Kim, D. M., Wampold, B. E., & Bolt, D. M. (2006). Therapist effects in psychotherapy: A random effects modeling of the NIMH TDCRP data. *Psychotherapy Research, 16,* 161–172.

Margolin, M. J., & Wampold, B. E. (1981). A sequential analysis of conflict and accord in distressed and nondistressed marital partners. *Journal of Consulting and Clinical Psychology, 49,* 554–567.

McKay, K. M., Imel, Z. E., & Wampold, B. E. (2006). Psychiatrist effects in the psychopharmacological treatment of depression. *Journal of Affective Disorders, 92,* 287–290.

Minami, T., Wampold, B. E., Serlin, R. C., Kircher, J. C., & Brown, G. S. (in press). Benchmarks for psychotherapy efficacy in adult major depression. *Journal of Consulting and Clinical Psychology.*

Wampold, B. E. (1984). Tests of dominance in sequential categorical data. *Psychological Bulletin, 96,* 424–429.

Wampold, B. E. (1997). Methodological problems with identifying efficacious psychotherapies. *Psychotherapy Research, 7*, 21-43.

Wampold, B. E. (2001a). Contextualizing psychotherapy as a healing practice: Culture, history, and methods. *Applied and Preventive Psychology, 10,* 69–86.

Wampold, B. E. (2001b). *The great psychotherapy debate: Models, methods, and findings.* Mahwah, NJ: Erlbaum.

Wampold, B. E., Ankarlo, G., Mondin, F., Trinidad, M., Baumler, B., & Prater, K. (1995). Social skills of and social environments produced by different Holland types: A social perspective on person–environment fit models. *Journal of Counseling Psychology, 42,* 365–379.

Wampold, B. E., & Bhati, K. S. (2004). Attending to the omissions: A historical examination of the evidenced-based practice movement. *Professional Psychology: Research and Practice, 35,* 563–570.

Wampold, B. E., & Brown, G. (2005). Estimating variability in outcomes attributable to therapists: A naturalistic study of outcomes in managed care. *Journal of Consulting and Clinical Psychology, 73,* 914–923.

Wampold, B. E., Imel, Z. E., Bhati, K. S., & Johnson, M. D. (2006). Insight as a common factor. In L. G. Castonguay & C. E. Hill (Eds.), *Insight in psychotherapy* (pp. 119–140). Washington, DC: American Psychological Association.

Wampold, B. E., & Kim, K. (1989). Sequential analysis applied to counseling process and outcome: A case study revisited. *Journal of Counseling Psychology, 36,* 357–364.

Wampold, B. E., & Margolin, G. (1982). Nonparametric strategies to test the independence of behavioral states in sequential data. *Psychological Bulletin, 92,* 755–765.

Wampold, B. E., Minami, T., Tierney, S. C., Baskin, T. W., & Bhati, K. S. (2005). The placebo is powerful: Estimating placebo effects in medicine and psychotherapy from clinical trials. *Journal of Clinical Psychology, 61,* 835–854.

Wampold, B. E., Mondin, G. W., & Ahn, H. (1999). Preference for people and tasks. *Journal of Counseling Psychology, 46,* 35–41.

Wampold, B. E., Mondin, G. W., Moody, M., Stich, F., Benson, K., & Ahn, H. (1997). A meta-analysis of outcome studies comparing bona fide psychotherapies: Empirically, "all must have prizes." *Psychological Bulletin, 122,* 203–215.

Wampold, B. E., & Serlin, R. C. (2000). Consequences of ignoring a nested factor on measures of effect size in analysis of variance. *Psychological Methods, 5,* 425–433.

Psychotherapy: *The* Humanistic (and Effective) Treatment

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Although it is well established that psychotherapy is remarkably effective, the change process in psychotherapy is not well understood. Psychotherapy is compared with

Editor's Note
Bruce E. Wampold received the Award for Distinguished Professional Contrubutions to Applied Research. Award winners are invited to deliver an award address at the APA's annual convention. A version of this award address was delivered at the 115th annual meeting, held August 17–20, 2007, in San Francisco, California. Articles based on award addresses are reviewed, but they differ from unsolicited articles in that they are expressions of the winners' reflections on their work and their views of the field.

medicine and cultural healing practices to argue that critical aspects of psychotherapy involve human processes that are used in religious, spiritual, and cultural healing practices. A model of psychotherapy is presented that stipulates various aspects that involve uniquely human characteristics. Central to this model is patient acquisition of an adaptive explanation of his or her difficulties. Finally, the research evidence for this model is presented.

Keywords: psychotherapy, psychological treatments, contextual model, efficacy, humanistic treatment

Psychotherapy is a remarkably effective healing practice. Yet the mechanisms by which psychotherapy creates change are not well understood. In an attempt to understand the mechanisms of change in psychotherapy, I compare psychotherapy with several other healing practices, highlighting how the psychological processes that distinguish psychotherapy from other healing practices are critical to an understanding of how change occurs. I focus specifically on aspects of psychotherapy that are uniquely human and are orthogonal to the specific ingredients of various treatments. Finally, I demonstrate how psychotherapy process and outcome research, as well as research from related areas, comports with the humanistic aspects of psychotherapy.

Classifying Healing Practices

A crucial step in understanding a phenomenon involves scientific categorization. Scientific categorization depends on classifying the phenomenon and related phenomena on the basis of essential rather than superfluous characteristics (Boyer, 1990). Psychotherapy is a healing practice, seemingly similar to some other healing practices and unlike many others, depending on the characteristics that one makes salient. Through description and discussion of six exemplars of human change, the characteristics that are deemed important in psychotherapy become apparent.

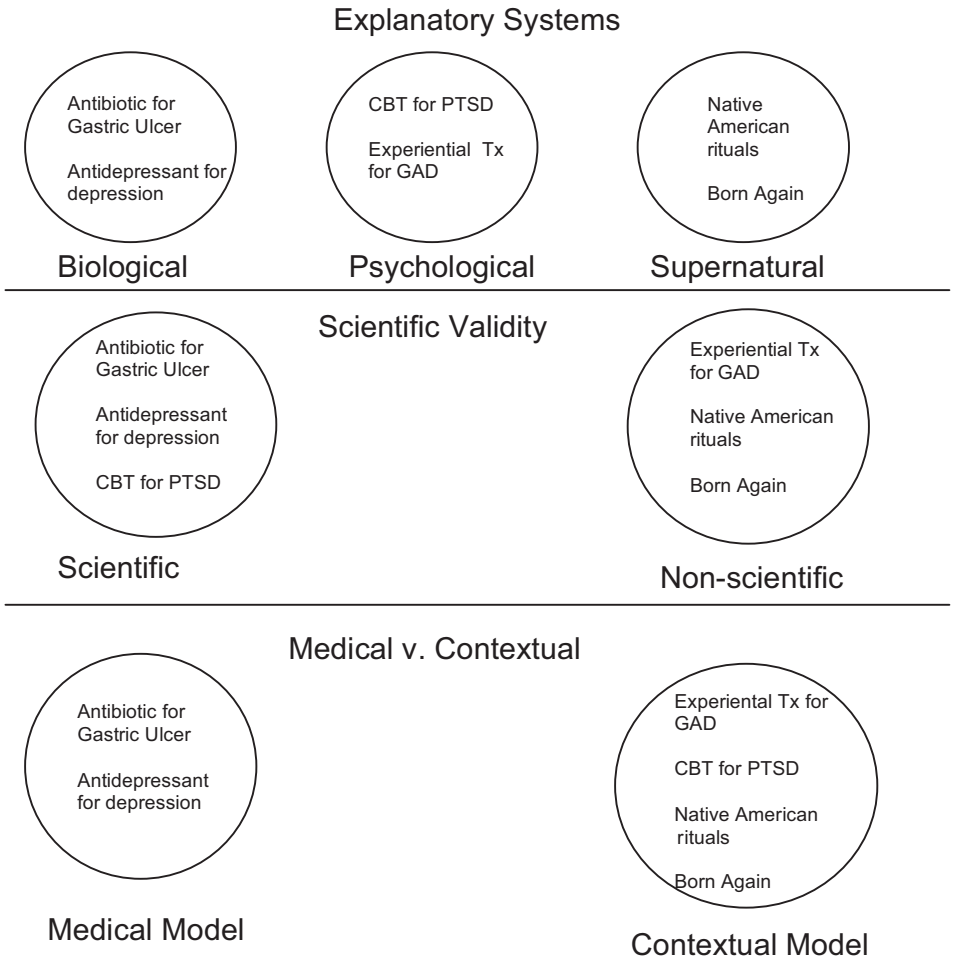
> Peter, a Native American, is depressed, abuses alcohol, and has occasionally suicidal thoughts. On a return trip to the reservation where he grew up to visit his ill grandmother, he runs into a childhood friend, who arranges a traditional *sweat* for him and his family. As a result, he develops a relationship with a traditional healer, who removes evil spirits. Peter's problems lessen and he returns to work.
>
> Susan, who experiences acute pain in her gut periodically during the day, presents to her physician, who orders laboratory studies that confirm her suspicion that she is suffering from a gastric ulcer. Susan begins a regimen of antibiotics and a proton pump inhibitor, which reduce her symptoms. After the course of treatment is finished, laboratory studies are negative.
>
> Serena, in middle age, presents to a psychologist because she is suffering from chronic anxiety about many aspects in her life, has periodically exhibited many symptoms of depression, and complains of a lack of romantic and intimate relationships in adulthood, and she receives a diagnosis of generalized anxiety disorder. Her experiential therapist explores the death of her father and her mother's series of boyfriends, helping her process her feelings with regard to these events and the actors, and has her express previously repressed grief. Her symptoms gradually decrease over the course of therapy.
>
> Wilhelm has led a particularly unremarkable life, earning just enough to support his hedonistic lifestyle, which included recreational drugs, alcohol, snowboarding, and women. Feeling increasingly lonely, he agrees to attend church with his current girlfriend. After a period of erratic church attendance, he breaks up with the woman, but seeks solace from some people at the church, including the minister. Soon thereafter, he is born again, gives up his hedonism, and becomes a practicing evangelical Christian.
>
> James feels lethargic, sleeping 10–12 hours per day. His attendance at work is erratic, as he avoids several situations that he finds stressful, and he no longer has an interest in previously enjoyable activities. He presents to his internist, who explains that he is depressed, that depression is caused by a chemical imbalance in his brain, and prescribes a selective serotonin reuptake inhibitor (SSRI). In about two weeks, he reports increased energy and enjoyment of various activities.
>
> Pat is suffering from symptoms of posttraumatic stress disorder (PTSD) as a result of military service in Iraq. She is referred to a psychologist, who administers the standard cognitive–behavioral treatment (CBT), including relaxation, cognitive restructuring, and prolonged exposure. After 20 sessions, the symptoms diminish, and she no longer meets the diagnostic criteria for PTSD.

These six exemplars can be categorized in various ways, and each categorization reveals something about the purported mechanisms of change involved. Putting aside a readily apparent classification based on professions—two treatments are delivered by physicians, two by psychologists, and two by religious figures—classifications could also be based on explanatory systems, scientific validity, and adherence to a medical model, as depicted in Figure 1.

Explanatory Systems

Essentially, there are three systems involved in the six treatments: biological, psychological, and religious/spiritual. The bases of the two medical treatments, antibiotics and antidepressants, are biological. Philosophically, medicine rests on the concept of *materialism*, which considers matter as the sole basis of reality and, thus, attempts to explain phenomena as the consequence of the interaction of matter. Applied to medicine, materialism implies that any

Figure 1
Three Classifications of Healing Practices



Note. CBT = cognitive–behavioral treatment; PTSD = posttraumatic stress disorder; tx = treatments; GAD = generalized anxiety disorder.

bodily state—including, most importantly, illness—has a physical substrate, and treatment involves altering some biological system. Treatment of depression with SSRIs, one of the change exemplars, makes the assumption that the disorder has a biological explanation involving, in part, neurotransmitters and that the biological intervention specifically remediates this biological cause of the disorder. Similarly, the treatment for the gastric ulcer specifically reduced the population of *H. pylori*, the biological cause of the gastric ulcer. In addition, to be established as bona fide medical practices, medical interventions must produce benefits over and above what can be achieved by means of hope, expectation, or relationship with a healer—that is, it must be shown that the treatment is more effective than a placebo.

Two of the treatments, CBT and experiential treatment, rely on psychological explanations and would be classified as psychotherapies. Of course, the particular psychological explanations underlying these two treatments are quite different. The explanatory systems of the three main forces in psychotherapy—psychodynamic, behavioral, and humanistic—offer dramatically different psychological explanations for various disorders. The variability in psychological explanations has given rise to a plethora of psychotherapies, numbering in the hundreds. In this regard, the class of treatments based on psychological explanations, characterized by a variety of explanations of the same disorder and a large number of treatments, differs from the class of treatments based on biological explanations, characterized by modal explanations of a disorder and a small number of treatments.

So far, I have classified antibiotics and SSRIs as biological and CBT and psychodynamic/experiential as psychological on the basis of the systems used to explain the disorder and construct the treatment. In contrast, the Native American and Christian exemplars belong to a class whose

explanations are based on what might be characterized as supernatural, religious, or spiritual. The bases of supernatural, religious, and spiritual treatments appear, at first glance, to be orthogonal from the empirical foundations of science, which leads to a second scheme for categorizing healing practices.

Scientific Validity

Consider another classification, one based on the scientific validity of the treatment, using the principles of the medical model. Scientific validity in medicine rests on an empirical demonstration of materialism in that it must be shown that substances and procedures that constitute medical practice are beneficial because of their direct effects on the anatomy and physiology of the patient. The term *specificity* is used to indicate that a treatment works through the hypothesized biological mechanisms. Stephen Jay Gould (1989) cited the demonstration that the effectiveness of Franz Anton Mesmer's treatments was not due to animal magnetism as one of the crown jewels of the scientific method. The establishment of specificity in medicine was made possible by the development in the mid-20th century of the randomized double-blind placebo control group design, which by 1980 was required for the approval of drugs by the Food and Drug Administration (Shapiro & Shapiro, 1997b). With regard to medical treatments, the scientific method requires the establishment of biological mechanisms of a disorder as well as the demonstration in a clinical trial that the administration of a substance to treat the disorder had effects attributable to specific ingredients. The two medical treatments, the antibiotic treatment of gastric ulcer and the antidepressant treatment of depression, meet the standards to be classified as scientifically valid.

The scientific validity of various psychotherapies raises some thorny issues. A case has been made that psychotherapy is an amalgam of treatments, some of which meet sufficient criteria to be called scientific and others of which do not. This distinction has been made notably by David Barlow (2004), who discussed two classes of talk therapies: psychological treatments and generic psychotherapy. Psychological treatments, built on characteristics found in a variety of treatment, including "the therapeutic alliance, the induction of positive expectancy of change, and remoralization," contain important "specific psychological procedures targeted at the psychopathology at hand" (Barlow, 2004, p. 873). Treatments lacking the specific psychological procedures to which Barlow refers would be designated as *generic psychotherapy*, whereas those containing the ingredients would be *psychological treatments*. Barlow's distinction between psychological treatments and generic psychotherapy rests on the specificity of action, the very notion that is one of the defining features of the medical model (Wampold, 2001b). That is, psychological treatments, while using the talk and context of therapy as means of delivery, provide ingredients that demonstrably remediate psychological deficits and produce observable benefits. Generic psychotherapy, however, may create change through creating hope, remoralization, and changed expectations and beliefs. However, these are the very mechanisms often used to explain, in psychological terms, change attained in religious and indigenous healing practices, thus further distancing "generic" psychotherapy from a classification as a scientific treatment. The distinction between treatments based on scientific psychology (i.e., behavioral therapy) and those based on mentalistic and unobservable constructs (e.g., most notably, psychoanalysis) was made at the origins of behavioral approaches (e.g., Eysenck, 1952, 1961, 1966; Watson & Rayner, 1920; see also Wampold, 2001b).

Because CBT for PTSD is based on sound psychological principles and has been shown to be efficacious in several clinical trials (Foa, Rothbaum, Riggs, & Murdock, 1991), a case could be made that it belongs to the category containing scientifically valid treatments. However, many would contend that experiential treatment of generalized anxiety disorder would fail to meet the criteria used to establish scientific validity, because this approach to treating generalized anxiety disorder has not been manualized, has not been found to be efficacious in clinical trials, and does not rest on canonical psychological theory and research.

From a scientific perspective, change accomplished in religious or cultural practice has been mostly dismissed (Shapiro & Shapiro, 1997b). It could be argued that the change was nonexistent in the sense that it was reported by a practitioner or client but was not documented scientifically. An alternative explanation is that the change was palliative only in that the recipient of the practice felt better but the underlying pathology, either biological or psychological, was unchanged. Finally, if change is documented, it could be attributed to the placebo effect (i.e., healing occurred but not through specified mechanisms), an explanation which has been relegated to the backwaters of medicine and psychology (Shapiro & Shapiro, 1997a, 1997b; Wampold, Imel, & Minami, 2007; Wampold, Minami, Tierney, Baskin, & Bhati, 2005). In this respect, experiential treatment of generalized anxiety disorder would be classified with the two religious/spiritual/cultural treatments, in that this treatment has not met the criteria generally accepted by the scientific community as necessary to qualify as scientifically valid.

Medical Versus Contextual Models

Jerome Frank (Frank & Frank, 1991) has proposed a different classification scheme, one in which psychotherapy is considered a cultural healing practice, more in line with religious and indigenous healing practices than with medical treatments. According to Frank and Frank, healing practices involve an emotionally charged and confiding

relationship with a healer, a healing setting, a rationale or conceptual scheme, and procedures that both the healer and patient believe in and that involve active participation and positive expectations for change. According to this perspective, these aspects of healing practices are the critical ingredients of the treatment, whereas in medicine it is the medicine's direct effect on the biological system. What the healing practices in the latter category have in common is that they appear to be embedded in a cultural context, rely on the interaction between the healer and the recipient of the treatment, and involve an interpretation of events and their meaning.

Modern medical treatments purportedly can be differentiated from cultural healing practices because medical practices have a scientific biological basis and have been subjected to the challenge of placebo-controlled trials. Although it is recognized that cultural context and patient preferences and expectations are important factors in medicine, the emphasis of evidence-based practice in medicine is on the effect that substances or procedures have on the biological system over and above effects of a placebo. Accordingly, the classification of the six change exemplars now contains two categories, *medicine* and a relatively ambiguous class that might generate labels such as *traditional*, *cultural*, *indigenous*, or simply *other*. Of course, such a classification is politically problematic, for it associates psychotherapy with a variety of practices that, while perhaps not ineffective, have not been empirically shown to be effective (Shapiro & Shapiro, 1997b).

Where Does Psychotherapy Fit?

The practice of psychotherapy, in which two conspecifics engage in a verbal/symbolic interaction with the intent to heal, is unique to humans. That is, psychotherapy is not a healing practice that can be used with nonhumans in the manner, say, that modern medicine is practiced with animals (i.e., veterinary medicine). When viewed from this perspective, psychotherapy does appear close (perhaps uncomfortably close) to various religious and cultural practices, as Frank and Frank (1991) have proposed. In some way, psychotherapists walk a precarious epistemological tightrope. Psychotherapists use the language and research tools of medicine and science but employ treatment procedures that may depend on the same psychological machinery as religious, spiritual, and culturally indigenous interventions. The thesis offered here resolves this tension by positing that the change process in psychotherapy occurs to a large extent in the context of the human interaction between therapist and patient in ways that are consistent with theory and research in cultural anthropology, evolutionary psychology, and related areas and, thus, *is* scientific.

I now turn to a discussion of the aspects of the psychotherapy process that involve the communication between the therapist and the patient and how that communication is not simply a necessary condition for the remediation of a dysfunction but is the primary mechanism of change.

The Humanistic Aspects of the Contextual Model

Human Abilities and Psychotherapy

The human brain is not simply a more advanced computing device than those possessed by nonhuman animals. That is, the distinction between humans and nonhuman animals extends beyond the notion that human brains have more storage, faster processors, and advanced circuitry, which can then be applied to multiple and more complex tasks. Rather, the human brain evolved with certain specific propensities that contain specific logics and convey certain adaptive advantages.[1] For example, humans have a specialized ability to detect and recognize faces as opposed to other similarly complex but less important objects (Boyer, 2001; Boyer & Barrett, 2005). Several of these specific capabilities are intimately involved in the process of psychotherapy and may be at least partly responsible for the benefits experienced by patients.

One of the specific strengths of the human brain is related to interpreting events, constructing explanations, and attributing causality (Gardner, 1998; Thomas, 2001). Religion and science are two, albeit very different, comprehensive systems for explaining phenomena. Not surprisingly, the propensity to construct explanations has been applied to bodily phenomena as well, and thus, the very origin of humans is associated with efforts to explain and treat illness:

> According to Sir William Osler (1932), the desire to take medicine is one feature that distinguishes hominids from their fellow creatures. . . . Although nothing is known about the earliest medications or about the first physician, historians date the earliest portrait of a physician to Cro-Magnon times, 20,000 B.C. (Haggard, 1934; Bromberg, 1954). This horned tailed, hirsute, and animal-like apparition had great psychological effect. (Shapiro & Shapiro, 1997b, p. 3)

Indeed, it is impossible to identify historically any civilization in which medicines, rituals, and healers were not central features of the culture. These practices and their accompanying explanations were generated by the prevailing metaphysical zeitgeist of the society. According to the Pythagoreans, for example, matter was composed of four basic elements—earth, air, fire, and water—and analogously, the body was composed of four humors—blood, phlegm, yellow bile, and black bile. Personalities were

[1] I make much of the distinction between humans and nonhuman animals. However, several of the abilities discussed here are exhibited in nonhuman primates (e.g., theory of mind, empathy, culture) but are only more developed in humans (see, e.g., de Waal, 2005). It is intriguing that the line of demarcation between humans and nonhuman primates has become increasingly murky as a result of advances in primatology. However, I suggest that the mechanisms of psychotherapy can be clarified by focusing on the traits that are the relative strengths of the human animal.

manifestations of mixtures of humors (the word *temperament* coming from the Greek *temperamentum*, meaning a blending of humors), which created health when balanced and illness when unbalanced (Morris, 1997). The Apache shaman, whose power derived from a special status among the spirits or from possession of a sacred object, administered rituals to replace evil spirits with protective ones that involved dances, drums, rattles, prayers, and chants led by the shaman elaborately dressed in animal skins and masks (Morris, 1997). Traditional Chinese medical practices, which have persisted for more than 2,500 years and are described in the *I Ching* (Book of Changes) and the *Huang Ti Nei Ching Su Wen* (The Yellow Emperor's Classic of Internal Medicine), entail five tastes, five types of grain, and five flavors, supplemented by acupuncture (Shapiro & Shapiro, 1997b). Societies continue to evolve in their conceptualization of illness and treatment, notwithstanding the advances of modern medicine (Morris, 1998).

Various explanatory systems use different knowledge claims as support. For example, evolution comports with scientific evidence and creationism comports with scripture, yet to their respective adherents, they are particularly persuasive explanations for the world. That one explanation is poppycock to those who believe in the other does not detract from the power of the explanation for the believers. A commonality of all psychotherapies is that they are based on particularly compelling explanatory systems, at least to their adherents.

A second feature of the evolving human brain was the capacity to expand social networks and the use of language to manage those networks (Gardner, 1998). Language became a means to convey information, influence others, and form communities. A case can be made that language is a means to extend cognitive processes beyond the individual; indeed, it may be that "language evolved, in part, to enable such extensions of our cognitive resources within actively coupled systems" (Clark & Chalmers, 1998, p. 17). Accordingly, psychotherapy is not simply the vehicle for the delivery of psychological ingredients but is, rather, a highly entwined system that uses language to construct or, better said, *re*construct the patient's interpretation of the world. In the latter part of the 20th century, psychotherapy was considered by some to be a social influence process (Heppner & Claiborn, 1989), but this view has become less prominent in recent years.

A third aspect of the human brain related to psychotherapy is the propensity to make inferences about the internal states of others, particularly their goals, desires, motivations, and beliefs (Boyer & Barrett, 2005; Hutto, 2004; Stich & Ravenscroft, 1994; Thomas, 2001). This propensity—variously referred to as *theory of mind* or *folk psychology*, depending on how it is conceived—is essentially an individual's "description and explanation of mental function" (Thomas, 2001, p. 3). These descriptions allow humans to make predictions about others, to discriminate between predators and prey, and to create adaptive social groups. According to Boyer and Barrett (2005), this capability leads to "coalitional alliance, based on a computation of other agents' commitments to a particular purpose. . . . as well as the development of friendship as an insurance policy against variance in resources" (p. 109). Although there are commonalities among folk psychologies across cultures, there are cultural variations as well (Thomas, 2001). What is clear is that the explanations of mental functioning by the layperson typically differs from the explanations of scientific psychology; in the language of Boyer and Barrett (2005), the "human brain's intuitive ontology is *philosophically incorrect*" (p. 99). It is my contention that the patient's idiosyncratic explanations of mental functions are deeply involved in creating the patient's problems, that psychotherapy is intimately involved in altering these explanations, and that "scientific" psychology plays a secondary role in this process of change.

The premise offered here is that the relative strengths of the human mind (relative to other animals) facilitated the development of psychotherapy as a cultural healing practice, and these psychological processes are critical to any understanding of the efficacious ingredients of psychotherapy. The model presented here, which has been presented in various forms over the years (most notably by Frank & Frank, 1991), is grounded in psychological and anthropological science and is consistent with research evidence produced in psychology and medicine (Wampold, 2001b).

The Change Process

Briefly, I describe the change process in a humanistic context. More expansive explanations have been provided elsewhere (Imel & Wampold, in press; Wampold, 2001b; Wampold, Imel, Bhati, & Johnson-Jennings, 2006).

Patients come to therapy because their problems are persistent and troublesome. Their explanation for the troubles are not adaptive. The maladaptive explanation—the patient's "folk psychology," if you will—typically has two characteristics. First, according to the patient's explanation, the troubles appear to be inevitable or, if not inevitable, to have a high enough probability of occurring that the fear of the trouble is sufficient to be troublesome. Second, because of the likelihood of continuing troubles, the patient feels demoralized and will tend to be inactive with regard to his or her problem.

The essential aspect of psychotherapy is that a new, more adaptive explanation is acquired by the patient. The means of acquisition of this new explanation is the verbal interaction between therapist and patient. This conjecture follows from theory and research in evolutionary psychology and cultural anthropology positing that cultural practices—including those related to religion, politics, etiquette, social hierarchy, and explanations for social, natural, and

bodily phenomena—are transmitted through communication in social interactions rather than through direct experience (Boyer, 2001). This is not to say that direct experience, either in sessions or between sessions, is not part of many psychotherapies— these experiences may be a result of the informational aspects of therapy, provide an additional source of information, or make the information more memorable.

There are several critical aspects of acquiring a functional explanation of one's troubles (Wampold et al., 2006). For one, a healer-provided explanation is expected in any healing practice. A patient presenting to a physician for a pain in the gut will not be satisfied (and will not likely follow the treatment regimen) if he or she is provided with a treatment (say antibiotics and proton pump inhibitors) without an explanation (e.g., an ulcer is caused by the bacterium *H. pylori*). Similarly, psychotherapy patients expect an explanation for their problems. The human brain craves the experience of understanding, and thus, the evolution of healing practices naturally accommodated that need by incorporating an explanation in all such practices. Yalom (1995) succinctly summarized the importance of explanation:

> The unexplained—especially the fearful unexplained—cannot be tolerated for long. All cultures, through either a scientific or a religious explanation, attempt to make sense of chaotic and threatening situations. . . . One of our chief methods of control is through language. Giving a name to chaotic, unruly forces provides us with a sense of mastery or control. (p. 84)

Another consideration is that the explanation is provided in the context of a treatment, which is critical to the change process. Whereas the patient's original explanation created an expectation that action would not alleviate the distress, acquisition of a functional explanation creates the expectation that if the treatment protocol is followed, the difficulties experienced by the patient are not inevitable and, therefore, are resolvable. This process can be conceptualized in several ways, some of which involve the constructs *remoralization* (Frank & Frank, 1991), *response expectancies* (Kirsch, 1985), *outcome expectations* (Greenberg, Constantino, & Bruce, 2006), and *self-efficacy* (Bandura, 1997). An explanation is functional in that it produces the expectation that the patient's problems or troubles are not inevitable provided the treatment protocol is followed. Acquisition of the functional explanation, according to Jerome Frank (Frank & Frank, 1991), is remoralizing, and according to Irving Kirsch (1985) it changes response expectancies. This formulation is also consistent with the research evidence that most symptom change actually occurs in the first few sessions, before full implementation of the treatment protocol (e.g., Illardi & Craighead, 1994).

Psychotherapy treatments usually lead patients to participate in useful activities, such as thinking more positively about their world, expanding their social networks, communicating more effectively, substituting adaptive emotions for maladaptive ones, and so forth. The treatments also typically involve primary processes such as conditioning, reinforcement, and modeling. However, the critical feature of the treatment is that it is consistent with the acquired explanation and leads to adaptive responses.

A corollary of the centrality of explanation and treatment to psychotherapy is that any talk treatment without these two critical elements is not a bona fide psychotherapy as conceptualized here (see Wampold, 2001b; Wampold et al., 1997). As such, there exists no "generic psychotherapy" as described by Barlow (2004)—a relationship with a warm therapist who responds empathically is not psychotherapy.[2] Put another way, explanation and a treatment are essential common factors of psychotherapy. In the research context, any control group that receives interventions without these two elements, as is the case for attention control groups or in supportive counseling, constitutes inappropriate control conditions to rule out common factors.

A critical consideration is that of the importance of the "truth" of the explanation. I argue here that the truth of the explanation is unimportant to the outcome of psychotherapy. The power of the treatment rests on the patient accepting the explanation rather than whether the explanation is "scientifically" correct. Arguably, the causes of most mental disorders have not been unambiguously identified; unarguably, it has never been demonstrated with sufficient scientific certainty that the benefits of any psychotherapeutic treatment are attributable to the remediation of some known cause of a disorder. What is critical to psychotherapy is understanding the patient's explanation (i.e., the patient's folk psychology) and modifying it to be more adaptive. This was well understood by Donald Meichenbaum (1986):

> As part of the therapy rationale, the therapist conceptualized each client's anxiety in terms of Schacter's model of emotional arousal (Schacter, 1996). . . . After laying this groundwork, the therapist noted that the client's fear seemed to fit Schacter's theory that an emotional state such as fear is in large part determined by the thoughts in which the client engages when physically aroused. . . . Although the theory and research upon which it is based have been criticized. . . . the theory has an aura of plausibility that the clients tend to ac-

[2] Often, Rogerian client-centered counseling is provided as an example of a psychotherapy that consists of a relationship with an empathic therapist and no active ingredients. However, client-centered therapy is based on an elaborate theory and involves significantly more than the provision of empathic response. Also, current humanistic treatments have treatment protocols as elaborate as any manualized, empirically supported treatment (see Rice & Greenberg, 1992).

cept: The logic of the treatment plan is clear to clients in light of this conceptualization. (p. 370)

If acceptance of an adaptive explanation is critical, what leads to acceptance? Theory about the transmission of culture, particularly religious concepts (see, e.g., Boyer & Ramble, 2001), is informative. It appears that concepts, such as religious concepts, are best acquired when they are discrepant from currently held beliefs but do not violate an excessive number of a person's assumptions (Boyer & Ramble, 2001). I hypothesize that effective explanations in psychotherapy must be different from presently held explanations for a patient's troubles but not sufficiently discrepant from the patient's intuitive notions of mental functioning as to be rejected.

A corollary is that the explanation provided to the client must be consonant with the cultural context of the healing practice. Patients presenting to a Western physician will expect anatomical or physiological explanations for their problems—unbalanced chi or four humors will, if the patient is knowledgeable of Western medicine and believes in its efficacy, be unacceptable explanations. Similarly, patients presenting to a psychologist expect some explanation whose locus is the mind and is consonant with the patient's folk psychology. Moreover, beyond the cultural context of the practice, acceptability of the explanation depends on the proximity of the explanation to the attitudes and values of the patient and the patient's particular sociocultural context. Effective therapists are skilled at monitoring acceptance of the explanation and the treatment and will modify the delivery of an explanation as necessary.

The source of the alternative notion is critical to its acceptance. Whereas the human brain is disposed to create and believe in particular types of explanations, the source of an explanation that is incongruent with spontaneous or currently held beliefs must be closely evaluated by the recipient. For example, "the diffusion of religious knowledge, norms, and concepts generally involves particularly authoritative figures (shamans, priests, sages, saints) whose statements are supposedly more reliable or closer to truth than those of average believers" (Bergstrom, Moehlmann, & Boyer, 2006, p. 535). This makes sense, because humans, surrounded by competing messages often emitted by others who wish to benefit from acceptance of their messages, must discriminate among conspecifics to identify those who are acting altruistically. Thus, psychotherapy patients need to evaluate the trustworthiness of the therapist. If the patient feels understood and ascertains that the therapist will work diligently in his or her behalf, then the probability of accepting the explanation of psychotherapy and the concomitant treatment is increased. This notion is consistent with the research on the relation between early working alliance and outcomes in psychotherapy (Horvath & Bedi, 2002).

The focus on acquisition of a more adaptive explanation does not reduce psychotherapy to a didactic experience in which the client is simply informed about the adaptive explanation. Psychotherapies are elaborate rituals, with complex explanatory systems, designed to influence the patient in a variety of ways. For example, behavioral therapists focus on actions and their consequences, cognitive therapists on thinking and attributions, dynamic therapists on the unconscious, and process–experiential therapists on adaptive emotional responses—each of the theories and consequent treatments constitute convincing narratives that persuasively influence patients to accept more adaptive explanations for their disorders and take ameliorative actions. It may well be that each of the therapies causes a system-specific change in the theory-specified way, but those effects are small relative to the effects produced by psychotherapy in toto.

If the premise offered here is correct, one would expect psychotherapies to be embedded in and to emerge from the cultural landscape, for the explanations involved would resonate with the psychotherapy community (theorists, researchers, and clinicians) and be acceptable to patients. Prior to Freud's lecture at Clark University, "talk therapy" was delivered in the moral, spiritual, and religious context of the second half of the 19th century by practitioners of the Christian Science, New Thought, and Emmanuel movements (Caplan, 1998; Taylor, 1999). When psychiatry coopted such treatments in the United States, a materialistic, scientific, and medical explanation was needed, which Freud provided in his lectures at Clark University (Wampold, 2001a). But further analysis arguably suggests that psychotherapy derived from the Freudian tradition was influenced by Ashkenazic Jewish traditions, particularly Jewish mysticism (Kabbalah); Gestalt and some humanistic therapies by the Jewish experience (e.g., the Holocaust) and traditions; and behavioral treatments, less reflective and more instrumental, by American pragmatism (Langman, 1997). Still, it is difficult to say with certainty that a particular psychotherapy has an identifiable cultural lineage. In the complex cultural milieu of the United States and other Western venues in which psychotherapy is a predominant healing practice, locating a single cultural thread is impossible, but there is little doubt that the practice of psychotherapy has been influenced by historical, cultural, and political forces. For a thorough discussion of the cultural context of various types of psychotherapy, one might see Fancher (1995), Jackson (1999), and Pilgram (1997).

The categorization used to understand psychotherapy has included religious, spiritual, and culturally indigenous healing practices. These practices typically involve a persuasive, charismatic, and culturally sanctioned change agent; an explanatory system that is culturally embedded but in a limited number of ways counter to the individual's current beliefs; and a set of rituals delivered in a way that

provokes emotional reaction (Frank & Frank, 1991). There are, however, perspicuous differences between such practices and psychotherapy. First, because the practitioners of psychotherapy are psychologists or allied professionals, and the explanatory systems of psychotherapy are distinctly psychological, the delivery of treatments that are not based on sound psychological principles, such as thought-field therapy, should not be delivered by psychologists, in my view. Second, psychotherapy patients have a cultural expectation of psychological explanations in the same way that medical patients expect a biological explanation. Finally, psychotherapy deviates from many healing practices in that psychotherapy researchers have used the tools of empirical science to demonstrate unequivocally that psychotherapy is effective.

A critical question is the following: Is the human propensity to heal as a consequence of elaborate and ritualistic practices an evolved human characteristic or an evolutionary by-product? In the former proposition, the ability to heal by means of societal rituals conferred an advantage that led to selection for this ability, which constitutes the conventional evolutionary calculus. However, many human activities are by-products of human abilities evolved for other purposes. The natural selection versus by-product debate is current in discussions of religion (see, e.g., Atran, 2002; Boyer, 2001), and the same considerations are germane to healing practices, although much less attention has been devoted to this area.

In many ways, the model presented here is an extension of various cultural healing and common-factors models presented over the years by Jerome Frank (Frank & Frank, 1991), Arthur Kleinman (Kleinman & Sung, 1979), Judd Marmor (1962), and me (Wampold, 2001b; Wampold et al., 2006), among others. These models are not in the mainstream of clinical science, to be sure. What is quite remarkable, however, is that the accumulating evidence, including research from clinical trials of psychotherapies (considered the "gold standard") as well as related areas, corroborates the model presented here.

Research Support

Briefly, for reasons of space, I review the major results from psychotherapy and related areas of research to demonstrate that the results are consistent with the model of psychotherapy presented here. This synopsis is an extension of my previous work (most particularly Wampold, 2001b).

Does psychotherapy work? As I have noted, the purported mechanisms of the contextual model are endemic to healing practices of every culture from the beginning of the human species. Shapiro and Shapiro (1997a, 1997b) have cogently argued that most treatments offered over the centuries were no more than placebos, involving elaborate rituals and arcane mixtures of organic and inorganic substances, many of which were clearly iatrogenic. Although these treatments have been sufficient to sustain, or at least not annihilate, humans for many millennia, there is no particular reason to believe that psychotherapy, as conceptualized in the contextual model, might alter the natural history of a disorder. Indeed, in the middle of the 20th century, Hans Eysenck (1952, 1961, 1966) claimed that psychotherapy was not only ineffective but likely harmful.

It was about two decades after Eysenck's original claims about the ineffectiveness of psychotherapy that Mary Lee Smith and Gene Glass (1977; Smith, Glass, & Miller, 1980) applied meta-analysis to the myriad controlled studies that existed at the time and demonstrated that psychotherapy was, in fact, remarkably effective. The effect size estimate yielded by Smith and Glass's (1977; Smith et al., 1980) meta-analysis of comparisons of patients receiving psychotherapy with those receiving no treatment was .80—that is, the treated patients had outcomes .80 standard deviation units better than no-treatment patients. Over the years, this estimate has proven to be remarkably robust (Wampold, 2001b).

There are a number of metrics that can be used to understand an effect of the size obtained by Smith and Glass (1977) and subsequent meta-analyses. Cohen (1988) has classified an effect of .80 as "large" for the social sciences. An effect of this size indicates that the average patient receiving a treatment would be better off than almost 80% of untreated patients. Another means to understanding this effect is to convert it to an index called the number needed to treat (NNT), the number of patients who need to receive the experimental treatment vis-à-vis the comparison to achieve one success, which is becoming the common metric of evidence-based medicine. An effect size of .80 is equivalent to an NNT of 3 (Kraemer & Kupfer, 2006)—that is, three patients need to receive psychotherapy to achieve a success relative to untreated patients (Wampold, 2001b). Although clearly not effective with every patient, psychotherapy compares well with established medical practices. For example, the NNT for aspirin as a prophylaxis for heart attacks, an accepted medical practice based on a clinical trial that was discontinued because it was thought to be unethical to withhold treatment from the control group (see R. Rosenthal, 1990), is 129. Moreover, a perusal of the University of Toronto's Centre for Evidence-Based Medicine Web site reveals that psychotherapy is more effective than many evidence-based medical practices, some of which are costly and produce significant side effects, including almost all interventions in cardiology (e.g., beta-blockers, angioplasty), geriatric medicine (e.g., calcium and alendronate sodium for osteoporosis), and asthma (e.g., budesonide); influenza vaccine; and cataract surgery, among other treatments. Moreover, when directly compared in clinical trials, psychotherapy typically is as effective as pharmacological treatments of mental disorders

and is more enduring (e.g., Barlow, Gorman, Shear, & Woods, 2000; Hollon, Stewart, & Strunk, 2006; Robinson, Berman, & Neimeyer, 1990). Finally, providers in private practice produce effects that are comparable to the effects achieved in clinical trials of psychotherapy (Minami et al., in press).

Psychotherapy as a class of healing practices, along with modern medicine, belongs to an elite club that admits only members who have demonstrated scientifically that their practices are effective. This elite status is a result of the fact that clinical scientists conceptualized psychotherapy in a medical model, which led to the use of clinical trials as a means to produce scientific evidence. However, establishment of effectiveness confers little in the way of explanation for the benefits of psychotherapy. Specifically, some would claim that the unique potent psychological ingredients of psychotherapy are responsible for the remarkable effectiveness of the practice, whereas others would give primacy to the contextual processes described earlier.

Are some psychotherapies more potent than others? Eysenck's (1952, 1961, 1966) evidence regarding the effectiveness of psychotherapy was presented in the context of an attempt to demonstrate that treatments grounded in scientific psychology (i.e., behavioral treatments emanating from learning theory) were superior to treatments based on mentalistic and unobservable constructs, such as psychoanalytic treatments (Wampold, 2001b). When Smith and Glass (1977; Smith et al., 1980) conducted their meta-analyses showing that psychotherapy was effective, they also claimed that when various confounding variables were controlled, such as the reactivity of the measures, there were no significant differences among treatments, a result that contradicted Eysenck's contention that those treatments that were based on scientific psychological principles would be superior. However, the general equivalence of treatments, often called the *dodo bird conjecture*, comports well with the notion presented here that it is the acceptance of the adaptive explanation that is critical rather than the absolute truthfulness of the psychological explanation.

A number of meta-analyses addressing the relative efficacy of psychological treatments have been conducted since Smith and Glass's (1977), and they have reached the same conclusion—all treatments intended to be therapeutic are approximately equally effective, a result that detracts from the contention that psychotherapies based on scientific psychology will be more effective than other treatments. In 1997, Wampold et al. corroborated the dodo bird conjecture in a meta-analysis of studies that directly compared psychotherapies intended to be therapeutic. However, this analysis was criticized on a number of grounds, the most valid being that the studies were aggregated without regard to particular diagnosis (e.g., Crits-Christoph, 1997). Nevertheless, I contend that there is little evidence, after decades of clinical trials with children and adults, that for any diagnosis, one treatment has been shown to be demonstrably superior to another (Wampold, 2001b; see also Miller, Wampold, & Varhely, in press; Spielmans, Pasek, & McFall, 2007; Wampold, 2005).

An examination of PTSD is particularly instructive. Because PTSD is a disorder that it attributable to a discrete event or series of events, it would seem that a treatment based on a scientific psychological explanation would be readily accessible; indeed Foa and her colleagues (e.g., Foa et al., 1991, 2005) have developed a treatment protocol involving cognitive restructuring, prolonged imaginal exposure, and in vivo exposure. And not surprisingly, this treatment has been shown to be quite effective. Nevertheless, several treatments with very different treatment rationales have also been shown to be effective, including eye-movement desensitization and reprocessing (e.g., Rothbaum, Astin, & Marsteller, 2005); cognitive therapy without exposure (Tarrier et al., 1999); hypnotherapy (Brom, Kleber, & Defares, 1989); psychodynamic therapy (Brom et al., 1989); and, recently, present-centered therapy (PCT; McDonagh et al., 2005). How can so many radically different treatments be approximately equally effective?

An examination of the history of PCT will illustrate how so many different treatments can effectively be used for PTSD. To control for common factors, cognitive components, and exposure, Foa et al. (1991) used a control group that was labeled *supportive counseling*, described as follows:

> Patients were taught a general problem-solving technique. Therapists played an indirect and unconditionally supportive role. Homework consisted of the patient's keeping a diary of daily problems and her attempts at problem solving. Patients were immediately redirected to focus on current daily problems if discussions of the assault occurred. (p. 718)

The supportive counseling treatment was not based on established psychological principles (i.e., there were no citations of the psychological literature in the description), whereas the authors were instrumental in the development of the two treatment conditions (prolonged exposure and stress-inoculation training) and trained the therapists. Despite the allegiance of the researchers/trainers and the lack of a cogent rationale for the supportive counseling, patients in the control condition improved, although reduction of PTSD symptoms was significantly less than that in the two treatment conditions. When PCT appeared again in the research literature (McDonagh et al., 2005), it was manualized; it was based on purported psychological processes, in this case the problem-solving literature (e.g., Nezu, Nezu, & Perri, 1989) and the client-centered approach of Carl Rogers (e.g., Meador & Rogers, 1973); and therapists were trained to deliver the treatment. However, PCT was still clearly a control group for CBT of PTSD: "PCT was spe-

cifically designed to omit the hypothesized active ingredients of CBT (breathing retraining, PE, in vivo exposure, and CR)" (McDonagh et al., 2005, p. 518). In the McDonagh et al. study, PCT and CBT were superior to no-treatment controls, and CBT and PCT were generally equivalent in terms of outcomes (n.b., CBT was superior to PCT in terms of proportion of completers not meeting PTSD diagnostic criteria at three-month follow-up, but none of the other eight variables for completers or intent to treat at termination or follow-up were statistically significant). The conclusion? When a treatment begins to resemble one that is intended to be therapeutic—by having a manual, legitimate psychological components, and therapists who are trained to deliver the treatment—it produces effects comparable to what is considered to be the gold standard of treatment for PTSD. In this case, PCT was designed intentionally to lack the specific ingredients thought to be essential for the treatment of PTSD (e.g., exposure), and yet it was well received by patients (significantly fewer dropped out than in CBT) and produced benefits comparable to CBT.

To be fair, there have been well-conducted trials that have shown some differences between treatments intended to be therapeutic. For example, recently, Dimidjian et al. (2006) found that behavioral activation was superior to CBT for severely depressed patients. However, the number of trials that showed significant differences between treatments intended to be therapeutic are what would be expected by chance under the null hypothesis of no differences (Wampold et al., 1997). More important, as discussed below, the trials that did show differences are not particularly informative about the remediation of psychological processes that lead to distress.

What is the evidence for specific psychological processes and their remediation? In medicine, specificity is established in two complementary ways. First, a substance containing the ingredient hypothesized to change a biological aspect of the patient can be shown to produce a predicted effect compared with a placebo in a double-blinded randomized placebo control group experiment. Second, some variation of the following prototypical system-specific sequence also needs to be established: (a) A biological explanation for the illness, based on scientific research, is established; (b) a treatment is designed or a substance is hypothesized to remediate the biological deficit; (c) administration of the substance demonstrably alters the biology of the patient in the expected way, and other substances do not; and (d) the change in the biology remediates the illness (a cure or management of chronic illness). Occasionally, a substance has been shown to be effective for unknown reasons, as was the case of *acetylsalicylic acid* (commonly known as aspirin), which was used as an analgesic, anti-inflammatory, and antipyretic agent before its biological mechanisms were understood. During the period that medicine adopted the placebo control group design, D. Rosenthal and Frank (1956) recommended that it be used in psychotherapy to establish specificity; forgotten was the fact that they also recognized that demonstration of a psychological, system-specific sequence was critical to establishing the specificity of psychotherapy.

Attempts to establish the specificity of psychological treatments through either of the two methods used in medicine have not produced convincing evidence with regard to any treatment for any psychological disorder. Placebo-controlled group designs in medicine have two requirements, blinding and indistinguishability, neither of which is present in clinical trials of psychotherapy (see Baskin, Tierney, Minami, & Wampold, 2003; Imel & Wampold, in press; Wampold, 2001b; Wampold et al., 2005). Essentially, it is impossible to blind clinical trials, and placebo-type controls do not resemble the active treatments in terms of the model presented here. The comparison groups used to validate psychotherapy treatments—which are often called *nonspecific*, *supportive counseling*, or *common-factors* controls—are missing the most important humanistic factors that I have discussed—simply, that they provide patients with a viable explanation for their problems and a set of actions that they can follow to accomplish their goals, which are provided by a therapist who believes in the treatment and delivers it with the expectation that it will be effective. However, as expected in the contextual model, when these types of controls begin to resemble treatments intended to be therapeutic, even if they do not have any particularly scientific psychological ingredients, they are as effective as so-called evidence-based treatments (Baskin et al., 2003). Indeed, as discussed above, PCT, when manualized and given by therapists trained to deliver the treatment, was an effective treatment for PTSD.

The best experimental design for establishing specificity is probably the dismantling design, in which the one or two active ingredients are removed, leaving a legitimate, if degraded, treatment. Jacobson et al. (1996) dismantled CBT for depression, which is arguably the most empirically established psychotherapy ever known, by systematically removing the cognitive components and found no decrement in outcomes when critical cognitive components were removed. Also, component studies of CBT for PTSD have revealed that omitting critical ingredients does not attenuate the effectiveness of CBT (e.g., Foa et al., 2005). These are not anomalies: Ahn and Wampold (2001) completed a meta-analysis of component studies and found no evidence to support the claim either that removing a critical ingredient of a treatment attenuated outcomes or that adding a specific ingredient to a treatment augmented outcomes.

Examination of the prototypical system-specific sequence that would establish specificity reveals a similar lack of evidence for specificity. Of course, psychotherapy is at a distinct disadvantage relative to medicine because

the classification system for psychiatric disorders remains objective–descriptive rather than etiological (Widiger & Trull, 2007). Although many good theories exist for most disorders, establishing the scientific basis for mental disorders has proven particularly difficult. For example, panic disorder is a relatively circumscribed disorder, but the six best psychological explanations provided for this disorder have either been falsified or are not falsifiable (Roth, Wilhelm, & Petit, 2005), creating a dilemma for researchers wishing to establish specificity in this area. Although the neurosciences offer much promise in this regard, current models are far from unambiguous (see Cannistraro & Rauch, 2003). Moreover, as various treatments for panic disorder have been manualized and tested, they have been found to be effective, now ranging from CBT (Barlow, Craske, Cerny, & Klosko, 1989) to psychodynamic psychotherapy (Milrod et al., 2007), creating havoc for attempts to establish the specificity sequence.

Establishing the psychological bases of treatments shown to be effective has also proven particularly troublesome. A salient example is systematic desensitization, one of the earliest behavioral treatments and one that is clearly effective. By 1977, many models—including reciprocal inhibition, extinction, expectancy effects, cognitive reassessment, and treatment credibility—had been offered to explain the efficacy of systematic desensitization, but none of these have been corroborated (Kirsch & Henry, 1977). Wampold (2001b) examined various moderating and mediating predictions that emanate from the specificity sequence and could not detect any consistent evidence that any treatment had established the mechanisms of action that purportedly form the basis of the treatment. For the few clinical trials that produced differences in outcomes between two treatments intended to be therapeutic, the differences between the two treatments typically were explained post hoc and without evidence to suggest that different mediating psychological mechanism were operating (e.g., Dimidjian et al., 2006).

Are engagement in therapy, formation of the alliance, and the therapist critical to successful therapy? If it is not the particular treatment that makes a difference, what is it? Of course, the answer is not known, but there are tantalizing suggestions.

In the model presented here, engagement in the therapeutic process is critical, for it signals a willingness to trust the therapist to provide an explanation that will benefit the patient. A consideration, thus, is whether the patient is unwilling to continue in therapy due to an incompatibility with the therapy or the therapist. In clinical trials, in which patients are presumably motivated to obtain the treatments offered, approximately 26%, 14%, and 16% of patients in depression, panic, and generalized anxiety disorder trials, respectively, do not complete the treatment protocol, despite incentives in research studies to do so (Westen & Morrison, 2001). Sometimes there is an indication in trials that patients find one of the treatments less acceptable than another. For example, in the comparison of CBT and PCT for PTSD discussed earlier (McDonagh et al., 2005), 40% of patients in CBT dropped out prematurely, whereas only 9% dropped out of PCT. It is unfortunate that given very small differences among treatments intended to be therapeutic, if they exist at all, relatively little attention is paid to issues of attrition.

It appears that several pretherapy factors lead to engagement in the therapeutic process, including a patient's preference for treatment (Elkin, Yamaguchi, & Arnkoff, 1999; Iacoviello et al., 2007) and expectations about improvement (Connolly Gibbons et al., 2003), which supports the notion that acceptance of the therapeutic rationale is critical. The consistent and robust finding that the working alliance, which is a measure of both relationship and collaboration (Hatcher & Barends, 2006), is related to outcome (Horvath & Bedi, 2002) suggests that successful therapy relies on the acceptance of the therapist as a trusted agent who will act in the best interest of the patient.

There is increasing evidence that it is the therapist and not the treatment per se that is responsible for therapeutic change (Wampold, 2006). Essentially, it appears that even in clinical trials in which therapists are selected for their skill, are trained and supervised, and are monitored so as to maintain adherence to the treatment protocol, a significant proportion of the variability in outcomes is attributable to therapists within treatments, and that this therapist effect is at least one order of magnitude greater than any differences among treatments in these trials (e.g., Kim, Wampold, & Bolt, 2006). Moreover, it appears that much of the variability among therapists is due to therapists' ability to form a working alliance with a variety of patients (Baldwin, Wampold, & Imel, in press). This line of research suggests that it is not what psychological ingredients are delivered but how they are delivered that is crucial. Further, it appears that better therapists are trusted by patients, the patients accept the explanation for their problems more readily, and they work collaboratively with the therapists to achieve their goals.

Over the years, an impressive array of literature, summarized by Norcross (2002), has emerged that supports the notion that interpersonal aspects of psychotherapy created by the therapist are reliably related to outcome. That these aspects of psychotherapy cannot be studied experimentally (i.e., that they cannot be manipulated as independent variables) does not detract from their possible importance as causal variables; moreover, modern statistical methods that can establish strong claims for causality from passive designs are beginning to reveal support for the importance of interpersonal variables unrelated to specific treatments.

What can we learn from placebo research? There continues to be debate about the magnitude of placebo ef-

fects in medicine, although it appears that such effects are present in medical clinical trials under the proper conditions (Wampold et al., 2005). Moreover, in laboratory studies, the placebo effect can be robustly induced, affecting physiological states as well as patient-reported internal states (e.g., pain). The commonality in all demonstrations of placebo effects is that the patient or subject is aware that he or she is receiving some intervention (i.e., a substance or a procedure) and that expectations are created by physician or researcher actions or instructions. For example, biological studies of the placebo effect suggest that positive expectancy for analgesia results in the release of endogenous opioids, a substance with known analgesic effects (Amanzio, Pollo, Maggi, & Benedetti, 2001; Levine, Gordon, & Fields, 1978). A recent study indicated that the expectation that one will receive a less noxious taste than previously experienced influenced activation in the primary taste cortex even though the actual taste stimulus remained the same—that is, expectation of taste influenced the actual experience of taste (Nitschke et al., 2006). Placebo response appears to be a uniquely human response, created by expectations created in a cultural context, often in the interaction with powerful others (physicians or researchers) by subjects who have come to believe that the substances or manipulations will be effective—a situation not unlike psychotherapy (see Kirsch, 2005).

It appears that the efficacy of many medical treatments is due largely to placebo effects. It has been demonstrated that medical treatments delivered surreptitiously to patients do not produce medical benefits comparable to the same treatments delivered within a patient's awareness (Benedetti, Mayberg, Wager, Stohler, & Zubieta, 2005). For disorders amenable to placebo effects, when designs are adequate, placebo effects are as large as treatment effects (Wampold et al., 2005). Moreover, it appears that most of the effect of SSRIs for depression is attributable to placebo effects (Kirsch, Moore, Scoboria, & Nicholls, 2002). Finally, adhering to a placebo therapy versus not adhering to the placebo therapy decreases mortality as much as does adhering to the drug therapy (Simpson et al., 2006). Thus, it appears that in medicine, in which biological agents have known potency, the human factor conveyed by way of placebo is responsible for demonstrable benefits to patients.

Conclusions

"Psychology's dual heritage," as Messer (2004, p. 586) observed, involves the scientific and the humanistic traditions—and this heritage has often divided the discipline. On the one hand, the scientists have often found applications of psychology to be not particularly scientific. Those aligned with humanistic aspects of psychotherapy, on the other hand, have perceived scientific investigations to be focused on aspects of psychotherapy that are irrelevant to the essence of the endeavor. Yet each perspective brings to the endeavor strategically important contributions.

Although healing practices have existed since the beginning of the human species, the efficacy of nearly all such practices has not been subjected to what would be considered a scientific test. Modern medicine emerged from the multitude of healing practices as the scientific application of biological knowledge to cure and prevent diseases, reduce mortality, and prolong life. The development of randomized control group designs allowed the demonstration that the chemical ingredients of drugs produced effects beyond those created by the mind and established the efficacy and specificity of these substances. The application of the randomized design by clinical scientists to the study of psychotherapy has robustly shown that this healing practice is remarkably efficacious—indeed, psychotherapy is as effective as or more effective than many established medical practices. The contributions of science to the establishment of psychotherapy as a legitimate and effective practice should not be underestimated.

Those interested in the humanistic aspects of psychotherapy tend to focus on the interpersonal relationship between therapist and patient and on the process of psychotherapy. Research has shown that these variables related to the interpersonal process are robust predictors of outcome and are likely causally involved in producing the benefits of psychotherapy (Norcross, 2002; Wampold, 2001b). Moreover, the focus on particular treatments as a source of variability in outcomes has produced little evidence that the type of treatment administered accounts for much of the variability in outcomes or that particular ingredients of particular treatments are necessary for the successful treatment of particular disorders. It appears that the focus on the therapeutic interaction as the critical aspect of psychotherapy is justified by the research evidence.

The humanistic and the scientific strands do not need to stand in opposition to each other. The mission of science is to explain, discover, and understand. It is time for science to be applied to the humanistic aspects of psychotherapy to better understand the intricate nature of a remarkably effective healing practice.

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References

Ahn, H., & Wampold, B. E. (2001). Where oh where are the specific ingredients? A meta-analysis of component studies in counseling and psychotherapy. *Journal of Counseling Psychology, 48,* 251–257.

Amanzio, M., Pollo, A., Maggi, G., & Benedetti, F. (2001). Response variability to analgesics: A role for nonspecific activation of endogenous opioids. *Pain, 90,* 205–215.

Atran, S. (2002). *In gods we trust: The evolutionary landscape of religion.* New York: Oxford University Press.

Baldwin, S. A., Wampold, B. E., & Imel, Z. E. (in press). Untangling the alliance–outcome correlation: Exploring the relative importance of therapist and patient variability in the alliance. *Journal of Consulting and Clinical Psychology.*

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: W. H. Freeman.

Barlow, D. H. (2004). Psychological treatments. *American Psychologist, 59,* 869–878.

Barlow, D. H., Craske, M. G., Cerny, J. A., & Klosko, J. S. (1989). Behavioral treatment of panic disorder. *Behavior Therapy, 20,* 261–282.

Barlow, D. H., Gorman, J. M., Shear, M. K., & Woods, S. W. (2000). Cognitive–behavioral therapy, imipramine, or their combination for panic disorder: A randomized controlled trial. *Journal of the American Medical Association, 283,* 2529–2536.

Baskin, T. W., Tierney, S. C., Minami, T., & Wampold, B. E. (2003). Establishing specificity in psychotherapy: A meta-analysis of structural equivalence of placebo controls. *Journal of Consulting and Clinical Psychology, 71,* 973–979.

Benedetti, F., Mayberg, H. S., Wager, T. D., Stohler, C. S., & Zubieta, J. (2005). Neurobiological mechanisms of the placebo effect. *Journal of Neuroscience, 25,* 10390–10402.

Bergstrom, B., Moehlmann, B., & Boyer, P. (2006). Extending the testimony problem: Evaluating the truth, scope, and source of cultural information. *Child Development, 77,* 531–538.

Boyer, P. (1990). *Tradition as truth and communication: A cognitive description of traditional discourse.* New York: Cambridge University Press.

Boyer, P. (2001). *Religion explained: The evolutionary origins of religious thought.* New York: Basic Books.

Boyer, P., & Barrett, H. C. (2005). Domain specificity and intuitive ontologies. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 96–118). Hoboken, NJ: Wiley.

Boyer, P., & Ramble, C. (2001). Cognitive templates for religious concepts: Cross-cultural evidence for recall of counter-intuitive representations. *Cognitive Science, 25,* 535–564.

Brom, D., Kleber, R. J., & Defares, P. B. (1989). Brief psychotherapy for posttraumatic stress disorders. *Journal of Consulting and Clinical Psychology, 57,* 607–612.

Cannistraro, P. A., & Rauch, S. L. (2003). Neural circuitry of anxiety: Evidence from structural and functional neuroimaging studies. *Psychopharmacology Bulletin, 37,* 8–25.

Caplan, E. (1998). *Mind games: American culture and the birth of psychotherapy.* Berkeley: University of California Press.

Clark, A., & Chalmers, D. J. (1998). The extended mind. *Analysis, 58,* 10–23.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Connolly Gibbons, M. B., Crits-Christoph, P., de la Cruz, C., Barber, J. P., Siqueland, L., & Gladis, M. (2003). Pretreatment expectations, interpersonal functioning, and symptoms in the prediction of the therapeutic alliance across supportive–expressive psychotherapy and cognitive therapy. *Psychotherapy Research, 13,* 59–76.

Crits-Christoph, P. (1997). Limitations of the dodo bird verdict and the role of clinical trials in psychotherapy research: Comment on Wampold et al. (1997). *Psychological Bulletin, 122,* 216–220.

de Waal, F. B. M. (2005). *Our inner ape: A leading primatologist explains why we are who we are.* New York: Berkeley.

Dimidjian, S., Hollon, S. D., Dobson, K. S., Schmaling, K. B., Kohlenberg, R. J., Addis, M. E., et al. (2006). Randomized trial of behavioral activation, cognitive therapy,

and antidepressant medication in the acute treatment of adults with major depression. *Journal of Consulting and Clinical Psychology, 74,* 658–670.

Elkin, I., Yamaguchi, J. L., & Arnkoff, D. B. (1999). "Patient–treatment fit" and early engagement in therapy. *Psychotherapy Research, 9,* 437–451.

Eysenck, H. J. (1952). The effects of psychotherapy: An evaluation. *Journal of Consulting Psychology, 16,* 319–324.

Eysenck, H. J. (1961). The effects of psychotherapy. In H. J. Eysenck (Ed.), *Handbook of abnormal psychology* (pp. 697–725). New York: Basic Books.

Eysenck, H. J. (1966). *The effects of psychotherapy.* New York: International Science Press.

Fancher, R. T. (1995). *Cultures of healing: Correcting the image of American mental health care.* New York: W. H. Freeman.

Foa, E. B., Hembree, E. A., Cahill, S. P., Rauch, S. A. M., Riggs, D. S., Feeny, N. C., et al. (2005). Randomized trial of prolonged exposure for posttraumatic stress disorder with and without cognitive restructuring: Outcome at academic and community clinics. *Journal of Consulting and Clinical Psychology, 73,* 953–964.

Foa, E. B., Rothbaum, B. O., Riggs, D. S., & Murdock, T. B. (1991). Treatment of posttraumatic stress disorder in rape victims: A comparison between cognitive–behavioral procedures and counseling. *Journal of Consulting and Clinical Psychology, 59,* 715–723.

Frank, J. D., & Frank, J. B. (1991). *Persuasion and healing: A comparative study of psychotherapy* (3rd ed.). Baltimore: Johns Hopkins University Press.

Gardner, R. (1998). The brain and communication are basic for human clinical sciences. *British Journal of Medical Psychology, 71,* 493–508.

Gould, S. J. (1989). The chain of reason vs. the chain of thumbs. *Natural History, 7,* 12–21.

Greenberg, R. P., Constantino, M. J., & Bruce, N. (2006). Are patient expectations still relevant for psychotherapy process and outcome? *Clinical Psychology Review, 26,* 657–678.

Hatcher, R. L., & Barends, A. W. (2006). How a return to theory could help alliance research. *Psychotherapy: Theory, Research, Practice, Training, 43,* 292–299.

Heppner, P. P., & Claiborn, C. D. (1989). Social influence research in counseling: A review and critique. *Journal of Counseling Psychology, 36,* 365–387.

Hollon, S. D., Stewart, M. O., & Strunk, D. (2006). Enduring effects for cognitive behavior therapy in the treatment of depression and anxiety. *Annual Review of Psychology, 57,* 285–315.

Horvath, A. O., & Bedi, R. P. (2002). The alliance. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 37–70). New York: Oxford University Press.

Hutto, D. D. (2004). The limits of spectatorial folk psychology. *Mind and Language, 19,* 548–573.

Iacoviello, B. M., McCarthy, K. S., Barrett, M., S., Rynn, M., Gallop, R., & Barber, J. P. (2007). Treatment preferences affect the therapeutic alliance: Implications for randomized controlled trials. *Journal of Consulting and Clinical Psychology, 75,* 194–198.

Illardi, S. S., & Craighead, W. E. (1994). The role of nonspecific factors in cognitive–behavior therapy for depression. *Clinical Psychology, 1,* 138–156.

Imel, Z. E., & Wampold, B. E. (in press). The common factors of psychotherapy. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (4th ed.). New York: Wiley.

Jackson, S. W. (1999). *Care of the psyche: A history of psychological healing.* New Haven, CT: Yale University Press.

Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., et al. (1996). A component analysis of cognitive–behavioral treatment for depression. *Journal of Consulting and Clinical Psychology, 64,* 295–304.

Kim, D. M., Wampold, B. E., & Bolt, D. M. (2006). Therapist effects in psychotherapy: A random effects modeling of the NIMH TDCRP data. *Psychotherapy Research, 16,* 161–172.

Kirsch, I. (1985). Response expectancy as a determinant of experience and behavior. *American Psychologist, 40,* 1189–1202.

Kirsch, I. (2005). Placebo psychotherapy: Synonym or oxymoron? *Journal of Clinical Psychology, 61,* 791–803.

Kirsch, I., & Henry, D. (1977). Extinction versus credibility in the desensitization of speech anxiety. *Journal of Consulting and Clinical Psychology, 45,* 1052–1059.

Kirsch, I., Moore, T. J., Scoboria, A., & Nicholls, S. S. (2002). The emperor's new drugs: An analysis of antidepressant medication data submitted to the U.S. Food and Drug Administration. *Prevention & Treatment, 5*(1).

Kleinman, A., & Sung, L. H. (1979). Why do indigenous practitioners successfully heal? *Social Sciences and Medicine, 13B,* 7–26.

Kraemer, H. C., & Kupfer, D. J. (2006). Size of treatment effects and their importance to clinical research and practice. *Biological Psychiatry, 59,* 990–996.

Langman, P. F. (1997). White culture, Jewish culture, and the origins of psychotherapy. *Psychotherapy, 34,* 207–218.

Levine, J. D., Gordon, N. C., & Fields, H. L. (1978). The mechanism of placebo analgesia. *The Lancet, 2,* 654–657.

Marmor, J. (1962). Psychoanalytic therapy as an educational process. In J. H. Masserman (Ed.), *Science and psychoanalysis* (Vol. 5, pp. 286–299). New York: Grune and Stratton.

McDonagh, A., Friedman, M., McHugo, G., Ford, J., Sengupta, A., Mueser, K., et al. (2005). Randomized trial of cognitive–behavioral therapy for chronic posttraumatic stress disorder in adult female survivors of childhood sexual abuse. *Journal of Consulting and Clinical Psychology, 73,* 515–524.

Meador, B., & Rogers, C. (1973). Client-centered therapy. In R. Corsini (Ed.), *Current psychotherapies* (pp. 125–128). Itasca, IL: Peacock.

Meichenbaum, D. (1986). Cognitive–behavior modification. In F. H. Kanfer & A. P. Goldstein (Eds.), *Helping people change: A textbook of methods* (3rd ed., pp. 346–380). New York: Pergamon Press.

Messer, S. B. (2004). Evidence-based practice: Beyond empirically supported treatments. *Professional Psychology: Research and Practice, 35,* 580–588.

Miller, S. D., Wampold, B. E., & Varhely, K. (in press). Direct comparisons of treatment modalities for pediatric disorders: A meta-analysis. *Psychotherapy Research.*

Milrod, B., Leon, A. C., Busch, F., Rudden, M., Schwalberg, M., Clarkin, J., et al. (2007). A randomized controlled clinical trial of psychoanalytic psychotherapy for panic disorder. *American Journal of Psychiatry, 164,* 265–272.

Minami, T., Wampold, B. E., Serlin, R. C., Hamilton, E., Brown, G. S., & Kircher, J. (in press). Benchmarking the effectiveness of psychotherapy treatment for adult depression in a managed care environment: A preliminary study. *Journal of Consulting and Clinical Psychology.*

Morris, D. B. (1997). Placebo, pain, and belief: A biocultural model. In A. Harrington (Ed.), *The placebo effect: An interdisciplinary exploration* (pp. 187–207). Cambridge, MA: Harvard University Press.

Morris, D. B. (1998). *Illness and culture in the postmodern age.* Berkeley: University of California Press.

Nezu, A. M., Nezu, C. M., & Perri, M. G. (1989). *Problem-solving therapy for depression: Theory, research, and clinical guidelines.* New York: Wiley.

Nitschke, J. B., Dixon, G. E., Sarinopoulos, I., Short, S. J., Cohen, J. D., Smith, E. E., et al. (2006). Altering expectancy dampens neural response to aversive taste in primary taste cortex. *Nature Neuroscience, 9,* 435–442.

Norcross, J. C. (Ed.). (2002). *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients.* New York: Oxford University Press.

Pilgram, D. (1997). *Psychotherapy and society.* Thousand Oaks, CA: Sage.

Rice, L. N., & Greenberg, L. S. (1992). Humanistic approaches to psychotherapy. In D. K. Freedman (Ed.), *History of psychotherapy: A century of change* (pp. 197–224). Washington, DC: American Psychological Association.

Robinson, L. A., Berman, J. S., & Neimeyer, R. A. (1990). Psychotherapy for the treatment of depression: A comprehensive review of controlled outcome research. *Psychological Bulletin, 108,* 30–49.

Rosenthal, D., & Frank, J. D. (1956). Psychotherapy and the placebo effect. *Psychological Bulletin, 53,* 294–302.

Rosenthal, R. (1990). How are we doing in soft psychology? *American Psychologist, 45,* 755–757.

Roth, W. T., Wilhelm, F. H., & Petit, D. (2005). Are current theories of panic falsifiable? *Psychological Bulletin, 131,* 171–192.

Rothbaum, B. O., Astin, M. C., & Marsteller, F. (2005). Prolonged exposure versus eye movement desensitization and reprocessing (EMDR) for PTSD rape victims. *Journal of Traumatic Stress, 18,* 607–616.

Shapiro, A. K., & Shapiro, E. S. (1997a). The placebo: Is it much ado about nothing? In A. Harrington (Ed.), *The placebo effect: An interdisciplinary exploration* (pp. 12–36). Cambridge, MA: Harvard University Press.

Shapiro, A. K., & Shapiro, E. S. (1997b). *The powerful placebo: From ancient priest to modern medicine.* Baltimore: Johns Hopkins University Press.

Simpson, S. H., Eurich, D. T., Majumdar, S. R., Padwal, R. S., Tsuyuki, S. T., Varney, J., et al. (2006). A meta-analysis of the association between adherence to drug therapy and mortality. *British Medical Journal, 333,* 15.

Smith, M. L., & Glass, G. V. (1977). Meta-analysis of psychotherapy outcome studies. *American Psychologist, 32,* 752–760.

Smith, M. L., Glass, G. V., & Miller, T. I. (1980). *The benefits of psychotherapy.* Baltimore: Johns Hopkins University Press.

Spielmans, G. I., Pasek, L. F., & McFall, J. P. (2007). What are the active ingredients in cognitive and behavioral psychotherapy for anxious and depressed children? A meta-analytic review. *Clinical Psychology Review, 17*, 642–654.

Stich, S., & Ravenscroft, I. (1994). What is folk psychology? *Cognition, 50,* 447–468.

Tarrier, N., Pilgrim, H., Sommerfield, C., Faragher, B., Reynolds, M., Graham, E., et al. (1999). A randomized trial of cognitive therapy and imaginal exposure in the treatment of chronic posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology, 67,* 13–18.

Taylor, E. (1999). *Shadow culture: Psychology and spirituality in America.* Washington, DC: Counterpoint.

Thomas, R. M. (2001). *Folk psychologies across cultures.* Thousand Oaks, CA: Sage.

Wampold, B. E. (2001a). Contextualizing psychotherapy as a healing practice: Culture, history, and methods. *Applied and Preventive Psychology, 10,* 69–86.

Wampold, B. E. (2001b). *The great psychotherapy debate: Model, methods, and findings.* Mahwah, NJ: Erlbaum.

Wampold, B. E. (2005). Are ESTs more effective than other treatments for particular disorders? Not a scintilla of evidence to support an affirmative answer and the suggestion that ESTs are more effective than other treatments should not be disseminated. In J. C. Norcross, L. E. Beutler, & R. F. Levant (Eds.), *Evidence-based practices in mental health: Debate and dialogue on the fundamental questions* (pp. 299–308). Washington, DC: American Psychological Association.

Wampold, B. E. (2006). The psychotherapist. In J. C. Norcross, L. E. Beutler, & R. F. Levant (Eds.), *Evidence-based practices in mental health: Debate and dialogue on the fundamental questions* (pp. 200–208). Washington, DC: American Psychological Association.

Wampold, B. E., Imel, Z. E., Bhati, K. S., & Johnson-Jennings, M. D. (2006). Insight as a common factor. In L. G. Castonguay & C. E. Hill (Eds.), *Insight in psychotherapy* (pp. 119–139). Washington, DC: American Psychological Association.

Wampold, B. E., Imel, Z. E., & Minami, T. (2007). The story of placebo effects in medicine: Evidence in context. *Journal of Clinical Psychology, 63,* 379–390.

Wampold, B. E., Minami, T., Tierney, S. C., Baskin, T. W., & Bhati, K. S. (2005). The placebo is powerful: Estimating placebo effects in medicine and psychotherapy from clinical trials. *Journal of Clinical Psychology, 61,* 835–854.

Wampold, B. E., Mondin, G. W., Moody, M., Stich, F., Benson, K., & Ahn, H. (1997). A meta-analysis of outcome studies comparing bona fide psychotherapies: Empirically, "all must have prizes." *Psychological Bulletin, 122,* 203–215.

Watson, J. B., & Rayner, R. (1920). Conditioned emotional reactions. *Experimental Psychology, 3,* 1–14.

Westen, D., & Morrison, K. (2001). A multidimensional meta-analysis of treatments for depression, panic, and generalized anxiety disorders: An examination of the status of empirically supported therapies. *Journal of Consulting and Clinical Psychology, 69,* 875–899.

Widiger, T. A., & Trull, T. J. (2007). Plate tectonics in the classification of personality disorders: Shifting to a dimensional model. *American Psychologist, 62,* 71–83.

Yalom, I. D. (1995). *The theory and practice of group psychotherapy* (4th ed.). New York: Basic Books.