Schore, A. N. (2008). Modern attachment theory: The central role of affect regulation in development and treatment. *Clinical Social Work Journal*, 36(1), 9-20.
- Schroder, T. A. (1999) Collaborative Research Network. International study of the development of psychotherapists. Difficulties in Therapeutic Practice. Personal communication. In Black, S., Hardy, G., Turpin, G., & Parry, G. (2005). Self-reported attachment styles and therapeutic orientation of therapists and their relationship with reported general alliance quality and problems in therapy. *Psychology and Psychotherapy*, 78, 363-377.

- Schure, M. B., Christopher, J., & Christopher, S. (2008) Mind-body medicine and the art of self-care: Teaching mindfulness to counseling students through yoga, meditation, and Qigong. *Journal of Counseling & Development, 86*, 47-56
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York: Guilford Press.
- Seligman, L., & Reichenberg, L., W. (2014). *Theories of counseling and psychotherapy: systems, strategies, and skills*. New Jersey: Pearson Prentice Hall.
- Shapiro, S. L., Astin, J., Bishop, S., & Cordova, M. (2005). Mindfulness-based stress reduction for health care professionals: Results from a randomized trial. *International Journal of Stress Management, 12*, 164-176.
- Shapiro, S. L., Brown, K., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and Education in Professional Psychology, 1*, 105-115.
doi:10.1037/1931-3918.1.2.105
- Shapiro, S. L., & Carlson, L. E. (2009). *The art and science of mindfulness: Integrating mindfulness into psychology and the helping professions*. Washington, DC: American Psychological Association.
- Shaver, P. R., & Mikulincer, M. (2006). Attachment theory, individual psychodynamics, and relationship functioning. In A. L. Vangelisti and D. Perlman (Eds.), *The Cambridge Handbook of Personal Relationships*. New York: Cambridge University Press.

- Sibley, C. G., Fischer, R., & Liu, J. H. (2005). Reliability and validity of the Revised Experiences in Close Relationships (ECR-R) self-report measure of adult romantic attachment. *Personality and Social Psychology Bulletin, 31*, 1524–1536.
- Sibley, C. G., & Liu, J. H. (2004). Short-term temporal stability and factor structure of the revised experiences in close relationships (ECR-R) measure of adult attachment. *Personality and Individual Differences, 36*, 969-975.
- Simpson, J. (1990). The influence of attachment styles on romantic relationships. *Journal of Personality and Social Psychology, 59*, 971-980.
- Sipps, G.J., Sugden, G.J., & Faiver, C. M., (1998). Counselor training level and verbal response type: Their relationship to efficacy and outcome expectations. *Journal of Counseling Psychology, 35*, 397-401.
- Skovholt, T. M., & Ronnestad, M. H. (2003). Struggles of the novice counselor and therapist. *Journal of Career Development, 30*(1), 45-58.
- Skovholt, T. M., & McCarthy, P. R. (Eds.). (1988). Critical incidents in counselor development [Special issue]. *Journal of Counseling and Development, 67*, 69-135.
- Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The revised almost perfect scale. *Measurement and Evaluation in Counseling and Development, 34*(3), 130-145.
- Smothers, M. K. (2009). *Counseling self-efficacy: The contributions of early attachment and the supervisory relationship*. Dissertation.

- Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory: STAI (Form Y)*. Palo Alto, CA: Consulting Psychologists Press.
- Spielberger, C. D., Gorusch, R. L., & Lushene, R. E. (1970). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Stiles, W. B., & Snow, J. S. (1984). Counseling session impact as viewed by novice counselors and their clients. *Journal of Counseling Psychology, 31*, 3-12. doi: 10.1037/0022-0167.31.1.3
- Stoltenberg, C. (1981). Approaching supervision from a developmental perspective: The counselor complexity model. *Journal of Counseling Psychology, 28*(1), 59-65.
- The Linehan Institute: Behavioral Tech. (2017). What is DBT? [webpage]. Retrieved from <https://behavioraltech.org/resources/faqs/what-is-dbt/>
- Thera, N (1972). *The power of mindfulness*. San Francisco: Unity Press.
- Todman, J., & Dugard, P. (2007). *Approaching Multivariate Analysis: An Introduction for Psychology*. New York, NY: Psychology Press.
- Tracey, T., & Kokotovic, A. (1989). Factor structure of the working alliance inventory. *Psychology Assessment, 1*, 207-210. Doi: 10.1037/1040-3590.1.3.207
- Trapnell, P. D., & Campbell, J. (1999). Private self-consciousness and the five factor model of personality: Distinguishing rumination from reflection. *Journal of Personality and Social Psychology, 76*, 284 –304.
- Trusty, J., Ng, K-M., & Watts, R. E. (2005). Model of effects of adult attachment on emotional empathy of counseling students. *Journal of Counseling and Development, 83*(1), 66-77.

- Urbani, S., Smith, M. R., Maddux, C. D., Smaby, M. H., Torres-Rivera, E. T. Crews, J. (2002). Skills-based training and counseling self-efficacy. *Counselor Education and Supervision, 42*, 92-106.
- U.S. Department of Labor Bureau of Labor Statistics (2017). *Occupational Outlook Handbook, 2016-17 Edition*. Retrieved on June 5, 2017 from <https://www.bls.gov/ooh/community-and-social-service/mental-health-counselors-and-marriage-and-family-therapists.htm>.
- Walsh, J.J., Balint, M.G., Smolira, D.R., Fredericksen, L.K., & Madsen, S., (2009). Predicting individual differences in mindfulness: The role of trait anxiety, attachment anxiety and attentional control. *Personality and Individual Differences, 46*, 94–99.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063–1070.
- Williams, J. M. G., Teasdale, J. D., Segal, Z. V., & Kabat-Zinn, J. (2007). *The mindful way through depression: Freeing yourself from chronic unhappiness*. New York: Guilford Press.
- Wright, S. L., & Perrone, K. M. (2008). The impact of attachment on career-related variables: A review of the literature and proposed theoretical framework to guide future research. *Journal of Career Development, 35*(2), 87-106.

Wright, S. L., Perrone-McGovern, K. M., Boo, J. N., & White, A. V. (2014). Influential factors in academic and career self-efficacy: Attachment, supports, and career barriers. *Journal of Counseling & Development, 92*, 36-46

APPENDIX A

INSTRUMENTS AND AUTHOR PERMISSIONS

Demographics Questionnaire

Five Facet Mindfulness Questionnaire (FFMQ) and Permission Letter

Experiences in Close Relationships-Revised (ECR-R) and Permission Letter

Counselor Activity Self-Efficacy Scales (CASES) and Permission Letter

Demographics Questionnaire

Please “x” or write in the appropriate information for each of the following questions. This information is for data collection purposes only and will not be used in any way to identify individuals.

Age: _____

Gender: Male _____ Female _____ Transgender _____ Other: _____

Ethnicity:

_____ African American/Black

_____ Asian or Pacific Islander

_____ Caucasian/White

_____ Hispanic/Latino

_____ Native American

_____ Biracial/Multiracial

_____ Other, Please specify: _____

Counseling track (e.g., clinical mental health, school, couples and family, other): _____

Status (please check one): Full-time _____ Part-time: _____

To date, total number of credit hours completed in your program:-

Completed counseling practicum: Yes _____ No _____

To date, total number of counseling practicum hours completed in your program: _____

Currently enrolled in internship: Yes _____ No _____

Do you have prior exposure to mindfulness training(s), techniques, and/or practices:

Yes _____ No _____

Does your program offer mindfulness-based classes or integrate mindfulness practice into class or supervision: Yes _____ No _____

Do you practice mindfulness or related activities (e.g., meditation, yoga, mindful eating, or other mindful activities): Yes _____ No _____

Approximately how many hours a week do you practice mindfulness or related activities: _____

What do you consider to be your mindfulness practice or related activities: -

Five Facet Mindfulness Questionnaire (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.

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

- ___ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.
- ___ 23. It seems I am "running on automatic" without much awareness of what I'm doing.
- ___ 24. When I have distressing thoughts or images, I feel calm soon after.
- ___ 25. I tell myself that I shouldn't be thinking the way I'm thinking.
- ___ 26. I notice the smells and aromas of things.
- ___ 27. Even when I'm feeling terribly upset, I can find a way to put it into words.
- ___ 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.

 **Jennifer Cannon** <jlcanno2@uncg.edu> Aug 14   
to rbaer 

Dear Dr. Baer,

My name is Jennifer Cannon and I am a doctoral student in Counseling and Counselor Education at the University of North Carolina at Greensboro. I am conducting a dissertation study exploring the relationship between attachment, mindfulness, and counselor self-efficacy (CSE) among counselor trainees. I have enjoyed reading your work on mindfulness and believe the Five Facet Mindfulness Questionnaire (FFMQ) to be the best measurement of mindfulness for my study. I am reaching to see if it is possible to obtain your permission to use the FFMQ for my study.

Thank you for your time, consideration, and many wonderful contributions to the counseling field.

Sincerely,

Jennifer L. Cannon, MS.Ed, NCC
UNCG Doctoral Student

...

 **Baer, Ruth** Aug 14   
to me 

Dear Jennifer,

You're welcome to use the FFMQ, permission is not required. You can download it from my website:  www.ruthbaer.com. Look on the Academics page under Questionnaires.

All the best,

Ruth

Ruth Baer, PhD
Professor of Psychology

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Experiences in Close Relationships-Revised

Instructions: The statements below concern how you feel in emotionally in relationships. I am interested in how you *generally* experience relationships, not just in what is happening in a current relationship. Respond to each statement with a number from the scale provided to indicate how much you agree or disagree with the statement. Please write the number in the blank space provided.

1= strongly disagree 2= disagree 3= slightly disagree 4= neutral 5= slightly agree 6= agree 7=strongly agree

- ___ 1. I'm afraid that I will lose other people's love.
- ___ 2. I often worry that other people don't really love me.
- ___ 3. Other people really understand me and my needs.
- ___ 4. I often wish that other peoples' feelings for me were as strong as my feelings for them.
- ___ 5. I worry a lot about my relationships.
- ___ 6. When my romantic partner or closest friends are out of sight, I worry that he/she/they might become interested in someone else.
- ___ 7. When I show my feelings for others, I'm afraid they will not feel the same about me.
- ___ 8. It helps to turn to other people in times of need.
- ___ 9. Others makes me doubt myself.
- ___ 10. I find it easy to depend on other people.
- ___ 11. I do not often worry about being abandoned.
- ___ 12. I find that others don't want to get as close as I would like.
- ___ 13. I don't feel comfortable opening up to others.
- ___ 14. It's not difficult for me to get close to others.
- ___ 15. I usually discuss my problems and concerns with other people.
- ___ 16. It makes me mad that I don't get the affection and support I need from others.
- ___ 17. I worry that I won't measure up to other people.
- ___ 18. Other people only seem to notice me when I'm angry.
- ___ 19. I prefer not to show others how I feel deep down.
- ___ 20. I feel comfortable sharing my private thoughts and feelings with other people.
- ___ 21. I find it difficult to allow myself to depend on others.
- ___ 22. I am very comfortable being close to other people.
- ___ 23. Sometimes others change their feelings about me for no apparent reason.
- ___ 24. I prefer not to be too close to others.
- ___ 25. I get uncomfortable when others wants to be very close.
- ___ 26. I often worry that other people will not want to stay with me.
- ___ 27. I find it relatively easy to get close to others.
- ___ 28. My desire to be very close sometimes scares people away.
- ___ 29. I rarely worry about others leaving me.
- ___ 30. I'm afraid that once others gets to know me, they won't like who I really am.
- ___ 31. I tell others just about everything.
- ___ 32. I talk things over with others.

- ___ 33. I am nervous when other people get too close to me.
___ 34. I feel comfortable depending on other people.
___ 35. It's easy for me to be affectionate with others.
___ 36. I worry that others won't care about me as much as I care about them.

Experiences in Close Relationships-Revised (ECR-R) Inbox x



R. Chris Fraley <rcfraley@gmail.com>

Aug 14 ☆

to me ▾

Please feel free to use it. You can learn more about it via the Resources tab on my homepage (link below).

Best wishes,
Chris

R. Chris Fraley
University of Illinois at Urbana-Champaign
Department of Psychology
603 East Daniel Street
Champaign, IL 61820
Internet: <http://www.psych.uiuc.edu/~rcfraley/>

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On Mon, Aug 14, 2017 at 11:16 AM, Jennifer Cannon <jcanno2@uncg.edu> wrote:

Dear Dr. Fraley,

My name is Jennifer Cannon and I am a doctoral student in Counseling and Counselor Education at the University of North Carolina at Greensboro. I am conducting a dissertation study exploring the relationship between attachment, mindfulness, and counselor self-efficacy (CSE) among counselor trainees. I have enjoyed reading your work on attachment and believe the Experiences in Close Relationships-Revised (ECR-R) Questionnaire to be the best measurement of attachment related anxiety and avoidance for my study. I am reaching to see if it is possible to obtain your permission to use the ECR-R for my study.

Thank you for your time, consideration, and many wonderful contributions to the counseling field.

Sincerely,

Jennifer L. Cannon, MS.Ed, NCC
UNCG Doctoral Student

The Counselor Activity Self-Efficacy Scales

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

Part I (cont'd)

	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?										
12. Information-giving (teach or provide the client with data, opinions, facts, resources, or answers to questions).	<input type="radio"/>									
13. Direct guidance (give the client suggestions, directives, or advice that imply actions for the client to take).	<input type="radio"/>									
14. Role play and behavior rehearsal (assist the client to role-play or rehearse behaviors in-session).	<input type="radio"/>									
15. Homework (develop and prescribe therapeutic assignments for clients to try out between sessions).	<input type="radio"/>									

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	9
How confident are you that you could do these specific tasks effectively with <u>most</u> clients over the next week?										
1. Keep sessions "on track" and focused.	<input type="radio"/>									
2. Respond with the best helping skill, depending on what your client needs at a given moment.	<input type="radio"/>									
3. Help your client to explore his or her thoughts, feelings, and actions.	<input type="radio"/>									
4. Help your client to talk about his or her concerns at a "deep" level.	<input type="radio"/>									
5. Know what to do or say next after your client talks.	<input type="radio"/>									
6. Help your client to set realistic counseling goals.	<input type="radio"/>									
7. Help your client to understand his or her thoughts, feelings, and actions.	<input type="radio"/>									
8. Build a clear conceptualization of your client and his or her counseling issues.	<input type="radio"/>									
9. Remain aware of your intentions (i.e., the purposes of your interventions) during sessions.	<input type="radio"/>									
10. Help your client to decide what actions to take regarding his or her problems).	<input type="radio"/>									

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.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
2. ... has been sexually abused.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
3. ... is suicidal.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
4. ... has experienced a recent traumatic life event (e.g., physical or psychological injury or abuse).	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
5. ... is extremely anxious.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
6. ... shows signs of severely disturbed thinking.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
7. ... you find sexually attractive.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
8. ... is dealing with issues that you personally find difficult to handle.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
9. ... has core values or beliefs that conflict with your own (e.g., regarding religion, gender roles).	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
10. ... differs from you in a major way or ways (e.g., race, ethnicity, gender, age, social class).	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
11. ... is not "psychologically-minded" or introspective.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
12. ... is sexually attracted to you.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
13. ... you have negative reactions toward (e.g., boredom, annoyance).	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
14. ... is at an impasse in therapy	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
15. ... wants more from you than you are willing to give (e.g., in terms of frequency of contacts or problem-solving prescriptions).	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9
16. ... demonstrates manipulative behaviors in-session.	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7	<input type="radio"/> 8	<input type="radio"/> 9

Dear Dr. Lent,

My name is Jennifer Cannon and I am a doctoral student in Counseling and Counselor Education at the University of North Carolina at Greensboro. I am conducting a dissertation study exploring the relationship between attachment, mindfulness, and counselor self-efficacy (CSE) among counselor trainees. I have enjoyed reading your work on the Counselor Activity Self-Efficacy Scales and believe it to be the best measurement of CSE for my study. I am reaching to see if it is possible to 1) obtain your permission to use the CASES for my study and 2) to obtain a full copy of the measurement. I understand if this is not possible and greatly appreciate your consideration.

Thank you for your time and the many wonderful contributions you make to the counseling field.

Sincerely,

Jennifer L. Cannon, MS.Ed, NCC
UNCG Doctoral Student

...

Robert W. Lent

Aug 14   

to me 

See attachments.

Best wishes,

Bob Lent, Ph.D.
Professor, Counseling Psychology
Department of Counseling, Higher Education, & Special Education
3214 Benjamin Building
3942 Campus Dr.
University of Maryland
College Park, MD 20742
[301-405-2878](tel:301-405-2878)

...

2 Attachments

APPENDIX B

INITIAL FACULTY RECRUITMENT EMAIL (FACE-TO-FACE)

Recruitment Email to CACREP Program Faculty Members

Dear (Faculty Member)

My name is Jennifer Cannon and I am a doctoral student in Counseling and Counselor Education at the University of North Carolina at Greensboro. I am conducting a dissertation study exploring the relationship between attachment related anxiety and attachment related avoidance, mindfulness, and counselor self-efficacy among counselor trainees at the internship stage of their training.

I am reaching out to you in hopes that you are willing to offer your students a chance to participate in this study. I would come to your campus and collect data in approximately 12-15 minutes of class time and am hoping to do so in the largest class that fits the criteria. In exchange, after the data collection is completed, I would be glad to give a brief talk (timed at your discretion) about the study and why I have hypothesized the model for this study.

If you agree to giving your students an option to participate in this study, please reply to this email with a verification "yes" and I will be in contact with more information. If you have any questions or concerns prior to replying "yes," please feel free to contact me: Jlcanno2@uncg.edu or my dissertation chair Dr. Craig Cashwell cscashwe@uncg.edu.

There will also be a gift card drawing worth \$25 held specifically for the students in your program who complete the study. If you choose not to participate, no further action is necessary at this time.

Thank you for your time and consideration.

Sincerely,

Jennifer L. Cannon, MS.Ed, NCC
UNCG Doctoral Student

Approved IRB
8/18/17

APPENDIX C

FOLLOW-UP RECRUITMENT EMAIL (FACE-TO-FACE)

Dear (Faculty Member)

Thank you for your interest in helping me conduct my dissertation study where I am exploring the relationship between attachment related anxiety and attachment related avoidance, mindfulness, and counselor self-efficacy among counselor trainees at the internship stage of their training.

I have attached the informed consent to this email to give you more insight into what the study entails as well as the in class student recruitment letter. My hope is that together we can identify a class this semester where the target population is highest (master's-level students enrolled in an internship course) and set a date and time for me to come to that class to collect data.

As mentioned in my previous email, I would be glad to give a brief talk about the study and why I have hypothesized the model for this study, if you would like me to. I will also be offering the students in your class who complete the study a chance to win a \$25 gift card and the drawing will be held after all of the survey packets are collected.

Please let me know if you prefer to communicate via email or phone as we move forward and coordinate the logistics.

Thank you again for your willingness to be a part of my dissertation study!

Sincerely,

Jennifer L. Cannon, MS.Ed, NCC
UNCG Doctoral Student

Approved IRB
8/18/17

APPENDIX D

FACULTY RECRUITMENT EMAIL (ONLINE)

Dear (Faculty Member)

My name is Jennifer Cannon and I am a doctoral student in Counseling and Counselor Education at the University of North Carolina at Greensboro. I am conducting a dissertation study exploring the relationship between attachment related anxiety and attachment related avoidance, mindfulness, and counselor self-efficacy among counselor trainees at the internship stage of their training.

I am reaching out to you in hopes that you are willing to offer your students a chance to participate in this study. I have included the Qualtrics survey link that contains the informed consent, the survey packet, and information regarding a chance for participants to win one of four gift cards worth \$25.

Qualtrics Link: https://uncg.qualtrics.com/jfe/form/SV_6mwl24go1qpcAbH

As mentioned above, participants must be master's-level students enrolled in internship. I ask that if you choose to provide your students with an opportunity to participate that you please reply to this email and provide me with the approximate number of internship students you emailed the link so that I can keep track of the respondent rate. If you choose to provide your students with an opportunity to participate, please forward the "Message to Students" (found at the end of this email) to your students.

If you have any questions or concerns please feel free to contact me: Jcanno2@uncg.edu or my dissertation chair Dr. Craig Cashwell cscashwe@uncg.edu.

Thank you for your time and consideration!

Sincerely,

Jennifer L. Cannon, MS.Ed, NCC
UNCG Doctoral Student

Approved IRB
10/16/17

APPENDIX E

MESSAGE TO STUDENTS RECRUITMENT EMAIL (ONLINE)

Hello Counselors-in-training,

My name is Jennifer Cannon and I am a doctoral student in Counseling and Counselor Education at the University of North Carolina at Greensboro. I am conducting a dissertation study exploring the relationship between attachment strategies, mindfulness, and counselor self-efficacy among counselor trainees at the internship stage of their training.

I am hoping that you are willing to participate in this study. You may participate if you are a counselor-in-training who is enrolled in internship at this time.

If you choose to participate, you will be asked to complete a brief survey packet that will take approximately 15 minutes of your time.

Link to Qualtrics Survey: https://uncg.qualtrics.com/jfe/form/SV_6mwl24go1qpcAbH

If you begin the survey and you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw during the survey, your data will not be used. Choosing not to participate or withdrawing from the study will not impact your grade in this class.

If you choose to complete the entire survey packet, you have the option to be entered into a drawing to win a \$25 gift card. Upon collection of your packets, you will be prompted to decide if you would like to participate in the drawing for the \$25 gift card. If you choose to enter the drawing you will be provided a link to a new webpage that is kept separate from your data and asked to provide your email address.

If you have any questions please let me know at this time. You are also welcome to contact me at Jlcanno2@uncg.edu or my dissertation chair Dr. Craig Cashwell: Cscashwe@uncg.edu with future questions or concerns.

If you agree to participate in the study, please read the informed consent that follows. The survey questions follow the informed consent.

Thank you for your consideration and participation.

Jennifer L. Cannon
UNCG Doctoral Student

Approved IRB
10/16/17

APPENDIX F

PILOT STUDY

The pilot study was conducted to field test the instrumentation and data collection procedures. In addition to testing the full study's instrumentation and research questions, participants also were asked to provide verbal feedback regarding the clarity of the instruments' directions, items, and survey packet arrangement. Statistical analysis was conducted using the proposed research questions. Conclusions from the statistical analysis cannot be drawn given the inadequate sample size.

Participants

Four master's-level counseling students enrolled in their first semester of internship at a CACREP-accredited counseling program were used to field test the study. The volunteer participants met on their University's campus located in the Southeast, outside of their class times. All participants were female and additional demographic information is provided in Table 8.

Instrumentation

Participants completed survey packets that included the Five Facet Mindfulness Questionnaire (FFMQ), the Experiences in Close Relationships-Revised (ECR-R), the Counselor Activity Self-Efficacy Scales (CASES), and a demographic questionnaire created by the author of this study (respectively). Following completion of the packets, participants answered eight feedback questions regarding their experiences completing the packets and pilot study.

Procedures

Once an approval was obtained from the Human Subjects Committee and IRB stamped documents were provided from The University of North Carolina at Greensboro, the researcher contacted a faculty member and gained approval to recruit participants from her master's-level research class, where the IRB approved "Student Recruitment" letter was read. Students were also provided the researcher's email address and asked to email if they had any further questions or were willing to participate. Students were offered a large chocolate bar of their choice as an incentive.

Data Analysis and Overview of Results

Qualitative verbal feedback regarding the instrument instructions, items, demographics questionnaire, and changes implemented to the full study are summarized in Chapter III. The "Phase I Feedback Session Questions" are at the end of this Appendix. The instrument summaries are in Table 9 and results from each of the research questions and hypotheses are below. The Pearson-Product Moment Correlations are located in Tables 10-12, and due to the inadequate sample size, the regression models were inconclusive and omitted.

Research Questions

The following quantitative research questions were addressed by the current pilot study:

Research Question 1: What is the relationships between counselor self-efficacy and attachment-related anxiety and avoidance?

Hypothesis 1: Attachment-related anxiety and avoidance will be negatively and significantly related to counselor self-efficacy.

Research Question 2: Does mindfulness moderate the relationship between counselor self-efficacy and attachment strategies?

Hypothesis 2a: Mindfulness will be a significant moderating variable between attachment related anxiety and counselor self-efficacy such that higher levels of mindfulness will weaken the relationship between attachment related anxiety and CSE.

Hypothesis 2b: Mindfulness will be a significant moderating variable between attachment related avoidance and counselor self-efficacy such that higher levels of mindfulness will weaken the relationship between attachment related avoidance and CSE.

Table 8

Pilot Demographic Information

Variable	Mean	SD	n	%
Age	27	1.29	4	
Ethnicity				
African Am/Black			3	70%
Asian or Pacific Islander			0	0
Caucasian/White			0	0
Hispanic/Latino			0	0
Native American			0	0
Biracial/Multiracial			1	25%
Other			0	0
Gender				
Female			4	100%
Male			0	0
Counseling Track				
Clinical Mental Health			1	25%
School			1	25%
Couple and Family			1	25%
College			1	25%

Table 8 Continued

Variable	Mean	SD	n	%
Status				
Full-time			4	100%
Part-time			0	0
Total Course Hours	43.75	4.57	4	
Practicum Completed				
Yes			4	100%
No			0	0
Total Practicum Hours	29.38	12.58	4	
Yes			4	100%
No			0	0
Prior Mindfulness Training				
Yes			2	50%
No			2	50%
Program Offers Mindfulness				
Yes			4	100%
No			0	0
Practice Mindfulness				
Yes			3	75%
No			1	25%
Hours/Week Practicing Mindfulness	1.88	1.65		

Table 9

Pilot Study Instrumentation

Instrument	# of Items	Subscales	Alphas	Scale Range
Counselor Activity Self-Efficacy (CASES)	41	N/A	.97	0-369
Experiences in Close Relationships- Revised (ECR-R)	36	Anxiety Avoidance	.95 .93	1-7
Five Facet Mindfulness Questionnaire (FFMQ)	39	N/A	.96	0-195
Demographics Questionnaire	14	N/A	N/A	N/A

Table 10

Pilot Study Pearson-Product Moment Correlations

Variable	Attach. ANX	Mindfulness	ANX x Mindfulness	CSE
Attach. ANX	-			
Mindfulness	-.866	-		
ANX x Mindfulness	.652	-.188	-	
Counseling Self-efficacy	-.586	.266	-.705	-

* significant at the $p < .05$

IV: Attachment anxiety, mindfulness, attachment anxiety x mindfulness

DV: CSE

Despite the inadequate sample size, based on the Pearson-Product Moment Correlations, there appears to be strong negative relationships between attachment anxiety and mindfulness ($r = -.866$) and the interaction (attachment anxiety x

mindfulness) and CSE ($r = -.705$). There also appears to be an adequate negative relationship between attachment anxiety and CSE ($r = -.586$) and an adequate positive relationship between attachment anxiety and the interaction (attachment anxiety x mindfulness) ($r = .652$). Although these results are based on a sample size of 4, the processes of running the statistical analysis was achieved.

Table 11

Pilot Study Pearson-Product Moment Correlations

Variable	AVD	Mindfulness	AVD x Mindfulness	CSE
AVD	-			
Mindfulness	.366	-		
AVD x Mindfulness	.857	.792	-	
CSE	-.639	.266	-.291	-

* significant at the $p < .05$

IV: Attachment avoidance, mindfulness, attachment avoidance x mindfulness

DV: CSE

Despite the inadequate sample size, based on the Pearson-Product Moment Correlations, there appears to be strong positive relationships between attachment avoidance and the interaction (avoidance x mindfulness) ($r = .857$) and mindfulness and the interaction (avoidance x mindfulness) ($r = .792$). There also appears to be an adequate negative relationship between attachment avoidance and CSE ($r = -.639$). Although these results are based on a sample size of 4, the processes of running the statistical analysis was achieved.

Table 12

Pilot Study Pearson-Product Moment Correlations

Variable	Total Attach.	Mindfulness	Total Attach. x Mindfulness	CSE
Total Attach.	-			
Mindfulness	-.433	-		
Total Attach. x Mindfulness	.303	.727	-	
CSE	-.975	.367	-.454	-

* significant at the $p < .05$

IV: Total attachment, mindfulness, total attachment x mindfulness

DV: CSE

Despite the inadequate sample size, based on the Pearson-Product Moment Correlations, there appears to be a strong positive relationships between mindfulness and the interaction (total attachment x mindfulness) ($r = .727$). There also appears to be a strong negative relationship between total attachment and CSE ($r = -.975$). Although these results are based on a sample size of 4, the processes of running the statistical analysis was achieved.

Phase 1 Feedback Session Questions

1. While listening to the student recruitment what, if anything would you change to make it clearer?
2. What if anything would you change about the informed consent to make it clearer?
3. How clear were the instructions throughout the packet?
 - a. What would help to improve them?
4. What would you change about the packet, including but not limited to the order of the assessments and demographic questionnaires, questions on the demographic questionnaire, etc?
5. What if anything would you add or delete from the packet?
6. Any additional thoughts or concerns about the survey you would like to share at this time?
7. Any thoughts or concerns regarding the researcher and her presence throughout the recruitment process and/or during the study?
8. Final thoughts, suggestions, questions, and/or concerns?

APPENDIX G

CONSENT TO ACT AS A HUMAN PARTICIPANT

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

CONSENT TO ACT AS A HUMAN PARTICIPANT

Project Title: Attachment Anxiety and Avoidance and Counseling Self-efficacy Among Counseling Students: Examining the Moderating Role of Mindfulness

Principal Investigator: Jennifer L. Cannon

What are some things you should know about the study? This is a research study and it is completely voluntary. If you agree to participate in the study, you are welcome to withdraw at any time. If you choose to withdraw from this study, it will not affect your relationship with the University of North Carolina at Greensboro or with the researcher. Choosing not to participate or withdrawing from the study will have no effect on your grade in this class.

This study aims to obtain new information about counselors-in-training, but may have no direct benefit to you. There can be risks associated with participating in research. Details of the study are in this consent form along with the researcher's contact information and her faculty advisor's contact information.

What is the study about? Given that there are a growing number of counselors entering the field each year it is important that counselor training programs take steps to ensure that trainees are prepared to provide competent counseling services. Although counseling self-efficacy (CSE) is linked to counselor development and client outcomes, there is still limited literature on the affects attachment anxiety and avoidance and mindfulness can have on trainees' CSE. This study aims to examine how mindfulness moderates the relationship between attachment anxiety and avoidance and counselor self-efficacy in order to add to the counseling literature.

Why are you asking me? You are being invited to participate in this study because you have completed your counseling practicum course(s) and are enrolled in a counseling internship course.

What will you ask me to do if I agree to be in the study? If you agree, you will be asked to complete a survey packet consisting of a demographics questionnaire and three measurements that assess attachment, mindfulness, and CSE. The packet will take approximately 15 minutes of your time.

What are the risks for me? There are minimal risks for you associated with this study if you choose to participate. Due to the nature of some of the questions, if you become triggered in any way throughout or after this study, the researcher can provide a counseling referral for you.

Are there any benefits to society as a result of me taking part in this study? The results from this study may help to inform the counseling profession, counselor educators, and other mental health professionals about factors that impact counselor trainees' CSE.

Are there benefits to me for taking part in this study? There are no direct benefits to you for participating in this study.

Approved IRB
8/18/17