

Psychotherapy Research: “Horse Race” Versus Process

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In the new world of hard-nosed, evidence-based medicine, evidence is emerging that specific psychotherapy techniques have efficacy for specific psychiatric disorders. However, evidence from studies comparing the efficacy of various specific psychotherapies indicates that they are equally effective overall. In addition, clinical experience demonstrates overwhelmingly that, in the real world, our present diagnostic categories overlap greatly, and individual drugs may be efficacious for multiple disorders, so that disorder-based specificity is something of a mirage. For example, depression, anxiety, maladaptive personality traits, and a substance use disorder commonly co-exist in the same patient, requiring that the selection of psychotherapeutic modalities as well as medications be tailored to the unique needs of the individual. In this guest column, Bernard Beitman brings a fresh perspective to thinking about evidence-based psychotherapy—a perspective consistent with the clinical experience of psychotherapists. He focuses on the essential processes characteristic of all of the widely practiced psychotherapies, their neurobiological substrates, and their relation to efficacy.

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Psychotherapy research has come to a crossroads. Meta-analytic studies comparing hundreds of research trials which pit one manualized therapy against another have concluded that no one approach is superior to another.¹ The majority of the studies have involved depression, but these findings hold across the diagnostic spectrum. Sometimes referred to as “horse race research,” manualized clinical trials have been built on the analogy of medication trials. One of the most surprising of the early published studies² suggested that cognitive therapy was equivalent to amitriptyline in its efficacy for the treatment of depression. Since then, manualized psychotherapy trials have been conducted according to the standards and mind sets of psychopharmacological treatment trials.

Rarely have process ideas been tested in psychopharmacological trials, although in one study of patients with generalized anxiety or panic disorder treated with

a benzodiazepine, our team at the University of Missouri found that readiness to change predicted outcome as well as assignment to drug or placebo.³ In psychotherapy research, however, a large body of data has been quietly gathered concerning relationships between process and outcome.⁴ For example, the strength of the working alliance has repeatedly been shown to correlate well with outcome, a finding which is of little surprise to clinicians.¹ In addition, empathic reception and discussion of the contract and goals also correlate well with outcome.⁴ Research also shows the value of responding differently to those patients who are high or low in resistance or who are more severely impaired.⁵ Research is beginning to suggest that positive regard, repair of ruptures in the alliance, certain types of self disclosure, management of countertransference, and the quality of interpretations of the relationship probably increase effectiveness.⁵ Customizing therapeutic responses to patient readiness to change and patient expectations also appears to increase effectiveness.⁴ This body of research constitutes evidence in the same way that we think of research results when utilizing evidence-based medicine. Clinicians tend to relate clinical judgments to diagnosis, but it is equally valid to look at correlations between patient characteristics, interventions, and outcomes. The double-blind, randomized controlled trial (RCT) is not the only form of clinically relevant evidence, although several researchers would prefer to believe this assertion.¹

Where do these findings leave the practicing clinician and the field of psychotherapy? The overall neutrality of comparative trials of manualized therapies does not necessarily indicate that all therapies are always equivalent. In fact, process research strongly suggests that psychotherapy must be customized to each individual patient. The need to customize includes using different

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technical responses to different patients. Yet specific techniques pale in importance compared to patient variables (symptom severity, social network, expectations) and to factors common to all psychotherapy situations (e.g., working alliance). According to Lambert and Barley,⁶ specific techniques account for 15% of outcome variance, while patient variables account for 55% and common factors for 30%.

Given these conclusions from meta-analytic and process studies, what then is psychotherapy? Psychotherapy is first and foremost an interpersonal relationship that proceeds on the basis of establishing trust in a viable working alliance. Within this working alliance something very special takes place. Rarely commented upon, but often absolutely necessary for the psychotherapeutic progress, the patient begins to become more aware of maladaptive patterns.⁷ Through silence, empathic reflections, questioning, homework, and school-specific psychotherapeutic techniques, patients become more ready to explore the contents of their minds. Often referred to within psychoanalysis as the “observing ego” or the “observing self,”⁸ the activation of this self-scanning potential guided by therapist responses is intended to help people develop new futures for themselves. Understanding the past and learning from here-and-now experiences in the therapy often facilitate knowledge of maladaptive patterns, but the ultimate purpose is to bring about change. Part of achieving this is helping patients reconceptualize what they will do or how they will manage their inner lives after they leave the office.⁹

Research arguments between process approaches and RCTs are giving way to concepts of psychotherapeutic processes that are based on an understanding of mechanisms of the brain. Engagement in the therapeutic relationship requires activation and maintenance of the neural circuitry supporting attachment, which involves the cortico-striatal-thalamic loops influenced by the nucleus accumbens—a key structure for defining value and reward. The search for patterns to be targeted for change requires the neural network-like activity of the hippocampus and entorhinal cortex, which help to categorize stimuli into familiar and unfamiliar groupings. Change seems to require repeated use of a newly acquired circuit with the aid of new memories in the medial prefrontal cortex to extinguish fears and new neurons in the dentate gyrus to support new categories of patterns and actions. Transference and countertransference can be understood as the activation of well-engrained neural circuits that do not fit the current circumstance and carry with them amygdala and nucleus accumbens weightings.^{10,11}

The brain appears to have developed to predict consequences of behavior before behavior takes place.^{11,12} Psychotherapeutic difficulty can be considered to be the result of mismatches between expectations and experience.⁹ Faulty predictions lead to dysphoric experiences and maladaptive behavior. The emotions associated with these faulty predictions can drive individuals to activate their observing selves to scan their minds and their environment for alternative perceptions and responses. Those who are overwhelmed with confusion, depression, anxiety, and other symptoms require an outside person to co-imagine their inner experiences in an effective way that leads to the creation of new choices, new alternatives, and new views of the future. Process research has yet to define the ultimate set of mechanisms by which psychotherapeutic change takes place in its different contexts, the variety of techniques, and the variety of therapists involved. The activation of self-awareness toward creating new futures provides a prime set of mechanisms common to all therapies that should be the focus of future process research.

Armed with this information, clinicians can better imagine the mind-brains of their patients—shifting between psychological models and neurological models. For example, patients with depression or posttraumatic stress disorder are likely to have smaller, hyper-metabolic amygdalae and smaller hippocampi. The hypermetabolic amygdalae distract the prefrontal cortices, preventing them from functioning as clearly as they might. The smaller hippocampi increase the probability of black/white dichotomous thinking since the small volume reflects diminished neuronal abilities to make sharp distinctions. Appreciation for the durability of engrained patterns encoded in the brain can increase clinicians’ frustration tolerance and the patience necessary to help foster change. Well functioning dorso-lateral prefrontal cortices are likely necessary for effective activation of self-awareness and the development of new futures.¹¹

The neutrality of meta-analytic studies of “horse race” research, the growing strength of process research, and our increased understanding of brain circuitry are bringing new clarity to the practice of psychotherapy. This clarity promises better conceptualizations, more rational training, and greater clinical effectiveness for our century-old profession. Freud should be smiling.

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POSTSCRIPT: A follow-up. In my January, 2004 column, “Documentation: The Doctor’s Dilemma” (J Psychiatr Pract 2004;10:64–7), I wrote about the serious problems raised by the requirements of my Ohio Medicare carrier for detailed documentation of psychotherapy that was subject to review. Communication by the Cleveland Psychoanalytic Center and the Cincinnati Psychoanalytic Institute/Society with the Medical Director of PalmettoGBA for Ohio and West Virginia has resulted in a complete revision of the requirements, so that they are now consistent with the minimum necessary disclosure requirements of HIPAA.

This fortunate outcome highlights three important facts. One is the value of HIPAA in protecting patient information from invasive disclosure, notwithstanding the controversial patient consent provisions. Another is how important it is for professional organizations to take an active and vigorous approach to dealing with threats to privacy and quality patient care. The third point—and one that is also consistent with successes in New York and New Jersey—is the advantage of Medicare, a universal, government-sponsored health care system administered by private insurance carriers under contract, because of the built-in accessibility to professional advisory input, in contrast to many profit-driven insurance companies.

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