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Applying Attachment Theory and the Wounded Healer Hypothesis to Clinical Psychology and Mental Health Counseling Graduate Students

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**APPLYING ATTACHMENT THEORY AND THE WOUNDED HEALER
HYPOTHESIS TO CLINICAL PSYCHOLOGY AND MENTAL HEALTH
COUNSELING GRADUATE STUDENTS**

by

Alison B. Levine, M.S.

A Dissertation Presented to the Center for Psychological Studies of
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for the Degree of Doctor of Philosophy

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DISSERTATION APPROVAL SHEET

This dissertation was submitted by Alison Levine under the direction of the Chairperson of the dissertation committee listed below. It was submitted to the School of Psychology and approved in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Clinical Psychology at Nova Southeastern University.

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This dissertation is dedicated to my parents. My mother, with her uncanny ability to motivate me regardless of setbacks, has shown me the true meaning of hard work and perseverance. My father, whose empathy and compassion for others is tangible, has been my source of inspiration ever since I was a little girl.

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ABSTRACT

APPLYING ATTACHMENT THEORY AND THE WOUNDED HEALER HYPOTHESIS TO CLINICAL PSYCHOLOGY AND MENTAL HEALTH COUNSELING GRADUATE STUDENTS

by

Alison B. Levine, M.S.

Nova Southeastern University

ABSTRACT

The personal characteristics of the therapist are strongly associated with therapeutic alliance and treatment outcome. Since treatment techniques are often shown to be equally effective, differential outcomes may be attributed to the therapist's early experiences and personality features. The purpose of this study was to determine the influence of childhood relational trauma in predicting specific components of mentalizing skills (i.e., affect consciousness, psychological mindedness, mindfulness, cognitive empathy and theory of mind) among therapists. Participants were 121 clinical psychology doctoral and master's in mental health counseling students (20 males, 101 females) aged 22 to 53 years old ($M = 27.26$, $SD = 5.25$). Measures included the Child Abuse and Trauma Scale (CATS), Kentucky Inventory of Mindfulness Skills (KIMS), Toronto Alexithymia Scale (TAS), Psychological Mindedness Scale (PMS), Reading the Mind in the Eyes Test-revised (RMET), Interpersonal Reactivity Index (IRI-PT/IRI-EC), Relationship Structures Questionnaire (RSQ) and a questionnaire assessing demographic information, graduate training and interests, personal therapy, objective childhood

familial trauma and adult and peer support. Linear regression and hierarchical multiple linear regression analyses (HMLR) were conducted to assess the relationship between childhood relational trauma (CATS) and the various components of mentalization. HMLR was also used to determine whether relational style (anxious/avoidance) as measured through the RSQ moderated between childhood relational trauma and the mentalizing components. Finally, emotional empathy (IRI-EC) was examined as a potential mediator between childhood relational trauma and the mentalizing components using Andrew Hayes' SPSS macro. Post hoc analysis explored associations between the mentalization variables and demographic questionnaire items related to objective childhood familial trauma and support. Results revealed that childhood relational trauma significantly predicted lower levels of affect consciousness, psychological mindedness and mindfulness among therapists. Relational style was not found to be a significant moderator and emotional empathy was not found to be a significant mediator. Growing up with a parent who had a disability or physical illness was significantly associated with higher levels of emotional empathy in therapists. The implications of these results for the training and supervision of graduate level therapists are discussed.

CHAPTER I

Statement of the Problem

In the largest review, to date, of research involving the therapeutic relationship, the American Psychological Association's Division of Psychotherapy Task Force aimed to identify the crucial elements of effective psychotherapy. In a subsequent manuscript consisting of over 400 pages, the main conclusion was, “the therapy relationship...makes substantial and consistent contributions to psychotherapy outcome independent of the specific type of treatment.” In light of this finding, the following recommendations were provided: (a) the “practice and treatment guidelines should explicitly address therapist behaviors and qualities that promote a facilitative therapy relationship”, (b) clinicians should “make the creation and cultivation of a therapy relationship...a primary aim in the treatment of patients”, and (c) therapeutic training programs should “provide competency-based training in the...effective elements of the therapy relationship” (Ackerman, et al., 2001; Norcross & Wampold, 2011, pp. 98-99). Likely stemming from this work, the field has demonstrated an increased interest in the personal characteristics of therapists and the extent to which these individual differences account for the variance in treatment outcomes (Rizq & Target, 2010b). In this regard, attachment theory, arguably the most empirically supported interpersonal framework based on over 50 years of research, has gained renewed attention (Benoit, 2004). A more recent concept in attachment theory, referred to as *mentalization*, has been found to be particularly relevant to both the therapeutic alliance and therapists’ skills (Wallin, 2007). Mentalization is defined loosely as the ability to reflect on one’s own and others’ thoughts and feelings

simultaneously (Allen, Fonagy, & Bateman, 2008). The capacity to mentalize is expected to grow out of a secure attachment relationship between infant and caregiver, equipping the child with a capacity for resilience, emotion regulation skills, empathy, attachment security and interpersonal effectiveness (Fonagy, 1997; Fonagy, Gergely, Jurist, & Target, 2002; Fonagy, Steele, Moran, Steele, & Higgitt, 1991).

A number of psychotherapy outcome studies have shown that a client's capacity to mentalize is directly related to therapeutic success (Bouchard et al., 2008; Fonagy et al., 1996; Meehan, Levy, Reynoso, Hill, & Clarkin, 2009; Müller, Kaufhold, Overbeck, & Grabhorn, 2006). In addition to mentalizing skills in the client, the interactive influence of therapist and client mentalization was found to be a central aspect of change (Diamond, Stovall-McClough, Clarkin, & Levy, 2003). Furthermore, two recent studies that examined the relationship between therapist mentalization and client post-treatment status discovered that clients of therapists with higher mentalizing skills demonstrated a significantly greater decrease in symptoms as compared to clients of therapists with lower mentalizing skills (Cologon, 2013; Reading, 2013). As the majority of existing studies involving mentalization in the therapeutic relationship have shown that therapists' mentalizing skills impact both clients' mentalizing abilities and treatment outcome in general, this study endeavored to explore the existence of and factors predicting the development of mentalizing skills specifically among therapists.

It is believed that early attachment trauma, including both complete separation from a caretaker or a parent's inconsistent emotional availability (Bowlby, 1944, 1958), will impair the child's development of mentalizing skills, denying him or her the resilience

that mentalizing affords and leading to inaccurate interpretations of others' mental states, reduced levels of empathy in response to the distress of others, emotionally dysregulated behavior and severe psychopathology/personality disorders (Fonagy, Steele, Steele, Higgitt, & Target, 1994). It is concerning then, that the large body of research on what has been termed the *wounded healer hypothesis* (Cohen, 2009; Jackson, 2001) has revealed higher incidences of childhood relational trauma among therapists (Trusty, Ng, & Watts, 2005; Watts, Trusty, Canada & Harvill, 1995; Wilcoxon, Walker & Hovestadt, 1989), with therapists reporting that their adverse histories actually contributed to their choice of the profession (Barr, 2006; Cushway, 1995). Of note, in the current study, childhood relational trauma is operationalized as negative relational experiences (i.e., sexual abuse, physical abuse and punishment, psychological maltreatment, physical or emotional neglect and discomfort while in the home) during childhood or adolescence (prior to age 18) involving primary caregivers. Conversely, objective childhood familial trauma is defined as adverse experiences within the family (financial problems, physically disabled or ill parent, mental health problems in parent) or separation from family members (parent passed away, member of household incarcerated) during childhood or adolescence (prior to age 18).

Conflicting with assumptions of attachment theory, the wounded healer hypothesis suggests that therapists with a history of childhood relational trauma are especially skilled at empathizing with, identifying and treating trauma (Cohen, 2009; Jackson, 2001). A certain type of empathy, namely *emotional empathy*, has been observed among wounded healers (Trusty, et al., 2005). According to Stotland (1969), emotional empathy involves

perceiving what another individual is feeling or is expected to feel and personally responding to that perception in an emotional manner. Emotional empathy was found to be predictive of training therapists' skills, clients' satisfaction (Ridgway & Sharpley, 1990), and the quality of the therapeutic alliance (Grace, Kivlighan, & Kunce, 1995).

Despite theoretical inconsistencies between attachment theory and the wounded healer hypothesis, there is a general agreement among the two that avoiding past pain interferes with an individual's ability to effectively function as a psychotherapist (i.e., wounded healer hypothesis) or caretaker (i.e., attachment theory) (Hesse & Main, 1999; Trusty, et al., 2005). Nevertheless, few studies have attempted to explore the association between childhood relational trauma/objective childhood familial trauma and mentalization among therapists. This is likely because of the current nature of mentalization research, which requires the use of qualitative measures that can take up to 8 hours to code and interpret (Meehan, et al., 2009). The studies that have considered the relationship between therapists' childhood histories and mentalizing skills have often utilized such measures, limiting sample size and/or quantitative analyses. Additionally, these studies tend to focus on therapists' attachment styles as opposed to self-reports of their early relational/familial experiences (Cologon, 2013; Rizq & Target, 2010a).

Through a critical review of concepts similar to mentalization, Choi-Kain and Gunderson (2008) created a map depicting specific points of division and coherence between and within mentalization and related terms. As a result, they identified specific skills involved in mentalizing that could be measured through more efficient self-report instruments (Choi-Kain & Gunderson, 2008). Utilizing reliable and valid paper-and-

pencil measures (i.e., self-reports and a performance test) of these identified underlying constructs, the present study aimed to address the gap in the research by examining the personal histories and mentalizing abilities of a representative sample of clinical psychology doctoral and master's in mental health counseling trainees. Emotional empathy was also assessed as a potential mediator between childhood relational trauma in therapists and mentalizing skills given the aforementioned findings on emotional empathy in wounded healers (Trusty, et al., 2005). Finally, relational style (i.e., avoidance and anxiety) was explored as a moderator of the relationship between childhood relational trauma in therapists and mentalizing skills, with the expectation that tendencies toward relational avoidance/anxiety would entail reluctance to build a trusting relationship in which traumatic interpersonal experiences could be processed (Ainsworth, Blehar, Waters, & Wall, 1978; Main, Kaplan, & Cassidy, 1985). Understanding the impact of childhood relational trauma on interpersonal abilities, specifically in terms of how it influences the development of various aspects of mentalization and related clinical skills, can be used to determine competency areas to address in clinical training as well as effective supervisory relationships.

CHAPTER II

Review of the Literature

Attachment Theory

Attachment theory is based on the notion that infants are innately driven to attach to a caretaker as a result of a behavioral system that aims to ensure survival (Bowlby, 1969). The quality of this early bond is expected to have an enduring effect on the individual's sense of safety, relational behavior and emotional capacities into childhood and throughout adulthood (Bowlby, 1973, 1980; Bowlby, 1988). At its inception, attachment theory was primarily focused on the parent-infant dyad, but overtime, the findings were applied to other intimate relationships including adult romantic relationships, and, as this dissertation will show, the therapeutic relationship (Allen, et al., 2008; Benoit, 2004; Dozier, Cue, & Barnett, 1994; Fraley, Heffernan, Vicary, & Brumbaugh, 2011; Holmes, 2001; Wachtel, 2011; Wallin, 2007).

John Bowlby, Mary Ainsworth, and internal working models. John Bowlby, one of the founders of attachment theory, was driven by a conviction that the interactions between parent and infant play a significant role in the formation of one's personality (Ainsworth & Bowlby, 1991). Bowlby (1973) theorized that the caregiver's availability and responsiveness to the child was central to what he referred to as "internal working models" of the self and the attachment figures. Bowlby (1982) described the internal working model held by the child as a cognition "of how his mother and other significant persons may be expected to behave, how he himself may be expected to behave, and how

each interact...” (p. 33). According to Bowlby (1973), the infant’s past experiences with the caregiver were stored in internal working (memory) models that provide prototypes for all future relationships: they continue to shape behavior and perception regardless of whether the original attachment figures are present.

Bowlby’s understanding of internal working models was influenced by the studies of his research peer, Mary Ainsworth. While examining infants’ responses to separation from and reunion with their caretakers through a laboratory procedure, Ainsworth, et al. (1978) identified three styles of attachment in infancy: (a) secure, (b) avoidant, and (c) ambivalent. Infants who were deemed “secure” used the mother as a “secure base” (i.e., exploring his or her surroundings when mother was in sight), exhibiting distress during separation and at initial moments of reunion. The “avoidant” infants were characterized by continuous exploration, a lack of visible distress when the caregiver departed and indifference upon her return. The “ambivalent” infants showed significant distress when separated from the caregiver, sought proximity when the parent returned, but remained angrily or passively distraught (Ainsworth, et al., 1978). Based on naturalistic observations of interactions between these infants and mothers in the home, Ainsworth, et al. (1978) concluded that the avoidant and ambivalent children’s attachment behavior was a defensive adjustment. Avoidant infants’ efforts to seek comfort from the caretaker had been repeatedly met with rejection, and thus, these children essentially stopped trying. Similarly, mothers of ambivalent infants had responded inconsistently to their infant’s signals and were emotionally available only part of the time, therefore, it was adaptive for ambivalent infants to communicate their attachment needs in a persistent and exaggerated

fashion.

Mary Main and the Adult Attachment Interview. Stemming from the works of Bowlby and Ainsworth, and in an effort to empirically measure internal working models, Mary Main developed the Adult Attachment Interview (AAI) (George, Kaplan, & Main, 1985; Main, et al., 1985). The AAI consists of a number of questions related to the interviewee's memories of and relationship with parent(s) (George, et al., 1985). According to Main (1993), what signified a secure state of mind regarding attachment was the capacity for "coherent discourse" (p. 224) during the AAI. Parents of secure children provided AAI answers that were organized, non-contradictory, clear, appropriate, and relatively brief. Conversely, the transcripts of insecure parents had responses that were at times incoherent and contradictory (Main, et al, 1985). Specifically, parents of avoidant infants denied the influence of attachments and claimed to have forgotten about past attachment experiences while parents of ambivalent infants seemed to focus excessively on attachment-related memories (Main, et al, 1985).

Main, et al. (1985) initially posited that secure parents raised secure children because their lack of rigidity in terms of affect, language, behavior and attention allowed them to respond sensitively to their infants' signals. In contrast, insecure parents were believed to raise insecure children because their limitations in attention and responsiveness to attachment signals manifested in speech as incoherencies and in behavior as insensitivities (Main, et al., 1985). However, van Ijzendoorn's (1995) meta-analysis revealed that, while the AAI did predict infant-parent attachment, parents' sensitivity to infant signals alone could not fully explain the association between parent

and child attachment classification.

Metacognitive monitoring. In response to van Ijzendoorn's (1995) findings, Main reviewed her AAI data and proposed the concept of "metacognitive monitoring," or metacognition (Main, 1991, 2000). Metacognitive monitoring involves the ability to reflect on one's perceptions about experiences, and while doing so, to acknowledge inconsistencies and misinterpretations among thoughts. In terms of the AAI, metacognitive monitoring among parents predicted secure attachment in their child while lapses in metacognition were associated with infant insecurity (Main, 1991).

Importantly, Main (1991) found that a number of parents who did not describe positive attachment experiences still demonstrated sufficient metacognitive monitoring (Main, 1991). It appeared that, even among parents with adverse attachment histories, the ability to talk about childhood experiences (whether good or bad) in an emotionally open, coherent, and reflective manner was associated with secure attachment in their children (Main, 1991). Pearson, Cohn, Cowan, and Cowan (1994) coined the term "earned-secure" to differentiate those individuals who described adverse attachment histories in a coherent manner from individuals who displayed the expected combination of infant-parent security and coherency (i.e., continuous-secure) (Pearson, et al., 1994). It has been proposed that the resilient maltreated individual possesses two internal working models: an insecure model related to the negative attachment relationship and a secure model associated with the positive attachment relationship (Main, et al., 1985; Roisman, Padrón, Sroufe, & Egeland, 2002). Due to the mental incongruence between the insecure working model and the secure working model, metacognitive abilities might

develop to help negotiate between the inconsistencies, aiding in resolving negative attachment experiences and ultimately leading to earned-security (Allen, 2012; Fonagy, Steele, Moran, et al., 1991).

Mentalization

Building on Main's foundational work on metacognitive capacities, Fonagy (1997) amended her original operationalization of the concept by incorporating *theory of mind* (Allen, et al., 2008). Theory of mind refers to the ability to attribute mental states such as beliefs, intentions and desires to the self and others while understanding that others have beliefs, desires and intentions that are different from the self's. Combining the notions of metacognition and theory of mind, Fonagy, Target, Steele, and Steele (1998) developed the construct of mentalization. While metacognitive monitoring refers only to the function of thinking about/monitoring thinking, mentalization expands upon this to include thinking about emotions and thinking about motives. Crucially, while metacognition involves thinking specifically about one's *own* thoughts, mentalization entails thinking about thinking, emotions and motives in both *oneself and others* (Allen, et al., 2008; Fonagy, et al., 1991). Operationalized for research purposes as the Reflective-Functioning Scale (RFS; Fonagy, et al., 1998), it was discovered that individuals with strong mentalizing skills were 3 to 4 times more likely to have securely attached children than their less skilled counterparts. Additionally, the capacity to mentalize among adults with negative attachment histories seemed to act as a buffer against raising insecure children (Lecours & Bouchard, 2011). In fact, high parent mentalization on the RFS was found to be a *stronger* predictor of child attachment

security than a classification of secure on the AAI (Fonagy, et al., 1998).

The RFS is currently the most widely employed research instrument for the assessment of mentalization, which is problematic for several reasons. First, the RFS produces only a single score for the overall level of mentalization, restricting the examination of the measure's psychometrics and factor structure (Choi-Kain & Gunderson, 2008). Although it would be of benefit to understand the extent to which individuals are more or less skilled in distinct aspects of mentalizing, mentalization can only be scored as a generalized ability on the RFS (Hill, Levy, Meehan, & Reynoso, 2007). Second, the RFS must be used in conjunction with the AAI; the AAI is costly, requires significant training in coding, must be taped and transcribed, and the time needed to transcribe each interview is typically between 6 and 8 hours (Meehan, et al., 2009). Finally, as Choi-Kain and Gunderson (2008) noted, the validity of the measure is underdeveloped, it remains difficult to employ in large-scale research, and more efficient self-report measures of adjacent concepts could prove effective in measuring the different dimensions of the mentalization concept.

Components of mentalization. More recently, Fonagy and others (Fonagy, Bateman, & Bateman, 2011; Hill, et al., 2007; Meehan, et al., 2009) have focused on the multidimensional nature of mentalization. As a result of efforts to understand the underlying constructs and skills involved in mentalizing, its components have been organized according to the following dimensions: (a) self-other-oriented, (b) implicit/explicit, and (c) cognitive-affective (Bateman & Fonagy, 2004b; Choi-Kain & Gunderson, 2008; Fonagy, et al., 2011). The self versus other dimension refers to the

object that is being mentalized about, that is, one's own and/or others' mental states. The implicit versus explicit dimension relates to the modes of functioning. Implicit mentalization occurs unconsciously (e.g., conversational turn-taking) while explicit mentalization is more effortful (e.g., therapist providing psychotherapy). Lastly, the cognitive versus affective dimension relates to the content and process of mentalizing; intentional mental states in oneself and others can be more cognitively focused or more affectively focused but ideally emotion and thought are integrated (Bateman & Fonagy, 2004b; Choi-Kain & Gunderson, 2008; Fonagy, et al., 2011).

Through a critical review of concepts similar to mentalization, Choi-Kain and Gunderson (2008) were able to create a map depicting specific points of division and coherence between and within mentalization and related terms. Focusing on empirically supported self-report measures that were capable of isolating the self-other-oriented, implicit/explicit and cognitive-affective aspects of mentalization yielded the following 4 skills: (a) mindfulness, (b) psychological mindedness, (c) empathy, and (d) affect consciousness.

Empathy. Davis (1983) described empathy as “the reactions of one individual to the observed experiences of another.” Empathy involves both (a) perspective taking, or being able to consider another individual's point of view; and (b) empathic concern, or feeling compassion for others (Davis, 1980). Empathy and mentalization share a commonality in that they both recognize the importance of mental states in others, but mentalization does not include experiencing the mental states of others (Choi-Kain & Gunderson, 2008). While mentalization places a proportionate emphasis on mental states

in the self and in others, empathy is more involved with the mental states of others (Choi-Kain & Gunderson, 2008). Empathy occurs both implicitly and explicitly, but the former is more common. In order to empathize, cognition and affective experience is necessary; nevertheless, empathy's content is mostly affective (Allen, et al., 2008; Choi-Kain & Gunderson, 2008).

Mindfulness. Mindfulness has been defined as “a kind of nonelaborative, nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is (Bishop et al., 2004, p. 232).” Factor analysis has revealed four key skills that support mindfulness: (a) observing, (b) describing, (c) acting with awareness and (d) accepting without judgment (Bishop, et al., 2004). The relevance of mindfulness to mentalization is apparent within the observing and describing skills. Both concepts entail focusing attention on internal experiences in the self as a means of controlling behavior (Choi-Kain & Gunderson, 2008). In addition, cognitive and affective components of mental states are integrated to facilitate recognition of and participation in one's own experience (Choi-Kain & Gunderson, 2008). However, in contrast to mentalization, mindfulness is self-oriented and only occurs explicitly (Bishop, et al., 2004).

Affect consciousness. Affect consciousness encompasses the capacity to experience affects as well as the ability to express affects (Lesser, 1981). The term *alexithymia*, which means “no words for moods,” can be construed as the opposite of affect consciousness (Lesser, 1981). The verbalization, awareness and representation of affect all play a central role in mentalizing (Choi-Kain & Gunderson, 2008). Affect

consciousness differs from mentalization, however, with respect to its focus on explicit modes of functioning (i.e., conscious awareness and expression of affect states) (Choi-Kain & Gunderson, 2008). Although affect consciousness considers mental states in both the self and others, it is more limiting than mentalization in its specific focus on affective mental states (Choi-Kain & Gunderson, 2008).

Psychological mindedness. The concept of psychological mindedness can be understood as “both the interest in and the ability to reflect on affects, thoughts and behavior in an integrated manner” (Shill & Lumley, 2002, p. 132). It also includes the person’s interest in “expanding self-awareness through such a process of reflection” (Shill & Lumley, 2002, p. 132). Like mentalization, psychological mindedness involves an interest in the mental states of others (Farber, 1985) as well as the self (Shill & Lumley, 2002). However, there is a greater emphasis on one’s own mental states. Furthermore, psychological mindedness does not pertain to one’s capacity to determine mental states (Choi-Kain & Gunderson, 2008). Psychological mindedness also differs from mentalization in that explicit mental states are the primary concern (Choi-Kain & Gunderson, 2008). Mentalization and psychological mindedness do place an equal level of importance on the cognitive and affective components of internal experiences (Choi-Kain & Gunderson, 2008).

Attachment and Mentalization in the Therapeutic Relationship

Parenting and psychotherapy have continuously been compared throughout the literature on attachment, particularly in terms of the therapist as a maternal developmental object (Bowlby, 1988; Holmes, 2001; Hurry, 1998). Indeed, Bowlby

(1988) most notably stated, “in providing his patient with a secure base ... the therapist’s role is analogous to that of a mother who provides her child with a secure base” (p. 140). Since a secure attachment between child and parent is facilitated by the parent’s mentalizing skills, mediation of a similar kind is thought to take place in the process of psychotherapy (Allen, et al., 2008; Fonagy & Target, 1998). As in the parent-child dyad, the therapist’s ability to mentalize not only fosters security in the patient, but it also facilitates the patient’s own use of mentalization (Fonagy, et al., 2002; Fonagy & Target, 1998; Fonagy, et al., 1998). Importantly, for individuals whose capacity to mentalize has been undermined by attachment trauma, the therapist mentalizing in a way that encourages the patient’s mentalizing is seen as a critical component of the therapeutic alliance and effective treatments (Bateman & Fonagy, 2004a). According to Fonagy, et al. (1994), the ability to mentalize not only permits an individual to cope with adversity, it also ensures the transmission of this capacity for resilience.

Therapist mentalizing skills and psychotherapy outcome. A number of psychotherapy outcome studies have shown that a client’s capacity to mentalize is directly related to therapeutic success (Bouchard, et al., 2008; Fonagy, et al., 1996; Levy et al., 2006; Meehan, et al., 2009; Müller, et al., 2006). In addition to mentalizing skills in the client, the interactive influence of therapist and client mentalization was found to be a central aspect of change. Diamond, et al. (2003) discovered that, after one year of treatment, therapists with a higher capacity for mentalization were able to improve their client’s mentalizing skills from a “rejecting stance” to a willingness to consider mental states in the self and others. In contrast, therapists with a poorer capacity for

mentalization that was congruent with their client's lower level demonstrated inferior treatment outcomes. In a recent study that examined the relationship between therapist mentalization and client post-treatment status, clients of therapists with greater mentalizing skills reported a decrease in symptoms and a decrease in interpersonal problems at a 6-month follow-up (Müller, et al., 2006). A similar study that assessed the relationship between mentalization, attachment status, and client's reported level of symptoms revealed that clients of therapists with high mentalizing scores reported a significant decrease in symptoms over the course of treatment whereas the clients of therapists with low mentalizing scores did not reveal a significant change in symptoms throughout therapy. Of note, the relationship between therapist mentalizing and therapist effectiveness existed independent of therapist attachment status (Reading, 2013).

Therapist empathy. It has been suggested that empathy is the most vital component of mentalizing (Allen & Fonagy, 2006). According to Allen and Fonagy (2006), if the concept of empathy expanded to include "having empathy for oneself" (p. 13) it would be synonymous with mentalization. In terms of psychotherapy, empathy is considered a common factor of numerous approaches and an essential clinical skill (Blow & Sprenkle, 2001). Rogers (1957) cited empathy as one of six "necessary and sufficient conditions" for psychotherapy. He defined empathy as "an attitude of profound interest in the client's world of meanings and feelings, where the counselor makes a maximum effort to live the attitudes expressed instead of observing them, diagnosing them, or thinking of ways to make the process go faster (Rogers, 1951, p. 29)." According to Greenberg, Domitrovich, and Bumbarger (2001), the client's view of the therapist as

empathic and authentic is critical for symptom reduction. Empirical research has consistently demonstrated that therapist empathy predicts outcome in psychotherapy. In a review of 116 outcome studies completed between 1946 and 1969, therapist empathy and experience was found to correlate directly with treatment outcome (Luborsky, Auerbach, Chandler, Cohen, & Bachrach, 1971). Lafferty, Beutler, and Crago (1989) considered differences in efficacy among therapist trainees and discovered lower levels of empathic understanding among the less effective therapists (Lafferty, et al., 1989). In a more recent meta-analysis, Elliott, Bohart, Watson, and Greenberg (2011) observed a moderately strong relationship between therapist empathy and success of treatment.

Therapist mindfulness. Falkenström et al. (2014) proposed that mindfulness is a prerequisite for mentalizing, since an individual must first notice mental states before mentalization can occur. In support of this notion, Falkenström, et al. (2014) found a significant positive relationship between measures of mentalization and mindfulness. According to Siegel (2007) mindfulness leads to a sort of self-attunement that, in turn, increases one's ability to attune to others. Studies have shown that trait mindfulness is predictive of the following: (a) the ability to respond constructively to relational stressors (b) skill at identifying and communicating emotions and (c) empathy. People with greater mindfulness appear to be less receptive to distress contagion and more likely to act with awareness in social situations (Dekeyser, Raes, Leijssen, Leysen, & Dewulf, 2008). Mindfulness is also positively associated with the ability to express oneself in various social situations (Dekeyser, et al., 2008). Since the therapeutic relationship requires tolerating the client's distress, working through therapeutic ruptures, and

tracking transference and countertransference dynamics, mindfulness would be expected to aid in the therapist's capacity to form effective relationships with clients (Bruce, Manber, Shapiro, & Constantino, 2010; Davis & Hayes, 2011). In one particular study, counseling students who completed a 15-week course on mindfulness meditation reported improved counseling skills and therapeutic relationships, greater attentiveness to the therapy process, improved discomfort with silence, and greater attunement to their clients (Newsome, Christopher, Dahlen, & Christopher, 2006). In terms of treatment outcome, Grepmaier et al. (2007) found that teaching psychotherapists to be more mindful resulted in significantly greater symptom reduction among their clients.

Therapist affect consciousness. Empirical research has revealed that low affect consciousness is associated with an inability to make sense of feelings in the self and emotional states in others (Mohaupt, Holgersen, Binder, & Nielsen, 2006). An individual with deficits in emotional understanding will struggle to explain the causes of one's own and others' behavior (Falkenström, et al., 2014). Expression and exploration of clients' affects is considered to be among the "basic requirements for successful therapeutic work" (Hölzer, Pokorny, Kächele, & Luborsky, 1997, p. 263). Psychotherapy outcome research has shown that the most successful therapists used emotion words more frequently than their least successful counterparts (Hölzer, et al., 1997).

Therapist psychological mindedness. According to Farber (1985), psychological-mindedness is a principal part of the therapist's professional life as well as his or her personal life. Research on psychological mindedness in therapists has shown that therapists with greater levels of psychological mindedness were better able to form

effective working relationships with their clients and possessed a higher degree of clinician empathy (Daw & Joseph, 2009).

Childhood Relational Trauma and Mentalization

A secure attachment relationship is believed to provide the foundation for developing mentalizing capacities (Allen, et al., 2008), whereas attachment trauma (i.e., abuse, neglect, loss, lack of support, over-control, and emotional mistreatment) can disrupt mentalization, resulting in mentalizing failures or hypermentalization (i.e., continuing attempts to mentalize, but without integration of cognition and affect) (Bleiberg, Fonagy, & Target, 1997; Fonagy, 1997; Main, 1995). Children who experience attachment trauma may refuse to consider the attachment figure's thoughts and feelings (i.e., inhibiting mentalization) as a coping strategy that protects the child from thinking about the caregiver's wish to inflict harm on him or her (Lecours & Bouchard, 2011). Consequently, the individual continues to form inaccurate impressions of mental states in the self and others, leaving him or her susceptible to the long-term impacts of the trauma including a reduced ability to cope, problems finding more positive relationships in later life and severe developmental psychopathology or personality disorder (Fonagy, et al., 1994). Fonagy, Mayes, and Target's (2007) review of the research on early attachment trauma revealed that maltreated children responded less empathically to other children's distress, displayed more emotionally dysregulated behavior, talked about internal and emotional states less often, and had difficulty understanding emotional expressions. Additional research showed that maltreated children often cannot describe their feelings in words, demonstrate impairments in

mentalizing about cognitions (e.g., theory of mind tasks) (Beeghly & Cicchetti, 1994; Cicchetti, Rogosch, Maughan, Toth, & Bruce, 2003; Pears & Fisher, 2005) and struggle with emotion-focused mentalizing (Beeghly & Cicchetti, 1994; Pears & Fisher, 2005).

Although a positive early attachment history is considered the optimal path to developing mentalizing skills, individuals with negative early relational experiences can still acquire the capacity to mentalize (Fonagy, et al., 1991; Fonagy, et al., 1994). Steele and Steele (2011) identified this second path to mentalization that is taken by resilient adults who, despite receiving insufficient, neglectful, or even malignant parental care, “somewhere along the way they mastered the capacity to put themselves in the shoes of the other and to see that the other may have different thoughts, feelings, and intentions than the self” (p. 143). In contrast to what traditional attachment theory would predict, more recent research found that the highest scores on the RFS came from individuals who did not report an advantageous developmental background (Fonagy, et al., 1996; Fonagy, et al., 1991; Fonagy, et al., 1994). In fact, the highest scorers appeared to be those who suffered major difficulties, processed these experiences, and ultimately achieved attachment security, i.e., earned security (Steele & Steele, 2011). Securely attached individuals with positive attachment histories (continuous-secure) often had moderate to low mentalizing skills, while insecure and unresolved individuals generally had low to very low mentalizing skills (Falkenström, et al., 2014; Fonagy, et al., 1994; Target, 2011).

According to Fonagy and Target (2005), earned secure individuals would reasonably display higher mentalization scores on the RFS given the likelihood that they

worked exceptionally hard to resolve distressing events and relationships, which would lead to the development of stronger mentalizing skills (Falkenström, et al., 2014; Target, 2011). This notion was echoed by Hesse (2008) in response to his observations of couples' interactions. According to Hesse (2008), earned secure individuals “were observed to more frequently reflect in the moment and appropriately modify their behavior in accordance with partner responses than were continuous-secure or insecure participants—and to do so even during conflict.” Hesse (2008) reasoned that, strong efforts to process and reflect on disturbing experiences equipped earned secure individuals with adaptive benefits that those with less adverse childhoods rarely attained.

Childhood relational trauma and therapists: The wounded healer hypothesis.

An abundance of studies that compared psychotherapists to other professionals revealed a higher reported incidence of disturbed or troubled family backgrounds among therapists (Elliott & Guy, 1993; Farber, 1985; Farber, Manevich, Metzger, & Saypol, 2005; Orlinsky & Rønnestad, 2005). One study in particular showed that 73.9% of counselors and psychotherapists have had one or more “wounding” experiences that influenced their choice of profession (Barr, 2006). In fact, therapists have frequently reported that their own troubled histories enabled them to be especially sensitive, empathic and attuned to their clients (Cushway, 1995). Multiple surveys of master's level clinical practicum students revealed that the perceived quality of trainees' early relationships with their parents was inversely related to their therapeutic efficacy (Trusty, et al., 2005; Wilcoxon, Walker, & Hovestadt, 1989). Despite the fact that attachment theory generally predicts that early attachment trauma would disrupt the development of mentalizing skills, (e.g.,

the capacity to observe one's own and other's internal states, regulate emotions and empathize) leading to an impaired understanding of others and difficulties in interpersonal relationships, research has suggested that psychotherapists' wounds have been used to promote healing in their clients (Fauth, Gates, Vinca, Boles, & Hayes, 2007; Gelso & Hayes, 2007). The large body of literature on what has been referred to as the wounded healer hypothesis (Cohen, 2009; Jackson, 2001) suggests that therapists who have undergone their own traumatic childhood relational experiences are uniquely equipped to empathize with, identify, and treat trauma relative to their unwounded peers.

In ancient Greek mythology, wounded healers were revered as capable and compassionate leaders who understood and could heal the suffering of others because of their own suffering. Psychiatrist Carl Jung was the first to apply the wounded healer concept to psychotherapy, and claimed that, "the doctor is effective only when he himself is affected" (Jung, 1961, p. 134). "It is his own hurt that gives the measure of his power to heal" (Jung, 1951, p. 116). Notable in the research has been the wounded healer's capacity for a specific type of empathy, referred to as emotional empathy (Trusty, et al., 2005). Trusty, et al. (2005) found that emotional empathy was positively associated with attachment/relational anxiety in therapist trainees. In a study involving the examination of three types of empathy (i.e., communicative, intellectual and emotional empathy) among counseling students who were at the beginning of their training experience, it was found that emotional empathy alone was predictive of counseling student's skill and their client's satisfaction with therapy (Ridgway & Sharpley, 1990; Trusty, et al., 2005). Additionally, emotional empathy was shown to be significantly related to the quality of

the therapeutic alliance (Grace, et al., 1995) as well as helping behavior in general (Batson, Fultz, & Schoenrade, 1987; Krebs, 1975). Emotional empathy is commonly differentiated from cognitive empathy. As noted by Walter (2012), cognitive empathy entails understanding what another is feeling without actually sharing in their affective state. In contrast, Stotland (1969) explained that emotional empathy involves perceiving what another individual is feeling or is expected to feel and personally responding to that perception in an emotional manner. Emotional empathy, however, does not necessarily involve an understanding of why the individual is experiencing a given emotional state.

The opposing view on wounded therapists cites a potential for difficulties remaining emotionally present, poorly managed countertransference, overidentification, projection, boundary confusion or violation, and using the therapy process to achieve unmet narcissistic needs (Briere, 1992; Halewood & Tribe, 2003). Despite the divide in the literature regarding the effects of woundedness, there is a general agreement that avoiding past pain interferes with an individual's ability to effectively function as a psychotherapist (i.e., wounded healer hypothesis) or caretaker (i.e., attachment theory). Jung (1914) warned that the therapist's own "blind" spots could limit or defensively divert treatment (p. 260), and it was his belief that the wounded healer "cannot heal beyond the extent to which he himself has healed" (p. 92). Likewise, Main (1995) stressed that the mother must be able to acknowledge, access, and evaluate openly and coherently her own feelings in relation to early attachment experiences, because, without this capacity to mentalize, she will be unable to cope with her infant's distress. Thus, both theories overlap regarding the notion that, in order to be a successful healer or

caretaker, one must be aware of his or her wounds and not project them onto others (Groesbeck, 1975). As Holmes (2001) pointed out, the capacity to think and talk about previous suffering (i.e., to mentalize) is a protective factor that allows for the development of secure attachment relationships regardless of one's degree of childhood trauma.

Considering the wounded healer hypothesis in light of the finding that individuals who have resolved their experiences of early maltreatment (i.e., earned secure) revealed the highest scores on the RFS, it seems reasonable to suggest that differences in levels of mentalizing among wounded healers might explain the divergent data regarding the consequences of woundedness for therapists.

Childhood relational trauma in therapists and mentalization. As far as this author is aware, only two studies have examined the relationship between mentalization and childhood relational trauma specifically among therapists. Rizq and Target (2010a) qualitatively explored the influence of attachment status and mentalization on how counseling psychologists discussed their own personal therapy and used it in their clinical work. Attachment status and mentalization were assessed using the AAI in conjunction with the RFS. In general, scores on the mentalization measure were found to be highest among the earned-secure and secure psychologists with the lowest scores coming from unresolved individuals and those who could not be classified. Although their study contributed to the existing literature, Rizq and Target (2010a) acknowledged its limitations in terms of generalizability given the small sample size and qualitative exploration and suggested the need for a broader scale quantitative analysis on the topic.

In a more recent study that was cited earlier in this paper, Cologon (2013) examined the interaction between therapist mentalization, attachment and effectiveness. The purpose of the research was to assess the relationship between therapist mentalization as measured by the RFS and psychotherapeutic effectiveness. Due to unsatisfactory interrater reliability on the AAI, only data from the self-report measure of attachment security were included in the main analysis. Cologon (2013) drew a connection between his results and those of Rizq and Target (2010a) regarding earned secure participants; he noted that the therapists in his study with the highest scores on the RFS (i.e., whose clients showed the greatest improvement in symptoms) were rated as secure on the AAI and insecure/anxious on a self-report measure of attachment. According to Cologon (2013), this combination is suggestive of an earned secure attachment status. However, as previously mentioned, because of insufficient interrater reliability in scoring the AAI, the data on AAI attachment status could not be taken as valid. Furthermore, given the sample size of 25 therapists, the study's generalizability remains questionable.

Summary and Hypotheses

Overall, studies have attempted to gain a better understanding of the relationship between childhood relational trauma, relational style and mentalizing skills among therapists. In general, the existing research has been limited in terms of sample size and quantitative analyses; this is likely a result of reliance on the AAI/RFS for measuring mentalizing abilities as opposed to more efficient measures of underlying constructs. Furthermore, most research has considered therapist's attachment status and excluded self-reports of adverse childhood relational/familial experiences. Therefore, the purpose

of this study was to quantitatively examine the relationship between childhood relational trauma and mentalization among a group of training therapists, focusing on mentalization's integral aspects as previously described.

The first hypothesis was that there would be a significant association between childhood relational trauma and mentalization among training therapists. This hypothesis was based on findings from the wounded healer research of an association between childhood relational trauma and therapist skills. Given that research has revealed contradictory findings regarding the association between therapists' skills and early relational trauma, the direction of this hypothesis was not specified.

The second hypothesis was that the association between relational trauma and mentalization would depend on trainees' relational style. This hypothesis was based on the noted overlap between the wounded healer hypothesis and attachment theory: that individuals who confront and process past relational traumas are capable of relating well to others. However, this would require an openness to discussing past struggles in the context of a trusting relationship. Therefore, it was expected that therapists who revealed a tendency towards relational avoidance/anxiety would demonstrate lower levels of mentalizing skills.

The third study hypothesis was that emotional empathy would be a significant mediator between childhood relational trauma and mentalization. This hypothesis stemmed from the aforementioned research indicating that emotional empathy among therapists predicted skill, helping behavior, and therapeutic alliance, despite also being associated with relational anxiety.

CHAPTER III

Method

This study utilized a cross-sectional survey methodology to examine a group of clinical psychology doctoral and master's in mental health counseling trainees. The purpose was to (a) determine the ability of an childhood relational trauma measure to predict scores on mentalization instruments, and (b) assess for potential factors mediating or moderating the relationship between the mentalization variables and childhood relational trauma scores.

Participants

The participants in this study were 121 trainees attending clinical psychology and mental health counseling programs at a university in the Southeast United States. Of the 121 participants, 20 were male and 101 were female, ranging in age from 22 years old to 53 years old ($M = 27.26$, $SD = 5.25$). The participants were predominantly White ($n = 64$, 53%), while over a third of participants ($n = 27$, 31%) were Hispanic/Latino. Table 1 provides additional information on participant gender and ethnicity.

Table 1

Frequencies and Percentages: Participant Demographic Variables (N = 121)

| Variables | Frequency | % |
|------------------|-----------|------|
| Gender | | |
| Male | 20 | 16.5 |
| Female | 101 | 83.5 |
| Ethnicity | | |
| White | 64 | 52.9 |
| Hispanic/Latino | 27 | 30.6 |
| Black | 15 | 12.4 |
| Asian | 4 | 3.3 |
| Other | 1 | 0.8 |

Participants also answered questions about their graduate psychology program and interests (please see Table 2). The number of trainees in mental health counseling master's programs ($n = 59$, 49%) was similar to the number of trainees in clinical psychology doctoral programs; 52 (43%) were clinical psychology PsyD students and ten (8%) were clinical psychology PhD students. The theoretical orientations of the participants were diverse, with the largest number of trainees endorsing a cognitive-behavioral orientation ($n = 44$, 36%) or an integrative/eclectic orientation ($n = 39$, 32%). The majority of participants ($n = 73$, 60%) were in their first or second year of their program. Most participants had provided therapy for at least 6 to 12 months ($n = 79$, 65%), and some had not provided therapy at all ($n = 42$, 35%). Seventy-one (59%) participants had received psychotherapy at some point in their life.

Sampling design. In order to be included in the study, participants had to be actively enrolled in a clinical psychology doctoral program or a master's in mental health counseling program. In order to attain a representative sample, three classes each were randomly chosen from a list of scheduled clinical psychology doctoral and master's in mental health counseling classes for the semester. Class professors were either emailed or asked in-person about allotting a portion of class time to the completion of surveys. Additionally, each day of the recruitment period, trainees were approached throughout the psychology building and asked about their interest in participating; this was done at various times and days of the week to ensure equal opportunities for inclusion in the study and to account for trainees who had completed all their required classes.

Table 2

Frequencies and Percentages: Graduate Psychology Program and Interest Variables (N = 121)

| Variables | Frequency | % |
|------------------------------------|-----------|------|
| Type of Psychology Degree | | |
| PhD | 10 | 8.3 |
| PsyD | 52 | 43.0 |
| Master's | 59 | 48.8 |
| Theoretical Orientation | | |
| Cognitive-Behavioral | 44 | 36.4 |
| Integrative/Eclectic | 39 | 32.2 |
| Humanistic/Existential | 18 | 14.9 |
| Interpersonal | 8 | 6.6 |
| Psychodynamic | 7 | 5.8 |
| Other | 4 | 3.3 |
| Behavioral | 1 | 0.8 |
| Year in Program | | |
| 1 st year | 19 | 15.7 |
| 2 nd year | 54 | 44.7 |
| 3 rd year | 20 | 16.5 |
| 4 th year | 13 | 10.7 |
| Internship | 13 | 10.7 |
| Missing | 2 | 1.7 |
| Months Providing Therapy | | |
| 0 months | 42 | 34.7 |
| 6-12 months | 50 | 41.3 |
| 13-24 months | 17 | 14.1 |
| 25-36 months | 5 | 4.1 |
| 37-48 months | 7 | 5.8 |
| Ever Received Psychotherapy | | |
| No | 50 | 41.3 |
| Yes | 71 | 58.7 |

Measures

Demographic questionnaire. This measure aimed to gather basic demographic information (i.e., age, gender, ethnicity), specific data related to participants' graduate

education and interests (e.g., degree being pursued, year in program, months spend providing therapy) and more sensitive information regarding the receipt of personal therapy (e.g., type, duration, frequency and age attended), adversity in childhood/childhood familial trauma (e.g., parent with mental or emotional illness, parental death, etc.), and the existence of supportive attachment figures (e.g., “When you were a child or teenager, were there any adults you were able to discuss your feeling with?”). Items related to adversity and support were taken from the Childhood Experiences of Care and Abuse Questionnaire (CECA.Q; Bifulco, Bernazzani, Moran, & Jacobs, 2005; Smith, Lam, Bifulco, & Checkley, 2002). The CECA.Q is a self-report questionnaire that assesses lack of parental care, parent physical abuse, sexual abuse, parental loss, psychological abuse, support, and role reversal. According to the scoring guide, the presence of at least one supportive figure is considered to be a positive factor whereas parental loss and role reversal is scored as a risk factor (Bifulco, et al., 2005). To ensure content validity, all items that were not related to demographic information were reviewed with five master’s-level clinical psychology doctoral students. In order for an item to be included, at least four of the five students needed to agree that the item measured what was intended.

Childhood relational trauma. The Child Abuse and Trauma Scale (CATS; Sanders & Becker-Lausen, 1995) was created as a research tool for studying childhood maltreatment outcomes. The 38-item self-report measure, presented as the ‘home environment questionnaire’, asks about interactions with primary caretakers during childhood and adolescence and experiences of sexual abuse, physical abuse and

punishment, psychological maltreatment, physical or emotional neglect and discomfort while in the home. Items are rated on a four-point scale ranging from 0 (“never”) to 4 (“always”). The total CATS score is calculated as the mean of all individual items. The authors of the measure explained that the items are intentionally delivered in an indirect manner, avoiding blunt phrasing to reduce the likelihood of underreporting or, in some cases, over-reporting. Sample questions include the following: “when you were punished as a child or teenager, did you understand the reason you were punished? “did your parents insult you or call you names?” “did you ever witness the sexual mistreatment of another family member?” (Sanders & Becker-Lausen, 1995).

In comparison to other measures of childhood trauma, unique to the CATS is its aim to assess the participant’s perception regarding the extent to which he or she endured a traumatic or stressful childhood. In this way, the creators of the measure take into account the role of meaning-making in the aftermath of trauma (Sanders & Becker-Lausen, 1995). Given the clear connection between mentalizing, meaning-making and the capacity to tell a coherent life story (Allen, et al., 2008), this measure seemed particularly appropriate for the current study. Furthermore, the literature supporting the wounded healer hypothesis has often examined the relationship between perceived childhood relational trauma and clinical skills (Trusty, et al., 2005; Wilcoxon, et al., 1989).

The initial version of the CATS was administered to psychiatrically hospitalized adolescents and was found to correlate significantly ($r = .44$; $p < .001$) with scores on a measure of dissociative experiences. Subsequent revisions were made which included

replacing three items (concerning parent's abuse history) and rewording one item. The added questions were related to loneliness/neglect and sexual maltreatment. This did not change the mean score of 1.4 ($SD = .64$) for the 47 adolescents (Sanders & Becker-Lausen, 1995).

The revised questionnaire was completed by 834 psychology undergraduates and yielded a mean score of .75 ($SD = .42$). Three factors were revealed through factor analysis: (a) Negative Home Environment/Neglect, (b) Sexual Abuse, and (c) Punishment, with intercorrelations of $r = .26$ (a & b), $r = .37$ (a & c), and $r = .12$ (b & c). Internal consistency of the overall measure was $\alpha = .90$. The measure was re-administered six to eight weeks later to 73 participants (fully completed by 67); the test-retest reliability was $r = .89$, $p < .001$. When the measure was administered to a second group of psychology students, the results resembled those from the first college sample (Sanders & Becker-Lausen, 1995).

In general, the measure has been found to correlate positively with dissociation, depression, stressful life events and impairments in relational functioning. Regarding uncontrollable childhood relational traumas, the CATS does not appear to correlate with events such as illness or death of a family member or friend (Sanders & Becker-Lausen, 1995).

The CATS was more recently employed in a study that compared CATS scores among psychology undergraduate students planning to pursue a career in clinical/counseling psychology to those without such plans and business students (Nikcevic, Kramolisova-Advani, & Spada, 2007). Significant differences in scores on

the CATS ($p < .0001$) were found between psychology students with clinical career goals ($N = 40$) and business students ($N = 91$) as well as psychology students with and without clinical career goals ($p = .02$). Interestingly, the researchers did not observe a correlation between CATS scores and levels of depression; although CATS scores were highest among psychology students with clinical career goals, no significant differences in level of depression were found across the three groups of students. The Cronbach's alpha in that study was .91 (Nikcevic, et al., 2007).

Mentalizing components. The following instruments were used to operationalize the dependent variable, mentalization, as suggested by Choi-Kain and Gunderson (2008). They were chosen based on their demonstrated reliability and validity as well as their prior use with relevant populations.

Mindfulness. The Kentucky Inventory of Mindfulness Skills (KIMS; Baer, Smith, & Allen, 2004) is a 39-item self-report measure developed by practitioners of dialectical behavioral therapy to assess their client's level of mindfulness skills; however, it also measures mindfulness in the general population and has been used to study mindfulness skills among therapists (Padilla, 2010). The instrument is comprised of the 4 following scales: (a) Observe, (b) Describe, (c) Act With Awareness, and (d) Accept Without Judgment. The Describe and Act With Awareness scales were used in the current study because of their previously discussed relevance to mentalization (Choi-Kain & Gunderson, 2008). These scales were used to measure the explicit and self-oriented aspects of mentalization. The Describe scale consists of 8 items that relate to the ability to label experiences using non-judgmental phrasing while refraining from analyzing the

observations, e.g., “I can easily put my beliefs, opinions, and expectations into words.” The Act With Awareness scale includes 10 items that address the capacity to fully attend to one specific task at a time, e.g., “When I do things my mind wanders off and I’m easily distracted.” Items are rated from 1 (never or very rarely true) to 5 (very often or always true) and 18 are reverse-scored. Higher scores are indicative of greater mindfulness skills (Baer, et al., 2004).

The KIMS has been shown to be significantly positively correlated with other measures of mindfulness including the Mindful Attention Awareness Scale (Brown & Ryan, 2003), The Freiburg Mindfulness Inventory (Walach, Buchheld, Buttenmüller, Kleinknecht, & Schmidt, 2006), the Cognitive and Affective Mindfulness Scale (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007) and the Mindfulness Questionnaire (Chadwick et al., 2008). The instrument was found to have good internal consistency ($\alpha = .84$ for Describe and $\alpha = .76$ for Act With Awareness). Test-retest reliability was determined to be adequate to good when calculated from an undergraduate sample ($r = .81$ for Describe and $r = .86$ for Act With Awareness) (Baer, et al., 2004). The KIMS has also been shown to be sensitive to change following mindfulness training interventions (Baum et al., 2010).

Affect consciousness. According to Monsen, Eilertsen, Melgård, & Ødegård (1996), a lack of affect consciousness can be understood in terms of alexithymia, or the impaired ability to process and experience emotions (Taylor, Bagby, & Parker, 1999). The Toronto Alexithymia Scale (TAS; Bagby, Parker, & Taylor, 1994) is the most widely used measure of Alexithymia (Grynberg, Luminet, Corneille, GrÉzes, & Berthoz, 2010).

The 20-item self-report questionnaire is characterized by three factors: difficulties identifying feelings (7 items; “I am often confused about what emotion I am feeling”), difficulties describing feelings (5 items; “people tell me to describe my feelings more”), and externally-oriented thinking (8 items; “I prefer to just let things happen rather than to understand why they turned out that way”). The first two factors are considered to be more affectively-based; the former is concerned with the degree of difficulty an individual has identifying emotions and the latter assesses his or her difficulties describing emotions. The externally-oriented thinking subscale is believed to be the most cognitive of the three, and relates to an individual’s tendency to focus attention outside of oneself. Items are rated on a 5-point likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Five items are negatively keyed and the total alexithymia score is the sum of responses to all 20 items. The TAS uses the following cutoff scoring: (a) equal to or less than 51 = no alexithymia, (b) equal to or greater than 61 = alexithymia, and (c) 52 – 60 = possible alexithymia (Bagby, Parker, & Taylor, 1994). While affect consciousness often considers both mental states in the self and the other, the TAS is more concerned with mental states in the self. Therefore, the TAS measured explicit and self-oriented aspects of mentalization.

The TAS was found to correlate negatively with the Levels of Emotional Awareness Scale, which is a performance measure of emotional awareness (Bydlowski et al., 2005). The measure demonstrates good internal consistency ($\alpha = .81$) and test-retest reliability ($r = .77$). Research using the TAS found adequate levels of convergent and concurrent validity. The 3-factor structure evidenced theoretical congruence with the

alexithymia construct. In addition, it has been found to be stable and replicable across clinical and nonclinical populations (Bagby, et al., 1994). In a recent study, the TAS was utilized to assess alexithymia in counseling psychology trainees (Vandermeer, 2014).

Psychological mindedness. The Psychological Mindedness Scale (PMS; Conte, Ratto, & Karasu, 1996) is a 45-item self-report measure which assesses an individual's degree of self-understanding as well as their interest in the motives and behaviors of others. The PMS assessed explicit and self-oriented aspects of mentalization. Sample items include "I am always curious about the reasons people behave as they do" and "I often find myself thinking about what made me act in a certain way." Factor analysis has yielded the following five factors: (a) willingness to try to understand oneself and others, (b) openness to new ideas and the capacity for change (c) access to one's feelings, (d) belief in the benefits of discussing one's problems, and (e) interest in the meaning of one's own and others' behavior. Items are rated on a 4-point scale from 'strongly agree' to 'strongly disagree' and twenty of the items are reverse scored. Total scores range from 45 to 180 with higher scores indicating higher levels of psychological mindedness (Conte, et al., 1996).

The PMS has been validated in studies of psychology students and therapists, demonstrating Cronbach's alphas between .83 and .87 (Beets, Nienaber, & Botha, 2011; Seymour-Hyde, 2012). Construct validity has been indicated by significant negative correlations between the PMS and the TAS (Bagby, et al., 1994). The PMS has also been shown to relate to mindfulness ($r = .41, p < .01$), private self-consciousness ($r = .27, p < .05$), cognitive ($r = .30, p < .01$) and affective ($r = .35, p < .01$) measures of empathy

(Beitel, Ferrer, & Cecero, 2005) and adaptive ego functioning ($r = .17$, $p < .05$) (Conte, Buckley, Picard, & Karasu, 1995).

Theory of mind. The Reading the Mind in the Eyes Test, Revised Version (RMET; Baron-Cohen, Wheelwright, Hill, Raste, & Plumb, 2001) was created for the purpose of assessing social sensitivity and Theory of Mind (i.e., the ability to attribute mental states to oneself or another). This instrument was included in order to assess participants' performance on a task of mentalization and to supplement the self-report instruments. According to Baron-Cohen, et al. (2001), the RMET assesses the ability to unconsciously and automatically interpret mental states by viewing an individual's eye region. Therefore, the RMET was used in the present study to measure implicit and other-oriented aspects of mentalization. The test only addresses the first step involved in mentalizing, that is, identifying the appropriate mental state observed (e.g., worried), but does not measure the ability to determine the content of the mental state (e.g., worried about an ill family member) (Baron-Cohen, et al., 2001). Choi-Kain and Gunderson (2008) pointed out that, as compared to mentalization, theory of mind is more other-oriented and cognitively focused.

The RMET consists of 36 black and white photographs of the faces/eye-regions of people with four different word choices per stimuli (Baron-Cohen, et al., 2001). For each photograph, participants are asked to choose the word that best describes what the person is thinking or feeling. One point is received for each correct response, with higher scores associated with greater abilities related to theory of mind. Of note, in order to control for

differences in comprehension abilities, a glossary with definitions of the mental state words is included (Baron-Cohen, et al., 2001).

The RMET has successfully been used to assess recognition of complex emotions in non-clinical groups (Harrison, Sullivan, Tchanturia, & Treasure, 2010) as well as clinical groups known to have deficits in socio-emotional abilities such as schizophrenia and autism disorders (Baron-Cohen, et al., 2001; Craig, Hatton, Craig, & Bentall, 2004). The measure demonstrated moderate reliability in a sample of undergraduate psychology students ($\alpha = .70$) (Cotler, 2011). The measure evidenced strong construct validity in assessing both affect and cognition; it was found to be only partially associated with a facial emotion task (60 Faces Test; Ekman & Friesen, 1976) and it showed convergent validity with Happe's Strange Stories (Happé, 1994), an assessment of cognitive understanding of mental states. It is also one of few mentalization tasks that found no correlation with IQ (Baron-Cohen, et al., 2001).

Cognitive empathy. The Interpersonal Reactivity Index (IRI; Davis, 1983) is a multidimensional scale that was developed to measure both cognitive and affective aspects of empathy. The measure consists of 28 self-report items rated on a likert scale from 1 (describes me well) to 5 (does not describe me well), with eight reverse scored items. The IRI contains four subscales, each comprised of 7 items. Subscale scores range from 0 to 28, with a higher score suggesting a greater ability to empathize (Davis, 1983).

The IRI is a widely used scale that is considered to be more relevant to clinical work than other measures of empathy (Davis, Conklin, Smith, & Luce, 1996; Hall, Davis, & Connelly, 2000). Several studies have used the IRI to examine empathy among

therapists and showed good internal consistency reliability (Kolchakian, 2003). Acceptable internal validity and test-retest reliability was reported across populations (Davis, 1983; Davis & Franzoi, 1986). The internal consistency reliabilities of the four subscales ranged from $\alpha = .68$ to $\alpha = .79$ and the test-retest reliabilities ranged from $r = .61$ to $r = .81$ (Davis, 1983; Davis & Franzoi, 1986). The IRI's empathic concern subscale correlated highly with the Mehrabian and Epstein Emotional Empathy Scale (Mehrabian & Epstein, 1972), and the IRI's personal distress and perspective taking subscales correlated with the Hogan Empathy Scale (Hogan, 1969), thus supporting the construct and concurrent validity of the measure. Davis (1983) noted that the reliability of the IRI's individual subscales is similar to that of the full IRI. Therefore, two subscales, the Perspective Taking (IRI-PT) scale and the Empathic Concern (IRI-EC) scale were chosen to assess emotional empathy and cognitive empathy, respectively. In the present study, the IRI was used to measure implicit and other-oriented aspects of mentalization.

Of the four scales, the IRI-PT scale and the fantasy scale are considered to be more cognitive in nature (Davis, 1983). The former refers to the tendency to identify with fictitious characters while the later reflects an ability to consider another's point of view. The IRI-EC scale (feeling compassion for others' misfortune) and the personal distress scale (feeling discomfort in response to others' distress) are strictly emotional, and emphasize the shared experience of others' emotions (Davis, 1983). Empathy, as a component of mentalization, does not involve sharing in one's emotional experience, but is most concerned with understanding another's affective state on a cognitive level (Choi-Kain & Gunderson, 2008). For this reason, the IRI-PT scale was considered appropriate

for specifically examining the type of empathy involved in mentalization. An example item from this subscale is, “I sometimes find it difficult to see things from the ‘other guy's’ point of view” (Davis, 1983).

Emotional empathy. The IRI-EC scale was used to assess emotional empathy. Importantly, emotional empathy was not considered to be a component of mentalization because the current authors do not believe that conceptualizations of mentalization throughout the literature include emotional empathy as a contributing skill. The IRI-EC scale focuses specifically on the tendency to feel compassion for others’ misfortune and includes items such as “I often have tender, concerned feelings for people less fortunate than me” (Davis, 1983).

Relational style. The Relationship Structures Questionnaire (RSQ; Fraley, et al., 2011) of the Experiences in Close Relationships—Revised (ECR-R; Fraley, Waller, & Brennan, 2000) is a self-report instrument designed to assess attachment patterns in several contexts. The RSQ was used instead of the full ECR-R because the RSQ scale alone was found to be as reliable as the complete ECR-R inventory in assessing relational style (Fraley, et al., 2011). The RSQ consists of 9 items that can be applied to all of the following relationships: mother/mother-figure, father/father-figure, romantic partner, and best friend. Alternatively, the instrument can be used to measure attachment behavior with one specific target (Fraley, et al., 2011). In the current study, the participant’s relational style with respect to his or her dating or marital partner was evaluated. This decision was based on the notion that individuals can have multiple internal working models (insecure with mother vs. secure with husband) as well as positive relational

experiences later in life that challenge negative early relational schemas (Fonagy et al., 1991; Main, et al., 1985; Roisman et al, 2002). Moreover, it was assumed that most participants likely developed relationships with current dating partner or marital figure at a later point in life as compared to their mother/mother-figure, father/father-figure, or best friend. Thus, relational patterns with current dating or marital partner would be expected to more accurately reflect trainees' current style of relating to others. The finding of positive, although not very strong, correlations among the RSQ's attachment dimensions with respect to different relationships supports the aforementioned assumption (Fraley, et al., 2011). Furthermore, global attachment avoidance on the ECR-R was found to correlate highest with attachment avoidance on the RSQ when assessed in relation to a romantic partner (Fraley, et al., 2011).

Participants are asked to respond to 9 items about their current dating or marital partner, or if they are not in a relationship currently, a former partner or desired partner. Items are rated on a likert scale from 1 (strongly agree) to 7 (strongly disagree) with 4-reverse scored items. The first 6 items relate specifically to relational avoidance whereas the last 3 items deal with relational anxiety. Higher mean scores on the avoidance subscale (RSQ-Avoidance) are indicative of higher attachment avoidance, while higher mean scores on the anxiety subscale (RSQ-Anxiety) suggest higher attachment anxiety. Items included are "It helps to turn to this person in times of need" and "I don't feel comfortable opening up to this person" (Fraley, et al., 2011).

An online sample of over 21,000 individuals revealed that the RSQ subscale scores were reliable, with a factor analysis confirming a two-factor structure of anxiety

and avoidance similar to that of the ECR-R (Fraley, et al., 2011). Reliability coefficients for RSQ-Anxiety and RSQ-Avoidance were $\alpha = .85$ and $\alpha = .88$ respectively. For each relationship domain (i.e., mother, father, romantic partner, best friend), internal consistency reliabilities ranged from $\alpha = .92$ to $\alpha = .87$. The test-retest reliability for romantic relationships was found to be $r = .65$. Convergent and divergent validity was confirmed using a sample of 338 individuals who were married or dating; the romantic relationship dimension of the RSQ significantly correlated with ECR-R attachment anxiety ($r = .66$) and attachment avoidance ($r = .56$) (Fraley, et al., 2011). The measure's scales have also been found to correlate with satisfaction in relationships, interpersonal effectiveness and the perception of others' emotional expressions (Fraley, et al., 2011).

Procedure

Once this study received full approval from the Institutional Review Board at Nova Southeastern University, a 1.5-month recruitment period began. Either this writer or the research assistant entered classrooms as pre-arranged with associated professors. Trainees were first given an overview of the study; it was explained that the research was being conducted to better understand how training therapists' histories influence their clinical skills and that participation involved completing a packet of surveys. Students were made aware that the surveys would take approximately 30 minutes to fill out and that they would receive a \$10 compensation for fully completing the measures. Students were warned that, due to the sensitive nature of some items, they might experience discomfort. Trainees were told that they could choose to discontinue the study at any point. It was understood that there would be no consequences for declining to participate.

All of this information was also included in a consent form that was subsequently handed out to interested students. Once signed, each participant was provided with a packet of surveys to be completed during the remaining 30 minutes of class time or prior to leaving the psychology building. The same approach was used with trainees who were recruited individually. Students who wanted to take part in the research at a later date provided their contact information and arranged a time with the research assistant. To control for any bias that could result from filling out the surveys in a different setting, trainees were asked to finish packets before leaving for the day. While every packet contained all of the survey instruments, the order in which measures were presented in each packet was randomized. On average, participants completed the surveys within 25 minutes. One participant began the survey packet but did not complete it in full. Every participant received \$10 if he or she finished the packet in its entirety.

CHAPTER IV

Results

The purpose of this chapter is to provide and discuss results from statistical analyses conducted to test study hypotheses. The chapter opens with a review of the study variables followed by the assumptions of regression. The chapter then turns to the study research questions with a presentation of results from linear regression and hierarchical multiple linear regression analyses. The chapter ends with a discussion of results from post hoc analyses.

Descriptive Statistics

In this study, there were five dependent variables measuring various components of mentalization, one mediating variable of emotional empathy, two moderating variables of relational style, and one independent variable of childhood relational trauma. Descriptive statistics for these variables are presented in Table 3. Based on the general rule that a sufficient sample size should consist of at least 15 participants per predictor variable, with 5 predictor variables, $N = 121$, the current study employed a ratio of 24 participants per predictor variable (Stevens, 2009).

Variables were examined for skewness and most were found to have values less than 2 (Garson, 2012). The RSQ-Avoidance, RSQ-Anxiety, TAS and CATS, however, had substantial skewness. Each of these scales showed positive skewness, which can be interpreted to mean that most participants reported relatively low levels of relational avoidance, relational anxiety, alexithymia and childhood relational trauma. Consistent

with such interpretations, regarding the TAS, Bagby, et al. (1994) identified a cutoff score of less than or equal to 51 indicating no alexithymia and in the current study, over 90% of participants scored below 51 on the measure. However, a review of the CATS frequencies revealed, most of the participants reported higher than average levels of childhood relational trauma based on findings from the measure's validation studies (i.e., nonclinical college students, $M = .73$ & $.74$) (Sanders & Becker-Lausen, 1995); 70% of trainees scored greater than $.73$, with 40% scoring a standard deviation above previously documented CATS means.

Table 3

Descriptive Statistics: Study Variables (N = 121)

| | <i>M</i> | <i>SD</i> | <i>Min</i> | <i>Max</i> | <i>SK</i> | <i>α</i> |
|------------------------------------|----------|-----------|------------|------------|-----------|----------|
| Affect Consciousness (TAS) | 37.29 | 10.80 | 20.00 | 82.00 | 5.50 | .88 |
| Mindfulness (KIMS) | 61.50 | 7.63 | 37.00 | 81.00 | 1.56 | .78 |
| Psychological Mindedness (PMS) | 144.93 | 11.14 | 115.00 | 170.00 | 1.09 | .84 |
| Theory of Mind (RMET) | 26.99 | 3.43 | 18.00 | 33.00 | 1.49 | .53 |
| Emotional Empathy (IRI-EC) | 28.78 | 4.52 | 16.00 | 35.00 | 1.39 | .81 |
| Cognitive Empathy (IRI-PT) | 27.53 | 4.54 | 15.00 | 35.00 | 1.40 | .77 |
| Childhood Relational Trauma (CATS) | 1.05 | 0.39 | 0.45 | 2.13 | 3.86 | .88 |
| Avoidant Style (RSQ-Avoidance) | 12.14 | 7.04 | 6.00 | 42.00 | 8.78 | .87 |
| Anxious Style (RSQ-Anxiety) | 7.69 | 5.33 | 3.00 | 21.00 | 4.34 | .91 |

Note. M = Mean, SD = Standard Deviation, Min = Minimum Score, Max = Maximum Score, Sk = Skewness value derived by skewness/skewness standard error, α = Cronbach's alpha; TAS = Toronto Alexithymia Scale, KIMS = Kentucky Inventory of Mindfulness Skills, PMS = Psychological Mindedness Scale, RMET = Reading the Mind in the Eyes Test, IRI-EC = Interpersonal Reactivity Index, Empathic Concern Scale, IRI-PT = Interpersonal Reactivity Index, Perspective Taking Scale, CATS = Child Abuse and Trauma Scale, RSQ-Avoidance = Relationship Structures Questionnaire, Avoidance scale, RSQ-Anxiety = Relationship Structures Questionnaire, Anxiety scale

Due to the substantial skewness for the RSQ-Avoidance, RSQ-Anxiety, CATS, and TAS variables, they were recomputed into dichotomous variables (Tabachnick & Fidell, 2007). RSQ-Avoidance was dichotomized via a median split, which resulted in 65 (54%) of the participants being placed in the high avoidance

category and 56 (46%) being placed in the low avoidance category. A median split was also used to dichotomize RSQ-Anxiety into a low anxiety group (56 participants; 47%) and a high anxiety group (64 participants; 53%). As 49% of participants had scores less than 1.00 for the CATS, the CATS scale was dichotomized so that 59 (49%) of the participants were placed in the < 1.00 category (low early trauma) and 62 (51%) of participants were placed in the ≥ 1.00 category (moderate to high early trauma). Finally, a median split was applied to the TAS scale, dividing it into a low alexithymia group consisting of 63 participants (52%) and a high alexithymia group with 58 participants (48%).

Assumptions of Regression

Some of the key assumptions of multiple linear regression are the following: (a) normality, (b) independence, (c) homoscedasticity, (4) lack of multicollinearity, (5) lack of autocorrelation and (5) linear association (Tabachnick & Fidell, 2007). The assumptions appeared tenable based on scatterplots of the predicted values versus the standardized residuals; that is, the scatterplots showed a random scattering of points. It is worth noting that the assumption of no multicollinearity was met as demonstrated by VIFs all approximately equal to one.

Results for Hypothesis 1

The first hypothesis was that there would be a significant association between childhood relational trauma and mentalization. Five linear regressions analyses were conducted in order to assess the relationship between the CATS scores and the various measures of mentalization.

Childhood relational trauma predicting affect consciousness. Results showed that CATS scores significantly predicted TAS scores, $F(1, 119) = 25.45$, $\beta = .42$, $p < .001$, with childhood relational trauma explaining 18% of the variance in affect consciousness.

Childhood relational trauma predicting mindfulness. Results showed that childhood relational trauma significantly predicted mindfulness, $F(1, 119) = 19.96$, $\beta = -.38$, $p < .001$, with CATS scores explaining 14% of the variance in scores on the KIMS.

Childhood relational trauma predicting psychological mindedness. Results showed that childhood relational trauma significantly predicted psychological mindedness, $F(1, 118) = 10.59$, $\beta = -.29$, $p < .01$, with CATS scores explaining 8% of the variance in PMS scores.

Childhood relational trauma predicting theory of mind. Results showed that childhood relational trauma did not significantly predict theory of mind score, $F(1, 119) = .05$, $p = .83$. CATS scores explained $< 0.1\%$ of the variance in RMET scores.

Childhood relational trauma predicting cognitive empathy. Results showed that childhood relational trauma did not significantly predict cognitive empathy, $F(1, 118) = .15$, $p = .70$. CATS scores explained $< 0.5\%$ of the variance in the IRI-PT scores.

Results for Hypothesis 2

The second study hypothesis was that there would be a significant relationship between trauma and mentalization depending on relational style. To address the second hypothesis, hierarchical multiple linear regressions (HMLR) in accordance with the moderation model proposed by Kenny and colleagues (Baron & Kenny, 1986; Judd,

Kenny, & McClelland, 2001; Kenny & Judd, 2013) were conducted. The moderator variable was an interaction variable computed by multiplying the dichotomous variables of childhood relational trauma and relational anxiety/avoidance, which were the independent variables (Baron & Kenny, 1986). The dependent variables were the five mentalization variables. There were no covariates.

In accordance with Baron and Kenny (1986), the two independent variables were entered together in the first model of the HMLR, and the interaction term was entered in the second model of the HMLR. If the interaction term was significant, moderation occurred (Baron & Kenny, 1986). Results from the HMLR are presented in the following sections. As the focus of these analyses is the moderation effect, results of the interaction effects will be presented.

Relational anxiety moderating between childhood relational trauma and affect consciousness. The interaction of childhood relational trauma and relational anxiety was not significant, $F_{change}(1, 117) = 1.02$, $\beta = .16$, $p = .32$, $R^2_{change} < .01$. Relational anxiety did not moderate between childhood relational trauma and affect consciousness.

Relational avoidance moderating between childhood relational trauma and affect consciousness. The interaction of childhood relational trauma and relational avoidance was not significant, $F_{change}(1, 117) = 1.79$, $\beta = .19$, $p = .18$, $R^2_{change} = .01$. Relational avoidance did not moderate between childhood relational trauma and affect consciousness.

Relational anxiety moderating between childhood relational trauma and mindfulness. The childhood relational trauma and relational anxiety interaction was not significant, $F_{change}(1, 117) = .18, \beta = .07, p = .67, R^2_{change} < .01$. Relational anxiety did not moderate between childhood relational trauma and mindfulness.

Relational avoidance moderating between childhood relational trauma and mindfulness. The childhood relational trauma and relational avoidance interaction was not significant, $F_{change}(1, 117) = .001, \beta = -.01, p = .98, R^2_{change} < .01$. Relational avoidance did not moderate between childhood relational trauma and mindfulness.

Relational anxiety moderating between childhood relational trauma and psychological mindedness. The childhood relational trauma and relational anxiety interaction was not significant, $F_{change}(1, 116) = .11, \beta = -.06, p = .74, R^2_{change} < .01$. Relational anxiety did not moderate between childhood relational trauma and psychological mindedness.

Relational avoidance moderating between childhood relational trauma and psychological mindedness. The childhood relational trauma and relational avoidance interaction was not significant, $F_{change}(1, 116) = .72, \beta = .13, p = .40, R^2_{change} < .01$. Relational avoidance did not moderate between childhood relational trauma and psychological mindedness.

Relational anxiety moderating between childhood relational trauma and theory of mind. The childhood relational trauma and relational anxiety interaction was not significant, $F_{change}(1, 117) = .76, \beta = -.16, p = .39, R^2_{change} < .01$. Relational anxiety did not moderate between childhood relational trauma and theory of mind.

Relational avoidance moderating between childhood relational trauma and theory of mind. The childhood relational trauma and relational avoidance interaction was not significant, $F_{change}(1, 117) = .40$, $\beta = .11$, $p = .53$, $R^2_{change} < .01$. Relational avoidance did not moderate between childhood relational trauma and theory of mind.

Relational anxiety moderating between childhood relational trauma and cognitive empathy. The childhood relational trauma and relational anxiety interaction was not significant, $F_{change}(1, 116) = 3.20$, $\beta = -.31$, $p = .08$, $R^2_{change} = .03$. Relational anxiety did not moderate between childhood relational trauma and cognitive empathy.

Relational avoidance moderating between childhood relational trauma and cognitive empathy. The childhood relational trauma and relational avoidance interaction was not significant, $F_{change}(1, 116) = 1.44$, $\beta = -.20$, $p = .23$, $R^2_{change} = .01$. Relational anxiety did not moderate between childhood relational trauma and cognitive empathy.

Results for Hypothesis 3

Emotional empathy mediating between childhood relational trauma and mentalization. The third study hypothesis was that emotional empathy would be a significant mediator between childhood relational trauma and mentalization. To test for mediation, the widely used and validated SPSS macro provided by Andrew Hayes (Hayes, 2013) was employed. Specifically, the indirect effect of the potential mediating variable, emotional empathy, on the relationship between the independent variable, childhood relational trauma and each of the five dependent variables of mentalization, was examined for significance.

Results revealed that there was no significant indirect effect of emotional empathy with respect to the association between the CATS scores and each of the five mentalization components. Emotional empathy did not mediate between childhood relational trauma and affect consciousness, mindfulness, psychological mindedness, cognitive empathy or theory of mind. Specifically, the 95% bootstrap confidence intervals generated from Hayes' process macro included zero. Of note, for three of the dependent variables (PMS, TAS, KIMS), the direct effect of CATS was significant, with the remaining two not significant (IRI-PT, RMET). See Table 4 for the 95% confidence intervals around the indirect effects.

Table 4

Indirect Effects of Emotional Empathy on the Association Between Childhood Relational Trauma and Dependent Mentalization Variables ($\alpha = .05$)

| Dependent Variable | Lower Limit | Upper Limit |
|--------------------|-------------|-------------|
| TAS | -0.95 | 0.71 |
| KIMS | -0.24 | 0.39 |
| PMS | -1.33 | 1.74 |
| RMET | -0.13 | 0.14 |
| IRI-PT | -0.72 | 0.77 |

Note. TAS = Toronto Alexithymia Scale, KIMS = Kentucky Mindfulness Scale, PMS = Psychological Mindedness Scale, RMET = Reading the Mind in the Eyes Test, IRI-PT = Interpersonal Reactivity Index-Perspective Taking Scale

Post Hoc Analysis

Given that the CATS childhood relational trauma measure assesses an individual's perceived experience of early trauma, it does not obtain a history of actual events. Therefore, objective items about adverse attachment experiences from the demographic questionnaire were examined for additional associations between negative attachment experiences in therapists and mentalizing skills. These were the following 6 items: (a) Did your parent or caretaker have emotional or mental health problems? (b)

Did your parent or caretaker have a disability or physical illness? (c) “Did either of your parents pass away before you were 17 years old?” (d) “As a child or teenager, was a member of your household ever incarcerated?” (e) “Were you ever separated from your parent/caregiver for one year or more before 17?” (f) “Did your parents struggle financially during your childhood?” Pearson correlations were conducted between the individual item scores, the emotional empathy variable, the relational style variables and the five mentalization variables. To address the possible inflation of type 1 error due to the large number of statistical tests on these Pearson correlations, alpha was set to .01. Results can be found in Table 5. As expected, the majority of the objective childhood familial trauma items were significantly positively associated with the CATS scores.

Two additional items in the demographic questionnaire asked about the availability of supportive adults and peers during childhood and adolescence. These two “support” questions asked (a) “When you were a child or teenager, were there any adults you were able to discuss your problems and feelings with?” and, (b) “When you were a child or teenager, were there other children/teenagers your age that you could discuss your problems and feelings with?” Correlations between the support questions, the emotional empathy variable, the relational style variables and the five measures of mentalization can also be found in Table 5.

Table 5

Pearson Correlations Between Independent Variables, Dependent Variables, Objective Childhood Familial Trauma Items and Support Items (N = 121)

| Variable/ Item | <i>TAS</i> | <i>KIMS</i> | <i>PMS</i> | <i>RMET</i> | <i>IRI-PT</i> | <i>IRI-EC</i> | <i>CATS</i> | <i>RSQ- Anxiety</i> | <i>RSQ- Avoid</i> |
|----------------------------------|------------|-------------|------------|-------------|---------------|---------------|-------------|-------------------------|-----------------------|
| IRI-EC | -.18 | .07 | .34** | .02 | .44** | 1 | .01 | -.09 | -.34* |
| RSQ-Anxiety | .34** | -.22 | -.29* | -.04 | -.24* | -.09 | .25* | 1 | .49** |
| RSQ-Avoid | .29* | -.14 | -.42** | -.03 | -.17 | -.34** | .09 | .49** | 1 |
| Mental health problems in parent | .06 | -.07 | .09 | -.04 | .05 | .13 | .27* | .09 | -.09 |
| Disabled or ill parent | .12 | -.18 | -.04 | -.04 | .11 | .29* | .23* | .07 | -.05 |
| Parent passed away | -.08 | -.12 | .13 | .01 | .06 | .16 | .12 | .05 | .04 |
| House member incarcerated | .07 | -.21 | -.23 | -.05 | -.11 | .09 | .16 | .11 | .08 |
| Separated from parent | .16 | -.01 | -.02 | -.08 | .02 | .06 | .25* | .05 | .12 |
| Parents struggled financially | .09 | -.12 | .02 | .04 | .23 | .13 | .38** | .10 | .01 |
| Adult supports | -.18 | .10 | .10 | .16 | -.02 | .11 | -.30** | -.18 | -.18 |
| Peer supports | -.17 | .10 | .06 | -.17 | -.04 | -.02 | -.19 | -.16 | -.14 |

Note. TAS = Toronto Alexithymia Scale, KIMS = Kentucky Inventory of Mindfulness Scale, PMS Psychological Mindedness Scale, RMET = Reading the Mind in the Eyes Test, IRI-PT = IRI-Perspective Taking Scale, IRI-EC = IRI-Empathic Concern Scale, CATS = Child Abuse and Trauma Scale, RSQ-Anxiety = Relationship Structures Questionnaire-Anxiety subscale, RSQ-Avoid = Relationship Structures Questionnaire-Avoidance subscale; * $p < .01$; ** $p < .001$

CHAPTER V

Discussion

This study explored the relationship between childhood relational trauma and mentalization in training therapists. Specifically, the ability of childhood relational trauma to predict therapist mentalizing skills was assessed. Next, relational style (i.e., anxiety and avoidance) was examined as a potential moderator of the relationship between childhood relational trauma and the mentalization components. Finally, emotional empathy was considered as a possible mediator between childhood relational trauma and mentalizing skills.

Summary of the Findings

The results of this study suggest that, among training therapists, higher levels of childhood relational trauma are predictive of lower levels of three out of the five components of mentalization (i.e., affect consciousness, psychological mindedness, and mindfulness), while lower levels of childhood relational trauma are predictive of higher levels of these three mentalizing skills. No relationship was found between childhood relational trauma and the two remaining mentalization components of cognitive empathy and theory of mind. Regarding the second study hypothesis, relational anxiety and relational avoidance did not appear to affect the strength of the association between childhood relational trauma and mentalization among therapists. The third hypothesis was not supported by the results. Emotional empathy did not explain the relationship between childhood relational trauma and the mentalization components of affect consciousness, psychological mindedness, mindfulness, theory of mind or cognitive

empathy. Post hoc analysis revealed a unique findings; growing up with a physically disabled or ill parent was directly associated with therapists' level of emotional empathy.

Context of the Findings and Interpretations

Rate of childhood relational trauma and mentalizing skills. Mentalizing skills were assessed through a performance measure and self-report measures of various underlying capacities involved in mentalization. Higher scores on the mentalizing components were equated with higher levels of overall mentalization. Furthermore, higher mentalizing scores were taken as an indication of greater interpersonal effectiveness/clinical skills. In the current study, therapists revealed above average scores on the measure of childhood relational trauma. This is consistent with the results of numerous studies supporting the wounded healer hypothesis (Elliott & Guy, 1993; Farber, 1985; Farber, et al., 2005; Fussell & Bonney, 1990; Nikcevic, et al., 2007; Orlinsky & Rønnestad, 2005). This sample also produced scores on the self-report measures of mentalization that were indicative of an overall high level of mentalizing skills. Other studies have similarly found higher than average scores on the mentalizing components among therapists (Vandermeer, 2014). On the mentalization performance task (i.e., RMET), however, participants' mean scores were similar to those found among other healthy samples. This finding coincides with those of Hassenstab, Dziobek, Rogers, Wolf, and Convit (2007); they observed that therapists' scores on the RMET did not differ significantly from a well-matched control group. In a separate study, a sample of individuals diagnosed with BDP displayed higher scores on the RMET, possibility because of these participants' hypervigilance to the facial expressions of others related to

fears of rejection (Frick et al., 2012). Taken together, these findings suggest that higher scores on the RMET may not be preferable to average scores when predicting effective interpersonal functioning.

Discussion of the results for hypothesis 1. Based on the results of previous research related to the wounded healer hypothesis and attachment theory, it was expected that childhood relational trauma would be associated with mentalizing skills among therapists. Since limited data exist on the association between childhood relational trauma and mentalizing skills specifically among therapists, the findings of hypothesis 1 will be discussed in a general context.

Childhood relational trauma predicting affect consciousness, psychological mindedness and mindfulness. Regarding affect consciousness/alexithymia, the finding that childhood relational trauma predicted lower levels of affect consciousness is consistent with the results of numerous studies that observed a positive relationship between alexithymia and childhood relational trauma across a variety of populations (Frewen et al., 2008; Zlotnick, Mattia, & Zimmerman, 2001). This study also replicated findings on the relationship between childhood relational trauma and psychological mindedness. Previous studies have shown that participants' reports of parental rejection in childhood were associated with lower levels of psychological mindedness (Alvarez, Farber, & Schonbar, 1998; Nyklíček, Poot, & van Opstal, 2010). In terms of mindfulness, the present study coincided with previous research that similarly found lower levels of mindfulness among individuals who reported a history of childhood trauma as compared to those who reported an absence of childhood trauma (Frewen, Dozois, Neufeld, &

Lanius, 2012).

Childhood relational trauma predicting empathy and theory of mind.

Childhood relational trauma did not predict levels of cognitive empathy among therapists. Although emotional empathy was not considered a component of mentalization, it is notable that neither the IRI-perspective taking subscale (i.e., cognitive empathy measure) nor the IRI-empathic understanding subscale (i.e., emotional empathy measure) was associated with scores on the childhood relational trauma measure (CATS). A possible explanation for the lack of significance between childhood relational trauma and empathy can be understood in terms of the modes of mentalization involved in empathizing. As discussed earlier, the various components of mentalization examined in this study can be combined to cover the explicit/implicit modes, self-oriented/other-oriented modes, and affective/cognitive modes involved in the total process of mentalizing. Cognitive empathy accounted for the other-oriented and implicit aspects of mentalization while mindfulness, psychological mindedness and affect consciousness corresponded with the self-oriented and explicit modes of mentalization. Like cognitive empathy, emotional empathy also occurs in the other-oriented and implicit modes. Since this study found that childhood relational trauma significantly predicted lower levels of mindfulness, psychological mindedness and affect consciousness in therapists but not cognitive empathy or emotional empathy, it appears that childhood relational trauma leads to impairments in the self-oriented and explicit aspects of mentalizing, but does not significantly negatively impact other-oriented and implicit modes of mentalizing. These results are understandable when considering mentalization in the context of a relationship

that is not experienced as safe. According to Allen, et al. (2008), when a relationship is perceived as potentially harmful or exploitative, mentalizing aids in identifying the threat and facilitates defensive/adaptive interactions. Moreover, in an insecure attachment, mentalizing about the other will occur automatically for self-protection; in this way, a negative relational history would not entail impaired abilities in other-oriented and implicit modes of mentalization because these aspects of mentalizing would be practiced (i.e., cognitive and emotional empathy would not be impaired). However, when the individual's primary focus is on the behaviors of the other, self-focusing would be limited and the attention required during explicit mentalizing would likely be disrupted; thus, lower levels of psychological mindedness, mindfulness, and affect consciousness (i.e., explicit and self-oriented modes of mentalizing) would reasonably be observed. It should be noted that, although emotional empathy was not associated with the CATS measure, it did correlate positively with the objective childhood familial trauma item of growing up with a disabled or ill parent. Additionally, at an alpha level of .05, cognitive empathy correlated positively with the objective childhood familial trauma item of having parents who struggled financially. These findings were interpreted to mean that, in some cases, childhood familial trauma is related to enhanced skills in the other-oriented and implicit modes of mentalization, likely because of the aforementioned higher degree of attention that is devoted to the other.

Regarding theory of mind, unlike the other measures used in this study, the RMET assessed participants' actual performance through a mentalizing task, and thus provided information on how childhood relational trauma impacted therapists' accuracy

at perceiving others' mental states. However, similar to the cognitive empathy and emotional empathy variables, the RMET assessed the other-oriented and implicit aspects of mentalizing, which might explain the lack of significant findings.

Discussion of the results for hypothesis 2. The second hypothesis aimed to resolve the theoretical disconnect between the wounded healer hypothesis and attachment theory. Hypothesis 2 was not supported by the data; the relationship between childhood relational trauma and mentalizing skills did not differ at different levels of the relational style variable. The results did suggest that part of the association between childhood relational trauma and mentalizing skills was explained by relational style. Recall that the RSQ aims to measure attachment style while the CATS was created to assess participants' *perception* of childhood trauma. Moreover, the CATS measure was utilized in the current study since the wounded healer literature has often associated negative perceptions of early attachment experiences with higher clinical skills (Trusty, et al., 2005; Wilcoxon, et al., 1989). Given that the CATS is a retrospective self-report measure, much like the AAI, it is prone to selective distortion and bias in terms of recalling early attachment experiences. Individuals with an anxious attachment style, per attachment theory, would be expected to over-report trauma given that this interactional style in infancy is associated with exaggerated displays of distress in order to receive care. Conversely, individuals with an avoidant relational style would not be expected to report significant childhood relational trauma, given their associated tendency to deny or suppress memories and feelings towards early caregivers. This is consistent with the current study's finding that relational anxiety was significantly associated with childhood

relational trauma while relational avoidance did not significantly correlate with the childhood relational trauma variable. It is likely, then, that the CATS scores measured attachment/relationally-based tendencies to report childhood relational trauma, rather than objective trauma, thus overlapping conceptually with the RSQ. As this possibility was recognized, a number of objective familial trauma items were also included in this study, which focused on the existence or absence (as opposed to severity/likert ratings) of major life events that would be less susceptible to attachment-related recall. The majority of these objective items correlated with the CATS measure, however, while the CATS measure predicted lower scores on a number of the mentalizing components, the objective trauma items were not associated with mentalizing scores. Furthermore, supporting the attachment theory notion that attachment status/relational style is based on one's perception of their history rather than actual events, none of the objective trauma items were found to be associated with relational style. While these findings suggest that perceived childhood relational trauma significantly differs from objective childhood familial trauma in terms of predicting mentalizing skills, the use of a validated measure of objective childhood familial trauma would be necessary to substantiate this conclusion.

Discussion of the results for hypothesis 3. The purpose of the third hypothesis was to examine whether emotional empathy could explain the relationship between childhood relational trauma and mentalizing skills among therapists. Since emotional empathy was not found to be a significant mediator, the association between objective childhood familial trauma items and emotional empathy were considered in post hoc analysis. The association between relational style and emotional empathy was also

examined based on the previously surmised conceptual overlap between childhood relational trauma and relational style. As already noted, post hoc analyses revealed that growing up with a disabled or ill parent was significantly positively associated with emotional empathy; this finding provides indirect support for the wounded healer postulation that, as children, effective therapists served as caretakers and/or provided support to family members/parents in adverse conditions (Cushway, 1995; Trusty, et al., 2005). Regarding relational style and emotional empathy, consistent with attachment theory and research, relational avoidance was found to be significantly negatively associated with emotional empathy. Since high levels of emotional empathy are indicative of high emotional responsiveness to the experiences of others and attentiveness to affective experiences in general, individuals with an avoidant relational/attachment style would reasonably exhibit lower levels of emotional empathy. In contrast to the findings of Trusty, et al. (2005), in the current study, relational anxiety was not significantly associated with emotional empathy. Relational anxiety in therapists was, however, negatively associated with cognitive empathy, a finding that might be expected given that individuals with high relational anxiety are particularly attuned to their own emotions, and therefore, they are likely to have difficulty understanding others' feeling without sharing in their affective state. It is also worth noting that relational avoidance was not significantly inversely associated with mindfulness, cognitive empathy, or theory of mind, which are all mentalizing components that do not require personally experiencing strong emotions (thus, individuals with an avoidant relational style are less likely to struggle with these).

Implications of the Findings for Theory, Research, and Practice

Theoretical implications. This study aimed to resolve the theoretical inconsistency between attachment theory and the wounded healer hypothesis. While questions still remain, this study contributed to the literature in several ways. For one, the data provide a possible explanation for the contradictory findings in the literature regarding the consequences of childhood relational trauma on therapists' clinical skills. When considering self-oriented and explicit aspects of mentalizing such as affect consciousness, psychological mindedness and mindfulness, our results suggest that therapists with a history of trauma demonstrate lower skills as compared to their non-traumatized counterparts. In contrast, therapists with and without a history of childhood relational trauma did not differ in terms of their abilities in other-oriented and implicit modes of mentalizing (i.e., cognitive empathy and theory of mind) or emotional empathy. Furthermore, positive correlations were found between individual objective measures of childhood familial trauma and both cognitive and emotional empathy. These findings suggest that the attachment theory and wounded healer hypothesis divide can be clarified by considering whether the observed clinical skills in the literature are self or other oriented and implicit or explicit. The current study indicates that the wounded healer hypothesis is likely to be supported when examining the relationship between childhood relational trauma and clinical skills that are other-oriented and implicit in nature. Conversely, findings consistent with the predictions of attachment theory might be expected when the relationship between childhood relational trauma and self-oriented and implicit clinical skills are studied.

Methodological implications. This study provides preliminary evidence that paper and pencil measures can effectively quantify mentalization. By differentiating the mentalizing instruments according to the object of focus (self or other) and mode of functioning (implicit or explicit) involved, this method improves upon traditional measures of mentalization that yield only a single score for overall mentalization. As this study demonstrated, self-report and performance measures of mentalization can isolate the various dimensions comprising mentalization, allowing for the identification of individuals' specific strengths and weaknesses.

Consistent with attachment theorists' warning that retrospective measures of childhood relational trauma (i.e., AAI) should not be considered reliable assessments of actual attachment experiences (Main, et al., 1985), the current study demonstrated that retrospective self-report measures of perceived childhood relational trauma differ significantly from more objective childhood familial trauma items in predicting mentalizing skills. The results suggest that it is one's perception of childhood relational trauma as opposed to actual objective events that is associated with interpersonal functioning. Therefore, inconsistent findings in the literature on the relationship between therapist skills and childhood relational trauma might also be related to differences in how childhood relational/familial trauma is operationalized and measured.

Practical implications. The findings of this study can be used to inform training and supervisory practices in clinical psychology and mental health counseling graduate programs. Data from the current study revealed that 70% of trainees produced above average scores on the measure of perceived childhood relational trauma (CATS). Since

above average scores on the CATS measure were associated with lower reported levels of affect consciousness, mindfulness and psychological mindedness, there is evidence to suggest that including training in these self-oriented and explicit aspects of mentalization would be beneficial for both training therapists and their patients. While many programs currently incorporate a pre-practicum course which focuses on basic empathic responding, the results of the current study indicate that the following skills should also be emphasized: (a) identifying and describing one's own feelings (b) nonjudgmentally labeling one's own experiences and attending fully to one task at a time (possibly through mindfulness meditation training) and (c) self-understanding. Recall that, while the therapists in this study did display an above average level of perceived childhood relational trauma, their scores on self-report measures of mentalizing components were, on the whole, at an above average level. Furthermore, scores on the performance task of mentalization did not differ significantly between those who reported higher and lower levels of childhood relational trauma, higher and lower levels of relational anxiety, or higher and lower levels of relational avoidance. Nevertheless, since successfully trained therapists would ideally be expert mentalizers, educational requirements aimed at improving mentalizing skills should be recommended regardless of whether these skills are at a deficient or average level.

From an attachment theory standpoint, therapist trainees' above average levels of childhood relational trauma and the significant association between childhood relational trauma and relational anxiety points to the need for a secure supervisor-trainee attachment relationship. Such a relationship may serve as a "corrective emotional

experience” (Bernier & Dozier, 2002) for the trainee. During times of high anxiety, trainees can turn to their supervisor as a secure base who aids in regulating overwhelming emotions while also encouraging independent exploration. Additionally, once a secure attachment is established, supervisors can encourage trainees to further develop their reflective skills, either in the context of the supervisor-trainee relationship or through personal therapy. Ultimately, trainees’ improved attachment security and self-reflectiveness/mentalizing skills, as developed through supervision, would allow them to, in a parallel fashion, foster secure attachment relationships with their clients and a therapeutic environment in which clients can feel comfortable mentalizing about past and present relationships.

Limitations of the Study and Future Directions

This study has a number of limitations, most notable being the use of self-report measures. Since the self-report measures assessed trainees’ personality qualities and included items about highly sensitive/personal experiences, socially desirable responding was a concern. Thus, it is unknown whether therapists provided accurate reports of their levels of mindfulness, affect consciousness, psychological mindedness, cognitive empathy, childhood relational trauma and relational style. Future research could improve this issue by including reports from peers, clients, family members, and/or partners. A performance measure was included in the design in order to enhance reliability, however, no significant associations were found between the performance measure and any of the self-report measures. It remains unclear whether this finding was related to the fact that the performance measure was assessing a unique aspect of mentalization not accounted

for by the self-report measures or that therapists are able to control the effects that childhood relational trauma/relational style might have on their interpretation of others' mental states. Regarding the latter possibility, future research could compare scores on the performance and self-report measures of mentalization for a therapist group against those of a non-therapist group. Finally, while theoretical evidence supports the relationship between this study's proposed mentalizing components and therapist mentalizing skills, there was no direct data confirming that therapists' scores on the mentalizing self-report measures actually corresponded with their level of mentalizing skills in a clinical setting. While one of this study's purposes was to measure mentalization more efficiently through self-reports as opposed to the standard method of using the AAI in combination with the RFS, this study would have benefitted from additionally measuring attachment and mentalization on the AAI/RFS. Future research should compare therapists' scores on the self-report and performance measures of mentalizing components and relational style with their attachment classification and mentalizing scores on the AAI/RFS. Despite these limitations, the current study contributes to the literature on the wounded healer hypothesis as well as the measurement of mentalization among training therapists.

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