

PSYCHOTHERAPIST MINDFULNESS AND THE PSYCHOTHERAPY PROCESS

NOAH G. BRUCE, RACHEL MANBER, SHAUNA L. SHAPIRO,
AND MICHAEL J. CONSTANTINO

*Oakland Psychiatry and Behavioral Medicine, Oakland Medical Center,
Oakland, California*

A psychotherapist's ability to relate to his or her patients is essential for decreasing patient suffering and promoting patient growth. However, the psychotherapy field has identified few effective means for training psychotherapists in this ability. In this conceptual article, we propose that mindfulness practice may be a means for training psychotherapists to better relate to their patients. We posit that mindfulness is a means of self-attunement that increases one's ability to attune to others (in this case, patients) and that this interpersonal attunement ultimately helps patients achieve greater self-attunement that, in turn, fosters decreased symptom severity, greater well-being, and better interpersonal relationships.

Keywords: mindfulness, attunement, meditation, empathy, clinical training, therapeutic relationship

Research consistently shows that effective psychotherapists are best distinguished in terms of effectiveness by their ability to relate to their patients (Lambert & Barley, 2001; Lambert & Okishi, 1997). However, there has been limited empirical focus on methods of training psycho-

therapists to develop quality relationships with patients (e.g., Castonguay, Constantino, & Holtforth, 2006). Instead, psychotherapy researchers have directed most of their energies toward discerning which psychotherapeutic *techniques* are most effective for alleviating specific symptoms (e.g., Lambert & Ogles, 2004; Roth & Fonagy, 2005). As we address this imbalance, the goal of the present conceptual article is to promote a dialogue about the role that a psychotherapist's mindfulness plays in the psychotherapy process, specifically in the development of the psychotherapist–patient relationship. We propose that a psychotherapist's ability to be mindful (psychotherapist mindfulness) positively impacts his or her ability to relate to patients. We posit that mindfulness may be a method for developing and optimizing clinically beneficial relational qualities in a psychotherapist such as empathy, openness, acceptance, and compassion. Although this hypothesis has yet to be substantiated empirically, we believe that the evidence, both empirical and theoretical, suggests a link between mindfulness and relational capacity. Our discussion draws primarily from psychotherapy research, theoretical work in the field of attachment, and empirical, theoretical, and Buddhist studies of mindfulness.

Mindfulness has been proposed as a form of self-attunement that increases one's capacity to attune with others (Siegel, 2007). We believe that the ability to attune with others can be learned, and that this ability is at the heart of a healing, empathic relationship. We propose that through mindfulness practice, a psychotherapist comes to increasingly know and befriend himself or herself, fostering his or her ability to know and befriend the patient. We further believe that the psychotherapist's ability to form an attuned, empathic relationship with the patient can lead to improvement in the patient's ability to self-attune, and that this ability can, in turn, diminish suffering, promote greater well-being, and in-

Noah G. Bruce, Rachel Manber, Shauna L. Shapiro, and Michael J. Constantino, Oakland Psychiatry and Behavioral Medicine, Oakland Medical Center, Oakland, California.

Correspondence regarding this article should be addressed to Noah G. Bruce, Oakland Psychiatry and Behavioral Medicine, Oakland Medical Center, 3900 Broadway, Oakland, CA 94611. E-mail: noah.g.bruce@kp.org

crease the patient's ability to form and maintain interpersonal relationships. Ultimately, we posit that a greater focus on the impact of psychotherapists' mindfulness may contribute to the field's understanding of ways in which psychotherapists can be trained to foster positive relational experiences in psychotherapy.

Mindfulness

Mindfulness refers to a psychological process, a type of meditation practice, and a theoretical concept (Brown, Ryan, & Cresswell, 2007; Germer, 2005). The concept and practice of mindfulness are rooted in Buddhism; however, the psychological process is universally applicable, and not exclusive to any one culture or religion. Just as the mind can be sleepy, daydreaming, concentrated, emotional, or scattered, the mind can also be *mindful*. Mindfulness meditation helps practitioners cultivate this quality of consciousness, dwelling in it more frequently and for longer periods (Kabat-Zinn, 2003; S. L. Shapiro, Astin, Carlson, & Freedman, 2006).

Western science has had a difficult time agreeing on a definition of mindfulness (Hayes & Shenk, 2004). As Gunaratana (2002, p. 137) noted, "You can play with word symbols all day long and you will never pin it down completely." However, it is important to have an operational definition for the purposes of academic exploration. An oft-cited definition in the literature is, "The awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment to moment" (Kabat-Zinn, 2003, p. 145). This definition can be broken down into three core mindfulness elements: (a) attention, (b) attitude, and (c) intention (S. L. Shapiro et al., 2006).

The first element is the ability to keep one's attention in the present moment. This ability requires suspension of all manner of interpreting experience and simply attending to the experience itself (S. L. Shapiro et al., 2006). The opposite of such attention is being lost in thought or being on autopilot. In mindfulness meditation, the practitioner trains in catching oneself when one's mind drifts from the present moment and returning the attention gently to the here and now. Over time, the practitioner's ability to attend to the present without drifting is increased. In psychotherapy, this ability can mean being aware, in the present moment, of three objects of attention:

(a) the psychotherapist's own body and mind, (b) the patient, and (c) the relationship as it plays out moment by moment between psychotherapist and patient. This process is akin to Sullivan's (1953) notion of the psychotherapist as a participant-observer of self, other, and process.

The second element is attitudinal. Although the ability to pay attention is essential to mindfulness, the experience of mindfulness is more than "bare awareness" (S. L. Shapiro et al., 2006). Mindful awareness is infused with attitudes of curiosity, openness, and acceptance (Lau et al., 2006). Siegel (2007) used the acronym *COAL* to refer to a similar list of qualities: curiosity, openness, acceptance, and love. These attitudes may be considered the "heart" aspects of the practice, and they differentiate mindfulness from solely cognitive pursuits (W. D. Morgan & Morgan, 2005; S. L. Shapiro & Schwartz, 2000). In fact, the Asian character for "mindfulness" is composed of two interactive figures: one mind and the other heart (Santorelli, 1999). Rinpoche (1993), writing from the perspective of a venerated Tibetan Buddhist monk, put it this way: "[mindfulness has] the flavor of boundless space, so warm and cozy that you feel enveloped and protected by it, as if by a blanket of sunshine" (p. 61).

For the psychotherapist, this element of mindfulness may involve the intention to relate to whatever arises in the psychotherapy process with an attitude of *COAL*. We suggest that Siegel's acronym *COAL* is actually hierarchical in that it is likely easiest to relate with curiosity to a patient, and likely most challenging to actually love a patient, particularly a difficult patient. This is not an easy task, for what arises in psychotherapy is sometimes unpleasant. The mindful psychotherapist would intend to greet with *COAL* not only the likable aspects of the patient's personality, but also the patient's darker feelings of anger, jealousy, loss, hate, and pain. We suggest that it is the patient's ability to be increasingly vulnerable and the psychotherapist's ability to connect with this vulnerability that allows the psychotherapist to relate to the patient's difficult feelings with a deepening progression from curiosity to openness, acceptance, and ultimately, love. He or she would also intend to relate with *COAL* to his or her own thoughts, emotions, and sensations, including feelings of boredom, fear, and frustration. Finally, he or she would intend to approach the therapeutic relationship with

COAL, in whatever stage the relationship is in, be it healthy and productive or stormy and stuck.

The third element of mindfulness is intention, which directly affects mindfulness practice. Individuals practice mindfulness with different intentions and, according to a study by D. H. Shapiro (1992), meditators tend to realize the experience that they *intend* to encounter. In other words, with mindfulness practice, you find what you seek. D. H. Shapiro (1992) found that individuals who practiced to achieve self-regulation achieved self-regulation, whereas those who practiced to achieve self-exploration or self-liberation achieved these goals.

The intention element adds nuance to the definition of mindfulness. It implies that mindfulness is not an all-or-nothing proposition. In mindfulness practice, one intends to pay attention to the present moment and to greet experience with openness, but these abilities vary moment to moment. Mindfulness is best thought of as a continuous variable rather than a dichotomous variable. Similarly, intention itself is a continuously evolving dimension of mindfulness practice that creates a personal context or vision for why one is practicing. In the context of psychotherapy, the psychotherapist's intentions may range from global intentions, focused on why one has entered the profession, to intentions specific to each psychotherapy session and patient. Implicit is the intention to pay attention with an attitude of COAL to the self, the patient, and the therapeutic relationship.

Mindfulness and Attunement

Attunement is a term used in the attachment and neurobiological literature to describe a relationship in which one person focuses on the internal world of the other, and the recipient of this attention feels felt, understood, and connected (Siegel, 1999, 2007; Stern, 1985). It is a two-way street where one person senses the mind of the other, and the other senses his own mind in the mind of the first. As one person "feels" the other, the recipient feels "felt." Stern (1985), who studied attunement between parents and infants, noted that attunement requires (a) the parent to accurately read the feeling state of the infant, (b) the parent to communicate this understanding to the infant through behaviors, and (c) for the infant to recognize his or her feeling state in the parent's behavior. Beebe (2004) illustrated a sim-

ilar process of bidirectional communication in a videotaped psychotherapy case study. She described in detail how she as the psychotherapist communicates her understanding of her patient's feelings state through facial expression, body posture, and speech including tone, cadence, and rhythm of voice, as well as the effects of these communications on her patient. Siegel (2007) noted that attunement is vital for people to feel vibrant, alive, understood, and peaceful in relationships.

We hypothesize that mindfulness enhances a psychotherapist's ability to create an attuned relationship and that attunement is an essential aspect of the therapeutic relationship. Mindfulness, according to Siegel (2007), is essentially a state of intrapersonal attunement in which one attends to himself or herself with compassion and kindness, and when able to manifest this self-attunement, he or she is also purportedly better able to attune to others. Ultimately, attunement with the psychotherapist may help a patient experience greater self-attunement and the benefits associated with this state. Therefore, it is our hypothesis that a psychotherapist's mindfulness affects the patient through a process of attunement in three relationships: (a) the psychotherapist's relationship with himself or herself, (b) the psychotherapist's relationship with the patient, and (c) the patient's relationship with himself or herself.

Psychotherapist Self-Attunement

We suggest that the basis for a psychotherapist's attuned relationship with the patient is the attuned relationship with himself or herself. An individual with a self-attuned relationship seeks to remain present for his or her experiences with an attitude of COAL. We believe that as self-attunement deepens, he or she comes to know and accept himself or herself more. In colloquial terms, the individual becomes his or her own best friend. In Siegel's (2007) words,

With mindful awareness, we can propose, the mind enters a state of being in which one's here and now experiences are sensed directly, accepted for what they are, and acknowledged with kindness and respect. This is the kind of interpersonal attunement that promotes love. And this is, I believe, the intrapersonal attunement that helps us see how mindful awareness can promote love for oneself. (pp. 16–17)

Siegel has hypothesized that the process of mindfulness uses the same neural circuitry that

we use to attune to the minds of others and to create relationships. Siegel has also noted the similarities between this type of self-relationship and a secure attachment between parent and child (Bowlby, 1988; Winnicott, 1969). Mindfulness, he has suggested, can be thought of as a form of secure attachment with oneself.

To propose that a person can be attuned to himself or herself suggests a duality of mind as both the knower and the known. The knower is what is called, in the analytic tradition, the *observing ego*, and in some spiritual traditions, the *witness consciousness*. This is the part of consciousness that observes one's experience without judgment or interpretation. The known is the contents of mind: the feelings, thoughts, and sensations that make up the experience of being a human being.

A metaphor may be useful to explain this duality of mind concept. Mindful awareness is seen as a bowl, and the contents of mind are held within the bowl. Through mindfulness practice, one's bowl is enlarged so that it can hold more intense experience without overflowing. Overflowing means losing mindful awareness—that is, getting lost in experience or pushing it away. Through practice, one begins to identify more with the bowl and less with what is in the bowl.¹ The result is increased self-attunement: knowing and accepting oneself.

Buddhist thought and modern psychotherapy research both suggest that the capacity to relate openly, curiously, and warmly to oneself translates directly into an ability to relate in these ways with others (e.g., Chodron, 2001; Henry, Schacht, & Strupp, 1990; Kristeller & Johnson, 2005). Chodron (2001), a western Buddhist nun, has noted that “without loving kindness for ourselves, it is difficult, if not impossible to genuinely feel it for others” (p. 42). She has articulated the relationship between self-acceptance and relating with others in the following way:

To relate with others compassionately is a challenge. Really communicating to the heart and being there for someone else—our child, spouse, parents, patients, or the homeless woman on the street means not shutting down on ourselves. This means allowing ourselves to feel what we feel and not pushing it away. It means accepting every aspect of ourselves, even parts we don't like. To do this requires openness, which in Buddhism is sometimes called emptiness—not fixating or holding onto anything. Only in an open, nonjudgmental space can we acknowledge what we are feeling. (Chodron, 1997, pp. 78–79)

The psychotherapist's capacity for an open relationship with himself or herself, also known as *intrapersonal attunement*, is likely to be a crucial precursor to creating an attuned relationship with the patient. Experiences that a psychotherapist is unable to hold in the “bowl” of awareness, those he or she pushes out of consciousness or those that overwhelm him or her, will affect the psychotherapist's ability to hold similar experiences in patients. This is known as *countertransference* (classically defined), and evidence shows that it can result in the psychotherapist engaging in unconsciously motivated behaviors that can be detrimental to the therapeutic process and outcome (Gelso & Hayes, 2001, 2007).

Kristeller and Johnson (2005) proposed a two-stage theoretical model to explain how meditation can enhance empathy for others by first changing one's relationship to the self. In the first stage, the practitioner begins the process by becoming aware of and then disengaging from habitual patterns and responses. The result is a loosening of the self's self-protective and self-centered stance. This work on the self paves the way for Stage 2, which involves a conscious attempt to generate empathy and compassion for others.

In the realm of empirical psychotherapy research, the link between relationship with self and relationship with others was demonstrated through the pioneering psychotherapy research on the Vanderbilt II dataset (for reviews, see Constantino, 2000, and Henry & Strupp, 1994). By analyzing moment-by-moment interactions in psychotherapy cases, the Vanderbilt researchers found that they could predict how a psychotherapist would relate with patients on the basis of how he or she related with himself or herself. For example, in one study, Henry et al. (1990) analyzed at a fine-grained level the interactions between psychotherapist and patient in 14 psychotherapy cases by using a coding system of interpersonal interactions called the *structural analysis of social behavior* (SASB; Benjamin, 1974, 1996). A parallel SASB questionnaire, the *Intrex* (Benjamin, 1983), was also used to assess psychotherapist introjects (or self-concepts). Ex-

¹ It is important to note that within a Buddhist paradigm, distinctions such as knower and known, bowl and contents are seen as useful metaphors; however, in the ultimate sense they are seen not as separate, but as part of one singular reality.

aming the association between psychotherapist introject and session-based interpersonal process, Henry et al. found that psychotherapists with self-accepting introjects were more likely to engage their patients with acceptance and support, in comparison with psychotherapists with hostile introjects who engaged in three times as many hostile and controlling communications with their patients.

As one might expect, the prevalence of hostile versus supportive communications is, in turn, linked with therapeutic outcome. Studies conducted by these as well as other researchers demonstrated that hostile and controlling communications on the part of the psychotherapist were linked with poor psychotherapy process and outcome, whereas cases with positive outcome were marked by a near-absence of these communication patterns (e.g., Constantino et al., 2006; Henry et al., 1990; Henry, Schacht, & Strupp, 1986; Hilliard, Henry, & Strupp, 2000; Price & Jones, 1998). These results support a supposition that makes intuitive sense but has been largely ignored by the empirical literature: A psychotherapist's relationship to himself or herself has direct bearing on his or her relationship to patients.

Though in its infancy, empirical research is beginning to show a relationship between mindfulness and a healthy attitude toward the self. Brown and Ryan (2003) found a significant correlation between scores on a mindfulness measure and a measure of self-esteem. S. L. Shapiro, Astin, Bishop, and Cordova (2005), using a randomized, controlled design, found that health care professionals participating in a mindfulness-based stress reduction (MBSR) course reported a statistically significant increase in self-compassion in comparison with participants in a control group. Consistent with these findings, Shapiro, Brown and Biegle (2006) found that an MBSR intervention significantly increased self-compassion in counseling psychology students in comparison with matched controls. More research is needed to validate a statement made by Tibetan Buddhist teacher Sogyal Rinpoche (1993): "[O]nly when we have removed the harm in ourselves do we become truly useful to others" (p. 61).

Psychotherapist Interpersonal Attunement

As is noted above, interpersonal attunement is a state of connection in which one senses the

mind of another, and this second person, sensing his own mind in the mind of the first, "feels felt." In psychotherapy, the process depends on a psychotherapist's sensitivity to the patient's signals, including what the patient does and does not say, as well as nonverbal signals, such as eye contact, voice quality, facial expression, and body posture. Attunement goes beyond perceiving signals; it involves the psychotherapist actually feeling something of the patient's state of mind.

This human ability to sense the internal state of another may rely on a system of neurological circuitry called the *mirror neuron system* (Carr, Iacoboni, Dubeau, Mazziotta, & Lenzi, 2003; Gallese, Eagle, & Migone, 2007; Iacoboni, 2009; Leslie, Johnson-Frey, & Grafton, 2004). Iacoboni (2009) speculated that this system seems to have evolved because it offers the adaptive advantage of enabling the understanding of feelings and mental states of others, thus providing the basis for social behavior. Though the existence of mirror neurons in humans has not yet been definitely proven² (Turella, Pierno, Tubaldi, & Castiello, 2007), the mirror neuron system theoretically works by activating the same neurological circuits in the observer that are activated in a person carrying out an action, expressing an emotion, or experiencing a sensation. Thus, if a person observes someone else's smile, the observer's mirror neurons will cause the activation of his neurons that are involved in a smile. According to the theory of "embodied simulation," this process is biologically based, automatic, unconscious, and noninferential (Gallese et al., 2007). However, the observer of the smile will not necessarily smile because the mirror neurons activate other neurons at a subacute level, allowing the observer to experience a "smaller dose" of the emotion and sensation than the smiling person is experiencing. This similar experiencing between two people may be the basis for attunement and, ultimately, of close human relationships (Siegel, 2007).

² A mirror neuron system has been demonstrated to exist in monkeys (Gallese, Fadiga, Fogassi, & Rizzolatti, 1996). According to Turella et al. (2007), it is reasonable to conclude, on the basis of the evidence gained from neuroimaging studies, that there is a mirror neuron system in humans as well and that it allows us to imitate the actions of others. The possibility that such a system, as outlined in the present article, as the basis for empathy is more controversial (Turella et al., 2007; for a fuller discussion of mirror neurons, see Rizzolatti & Sinigaglia, 2008).

When a psychotherapist is able to feel the internal state of the patient and then hold his or her own experience of the patient's experience in the "bowl" of the psychotherapist's observing ego, a message is sent to the patient that his or her experience is tolerable, that another person can be close to the patient despite his or her suffering. Patients' often fear their own toxicity and believe that the psychotherapist will treat them as they have been treated (or treated themselves) in the past; that is, they expect recapitulated rejection, distancing, and negative judgment (Benjamin, 1984, 2003). Patients also fear that the intensity of their pain will overwhelm and harm the psychotherapist. When instead, the psychotherapist holds the patient's experience and stays present and attuned, these fears can, in time, be laid to rest, and patients can begin changing their relationships with themselves and with others in their lives—what might be referred to as a *corrective emotional*, or *relational*, experience (e.g., Alexander & French, 1946; Bridges, 2006). The concept of interpersonal attunement between psychotherapist and patient is similar to Rogers' (1951, 1957) concept of unconditional positive regard. What is suggested here is that mindfulness may be a means for developing this unconditional positive regard, both for oneself and one's patients.

According to Porges' (1998) polyvagal theory, "our nervous system evaluates the state of threat or safety of a situation and activates the brainstem's vagal and autonomic nervous systems to respond with either a sense of 'safety' or 'threat'" (Siegel, 2007, p. 129). According to this hypothetical model, when the nervous system determines that a situation is safe, the facial muscles soften, the vocal tone relaxes, the rate of neural signal transfer increases, and most importantly for therapeutic purposes, the perceptual system opens to receive input from the outside world. This receptive, attuned, state of mind is, of course, ideal grounds for connecting in psychotherapy and forming a strong therapeutic relationship. This is perhaps why Siegel (2007) referred to attunement as "the heart of therapeutic change" (p. 290).

Attunement and Empathy

Although the field of psychotherapy research has not focused on the concept of attunement, the closely related concept, *empathy*, is one of the

most heavily researched aspects of the psychotherapy relationship (see Bohart, Elliot, Greenberg, & Watson, 2002). The difference between these two constructs may be based primarily in language. For example, Siegel (2007) seemed to use the terms *attuned relationship* and *empathic relationship* interchangeably. Also note the similarity between the concepts of the subacute ("smaller dose") firing of neurons in the observer and Rogers' (1961) definition of empathy as the ability "to sense the [patient's] private world as if it were your own, but without losing the 'as if' quality" (p. 284). Stern (1985), however, distinguished between the two concepts and described empathy as a more conscious process.

Both empathy and attunement describe a balanced state that resides between being emotionally withdrawn or cut off from another and being overwhelmed by another's internal world. The empathic individual opens his or her mind to the influence of another, but does not lose himself or herself in the experience. Mindfulness practice may increase an individual's capacity for empathy by simultaneously building the brain's resonance circuitry and self-regulatory circuits, though research has yet to document this change in neurobiology (Siegel, 2007). The resonance circuits (part of the mirroring system) may allow one to feel what another feels, while the self-regulatory circuits may allow the continued distinction between self and other (the "as-if quality" of Rogers', 1961, definition of empathy).

Both empathy and attunement describe a process that can occur between two people. Greenberg, Watson, Elliot, and Bohart (2001) have argued that empathy is probably best "conceived of as a mutually created climate variable rather than as a variable unilaterally 'provided' by the psychotherapist" (p. 382). This view of empathy as a bilateral process likely explains why patient-rated scores of psychotherapists' empathy correlate most highly with outcome, whereas the correlations of outcome with observer or psychotherapist self-rated empathy scores are more modest (Bohart et al., 2002).

A likely important consequence of psychotherapist empathy is that it enhances the psychotherapist's ability to sense when a patient needs space (Siegel, 1999, 2007). An empathic psychotherapist knows when to allow space by reducing the intensity of the empathic connection. Siegel has suggested that intimate relationships alternate between states of "engaged alignment" and "dis-

tanced autonomy” (p. 70). The empathic psychotherapist is thus sensitive to the patient’s signals, mostly nonverbal, that indicate the need for closeness or distance much as an attuned mother who senses when her infant needs space and removes stimulation when he or she is overwhelmed (Sander, 1962).

Psychotherapist empathy is considered an essential ingredient in psychotherapy regardless of theoretical orientation, and the evidence linking empathy to therapeutic outcome is robust (Ackerman et al., 2001; Bohart et al., 2002). In their meta-review of the literature, Bohart et al. (2002) found that empathy, which is considered an ingredient in the therapeutic relationship, was more strongly related to the outcome of the psychotherapy than was the more global construct of therapeutic alliance. Despite the abundance of the research on empathy, psychotherapists have been challenged to find ways to cultivate this quality, which may be harder to learn than specific psychotherapy skills and knowledge (Lazarus, 1993).

Mindfulness and Ruptures in the Attuned Relationship

Even the most mindful and sensitive psychotherapist will sometimes lose attention and focus, misunderstand the patient, say something hurtful, or in some other way fail to attune. As is noted above, psychotherapists are affected by a variety of factors both within the psychotherapy room and without. At times, the psychotherapist will simply be less present with the patient, and sometimes these lapses will contribute to a deterioration in the relationship with the patient, or *alliance rupture*. We believe that mindfulness could theoretically enhance the psychotherapist’s ability to notice these fluctuations in presence (S. P. Morgan, 2005). This noticing may promote a return to a mindful presence and attunement, and can also decrease the possibility of a rupture in the first place.

Ruptures are fairly common,³ and they mark crucial moments in psychotherapy (Nagy, Safran, Muran, & Winston, 1998; Safran & Muran, 1996). Addressed and worked through, a rupture can strengthen the therapeutic relationship and provide the patient with a constructive template for handling interpersonal antagonism. Evidence shows that an unaddressed or improperly addressed rupture can weaken the relationship and lead to dropout or treatment failure (Safran & Muran, 1996). Repair of

a therapeutic rupture consists of two main tasks: noticing the rupture and working through it (Safran, Muran, Samstag, & Stevens, 2001). To our knowledge, there is no empirical research examining the direct connection between mindfulness and ruptures. However, as we attempt to demonstrate below, the qualities associated with mindfulness are closely related to qualities that have been shown to be beneficial to both noticing and working through alliance ruptures.

To work through a rupture, the rupture must first be recognized. Research suggests, however, that psychotherapists often miss ruptures (Hill, Nutt-Williams, Heaton, Thompson, & Rhodes, 1996; Hill, Thompson, Cogar, & Denman, 1993; Regan & Hill, 1992). A rupture is like a wound: Properly addressed, it can begin to heal, but ignored, it will likely fester. Mindfulness is theoretically believed to help the psychotherapist be “attuned to subtle indications of ruptures” (Safran et al., 2001). These subtle indications are the signals that the patient transmits through what he or she says and does not say, as well as through nonverbal communication. The mindful psychotherapist is perhaps more likely to receive these signals and therefore more likely to notice and address a rupture.

Awareness of a rupture is essential, but not sufficient for resolution. At the time the psychotherapist recognizes the presence of a rupture, he or she stands at a critical juncture. Research indicates that if the psychotherapist and the patient can successfully work through the therapeutic rupture, the alliance becomes stronger (Foreman & Marmar, 1985; Lansford, 1986; Rhodes, Hill, Thompson, & Elliot, 1994). If the dyad cannot reach resolution, the rupture remains detrimental to outcome.

Working through a rupture requires contributions from both psychotherapist and patient. Research indicates that for the psychotherapist, the most effective approach involves addressing the rupture directly, a nondefensive attitude, a willingness to listen to the patient’s negative feelings about the psychotherapy and the psychotherapist, and a willingness to change his or her own behavior (Foreman & Marmar, 1985; Lansford, 1986; Rhodes et al., 1994). Though the research

³ Nagy, Safran, Muran, and Winston (1998) found that patients reported ruptures in 11% to 38% of sessions, whereas psychotherapists reported ruptures in 25% to 53% of sessions.

cited here did not study mindfulness per se, the parallels between these qualities and the attributes of mindfulness are apparent. By definition, a psychotherapist who remains mindful attends to what is occurring in the present, in this case a rupture, and keeps an attitude of friendliness, openness, and flexibility, which is precisely the attitude recommended by the research.

We suggest that mindfulness may also be an effective remedy for two additional processes that past research has suggested can impede effective resolution of ruptures: (a) the psychotherapist's temptation to respond to patients sharing of negative feelings by defensively expressing his or her own negative feelings and (b) the tendency to adhere rigidly to a treatment model when confronted with a rupture⁴ (Castonguay, Goldfried, Wiser, Raue, & Hayes, 1996; Henry et al., 1986, 1990; Henry, Strupp, Butler, Schacht, & Binder, 1993; Piper et al., 1999; Safran et al., 2001). In both processes, the psychotherapist loses sight of the interpersonal process as it exists in the moment. In the first, he or she mindlessly reacts to his or her own negative feelings. Though not empirically validated, some have argued that mindful awareness of negative feelings could prevent such defensive actions. For example, S. P. Morgan (2005) noted, "if we are aware of [negative feelings] we are less likely to be driven by them in our interactions with our patients (p. 141). In the second process, the psychotherapist sacrifices in-the-moment flexibility for the security provided by strict adherence to techniques and to the treatment model. Again, the psychotherapist anchored in mindfulness is theoretically more likely to be willing to temporarily drop the model and its techniques and simply be present, acknowledging his or her own contribution to the rupture and greeting with openness the patient's feelings. Such approaches to alliance ruptures have been shown, at least preliminarily, to reduce dropout (Muran, Safran, Samstag, & Winston, 2005; Safran, Muran, Samstag, & Winston, 2005), heighten patient-reported alliance quality and psychotherapist empathy (Constantino et al., 2008), and improve outcome (Constantino et al., 2008).

Patient Self-Attunement

We propose, on a theoretical basis, that the successful result of a psychotherapist's ability to attune to the patient may be improvement in the patient's ability to attune to himself or herself. That is, the patient will likely increase his or her

ability to be present for his or her experience within and outside the psychotherapy room without judgment and with friendliness toward himself or herself. Siegel (2007) has written, "Secure interpersonal attunements likely create states of integration that promote internal attunement and mindfulness as a trait" (p. 317).

The idea that psychotherapist-patient attunement will result in patient self-attunement is at this stage theoretical rather than empirically validated, though it is akin to the concept that the patient develops intrapsychically through the interpersonal relationship with the psychotherapist that appears repeatedly in the psychodynamic literature. The concept of the holding environment, pioneered by Winnicott (1969), originally described the relationship between mother and child and was later adapted to the therapeutic relationship. The holding environment is provided by the mother and meets the needs of the child. It has both physical and emotional elements, and when such an environment is provided, the child feels connected, supported, and safe. Initially all encompassing, this safety allows the child to begin to explore his or her environment and differentiate from his or her mother. The mother, sensing the child's growing independence, allows his or her differentiation by gradually withdrawing support, allowing the child to begin to meet his or her own needs.

This concept was applied to the psychotherapeutic context with greater emphasis on the emotional rather than physical components of holding; however, such concrete details as the physical space (be it the psychotherapist's office or a hospital setting) and time (50-minute hour, regular appointment) also compose the holding environment. Instead of using the holding environment to explore the physical world around him or her as the child does, the patient in psychotherapy uses the safety provided by the environment to explore his or her internal world. We suggest, again theoretically, that mindfulness increases the psychotherapist's attunement to the patient, which the patient then internalizes. For

⁴ For example, a cognitive-behavioral psychotherapist's perseverative insistence that a patient's negative feelings about treatment are the result of distorted thinking or a dynamic psychotherapist unbending interpretation that the patient's negative feelings about the psychotherapist stem solely from feelings about the patient's mother or father.

the patient, the psychotherapist's mindful and attuned state provides a safe environment and a model for a new way of relating to himself or herself. It allows the exploration of his or her interior experience with curiosity, openness, and friendliness, encountering whatever arises without disconnection or being overwhelmed.

Winnicott (1960) and Kohut (1971) have both described a process in which the patient internalizes aspects of the psychotherapist. The idea is that through continued contact with the psychotherapist, the patient begins to manifest relational qualities of the psychotherapist, in particular the psychotherapist's empathy for the patient. Portnoy (1999) reflected this idea, stating, "When patients internalize the psychotherapist's empathy, they develop a capacity to assume a reflective, understanding, accepting, comforting attitude toward their own emotions and needs" (p. 23).

Siegel (2007) theorized that an attuned psychotherapist, like an attuned parent, may help build the fibers of the patient's prefrontal cortex (Siegel, 2007). This part of the brain is responsible for many functions related to mindfulness, including emotion regulation, empathy, modulating fear, insight, attunement, and the ability to be nonreactive. This concept has not been verified by science; however, there is a burgeoning body of evidence from neuroimaging studies that demonstrates that successful psychotherapy does change the brains of patients.

These studies have demonstrated that successful application of different kinds of psychotherapy have changed the levels of activation in certain parts of patients' brains suffering from a variety of disorders, including behavioral therapy for obsessive-compulsive disorder (Baxter et al., 1992; Brody et al., 1998), cognitive-behavioral therapy for social phobia (Furmark et al., 2002), specific phobia (Paquette et al., 2003), and depression (Goldapple et al., 2004; Kennedy et al., 2007), and interpersonal therapy for depression (Brody et al., 2001). These studies show only that successful psychotherapy changes activation in patients' brains; they do not explain how this change occurs. As our ability to study the brain increases, neuroscience may eventually validate Siegel's (2007) theory that attunement between psychotherapist and patient is an important, underlying factor in all psychotherapies, which stimulates physical change in the brain that, in turn, allows the patient to create a more healthy

relationship with himself or herself (Siegel, 2007).

Mindfulness as Clinical Training

Mindfulness has been the subject of much attention from the medical and mental health fields (Baer, 2003; Day & Horton-Deutsch, 2004). However, this attention has been almost entirely focused on mindfulness as a clinical intervention. Research has demonstrated that mindfulness-based interventions can have various effects on diverse clinical and nonclinical populations, including increasing immune function, improving interpersonal relationships, reducing subjective states of suffering, and enhancing overall well-being (Baer, 2003).

A randomized, controlled study of the 8-week, MBSR program demonstrated that subjects in the mindfulness group showed increased activity in the left-sided anterior regions of the brain, a pattern previously associated with positive emotion and a disposition toward positive affect, as well as increased immune function in response to an influenza vaccine (Davidson et al., 2003). A recent study examined the effects of concentration meditation in experienced meditators and novices and found that increases in attention and response inhibition correlated with increased practice, supporting the theory of neural plasticity, and the ability to train our minds and enhance specific capacities (e.g., attention/response inhibition; Brefczynski-Lewis, Lutz, Schaefer, Levinson, & Davidson, 2007). Although the study focused on concentration meditation and not mindfulness, it lends indirect support to the idea that meditation training can cultivate important capacities for both healthy and clinical populations.

Mindfulness-based interventions are being used to treat a range of mental health issues, including eating disorders, posttraumatic stress disorder, obsessive-compulsive disorder, anxiety, insomnia, and substance use (Bowen, Witkiewitz, & Dillworth, 2006; Cropley, Usher, & Charitou, 2007; Fairfax, 2008; Kristeller, Baer, & Quinlan-Wolever, 2006; Ong, Shapiro, & Manber, 2008; Roemer & Orsillo, 2005; Walser & Westrup, 2007). Furthermore, mindfulness practice has been incorporated into psychotherapeutic treatments such as dialectical behavior therapy (Linehan, 1993), acceptance and commitment therapy (Hayes, 2003), and mindfulness-based

cognitive therapy (Segal, Teasdale, & Williams, 2002).

In contrast, limited attention has been directed to the possibility that mindfulness practice may help psychotherapists become more effective. Martin (1997) referred to mindfulness as a core psychotherapy process and noted that the process of mindfulness has been tacitly contained in Western psychotherapies all along. For psychotherapists, according to Martin (1997), mindfulness means entering a state in which "such attitudes as being right, controlling the situation, or maintaining psychotherapist self-esteem give way to a quiet, limber, nonbiased and nonreactive response" (p. 299). Martin pointed out, as have several other writers, that Freud's (1912/1958) instruction to maintain an "evenly hovering attention" bears a strong resemblance to descriptions of mindfulness. We feel similarly about Bion's (1970) notion of engaging the patient during the clinical hour in a manner free of the psychotherapist's own memory or desire. By shunning his or her memories (naturally linked to the past) and desires (naturally linked to the future), the psychotherapist can be fully present in the moment in the service of achieving a state of *hallucinosi*s in which hunches, intuitions, gut feelings, fantasies, and so forth are free to emerge in patient and therapist as core interpretable material. Fulton (2005) argued that the effects of mindfulness on the psychotherapist are congruent with qualities such as flexibility, empathy, compassion, understanding, presence, and warmth that underlie a successful treatment relationship.

Dimidjian and Linehan (2003) suggested that it would be valuable for future research to assess empirically the relation between psychotherapist mindfulness and treatment outcome. The possibility that psychotherapists' mindfulness could affect patients' outcome is supported by research on nonspecific therapeutic factors. In their review of the literature on psychotherapist differences, Lambert and Okishi (1997) concluded that empirical research demonstrated that "the largest differences among psychotherapists were found on 'nonspecific' relationship variables rather than 'specific' technical ones" (p. 70). They found that the most successful psychotherapists were those who were able to demonstrate warmth, understanding, and the willingness to look at oneself critically and admit mistakes, qualities that foster a strong therapeutic relationship (see Ackerman & Hilsenroth, 2003, and Constantino, Caston-

guay, & Schut, 2002). Indeed, Lambert and Barley (2001), after extensively reviewing the psychotherapy outcome literature, stated that "the improvement of psychotherapy may best be accomplished by learning to improve one's ability to relate to clients" (p. 357). As we argue in this article, these qualities can likely be promoted by mindfulness practice.

For example, there is preliminary empirical evidence that mindfulness practice increases an individual's capacity for empathy. Using a randomized, controlled design, Lesh (1970) demonstrated that participation in a 4-week program in Zen meditation increased graduate student psychotherapists' ability to respond empathically to videotaped vignettes of patients. Lesh also found greater improvement in empathic ability after this Zen program in students who were rated as less empathic at baseline. Consistent with these findings, a prospective controlled study examining the effects of a mindfulness-based stress reduction intervention for medical and premedical students found that students in the mindfulness intervention group experienced a significant increase in empathy in comparison with controls (S. L. Shapiro, Schwartz, & Bonner, 1998). Thus, preliminary evidence suggests that mindfulness practice may enhance a psychotherapist's ability to create an empathic, attuned relationship with patients. Given the central role of empathy in the therapeutic relationship, these findings hold significant promise for psychotherapists and their patients.

In summary, the literature indicates that psychotherapists are differentiated by their ability to form a strong therapeutic relationship with patients and suggests that mindfulness practice may enhance this ability. We further suggest that mindfulness practice enhances a psychotherapist's ability to relate to patients through enhancing the ability to create an attuned relationship.

Mindfulness Training: Recommendations and Future Directions

A recent study conducted in Germany demonstrated the effectiveness of training psychotherapists to be more mindful (Grepmaier et al., 2007). In this study, two groups of psychotherapists treating a total of 124 patients in an inpatient setting were randomized to a group participating in meditation and a group that did not meditate. The meditating group met with a Zen master 5

days per week for 1 hr of meditation and instruction. After 2 months of twice-weekly individual psychotherapy sessions, patients of the meditating psychotherapists showed significantly greater symptom reduction, reported greater satisfaction, and rated their therapies as more helpful.

This study provides preliminary evidence that training in Zen meditation (which is closely related to mindfulness meditation) improves a psychotherapist's ability to help patients. Although a promising beginning, more research is needed. First, more studies are needed to test mindfulness training programs to establish that mindfulness practice does enhance psychotherapeutic outcome. Second, research is needed that looks at how mindfulness accomplishes this goal. As we have detailed in this article, we speculate that meditation may most directly affect a psychotherapist's ability to create a therapeutic relationship, likely by increasing his or her ability to empathize, both with himself or herself and with the client. This could be accomplished by inserting alliance and outcome measures into studies examining therapist mindfulness or by using audio or videotapes and coding interpersonal process in psychotherapy sessions. Mindfulness may also increase a therapist's ability to use techniques effectively or to accurately conceptualize a case. This could be accomplished by having supervisors rate therapists receiving mindfulness training, as well as a control group. Qualitative research could study therapists who already have a mindfulness practice to find out how they use mindfulness and how their practice helps them in their work.

If research continues to demonstrate that mindfulness is an effective means of training psychotherapists, and as we begin to understand how this process works, the next step will be to design and test trainings in mindfulness meditation geared specifically for psychotherapists to answer questions about what is the best means for training psychotherapists in mindfulness meditation. Questions could be addressed such as what mindfulness practices are most helpful, such as breath meditation, loving kindness meditation (*metta*), or meditation without an object of concentration. Mindfulness training programs could guide trainees in working directly with difficult countertransference feelings that get in the way of an attuned relationship. Other questions include, When and how often does one need to practice to make a difference? For example, it may be help-

ful for therapists to sit for just a few minutes prior to each session as a means to "reset" the mind in addition to longer periods of meditation practice during the week. Another question is, How does one carry mindfulness generated during meditation into an actual psychotherapy session? We suggest that supervision could be utilized here as a link between meditation practice and an actual session by providing trainees a space to discuss and incorporate into their work insights gained during meditation practice. The goal of this research is an empirically based training method for increasing psychotherapist effectiveness.

However, therapists do not have to wait for empirical validation to benefit from mindfulness practice. As is outlined in this article, preliminary empirical evidence suggests that meditation enhances foundational therapeutic skills. We encourage therapists to experiment with mindfulness meditation and to see whether the practice affects their therapy, in particular their ability to relate to patients. Although meditation is not always easy, beginning to meditate is quite simple and instructions are readily available (e.g., Hahn, 1987; Kabat-Zinn, 2000).

We also offer the following exercise, borrowed from W. D. Morgan and Morgan (2005), for psychotherapists to use before they greet a patient:

1. Take a moment and feel the rise and fall of your breath before rising to meet your next patient.
2. As you walk to the door, imagine that on the other side of the door, another human being is waiting. The human being is someone who is suffering, who has hopes and dreams, who has tried to be happy and only partially succeeded, and who is coming to you, believing that you can relieve his or her suffering.
3. Now open the door.

Though mindfulness meditation shows particular promise for therapists, we believe that any practice that develops qualities of curiosity, openness, acceptance, and love, particularly toward oneself, would yield benefits in the therapy room. Examples include yoga, tai chi, chi gung, journaling, artistic expression with the intent of self-exploration, and the therapist's own psychotherapy. "Know thyself," the adage inscribed in the

temple of Apollo at Delphi, is applicable. The therapist who is able to know himself is better able to know the patient, and therefore better able to help the patient know himself or herself.

References

- ACKERMAN, S. J., BENJAMIN, L. S., BEUTLER, E., GELSO, C. J., GOLDFRIED, M. R., HILL, C., ET AL. (2001). Empirically supported psychotherapy relationships: Summary report of the division 29 task force. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 495–497.
- ACKERMAN, S. J., & HILSENROTH, M. J. (2003). A review of psychotherapist characteristics and techniques positively impacting the therapeutic alliance. *Clinical Psychology Review*, 23, 1–33.
- ALEXANDER, F. G., & FRENCH, T. M. (1946). *Psychoanalytic psychotherapy: Principles and application*. New York, NY: Ronald.
- BAER, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, 10(2), 125–143.
- BAXTER, L. R., SCHWARTZ, J. M., BERGMAN, K. S., SZUBA, M. P., GUZE, B. H., MAZZIOTTA, J. C., ET AL. (1992). Caudate glucose metabolic rate changes with both drug and behavior therapy for obsessive compulsive disorder. *Archives of General Psychiatry*, 49(9), 681–689.
- BEEBE, B. (2004). Faces in relation: A case study. *Psychoanalytic Dialogues*, 14(1), 1–51.
- BENJAMIN, L. S. (1974). Structural analysis of social behavior. *Psychological Review*, 81, 392–425.
- BENJAMIN, L. S. (1983). *The INTREX user's manual (parts I and II)*. Salt Lake City: University of Utah.
- BENJAMIN, L. S. (1984). Principles of prediction using structural analysis of social behavior. In R. A. Zucker, J. Aronoff, & A. J. Rabin (Eds.), *Personality and the prediction of behavior* (pp. 121–173). New York, NY: Academic.
- BENJAMIN, L. S. (1996). Introduction to the special section on structural analysis of social behavior. *Journal of Consulting and Clinical Psychology*, 64, 1203–1212.
- BENJAMIN, L. S. (2003). *Interpersonal reconstructive psychotherapy: Promoting change in non-responders*. New York, NY: Guilford Press.
- BION, W. R. (1970). *Attention and interpretation*. London, England: Tavistock.
- BOHART, A. C., ELLIOT, R., GREENBERG, L. S., & WATSON, J. S. (2002). Empathy. In J. C. Norcross (Ed.), *Psychotherapy relationships that work* (pp. 89–108). New York, NY: Oxford University Press.
- BOWEN, S., WITKIEWITZ, K., & DILLWORTH, T. M. (2006). Mindfulness meditation and substance use in an incarcerated population. *Psychology of Addictive Behaviors*, 20(3), 343–347.
- BOWLBY, J. (1988). *A secure base: Parent-child attachment and healthy human development*. London, England: Routledge.
- BREFCZYNSKI-LEWIS, J. A., LUTZ, A., SCHAEFER, H. S., LEVINSON, D. B., & DAVIDSON, R. J. (2007). Neural correlates of attentional expertise in long-term meditation practitioners. *Proceedings of the National Academy of Sciences, USA*, 104(27), 11,483–11,488.
- BRIDGES, M. R. (2006). Activating the corrective emotional experience. *Journal of Clinical Psychology/In Session*, 62, 551–568.
- BRODY, A. L., SAXENA, S., SCHWARTZ, J. M., STOESEL, P. W., MAIDMENT, K., PHELPS, M. E., ET AL. (1998). FDG-PET predictors of response to behavioral therapy and pharmacotherapy in obsessive compulsive disorder. *Psychiatry Research*, 84(1), 1–6.
- BRODY, A. L., SAXENA, S., STOESEL, P., GILLIES, L. A., FAIRBANKS, L. A., ALBORZIAN, S., ET AL. (2001). Regional brain metabolic changes in patients with major depression treated with either paroxetine or interpersonal therapy: Preliminary findings. *Archives of General Psychiatry*, 58(7), 631–640.
- BROWN, K. W., & RYAN, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848.
- BROWN, K. W., RYAN, R. M., & CRESSWELL, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18, 211–237.
- CARR, L., IACABONI, M., DUBEAU, M. C., MAZZIOTTA, J. C., & LENZI, G. L. (2003). Neural mechanisms of empathy in humans: A relay from neural systems for imitation to limbic areas. *Proceedings of the National Academy of Sciences, USA*, 100(9), 5497–5502.
- CASTONGUAY, L. G., CONSTANTINO, M. J., & HOLTFOORTH, M. G. (2006). The working alliance: Where are we and where should we go? *Psychotherapy: Theory, Research, Practice, Training*, 43, 271–279.
- CASTONGUAY, L. G., GOLDFRIED, M. R., WISER, S., RAUE, P. J., & HAYES, A. M. (1996). Predicting the effect of cognitive psychotherapy for depression: A study of unique and common factors. *Journal of Consulting and Clinical Psychology*, 64, 497–504.
- CHODRON, P. (1997). *When things fall apart: Heart advice for difficult times*. Boston, MA: Shambhala.
- CHODRON, P. (2001). *The places that scare you: A guide to fearlessness in difficult times*. Boston, MA: Shambhala.
- CONSTANTINO, M. J. (2000). Interpersonal process in psychotherapy through the lens of the structural analysis of social behavior. *Applied and Preventive Psychology*, 9, 153–172.
- CONSTANTINO, M. J., CASTONGUAY, L. G., & SCHUT, A. J. (2002). The working alliance: A flagship for the “scientist-practitioner” model in psychotherapy. In G. S. Tryon (Ed.), *Counseling based on process research: Applying what we know*. Boston, MA: Allyn & Bacon.
- CONSTANTINO, M. J., MARAMBA, G. J. K., BRUCE, N., COLLINS, A. J., PRICE, R., DEGEORGE, J., ET AL. (2006, October). *A fine-grained analysis of patient-psychotherapist interpersonal process and differential outcome in cognitive-behavioral psychotherapy for bulimia nervosa*. Paper presented at the meeting of the North American chapter of the Society for Psychotherapy Research, Burr Oak, Ohio.
- CONSTANTINO, M. J., MARNELL, M., HAILE, A. J., KANTHER-SISTA, S. N., WOLMAN, K., ZAPPERT, L., & ARNOW, B. A. (2008). Integrative cognitive psychotherapy for depression: A randomized pilot comparison. *Psychotherapy: Theory, Research, Practice, Training*, 45(2), 122–134.
- CROPLEY, M., USHER, M., & CHARITOU, E. (2007). Acute

- effects of a guided relaxation routine (body scan) on tobacco withdrawal symptoms and cravings in abstinent smokers. *Addiction*, 102(6), 989–993.
- DAVIDSON, R. J., KABAT-ZINN, J., SCHUMACHER, J., ROSENKRANZ, M., MULLER, D., SANTORELLI, S. K., ET AL. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine*, 65(4), 564–570.
- DAY, P. O., & HORTON-DEUTSCH, S. (2004). Using mindfulness-based therapeutic interventions in psychiatric nursing practice: I. Description and empirical support for mindfulness-based interventions. *Archives of Psychiatric Nursing*, 18(5), 164–169.
- DIMIDJIAN, S., & LINEHAN, M. M. (2003). Defining an agenda for future research on the clinical application of mindfulness practice. *Clinical Psychology: Science and Practice*, 10(2), 166–171.
- FAIRFAX, H. (2008). The use of mindfulness in obsessive compulsive disorder: Suggestions for its application and integration in existing treatment. *Clinical Psychology & Psychotherapy*, 15(1), 53–59.
- FOREMAN, S. A., & MARMAR, C. R. (1985). Psychotherapist actions that address initially poor therapeutic alliances in psychotherapy. *American Journal of Psychiatry*, 142(8), 922–926.
- FREUD, S. (1958). Recommendations to physicians practicing psycho-analysis. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud, Vol. 12* (pp. 109–120). London, England: Hogarth Press. (Original work published 1912)
- FULTON, P. R. (2005). Mindfulness as clinical training. In C. K. Germer, R. D. Siegel, & P. R. Fulton (Eds.), *Mindfulness and psychotherapy* (pp. 55–72). New York, NY: Guilford Press.
- FURMARK, T., TILLFORS, M., MARTEINSDOTTIR, I., FISCHER, H., PISSIOTA, A., LANGSTOM, B., ET AL. (2002). Common changes in cerebral blood flow in patients with social phobia treated with citalopram or cognitive behavioral therapy. *Archives of General Psychiatry*, 59(5), 425–433.
- GALLESE, V., EAGLE, M. E., & MIGONE, P. (2007). Intentional attunement: Mirror neurons and the neural underpinnings of interpersonal relations. *Journal of the American Psychoanalytic Association*, 55(1), 131–176.
- GALLESE, V., FADIGA, L., FOGASSI, L., & RIZZOLATTI, G. (1996). Action recognition in the premotor cortex. *Brain*, 119(Pt. 2), 593–609.
- GELSO, C. J., & HAYES, J. A. (2001). Countertransference management. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 418–422.
- GELSO, C. J., & HAYES, J. A. (2007). *Countertransference and the psychotherapist's inner experience: Perils and possibilities*. Mahwah, NJ: Erlbaum.
- GERMER, C. K. (2005). Mindfulness: What is it? What does it matter? In C. K. Germer, R. D. Siegel, & P. R. Fulton (Eds.), *Mindfulness and psychopsychotherapy*. New York, NY: Guilford Press.
- GOLDAPPLE, K., ZINDEL, S., GARSON, C., LAU, M., KENNEDY, S., ET AL. (2004). Modulation of cortic-limbic pathways in major depression: Treatment-specific effects of cognitive behavior therapy. *Archives of General Psychiatry*, 61(1), 34–41.
- GREENBERG, L. S., WATSON, J. C., ELLIOT, R., & BOHART, A. C. (2001). Empathy. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 380–384.
- GREPMAIR, L., MITTERLEHNER, F., LOEW, T., BACHLER, E., ROTHER, W., & NICKEL, M., (2007). Promoting mindfulness in psychotherapists influences the treatment results of their patients: A randomized, double blind, controlled study. *Psychotherapy and Psychosomatics*, 76(6), 332–338.
- GUNARATANA, B. H. (2002). *Mindfulness in plain English*. Boston, MA: Wisdom.
- HAHN, T. H. (1987). *The miracle of mindfulness*. Boston, MA: Beacon Press.
- HAYES, S. C., & SHENK, C. (2004). Operationalizing mindfulness without unnecessary attachments. *Clinical Psychology: Science and Practice*, 11(3), 249–254.
- HAYES, S. C., STROSAHL, K. D., & WILSON, K. G. (1999). *Acceptance and commitment psychotherapy: An experiential approach to behavior change*. New York, NY: Guilford Press.
- HENRY, W. P., SCHACHT, T. E., & STRUPP, H. H. (1986). Structural analysis of social behavioral: Application to a study of interpersonal process in differential psychotherapeutic outcome. *Journal of Consulting and Clinical Psychology*, 54, 27–31.
- HENRY, W. P., SCHACHT, T. E., & STRUPP, H. H. (1990). Patient and psychotherapist introject, interpersonal process, and differential psychotherapy outcome. *Journal of Consulting and Clinical Psychology*, 58, 768–774.
- HENRY, W. P., & STRUPP, H. H. (1994). The therapeutic alliance as interpersonal process. In A. O. Horvath & L. S. Greenberg (Eds.), *The working alliance: Theory, research and practice* (pp. 51–84). New York, NY: Wiley.
- HENRY, W. P., STRUPP, H. H., BUTLER, S. F., SCHACHT, T. E., & BINDER, J. L. (1993). The effects of training in time-limited dynamic psychotherapy: Changes in psychotherapist behavior. *Journal of Consulting and Clinical Psychology*, 61, 434–440.
- HILL, C. E., NUTT-WILLIAMS, E., HEATON, K. J., THOMPSON, B. J., & RHODES, R. H. (1996). Psychotherapist retrospective recall impasses in long-term psychotherapy: A qualitative analysis. *Journal of Counseling Psychology*, 43, 207–217.
- HILL, C. E., THOMPSON, B. J., COGAR, M. C., & DENMAN, D. W. (1993). Beneath the surface of long-term psychotherapy: Psychotherapist and client report of their own and each other's covert processes. *Journal of Counseling Psychology*, 40, 278–287.
- HILLIARD, R. B., HENRY, W. P., & STRUPP, H. H. (2000). An interpersonal model of psychotherapy: Linking patient and psychotherapist developmental history, therapeutic process, and types of outcome. *Journal of Consulting and Clinical Psychology*, 68, 125–133.
- IACOBONI, M. (2009). Imitation, empathy, and mirror neurons. *Annual Review of Psychology*, 60, 653–670.
- KABAT-ZINN, J. (2000). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Delta Books.
- KABAT-ZINN, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156.
- KENNEDY, S. H., KONARSKI, J. Z., SEGAL, Z. V., LAU, M. A., BIELING, P. J., MCINTYRE, R. S., ET AL. (2007). Differences in brain glucose metabolism between re-

- sponders to CBT and venlafaxine in a 16-week randomized controlled trial. *American Journal of Psychiatry*, 164(5), 778–788.
- KOHUT, H. (1971). *The analysis of the self*. New York, NY: International University Press.
- KRISTELLER, J. L., BAER, R. A., & QUILLIAN-WOLEVER, R. (2006). Mindfulness-based approaches to eating disorders. In R. A. Baer (Ed.), *Mindfulness-based treatment approaches: Clinician's guide to evidence base and applications* (pp. 75–91). San Diego, CA: Elsevier Academic Press.
- KRISTELLER, J., & JOHNSON, T. (2005). Cultivating loving kindness: A two-stage model of the effects of meditation on empathy, compassion, and altruism. *Zygon*, 40, 391–407.
- LAMBERT, M. J., & BARLEY, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 357–361.
- LAMBERT, M. J., & OGLES, B. M. (2004). The efficacy and effectiveness of psychotherapy. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (5th ed., pp. 139–193). New York, NY: Wiley.
- LAMBERT, M. J., & OKISHI, J. C. (1997). The effects of the individual psychotherapist and implications for future research. *Clinical Psychology: Science and Practice*, 4, 66–75.
- LANSFORD, E. (1986). Weakenings and repairs of the working alliance in short-term psychotherapy. *Professional Psychology: Research and Practice*, 17(4), 364–366.
- LAU, M. A., BISHOP, S. R., SEGAL, Z. V., BUIS, T., ANDERSON, N. D., CARLSON, L., ET AL. (2006). The Toronto mindfulness scale: Development and validation. *Journal of Clinical Psychology*, 62(12), 1445–1467.
- LAZARUS, A. A. (1993). Tailoring the therapeutic relationship or being an authentic chameleon. *Psychotherapy*, 30, 404–416.
- LESH, T. (1970). Zen meditation and the development of empathy in counselors. *Journal of Humanistic Psychology*, 10(1), 39–74.
- LESLIE, K. R., JOHNSON-FREY, S. H., & GRAFTON, S. T. (2004). Functional imaging of face and hand imitation: Towards a motor theory of empathy. *NeuroImage*, 21, 601–607.
- LINEHAN, M. M. (1993). *Cognitive behavioral treatment of borderline personality disorder*. New York, NY: Guilford Press.
- MARTIN, J. (1997). Mindfulness: A proposed common factor. *Journal of Psychotherapy Integration*, 7(4), 291–312.
- MORGAN, S. P. (2005). Depression: Turning towards life. In C. K. Germer, R. D. Siegel, & P. R. Fulton (Eds.), *Mindfulness and psychotherapy* (pp. 130–151). New York, NY: Guilford Press.
- MORGAN, W. D., & MORGAN, S. T. (2005). Cultivating attention and empathy. In C. K. Germer, R. D., Siegel, R. D., & P. R. Fulton (Eds.), *Mindfulness and psychotherapy* (pp. 73–90). New York, NY: Guilford Press.
- MURAN, J. C., SAFRAN, J. D., SAMSTAG, L. W., & WINSTON, A. (2005). Evaluating an alliance-focused treatment for personality disorders. *Psychotherapy: Theory, Research, Practice, Training*, 42, 532–545.
- NAGY, J., SAFRAN, J. D., MURAN, J. C., & WINSTON, A. (1998). *A comparative analysis of treatment process and therapeutic ruptures*. Paper presented at the international meeting of the Society for Psychotherapy Research, Snow-Bird, Utah.
- ONG, J. C., SHAPIRO, S. L., & MANBER, R. (2008). Combining mindfulness meditation with cognitive-behavior psychotherapy for insomnia: A treatment-development study. *Behavior Psychotherapy*, 39, 171–182.
- PAQUETTE, V., LEVESQUE, J., MENSOUR, B., LEROUX, J. M., BEAUDOIN, G., BOURGOUIN, P., ET AL. (2003). Change the mind and you change the brain: Effects of cognitive-behavioral therapy on the neural correlates of spider phobia. *Neuroimage*, 18(2), 401–409.
- PIPER, W. E., OGRONCZUK, J. S., JOYCE, A. S., MCCALLUM, M., ROSIE, J. S., O'KELLY, J. G., & STEINBERG, P. I. (1999). Prediction of dropping out in time-limited, interpretive individual psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, 36, 114–122.
- PORGES, S. W. (1998). Love: An emergent property of the mammalian autonomic nervous system. *Psychoneuroendocrinology*, 23, 837–861.
- PORTNOY, D. (1999). Relatedness: Where humanistic and psychoanalytic psychotherapy converge. *Journal of Humanistic Psychology*, 39(1), 19–34.
- PRICE, P. B., & JONES, E. E. (1998). Examining the alliance using the psychotherapy process q-set. *Psychotherapy: Theory, Research, Practice, Training*, 35, 392–404.
- REGAN, A. M., & HILL, C. E. (1992). Investigation of what clients and counselors do not say in brief psychotherapy. *Journal of Counseling Psychology*, 39, 168–174.
- RHODES, R. H., HILL, C. E., THOMPSON, B. J., & ELLIOTT, R. (1994). Client retrospective recall of resolved and unresolved misunderstanding events. *Journal of Counseling Psychology*, 41, 473–483.
- RINPOCHE, S. (1993). *The Tibetan book of living and dying*. San Francisco, CA: Harper San Francisco.
- RIZZOLATTI, G., & SINIGALIA, C., (2008). *Mirrors in the brain: How our minds share actions and emotions*. New York, NY: Oxford University Press.
- ROEMER, L., & ORSILLO, S. M. (2005). An acceptance-based behavior psychotherapy for generalized anxiety disorder. In L. Roemer & S. M. Orsillo (Eds.), *Acceptance and mindfulness-based approaches to anxiety* (pp. 213–240). New York, NY: Springer.
- ROGERS, C. R. (1951). *Client-centered therapy*. Boston, MA: Houghton Mifflin.
- ROGERS, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 21, 95–103.
- ROGERS, C. (1961). *On becoming a person*. New York, NY: Houghton Mifflin.
- ROTH, A., & FONAGY, P. (2005). *What works for whom: A critical review of psychotherapy research* (2nd ed.). London, England: Guilford Press.
- SAFRAN, J. D., & MURAN, J. C. (1996). The resolution of ruptures in the therapeutic alliance. *Journal of Consulting and Clinical Psychology*, 64, 447–458.
- SAFRAN, J. D., MURAN, J. C., SAMSTAG, L. W., & STEVENS, C. (2001). Repairing alliance ruptures. *Psy-*

- chotherapy: *Theory, Research, Practice, Training*, 38(4), 406–412.
- SAFRAN, J. D., MURAN, J. C., SAMSTAG, L. W., & WINSTON, A. (2005). Evaluating alliance-focused intervention for potential treatment failures: A feasibility study and descriptive analysis. *Psychotherapy: Theory, Research, Practice, Training*, 42, 512–531.
- SANDER, L. W. (1962). Issues in early mother–child interaction. *Journal of the American Academy of Child and Adolescent Psychiatry*, 1, 141–166.
- SANTORELLI, S. (1999). *Heal thy self: Lessons on mindfulness in medicine*. New York, NY: Random House.
- SEGAL, Z. V., TEASDALE, J. D., & WILLIAMS, M. G. (2002). *Mindfulness-based cognitive psychotherapy for depression: A new approach to preventing relapse*. New York, NY: Guilford Press.
- SHAPIRO, D. H. (1992). A preliminary study of long term meditators: Goals, effects, religious orientation, cognitions. *Journal of Transpersonal Psychology*, 24(1), 23–39.
- SHAPIRO, S. L., ASTIN, J. A., BISHOP, S. R., & CORDOVA, M. J. (2005). Mindfulness-based stress reduction for health care professionals: Results from a randomized controlled trial. *International Journal of Stress Management*, 12, 164–176.
- SHAPIRO, S. L., ASTIN, J. A., CARLSON, L., & FREEDMAN, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62(3), 373–386.
- SHAPIRO, S. L., & SCHWARTZ, G. E. (2000). The role of intention in self-regulation: Toward intentional systemic mindfulness. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 253–273). New York, NY: Academic Press.
- SHAPIRO, S. L., SCHWARTZ, G. E., & BONNER, G. (1998). Effects of mindfulness-based stress reduction on medical and premedical students. *Journal of Behavioral Medicine*, 21(6), 581–599.
- SIEGEL, D. J. (1999). *The developing mind: How relationships and the brain interact to shape who we are*. New York, NY: Guilford Press.
- SIEGEL, D. J. (2007). *The mindful brain: Reflection and attunement in the cultivation of well-being*. New York, NY: Norton.
- STERN, D. N. (1985). *The interpersonal world of the infant: A view from psychoanalysis and developmental psychology*. New York, NY: Basic Books.
- SULLIVAN, H. S. (1953). *The interpersonal theory of psychiatry*. New York, NY: Norton.
- TURELLA, L., PIERNO, A. C., TUBALDI, F., & CASTIELLO, U. (2007). Mirror neurons in humans: Consisting or confounding evidence? *Brain and Language*, 108(1), 10–21.
- WALSER, R. D., & WESTRUP, D. (2007). *Acceptance and commitment psychotherapy for the treatment of post-traumatic stress disorder and trauma-related problems: A practitioner's guide to using mindfulness and acceptance strategies*. Oakland, CA: New Harbinger.
- WINNICOTT, D. W. (1960). The theory of the parent–child relationship. *International Journal of Psychoanalysis*, 41, 585–595.
- WINNICOTT, D. W. (1969). The use of an object. *International Journal of Psychoanalysis*, 50, 711–716.