

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/344862542>

American Psychologist Generating Psychotherapy Breakthroughs: Transtheoretical Strategies From Population Health Psychology

Article · October 2020

CITATIONS

0

READS

465

3 authors, including:



John C. Norcross

University of Scranton

313 PUBLICATIONS 23,652 CITATIONS

[SEE PROFILE](#)



Southey Saul

Cambridge Health Alliance

5 PUBLICATIONS 11 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Working on new editions of: Psychotherapy Relationships That Work, Handbook of Psychotherapy Integration, Leaving It at the Office [View project](#)



Predictors of successful behavior change within and across multiple health risk behaviors [View project](#)

American Psychologist

Generating Psychotherapy Breakthroughs: Transtheoretical Strategies From Population Health Psychology

James O. Prochaska, John C. Norcross, and Southey F. Saul

Online First Publication, November 25, 2019. <http://dx.doi.org/10.1037/amp0000568>

CITATION

Prochaska, J. O., Norcross, J. C., & Saul, S. F. (2019, November 25). Generating Psychotherapy Breakthroughs: Transtheoretical Strategies From Population Health Psychology. *American Psychologist*. Advance online publication. <http://dx.doi.org/10.1037/amp0000568>

Generating Psychotherapy Breakthroughs: Transtheoretical Strategies From Population Health Psychology

James O. Prochaska
University of Rhode Island

John C. Norcross
University of Scranton

Southey F. Saul
University of Rhode Island

Over the past 40 years, few breakthroughs have dramatically increased the impacts of psychotherapy. There have been new and exciting therapies, but the research does not convincingly demonstrate that any recent or more established therapies produce greater impacts than 40 years ago. Seven strategies from the transtheoretical model that have produced breakthroughs in health psychology/population health are analyzed to illustrate how they can similarly generate breakthroughs in mental health outcomes. The first three strategies can enhance impacts by increasing the percentage of troubled populations entering and completing best-practice treatments: reach, recruit, and retain. The fourth strategy accords higher value to synergy than to specificity by generating more benefits from whole-health therapies that briefly treat the small number of behaviors that account for a large percentage of chronic disabilities and premature deaths. The fifth breakthrough strategy creates multiple synergistic changes within individuals; changing one problem behavior promotes the probabilities that individuals will change a second problem (coaction). The sixth strategy increases impacts by complementing psychologists with tailored technology that extends their influence into homes, schools, workplaces, and communities. The seventh strategy calls on researchers to test their innovations against best practices and to benchmark outcomes, like those found with depression. We conclude by advancing a framework that can generate more inclusive and effective psychotherapies by integrating individual health care with population health practices.

Public Significance Statement


This article presents seven transtheoretical strategies that have produced breakthroughs in population health to illustrate how they can similarly generate breakthroughs in mental health outcomes. New models of psychological service delivery can increase health impacts and reduce the burdens of mental disorders.

Keywords: psychotherapy, breakthroughs, population health, impacts, integrating individual and population care

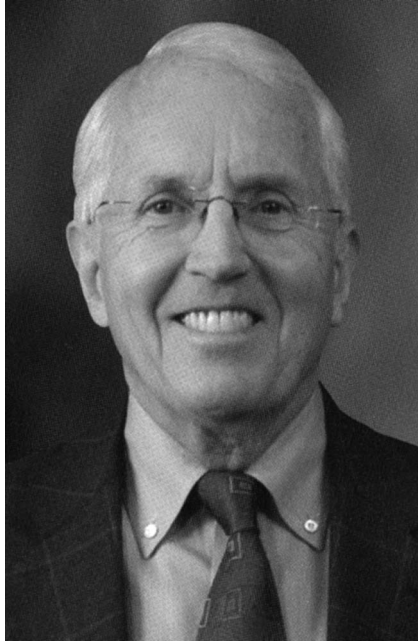
In recently surveying the field and publishing the ninth edition of a psychotherapy textbook (Prochaska & Norcross, 2018), we compiled research evidence on a broad range of

psychotherapies. The research review was based on the results of thousands of randomized clinical trials (RCTs) and hundreds of meta-analyses. The good news from that research is that psychotherapies work. The typical client receiving psychotherapy is better off than 80% to 85% of untreated people within a dozen sessions. The average effect size of 0.85 compared with no treatment is a large, robust effect. Those numbers concretely translate into healthier and happier people. The bad news is there have been few, if any, breakthroughs in increasing the impacts of psychotherapy in the 40 years since the first edition of the textbook (Prochaska, 1979).

To be sure, new and exciting psychotherapies have emerged in recent decades, leading to a cacophony of ac-

James O. Prochaska, Department of Psychology, Cancer Prevention Research Center, University of Rhode Island;  John C. Norcross, Department of Psychology, University of Scranton; Southey F. Saul, Department of Psychology, Cancer Prevention Research Center, University of Rhode Island.

Correspondence concerning this article should be addressed to John C. Norcross, Department of Psychology, University of Scranton, Scranton, PA 18510-4596. E-mail: norcross@scranton.edu



**James O.
Prochaska**

ronyms (e.g., acceptance and commitment therapy (ACT), behavioral activation [BA], dialectical behavior therapy [DBT], and emotion-focused therapy [EFT]). These innovations and integrative hybrids provide clinicians and clients with more evidence-based choices. And, to be doubly sure, psychotherapy has become decidedly briefer in achieving its typically salubrious outcomes; RCTs are now typically limited to between eight and 16 sessions.

At the same time, the research evidence does not indicate that any of the more recent psychological therapies or any of the more established therapies produce higher impacts than 40 years ago. A few exceptions probably occurred in treatment success with personality disorders (Livesley & Larstone, 2018) and severe anxiety-based disorders, such as obsessive-compulsive and posttraumatic stress disorders (Friedman, Keane, & Resick, 2014; Öst, Havnen, Hansen, & Kvale, 2015). However, across disorders and across treatments, psychotherapy has not experienced consistent breakthroughs in higher efficacy (beyond briefer duration). Despite decades of theoretical development and empirical research, where are the quantum leaps in treating mental disorders that occur routinely in other areas of health care?

The Dodo Bird Verdict and Beyond

The Dodo bird verdict in psychotherapy (in)famously posits that “everybody has won and all must have prizes.” In 1936, Rosenzweig published a brief article in which he argued that the effectiveness of multiple therapeutic approaches probably had more to do with their common elements than with their theoretical differences (Rosenzweig, 1936). Referring to the race in *Alice and Wonderland*

in which participants started when they wanted and ended when they wanted, Rosenzweig used the metaphor “At last the Dodo bird said, ‘Everybody has won and all must have prizes’”. This refers to both the competition among the psychotherapies and the generally equivalent outcomes among them. Luborsky and Singer (1975) subsequently reused and popularized the phrase in their influential review of comparative outcome studies in psychotherapy.

Back in the 1970s, the Dodo bird verdict certainly looked secure. The first large and quite comprehensive meta-analysis by Smith and Glass (1977; Smith, Glass, & Miller, 1980) included more than 600 psychotherapy outcome studies. The results were startling. No single psychotherapy was winning the horse race studies that compared one breed with another. Perhaps even more startling was that there were no dose-response relations with more intensive treatments outperforming briefer therapies. It seemed like managed care began to use our own research evidence against us, as they moved to fund the briefest and cheapest of therapies.

Later, two of the largest comparative psychotherapy studies ended in predictable ties across treatments. **The National Institute of Mental Health Collaborative Treatment Study of Depression compared three leading treatments: cognitive therapy, interpersonal therapy, and antidepressant medication (and placebo plus clinical management) for unipolar depressed outpatients (Elkin et al., 1989).** Several reanalyses of those outcome data in the ensuing decades provided important nuance (e.g., Elkin et al., 1995; Ogles, Lambert, & Sawyer, 1995) but, in the end, resulted in a grand tie among the active treatments. Likewise, the Project MATCH Research Group (1993, 1997), one of the largest comparative outcome studies, produced equivalent outcomes. Four sessions of motivational interviewing (MI) was compared with 12 sessions of cognitive-behavioral coping skill training and to 12 sessions of twelve-step facilitation therapy. Two parallel but independent RCTs were conducted, with 952 alcohol-dependent clients receiving outpatient psychotherapy and 774 clients receiving aftercare therapy following alcohol inpatient treatment. The briefer MI proved as effective at each follow-up as the lengthier 12-step and cognitive-behavioral treatments. At first glance, MI appeared to be cost-effective with only four sessions, but the time spent on clinical assessments (e.g., cognitive functioning and cardiovascular functioning that provided feedback to enhance motivation) resulted in approximately equal contact time.

In the multitude of psychotherapy RCTs, occasional studies reported results that favored one type of psychotherapy over another. The difference in effect sizes was small but statistically significant. But the significant differences disappeared when the theoretical allegiance of the researchers were controlled (e.g., Gaffan, Tsaousis, & Kemp-Wheeler, 1995; Luborsky et al., 1999; Munder, Gerger, Trelle, & Barth, 2011; Wampold & Imel, 2015). Any residual differ-



**John C.
Norcross**

ences were small, limited to targeted symptoms, disappeared at follow-up, and were probably due to methodological aspects (Wampold et al., 2017). Adherence (or fidelity) to a treatment protocol is not systematically related to outcome (Boswell et al., 2013; Webb, DeRubeis, & Barber, 2010), whereas theoretical flexibility seems to be related to better outcomes (Owen & Hilsenroth, 2014; Wampold & Imel, 2015).

Worse News

Despite the established efficacy of psychotherapy on individual patients, population rates of mental and addictive disorders have not notably decreased. The percent of the population suffering from mental disorders continues to stagger—at least 30% of U.S. and European adults (Alonso et al., 2004; Kessler et al., 2005).

Even when psychotherapy is effective, the vast majority of people in need of psychological services receive no professional care (Kessler et al., 2005; Merikangas et al., 2011). That percentage is even higher in developing countries. The World Health Organization (Demyttenaere et al., 2004) estimates that between 35% and 50% of individuals in developed countries, and between 76% and 85% of individuals in less-developed countries, suffering from mental health disorders do not have access to needed care. Phrased starkly, the treatment as usual is *no treatment*.

In the words of Kazdin and Rabbitt (2013), “The dominant model of delivering services in developed countries (individual therapy by a highly trained mental health professional) can provide effective treatments, but it is greatly limited as a means of reaching the large swath of individuals

in need” (p. 170). Scalability and reach have become the central goals, at least from a population or public health perspective.

A startling exception is the remarkable decline in the prevalence of the most deadly of addictions, namely, smoking. Over the past 50 years, the prevalence of smoking in the United States has dropped dramatically from almost 50% to less than 20% (Surgeon General’s Report, Lushniak, Samet, Pechacek, Norman, & Taylor, 2014). Innovative interventions have been applied on a population basis, including cessation programs and social marketing messages tailored to smokers in each stage of change (Prochaska & Velicer, 2004; Prochaska, Velicer, Fava, Rossi, & Tsoh, 2001; Prochaska, Velicer, Fava, Ruggiero, et al., 2001). After the prevalence rate had dropped significantly, governments felt freer to apply more restrictive policies, such as increasing taxes on tobacco and enforcing bans on smoking in public places. A study of smokers in five countries found that the further smokers were in the stages of change, the more they supported such policies from the least restrictive (education) to the most restrictive (bans; Laforge et al., 1998). The huge impact on tobacco smoking highlights the need for innovative interventions that treat other addictions and mental health disorders on a population basis.

Early Transtheoretical Lessons

Forty years of research on the transtheoretical model (TTM) has generated practice-ready interventions and impressive outcomes (for research summaries, see Connors, DiClemente, Velasquez, & Donovan, 2013; Prochaska & Norcross, 2018; Prochaska, Redding, & Evers, 2015). Lessons learned from this large body of studies funded by \$75 million in federal grants and tens of thousands of participants provide a foundation for how psychotherapy can become a higher impact science and service.

Our early lessons were gleaned from the addictions and were summarized in this journal in 1992 (Prochaska, DiClemente, & Norcross, 1992). Our first lesson was modest, came directly from clients, and did not require millions of dollars or complex methods. Ex-smokers who had quit on their own were asked about how often they used change processes identified in leading theories of psychotherapy. How often, for example, did they increase their awareness by understanding what had kept them from quitting? That question was inspired by Freud’s dictum to make the unconscious conscious. How often, for another example, did they reinforce themselves for not smoking when they were tempted? That question was inspired by Skinner’s emphasis on immediate reinforcement for healthy behaviors.

Our research participants said repeatedly that it depended on *when*: They employed different methods at different times, such as increasing their awareness early on but not after they quit, when they frequently reinforced themselves.



Southey F. Saul

We heard them describing different periods of time. They were repeatedly describing the *stages of change*.

As psychologists trying to integrate change processes or principles from diverse psychotherapies, we quickly realized that the stage of change was a missing link. We subsequently named our approach the *transtheoretical model* because it was designed to synthesize, across these stages of change, the processes of change found in disparate psychotherapy systems (Prochaska & DiClemente, 1983).

Another lesson learned early was that TTM is more comprehensive than most theories of therapy, like conventional cognitive and behavioral therapies, which equate the totality of behavior change with action. Here is a striking example from health psychology. The Clinical Guidelines for the Treatment of Tobacco (Fiore & Tobacco Use and Dependence Clinical Practice Guideline Panel, Staff, and Consortium Representatives, 2000) drew from 6,000 studies and identified a broad range of evidence-based, action-oriented treatments for “motivated” smokers who intended to quit in the next 30 days. In TTM, we describe these individuals as being in the preparation stage of change. But the guidelines had no evidence-based therapies for smokers in the precontemplation or contemplation stages, even though they account for about 80% of all smokers in the United States (Prochaska, 2003; Velicer et al., 1995). The guidelines produced treatment recommendations for the select minority of motivated smokers but failed to offer more inclusive guidance for smokers in each stage of change. Nor were there evidence-based treatments for smokers suffering with mental health disorders, even though they consume almost 50% of all cigarettes.

Applying TTM lessons from the stages of change to psychotherapy can prove instructive. Psychotherapy experts consensually predict that cognitive behavioral therapy (CBT) will continue to increase in professional popularity (Norcross, Pfund, & Prochaska, 2013). In fact, we once wrote (Prochaska & Norcross, 2010, p. 294), “If we were forced to purchase stock in any of the psychotherapy systems, Beck’s cognitive therapy would be the blue-chip growth selection for the next decade.” However, an extensive literature search and research synthesis on CBT finds its conventional efficacy diminishes substantially from a population perspective (Lipschitz et al., 2018). Only 11% of populations with anxiety disorders complete CBT. Even if CBT had a 75% efficacy rate and we multiplied that by an 11% reach, the resultant population impact would only be an 8.25% prevalence reduction.

In this respect, psychological therapies with lower efficacy could exercise much greater impacts than therapies with much less reach. For example, if Therapy A for alcohol abuse produced 30% abstinence at long-term follow-up, and Therapy B produced only 20%, then Treatment A would be judged to have 50% greater efficacy than Treatment B. However, if Treatment A reached only 5% of a population and Treatment B reached 75%, then Treatment B would have 10 times greater impact (75% reach \times 20% efficacy = 15% reduction in population prevalence vs. 5% reach \times 30% efficacy = 1.5% impact). **Impact, not efficacy alone, should determine the winners in psychotherapy horse races.**

Here, we offer seven transtheoretical strategies for accelerating psychotherapy breakthroughs, applicable to researchers and practitioners alike, to facilitate greater impact. Representative research studies and practice applications will illustrate each strategy. These strategies or principles largely draw from the major movement toward *population health*, which focuses on the health outcomes of entire populations. **The goal is to enhance not only the health of individual patients but also the health and well-being of whole populations.** Population health frequently, though not necessarily, targets multiple health risk behaviors and existing health problems, not just diagnosable mental disorders.

Strategies for Psychotherapy Breakthroughs

1. Increase the Reach to Increase the Impact

Like most specialties in health care, health service psychology has followed **a passive-reactive practice**, whereby practitioners passively wait for patients to call them. Then, psychologists react by offering services. As a result, conventional psychotherapy reaches a minority of people suffering from mental and health disorders (Kazdin & Rabbitt, 2013).

There is a serious disconnect between current psychotherapy practice and population health. Those calling for psy-

chological treatment are overwhelmingly in the contemplation and early-actions stages (Lichtenstein & Hollis, 1992). By contrast, far more suffering humans are in the precontemplation and contemplation stages. In fact, across behavioral disorders, approximately 40% of the population is in precontemplation, 40% in contemplation, and only 20% in the preparation and action stage (Prochaska & Prochaska, 2016).

Practically all psychotherapy research and practice uses reactive service. Even when 80% of treated patients evidence improvement, if that psychotherapy reaches only 5% of the population, its impact is a negligible 4%. That is why TTM is dedicated to proactive outreach, which can markedly increase impact among people suffering from mental and health disorders.

Consider the case of clinics in Windsor, Canada, where casinos were required to fund clinics to treat pathological or addicted gamblers. Experienced clinicians were given intensive training in applying CBT to gambling. The treatment program was promoted, but few pathological gamblers called. The clinics were faced with laying off most of their enthusiastic clinicians and returning hundreds of thousands of dollars to the casinos.

Instead, at a conference in Toronto, Canada, leaders learned about TTM and proactive outreach. They saw a slide of a traffic light that read, “Red light—not ready; Yellow light—getting ready; green light—ready.” They embraced the theme “Wherever you are at, we can work with that!” Clinic directors transferred their learning to posters on the backs of buses, with traffic lights that announced, “Red light, not ready; yellow light, getting ready; green light, ready. Whether you are ready, getting ready, or not ready to stop gambling, we can work with that! Give us a call at. . . .” They were flooded with calls.

2. Recruit Those You Reach

Many telephone callers in Canada were skeptical. They asked the receptionists, “Do you really mean it? Wherever I am at, you can work with that?” The telephone staff were also trained in TTM to empathize with the callers and to reassure them that the clinic would respect and would work with where they were in the cycle of change.

The bus advertisements reached populations of gamblers with intriguing messages that caused many to call the clinics. The clinic administrators had also learned in Toronto about the research of Howard and colleagues (Howard, Kopta, Krause, & Orlinsky, 1986; Howard, Lueger, Maling, & Martinovich, 1993), who examined the modal number of psychotherapy sessions in the fee-for-service era. That was when clients could usually attend as many sessions as they preferred. Howard was fond of kidding that the session mode was “-1: people call and no show!” (the mean

number was 12 for private practices and six for public settings; the median number was three).

A deep irony of huge efforts to reach distressed people is the subsequent inability to retain them in treatment. No psychotherapy works if it is not implemented. Therapy discontinuation and demoralization constitute serious problems in enhancing outcomes.

Look at how costly no-shows can be. The first HMO in Rhode Island was dedicated to quality mental health care and hired 12 doctoral-level health-service psychologists in a relatively brief period of time. But after a few years, research found that the psychotherapy delivered by the HMO’s staff psychologists proved more costly than the same services delivered by doctoral-level psychologists in independent practice. The main reason was no-shows, for which independent practitioners were not reimbursed but for which HMO staff still were paid. In a relatively brief period of time, all of the HMO’s staff psychologists were dismissed. The no-shows had clearly reduced the impacts of the staff psychotherapists without reducing the costs.

Research has highlighted the gift of massive open online interventions (MOOIs) in increasing reach and recruitment of psychological treatments. Consider two exemplars in the Coping With Depression course and smoking cessation by psychotherapy researcher Ricardo Muñoz and colleagues. A meta-analysis of 25 RCTs conducted on the depression course found an average *d* of .28 (Cuijpers, Muñoz, Clarke, & Lewinsohn, 2009). It proves scalable, free, and effective, but is below the typical efficacy of individual psychotherapy. An MOOI for smoking cessation involved 292,978 smokers in 168 countries; it, too, achieved impressive quit results (Muñoz et al., 2016). Here are lived examples of active and successful recruitment in the context of psychotherapy.

The point, and the breakthrough strategy, is to recruit those reached through proactive outreach. Train practice receptionists, intake workers, and clinical staff to understand that humans are invariably in different stages of change and have them commit to assisting all of them as opposed to demeaning phrases such as “Come back when you are ready to work.” Work with all stages and cultural identities as opposed to imposing one way. A few sessions of MI or person-centered methods produce large gains in recruitment and retention (Burke, Arkowitz, & Menchola, 2003; Lundahl, Kunz, Brownell, Tollefson, & Burke, 2010).

3. Retain Those You Recruit

The potential impacts of psychotherapy are dramatically reduced by the one in four or five patients who prematurely terminate psychotherapy (Swift & Greenberg, 2012; Wierzbicki & Pekarik, 1993). The premature discontinuation rates prove even higher for youth and racial/ethnic minority clients. This is why contemporary research standards insist

on intent-to-treat analyses rather than completer analyses. The former provides an accurate portrayal of efficacy, whereas the latter artificially inflates success rates.

We studied a sample of outpatients with a broad range of diagnoses receiving a variety of psychotherapies not based on TTM (Brogan, Prochaska, & Prochaska, 1999). Prior to the start of psychotherapy, patients were assessed on demographics and TTM variables, such as stage of change and pros and cons of changing. The results were striking: The profiles of the premature terminators were those of people in the precontemplation stage. The profiles of those who terminated quickly but appropriately, as judged by their psychotherapists, were those of people in the action stage. Overall, the TTM variables alone correctly predicted 93% of the premature terminators.

In fact, a recent meta-analysis of 76 psychotherapy studies, encompassing 25,917 adults, found that patient outcomes were a function of pretreatment stage of change. That is, the further along a patient is in the stages or readiness for change, the better the outcomes ($d = 0.41$; Krebs, Norcross, Nicholson, & Prochaska, 2018). Similar findings have been reported for youth clients, such as 153 adolescents in a community mental health agency (Sliter, 2009).

When we ask health-service psychologist audiences to nominate clinical methods for a client who started therapy in the action stage after recently quitting drinking, most of their hands go up, quickly. The consensus method is relapse prevention. When we ask for their clinical methods for the much larger group (30%) of premature terminators, few hands are raised. How many psychologists have been trained in relapse prevention? Almost all hands go up. How many have been trained in dropout prevention? Few hands go up.

Training in dropout prevention begins with understanding the dynamics of precontemplation. We summarize care principles for such potential patients with the four *Ds* (Prochaska & Prochaska, 2016):

1. Don't know about the stages of change and how to progress from precontemplation.
2. Demoralized after trying to change multiple times, which challenges the ubiquitous myth that they do not want to change.
3. Defensive after family, friends, physicians, and others have pressured or persuaded them to take action when they were not ready.
4. Decisional balance is negative, with the cons of psychotherapy clearly outweighing its pros (Tsoh, 1996).

The following is an example of a patient in precontemplation about changing his chronic cocaine addiction. His marriage was in jeopardy, as was his job. His moods moved

from depression to aggression with fights in bars; he feared that he would end up behind prison bars.

I (JOP) share with him a sheet that describes the stages of change. He quickly sees himself in precontemplation. Thus, I express my number one concern: that he might not return for additional psychotherapy sessions, and I would not want to lose the opportunity to make a significant difference in his life.

"Should I be concerned that you might not come back?"
"Yeah, probably," he quickly responds.

Then I say, "I have found it helpful for clients to be aware of the multiple benefits that can come from therapy. Do you think therapy could help you with your cocaine problem?"

"I hope so, but I have my doubts," he says.

"Do you think therapy could help you with your wife?" "Oh yeah. She sent me here."

"Do you think it could help you to share things that can distress you?" "I would like that."

"Here is another concern: If you feel I am pressuring you to do something you are not ready to change, will you let me know?"

"You will know!" he insists. "How will I know?" I ask. "I will be angry as hell!" he asserts.

"That's OK," I say. "I can work with that. What I can't work with is you not coming back!"

To be sure, some health-service psychologists are committed to reaching, recruiting, and retaining patients from all stages of change and from multiple cultures. A case in point is systematic efforts to engage minority populations traditionally underserved by mental health practitioners. Culturally sensitive recruitment and treatment adaptations prove demonstrably effective for diverse populations (Huey & Jones, 2013; Soto, Smith, Griner, Domenech Rodríguez, & Bernal, 2018; Sue, Sue, Neville, & Smith, 2019). As with all the strategies in this article, we are not the first to advocate or implement them; rather, we aim to bolster these nascent directions for all of health service psychology.

Of course, tailoring psychotherapy to the individual patient to increase impacts is not restricted to stage matching. Other effective adaptation or responsiveness methods include the client's race/ethnicity (Soto et al., 2018), treatment preferences (Swift, Callahan, Cooper, & Parkin, 2018), religion/spirituality (Captari et al., 2018), and reactance level (Beutler, Edwards, & Someah, 2018). The overarching goal is to retain patients by creating a new therapy for each based on both their diagnostic and transdiagnostic features (Norcross & Wampold, 2019).

4. Value Synergy Over Specificity

Most sciences value specificity as a sign of their maturity: This specific germ causes this specific illness. These specific genes cause this specific condition. This specific vaccination prevents this specific disease. This particular medication manages this particular illness.

Likewise, the science of psychotherapy has been heavily driven by the search for specificity. The desideratum of specificity is ingrained in Gordon Paul's (1967) challenge: "What treatment, by whom, is most effective for this individual with that specific problem, and under which set of circumstances?" For decades now, psychotherapists have sought the elusive prescriptive match between Therapy X and Disorder Y. This specific treatment is designed for this specific behavioral disorder. That has been the goal, but what has been the research evidence?

In the seminal book, *The Great Psychotherapy Debate*, Wampold (2001; Wampold & Imel, 2015) presents an exhaustive review of research on the effects within and between different psychotherapies. The evidence-based answer is in the affirmative to the Dodo bird verdict: **Everybody has won and all must have prizes. There is precious little evidence for the specificity of psychotherapy (Ahn & Wampold, 2001).**

Wampold and Imel (2015) concluded that psychotherapy's major mistake, in pursuit of respectability and funding, was to follow a medical model that highly values interventional specificity. They—and we—recommend that the science and practice of psychotherapy begin to build a more behavioral, contextual model of health and treatment.

Examine the impacts that such a strategy can generate. **There is a growing consensus in population health that four behaviors are causal factors for more than 70% of chronic diseases, lost productivity, and premature deaths (Mokdad, Marks, Stroup, & Gerberding, 2004). The four deadly behaviors are smoking, alcohol abuse, unhealthy eating, and inadequate exercise.** Patients suffering from substance abuse and mental health disorders are plagued by these same four behaviors, but they die from them an average of 10 years sooner. No wonder that the Substance Abuse and Mental Health Services Administration, the National Institutes of Health, and the Center for Medicare and Medicaid Innovation have all become strong advocates for holistic health care focused on behaviors.

Why are these big four behaviors so critical for chronic conditions? They are dysfunctional forms of four fundamental functions for life: breathing, drinking, eating, and moving. When people are breathing toxins, they risk much of their bodies and selves. When they drink to toxic levels, they do the same. When they eat too many toxins, they repeat the pattern. And if they do not move enough, they do not remove enough of the toxins from their bodies.

A fifth behavior frequently drives the other four: unhealthy stress, which Hans Selye (1974) labeled *distress*. A classic survey of 17,000 households found that populations facing increased distress cope by smoking more cigarettes, drinking more alcohol, eating more comfort foods, and retreating to the couch (Mellinger, Balter, Manheimer, Cisin, & Parry, 1978). For example, about 10% of Army officers smoke when in the United States, but when deployed to distressing combat zones, relapses raise the prevalence of officers smoking to about 40% (National Institute on Drug Abuse, 2013).

Research has found that a history of depression predicts failure for smoking cessation. More recent research found that proactively recruiting smokers in depression clinics and treating them with TTM programs produced long-term cessation rates that were essentially equal to our results with general populations of smokers (Hall et al., 2006).

More challenging research recruited smokers hospitalized for acute episodes of severe mental illnesses, such as bipolar disorder and major depression. The randomized treatment group was 2.5 times more successful than controls at 12-month follow-up. More striking was that the treatment group had significantly fewer rehospitalizations over the 12-month follow-up than did the controls (Prochaska, Gill, & Hall, 2004).

Another challenging population for smoking cessation is adolescents. The Surgeon General's Report on Youth and Tobacco Use (Report of the Surgeon General, Elders, Perry, Eriksen, & Giovino, 1994) concluded that adolescents would rarely participate in treatment, and even if they did, they would not quit smoking. Researchers at Kaiser Permanente recruited 65% of adolescent smokers in their primary care practices. Applying TTM-tailored digital programs outperformed controls and produced quit rates of 25%, essentially the same as our quit rates with diverse populations of adults (Hollis et al., 2005).

Psychologists are widely familiar with the concept of **synergy for individuals**: shifting the downward spiral to an upward spiral by building small successes on each other. Clinical synergy, echoing the Gestalt principle that the whole proves greater than the sum of its parts, can also be applied to entire populations and to a multitude of health problems.

The following is an example of synergy with a vulnerable population of 4,000 participants from 39 states who suffered from an average of almost four chronic conditions and four health risk behaviors. The goals of the intervention were to modify inadequate exercise and unhealthy stress management and to determine whether reducing those negative risk behaviors would enhance well-being. Participants who were suffering had one risk behavior more than people who were struggling, who, in turn, had one more risk behavior than people who were thriving. The synergy hypothesis was that directly modifying risk behaviors could indirectly enhance

well-being. In other words, the more risk behaviors that intervention could change, the more treatment could then enhance well-being, including moving people from struggling to thriving.

To be eligible, participants had to exercise inadequately and manage stress ineffectively. They were randomly assigned to one of the three conditions: telephonic TTM health coaching with three 20-min sessions treating exercise as the primary target and stress management as secondary; three 20-min online, TTM-tailored, computer-delivered interventions with stress management as primary and exercise as secondary; or an assessment-only control.

The outcome results were consistent across the target behaviors. The telephonic health coaching for exercise outperformed the online program for stress management, which, in turn, outperformed the controls. Telephonic coaching produced 2.4 times more behavior changes than controls, with 65% more adequate exercise, about 50% more effective stress management, and about 50% more healthy eating, which was not treated.

More profound was the impact on well-being, even though these domains were not directly treated. Coaching produced 2.4 times greater enhancements in physical well-being than controls and almost 2 times more emotional well-being (which included decreases in depression and stress and increases in happiness and joy). In both treatment groups, the majority of participants shifted from struggling or suffering to thriving, which rarely occurred in the control group. Specifically, the percentage of patients thriving almost doubled for those receiving TTM health coaching (67% vs. 34% of controls). This is an example of how psychotherapy can raise the bar to help more individuals feel better and live better.

These results illustrate the magnitude of synergy that can be generated by a total of 60 minutes treating one primary and one secondary behavior. Not only were more multiple risk behaviors reduced, but multiple domains of well-being were also enhanced even though they were not treated. Perhaps most important for psychotherapy is that such brief interventions can help move a majority of the population from suffering or struggling to a majority thriving.

5. Create Multiple Synergistic Changes Within Patients

The vast majority of psychotherapy research (and health-risk-reduction research) relies on RCTs that compare between-group outcomes, for example, treatment versus control groups. The highly predictable outcome is that both groups improve, but the treatment improves significantly more. After three decades of conducting such research, we explored patterns of multiple health behavior change (MHBC) within individual patients.

The key question is, if individuals successfully change one problem behavior, like depression, will they be more or less likely to change a second dysfunctional behavior, like inadequate exercise? We discovered that the treated individuals who were successful in overcoming one problem were significantly more likely to be successful on the second problem. However, the controls were not. We labeled this phenomenon *coaction* to indicate that this was a new type of MHBC.

What are the implications of coaction for psychotherapy? When we change one disorder in psychotherapy, we can frequently produce a synergy in which there are greater changes in other behaviors. Historically, the established wisdom in some theoretical orientations was that it was hard enough to change one long-term addiction or disorder. Trying to change more than one could overwhelm the motivation, confidence, or optimism of treated patients. This was one of the conclusions of the Heart Health Projects in which the MHBC treatment communities failed to outperform the controls on any of the health risk behaviors (Luepker et al., 1994).

Demonstrating that MHBCs could be produced in community populations required innovations not available in Heart Health Projects. One innovation was TTM digital programs delivered at home to randomly assigned participants from three populations: patients from primary care practices, employees from companies, and parents of high-school students who received MHBC digital programs at school. The digital treatment groups produced significantly more MHBCs within each of the populations (Prochaska et al., 2004, 2005).

But we failed with “5 As” counseling (Ask, Assess, Advise, Assist, and Arrange follow-up) delivered to patients in primary care over a 2-year period (DePue et al., 2008). We also failed with quarterly worksite campaigns on four risk behaviors (smoking, diet, exercise, and sun exposure) repeated over 2 years (Linnan et al., 2002). Unlike so many comparative psychotherapy studies that end in grand ties, population-based MHBC often does not.

MHBC programs with youth are largely expected to fail. MHBC interventions to prevent substance abuse and increase energy balance behaviors were applied with 4,158 students in 20 middle schools (Velicer et al., 2012). Half of the schools were assigned to treatments to increase energy balance behaviors and half to prevent substance abuse. Each intervention involved 5 in-class, TTM-tailored digital interventions over a 3-year period. In the energy balance group, as well as subsamples at risk and not at risk, strong effects were found for physical activity, healthy diet, and reducing TV time. Despite no direct treatment, the energy balance group showed significantly lower smoking and alcohol use over time than the substance-abuse prevention group. Producing changes on untreated behaviors is a form of synergy known as *transfer*.

6. Complement Psychologists With Tailored Technology

Patients in psychotherapy spend less than 1% of their waking week in sessions. To increase impacts, psychologists need to extend their professional services to homes, workplaces, and communities. A high-impact strategy is to add individualized digital interventions. These digital technologies can complement, not replace, the human psychotherapist.

Health-service psychology has steadily incorporated technology into practice, and this strategy is probably the most widely implemented of all advanced here. The proliferating number and sheer varieties of mHealth—web-based interventions, online therapy, Internet-operated therapeutic software, and other online activities (e.g., as supplements of face-to-face therapy; Barak, Klein, & Proudfoot, 2009)—challenge researchers and practitioners to keep apace (Baker, Gustafson, & Shah, 2014). We heartily concur with the conclusions of the European Federation of Psychologists' Association (Ebert et al., 2018) that “Internet- and mobile-based psychological interventions have high potential for improving mental health and should be implemented more widely in routine care.” Our breakthrough strategy is not to employ technology in general, but research-supported *tailored* technology.

More than 30 years of RCTs with tens of thousands of patients have demonstrated that computer-tailored interventions (CTIs) can exert impressive impacts on populations in schools, homes, companies, and communities. A meta-analysis was performed on 88 prospective, tailored interventions delivered via computer or mail across smoking cessation, physical activity, healthy diet, and mammography screening (Krebs, Prochaska, & Rossi, 2010). The mean effect size of $d = 0.18$ represents a 39% increase over the assessment or minimal care conditions to which the interventions were compared. That effect indicates a medium-sized effect for population-based interventions.

That and other meta-analyses of tailored communications for lifestyle modification (e.g., Bully, Sánchez, Zabaletadel-Olmo, Pombo, & Grandes, 2015; Noar, Benac, & Harris, 2007) find that TTM is the most frequently used approach. Significantly greater effect sizes are obtained when tailored communications include the TTM constructs of stages of change, pros and cons of changing, and processes of change.

Consider the population consequences of bullying, which may constitute the number one daily mental health concern of youth. Tailored digital interventions based on the TTM were designed to reduce student participation in each of three roles related to bullying—bully, victim, and passive bystander. Effectiveness trials were completed in 12 middle schools and 13 high schools in the United States. A diverse sample of 1,237 middle school and 1,202 high school stu-

dents were available for analyses. At follow-up in the middle schools, there was about a 30% reduction in each of the three roles for the treatment groups compared with about 19% in the control group (Evers, Prochaska, Van Marter, Johnson, & Prochaska, 2007). In the high schools, there was about a 40% reduction in the treatment groups in each of the roles compared with about 22% in the control group. Given the relative ease of dissemination, these programs could be applied as standalone practices or as part of more intensive, therapist-guided treatment.

CTIs have also enhanced outcomes by complementing clinicians, such as with male perpetrators of intimate partner violence in 50 hours of mandated group therapy. Three additional 20-min CTI sessions reduced violence. With the addition of TTM tailoring, 16% of the female partners of the perpetrators were abused in the past 6 months compared with 32% of the women whose partners received only the group therapy (Levesque, Ciavatta, Castle, Prochaska, & Prochaska, 2012). Lest psychologists become concerned that apps will replace them, the added 60 min of CTIs resulted in violent partners voluntarily seeking individual or couple psychotherapy at about twice the rates of those who received the group therapy alone.

Unipolar depression constitutes one of the most common disorders that psychologists confront and treat. Evidence-based CTI programs can connect treatment from clinics to homes. An RCT involved a home-based, TTM-tailored treatment and prevention program with 350 proactively recruited primary care patients suffering from depression (Levesque et al., 2011). The TTM group was significantly more likely to achieve reliable and clinically significant reductions in depression (38% vs. 22%). Severely depressed patients in the TTM group were 5 times more likely than controls to achieve such improvements. Patients with mild depression at pretreatment/baseline received either usual care or a TTM program to prevent major depression. The usual care group developed 2.5 times greater chance of developing major depression than the TTM group (19.1% vs. 7.8%).

We conceptualize such CTIs as population treatments applied by patients outside of clinics at lower costs. Such programs assist health service psychologists in reaching segments of the population in the precontemplation and contemplation stages, who tend to pose the biggest clinical challenges. They typically deliver high-impact outcomes with few side effects. And as in the case of mood disorders, CTIs can help prevent mild depression from becoming major depression.

Psychologists can start the behavior change process by taking a few minutes to assess the Big 5 behaviors and the patient's stage of change for each behavior. They can then guide patients on the one or two best steps to begin progressing to the next stage. This work can occur in

tandem with the psychotherapeutic work targeting other, more pressing clinical needs.

Patients can then be given the equivalent of a prescription for CTIs that will tailor additional guidance to their stage of change and encourage them to use the online programs at home, work, in school, or in other community settings. The tailored digital technology can automatically communicate to clinicians the patient's progress via a clinical dashboard between sessions. Such connected care can help clinicians and clients collaborate on behavior change within and between sessions.

7. Benchmark Against Best Practices

A disadvantage of research-supported best practices is that the consensus can beget complacency. Most financial and training resources are dedicated to ensuring that graduate students and licensed practitioners develop competencies in current evidence-based practices and to disseminating and implementing those practices (Norcross, Hogan, Koocher, & Maggio, 2017). Virtually all accreditation, licensure, and board certification standards address competencies to deliver the *past* best practices. Almost never does the question arise as to whether practitioners are prepared to become leaders, to create a future in which better practices keep outperforming best practices. The need for clinical innovation—pushing the ceiling—cannot be mandated or prescribed.

Once a best practice is consensually identified, it rarely proves helpful to continue conducting RCTs on that practice (unless investigating treatment moderators and mediators). Thousands of psychotherapy studies have demonstrated that credible treatments routinely outperform waiting lists, no treatment, and other control conditions; “something” invariably works better than nothing at all. If we are to produce breakthroughs, then the field requires innovative psychotherapies outperforming current best practices in terms of reach, recruitment, retention, impact, coaction, synergy, and durability.

Our first CTI comparative trial did not compare TTM interventions with no treatment or placebo. We were tempted to do so, as such comparisons uniformly favor any active treatment, which can generate practitioner excitement and grant funding. Instead, we compared our CTIs delivered to smokers at home with what was considered the “gold standard” of home-based cessation programs: the American Lung Association's self-help program (Prochaska, DiClemente, Velicer, & Rossi, 1993).

Over the decades, CTIs alone were compared with CTIs plus. The “plus” entailed smoking cessation counselors who provided personalized care for each client. When our CTIs alone outperformed both the home-based program and trained clinicians, we knew that we had

developed a new benchmark. Of course, benchmarks are made to be broken.

Yet over 2 years with multiple attempts, we could tie, but not beat, our best practice. More CTI interactions, additional counselor sessions, and new digital technologies all failed to outperform what we came to consider the curse of a best practice. Our innovations could not move the needle for long-term smoking abstinence from 25% to even 30%.

Then, two projects outperformed the treatment outcomes that we had replicated multiple times. The first was a comparative treatment trial with no control or placebo group. The goal was to beat our best CTI practice alone with CTI plus tailored texting. This combination leaped smoking abstinence from 25% to 36%—11 points past the previous best performance. Qualitative data from those receiving text messages provided a sense of how this enhancement was received. Participants said things like “Whoever sent me my personal messages really understands me” or “Those texts seemed to arrive at the right time.”

The second project was a benchmarking study that compared three data sets from interventions for multiple behavior changes: smoking, high-fat diets, low fruits and vegetables, and inadequate exercise (Johnson et al., 2013). The same criteria were used for each risk across the studies. Each data set was based on employee and other community populations. Data Set 1 came from a Centers for Disease Control and Prevention (CDC) sponsored project that combined results of 58 RCTs and large case studies. The average participation rate across the studies was 58%. The average follow-up was about 2.75 years. Data Set 2, with 26 studies, mostly RCTs simultaneously treating multiple risk behaviors, hailed from our TTM trials. The average participation rate was about 70%, with a similar average follow-up of about 2.75 years. And Data Set 3 came from a large case study of a national company with 30 worksites, which proved similar to combining 30 separate studies. The participation rate was 92%, with a follow-up of about 3 years.

Across the three data sets, patient outcomes were statistically and clinically superior from preintervention to final follow-ups, except for fruit and vegetable consumption in the CDC project. Formal statistical comparisons could not be performed on the outcomes between the three groups on the four behaviors. Nonetheless, benchmarking comparisons produced clear contrasts between the three projects (Johnson et al., 2013).

The CDC project outcomes served as initial benchmarks for average performances. Outcomes from the 26 TTM population-based RCTs clearly outperformed each of the average benchmarks. Outcomes for exercise in TTM CTI treatments were more than twice the CDC average. With healthy eating, measured as the right

amount of the right types of fats, the transtheoretical CTIs were 6 times greater than the CDC average. The greatest differences were with fruits and vegetables, with TTM CTI outcomes being more than 10 times greater. The smallest differences were with smoking, with the TTM CTIs being about 50% greater.

Equally surprising was that the real-world dissemination outcomes on these four health behaviors were consistently larger than our TTM best practices. The theory of innovation diffusion (Rogers, 2010) suggests the opposite: Many studies show that the quality of performance deteriorates with diffusion. This anticipated pattern tends to be true with dissemination of innovations that produced significant outcomes in RCTs.

What factors might produce dissemination outcomes that consistently outperformed TTM best practices? One may be the freedom to choose which risk behaviors to change. In RCTs, researchers determine which behavior or behaviors will be treated. Also, dissemination participants were free to choose which behavior to work on from one year to the next. In TTM CTIs, all participants were terminated after 6 or 12 months because the consensus among most behavioral scientists is that the biggest problem after treatment termination is relapse. In the dissemination program, there was continuous care from one year to the next; there were no demands to terminate treatment to assess relapse. Still another freedom for the dissemination participants is their chance to work with telephonic health coaches or directly with online programs. The “rules” of treatment RCTs may prove too rigid, with costly controls and too little innovation. Standardized intervention protocols can rarely match the flexibility and freedom afforded by best practices delivered in real-world disseminations.

For almost two decades, we had tried to produce a breakthrough from our best practice of smoking cessation from 25% to 30% abstinent at long-term follow-up. We doubled our number of interactions, added new types of technology, included nicotine replacement, and revised the counseling protocols—to no avail. But our dissemination trial produced a breakthrough to 33.7% abstinence at 26 months, which is 43% higher than the TTM average and 68% higher than the CDC average. Now the challenge is to outperform our new best practice.

How might benchmarking be performed by real-world psychologists in routine clinical settings? The example we will use is the treatment of depression, in which there are a number of evidence-based or best practices, including cognitive therapy, interpersonal therapy, short-term psychodynamic therapy, emotion-focused therapy, and behavioral activation. Rather than repeating expensive multisite RCTs with multiple treatment and control groups, a more practical and promising approach is for clusters of psychologists to determine whether they can

outperform benchmarks produced by best practices. Using a standard measure like the Beck Depression Inventory (BDI), at baseline, the BDI has a mean score of 20 to 21. The treatment BDI outcome has been a score of 10 to 11, which is significantly greater than BDIs in control groups. The average 10-point improvement on the BDI in the treatment groups meets the criteria of clinical significance (Jacobson & Truax, 1991), which is measured by a one-standard-deviation improvement.

Completing psychotherapy to obtain a BDI score of 10 rarely leads to a happy conclusion. A score of 10 could indicate that the patient is sad much of the time. A 10 on the BDI is not how a happy person would respond. The score of 10 does not even equal typical distressed adults, who average a score of 7. Nondistressed adults representing our normal benchmark have an average BDI of 4. Even better, could innovative psychotherapies not only reduce the negatives of depression but also increase the positives of happiness and thriving?

Clearly, there is room for considerable improvement in the outcomes of our psychotherapies. Could a cluster of creative health service psychologists generate depression treatment enhancements that could beat best practice’s benchmarks? Could such psychologists treating typical depressed clients produce a new best practice and benchmark represented by an average score of 7? Could other clinician clusters replicate the results of enhanced new best practices with BDI scores of 7?

One way to beat established best practices is to form a cluster of talented psychotherapists who routinely outperform their colleagues with comparable patients (sometimes referred to as “super shrinks”; Castonguay & Hill, 2017; Okiishi, Lambert, Nielsen, & Ogles, 2003; Ricks, 1974). We have much to learn from colleagues who outperform best-practice standards: not only what they do but how they do it. Best practice, from a client’s standpoint, might be selecting a super shrink.

Concluding Thoughts

Hundreds of millions of youth and adults worldwide suffer from consequential mental health disorders for which they receive no treatment whatsoever (Kazdin, 2018; World Health Organization, Demyttenaere et al., 2004). The field requires new models of service delivery to increase health impact and to reduce the burden of mental disorders. Pick your favorite metaphor for the need for quantum change or psychotherapy breakthroughs: “We need lightning but have lightning bugs”; “Treating only willing psyches but ignoring entire systems”; “No epidemic was ever cured one person at a time.” All fundamentally demand that practitioners of the future increasingly behave like public health, population, and community advocates.

Health-service psychologists can do so, according to the research and our experience, by reaching the entire population (not only individual patients), by recruiting most people in distress (not only treatment seekers), and by retaining those we recruit (not losing or alienating them). Having fully engaged their patients, psychologists can value synergy over specificity and create synergistic changes within individuals; changing one problem promotes the probability of patients resolving a second. When possible, psychologists can complement in-person sessions with tailored digital programs that extend therapeutic influence into homes, schools, worksites, and communities. Researchers and practitioner clusters can test their innovations not against placebo or assessment-only conditions but against current best practices.

Our leitmotif in this article is to help colleagues progress into the contemplation or preparation stage for population health or whole-health psychology. That is, we hope that psychologists will become more aware of and appreciate the multiple outcome benefits that can be produced for their patients. But the contemplation stage is characterized by doubt and delay. Across 48 health-related behaviors, including mental health behaviors, the pros and cons for participants in contemplation were tied (Hall & Rossi, 2008).

What is the biggest con of changing almost all behaviors? Time, and it is understandable if the biggest con for practicing population health is time—especially time that is not rewarded or reimbursed for key changes. Most psychologists are likely to vastly overestimate how much professional time it takes to help vulnerable populations change. Best TTM practices for changing one or more of the Big 5 behaviors take a total of 60 minutes spread over professional contacts.

Larger and more intense impacts can be produced in psychotherapy by a population health psychology. Psychotherapy is at risk of being left behind by the newer population paradigm. We seek to complement the best individual care with the best of population health. Our strategies for producing breakthroughs in the science and practice of psychotherapy build on best practices for individual patients by adding enhancements and innovations discovered in population health.

These practices usually embrace and complement, not compete with, what has been found over the past 40 years in conventional psychotherapy research. Our ardent wish is to build up (not tear down) what we already do well in psychotherapy. We can avoid the destructive results of pitting individual psychotherapy versus population health as though it were an either/or zero-sum enterprise.

The following list summarizes how psychologists can practice and research more inclusively (and effectively) by complementing reactive treatment of individuals with proactive treatment of entire populations:

<i>Individual Patient Treatment</i>	<i>Entire Population Treatment</i>
Action oriented	Stage based
Reactive	Proactive
DSM or ICD disorders	Whole health
Standardized	Tailored
Clinician delivered	Technology enhanced
Clinic based	Home based
Professional help	Self-help and peer-support augmented
Typically single problem	Typically multiple problems
Efficacy	Impact
Specificity	Synergy
Fragmented	Integrated

In the future, health-service psychologists can add the repertoire of public health and community advocates: target the entire population, not only individual patients, for a myriad of health concerns, not only mental disorders. Forward-looking therapists will plan for careers that entail more than reactively waiting for distressed patients seeking their services in a private office. In the future, psychologists will proactively and effectively impact a much broader range of populations, including those who do not initiate the help-seeking process. Tailored digital programs will augment psychotherapy sessions, and more ambitious coercion will characterize treatment plans. All of these strategies retain the cherished competencies of psychologists while also providing the lightning for psychotherapy breakthroughs.

References

- Ahn, H. N., & 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. <http://dx.doi.org/10.1037/0022-0167.48.3.251>
- Alonso, J., Angermeyer, M. C., Bernert, S., Bruffaerts, R., Brugha, T. S., Bryson, H., . . . Vollebergh, W. A. M. (2004). Prevalence of mental disorders in Europe: Results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatrica Scandinavica, 109*, 21–27. <http://dx.doi.org/10.1111/j.1600-0047.2004.00327.x>
- Baker, T. B., Gustafson, D. H., & Shah, D. (2014). How can research keep up with eHealth? Ten strategies for increasing the timeliness and usefulness of eHealth research. *Journal of Medical Internet Research, 16*, e36. <http://dx.doi.org/10.2196/jmir.2925>
- Barak, A., Klein, B., & Proudfoot, J. G. (2009). Defining internet-supported therapeutic interventions. *Annals of Behavioral Medicine, 38*, 4–17. <http://dx.doi.org/10.1007/s12160-009-9130-7>
- Beutler, L. E., Edwards, C., & Someah, K. (2018). Adapting psychotherapy to patient reactance level: A meta-analytic review. *Journal of Clinical Psychology, 74*, 1952–1963. <http://dx.doi.org/10.1002/jclp.22682>
- Boswell, J. F., Gallagher, M. W., Sauer-Zavala, S. E., Bullis, J., Gorman, J. M., Shear, M. K., . . . Barlow, D. H. (2013). Patient characteristics and variability in adherence and competence in cognitive-behavioral therapy for panic disorder. *Journal of Consulting and Clinical Psychology, 81*, 443–454. <http://dx.doi.org/10.1037/a0031437>
- Brogan, M. M., Prochaska, J. O., & Prochaska, J. M. (1999). Predicting termination and continuation status in psychotherapy using the transtheoretical model. *Psychotherapy: Theory, Research, Practice, Training, 36*, 105–113. <http://dx.doi.org/10.1037/h0087773>
- Bully, P., Sánchez, Á., Zabaleta-del-Olmo, E., Pombo, H., & Grandes, G. (2015). Evidence from interventions based on theoretical models for lifestyle modification (physical activity, diet, alcohol and tobacco use) in primary care settings: A systematic review. *Preventive Medicine: An*

- International Journal Devoted to Practice and Theory*, 76, S76–S93. <http://dx.doi.org/10.1016/j.ypped.2014.12.020>
- Burke, B. L., Arkowitz, H., & Menchola, M. (2003). The efficacy of motivational interviewing: A meta-analysis of controlled clinical trials. *Journal of Consulting and Clinical Psychology*, 71, 843–861. <http://dx.doi.org/10.1037/0022-006X.71.5.843>
- Captari, L. E., Hook, J. N., Hoyt, W., Davis, D. E., McElroy-Heltzel, S. E., & Worthington, E. L., Jr. (2018). Integrating clients' religion and spirituality within psychotherapy: A comprehensive meta-analysis. *Journal of Clinical Psychology*, 74, 1938–1951. <http://dx.doi.org/10.1002/jclp.22681>
- Castonguay, L. G., & Hill, C. E. (Eds.). (2017). *How and why are some therapists better than others? Understanding therapist effects*. Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/0000034-000>
- Connors, G. J., DiClemente, C. C., Velasquez, M. M., & Donovan, D. M. (2013). *Substance abuse treatment and the stages of change* (2nd ed.). New York, NY: Guilford Press.
- Cuijpers, P., Muñoz, R. F., Clarke, G. N., & Lewinsohn, P. M. (2009). Psychoeducational treatment and prevention of depression: The "Coping with Depression" course thirty years later. *Clinical Psychology Review*, 29, 449–458. <http://dx.doi.org/10.1016/j.cpr.2009.04.005>
- Demyttenaere, K., Bruffaerts, R., Posada-Villa, J., Gasquet, I., Kovess, V., Lepine, J. P., . . . WHO World Mental Health Survey Consortium. (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *Journal of the American Medical Association*, 291, 2581–2590. <http://dx.doi.org/10.1001/jama.291.21.2581>
- DePue, J. D., Goldstein, M. G., Redding, C. A., Velicer, W. F., Sun, X., Fava, J. L., . . . Rakowski, W. (2008). Cancer prevention in primary care: Predictors of patient counseling across four risk behaviors over 24 months. *Preventive Medicine: An International Journal Devoted to Practice and Theory*, 46, 252–259. <http://dx.doi.org/10.1016/j.ypped.2007.11.020>
- Ebert, D. D., Van Daele, T., Nordgreen, T., Karekla, M., Compare, A., Zarbo, C., . . . Kaehlke, F. (2018). Internet and mobile-based psychological interventions: Applications, efficacy and potential for improving mental health. A report of the EFPA E-Health Taskforce. *European Psychologist*, 23, 269–269.
- Elders, M. J., Perry, C. L., Eriksen, M. P., & Giovino, G. A. (1994). The report of the Surgeon General: Preventing tobacco use among young people. *American Journal of Public Health*, 84, 543–547. <http://dx.doi.org/10.2105/AJPH.84.4.543>
- Elkin, I., Gibbons, R. D., Shea, M. T., Sotsky, S. M., Watkins, J. T., Pilkonis, P. A., & Hedeker, D. (1995). Initial severity and differential treatment outcome in the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology*, 63, 841–847. <http://dx.doi.org/10.1037/0022-006X.63.5.841>
- Elkin, I., Shea, M. T., Watkins, J. T., Imber, S. D., Sotsky, S. M., Collins, J. F., . . . Parloff, M. B. (1989). National Institute of Mental Health Treatment of Depression Collaborative Research Program: General effectiveness of treatments. *Archives of General Psychiatry*, 46, 971–982. <http://dx.doi.org/10.1001/archpsyc.1989.01810110013002>
- Evers, K. E., Prochaska, J. O., Van Marter, D. F., Johnson, J. L., & Prochaska, J. M. (2007). Transtheoretical-based bullying prevention effectiveness trials in middle schools and high schools. *Educational Research*, 49, 397–414. <http://dx.doi.org/10.1080/00131880701717271>
- Fiore, M. C., & Tobacco Use and Dependence Clinical Practice Guideline Panel, Staff, and Consortium Representatives. (2000). A clinical practice guideline for treating tobacco use and dependence: A U.S. Public Health Service report. *Journal of the American Medical Association*, 283, 3244–3254. <http://dx.doi.org/10.1001/jama.283.24.3244>
- Friedman, M. J., Keane, T. M., & Resick, P. A. (Eds.). (2014). *Handbook of PTSD: Science and practice* (2nd ed.). New York, NY: Guilford Press.
- Gaffan, E. A., Tsaousis, I., & Kemp-Wheeler, S. M. (1995). Researcher allegiance and meta-analysis: The case of cognitive therapy for depression. *Journal of Consulting and Clinical Psychology*, 63, 966–980. <http://dx.doi.org/10.1037/0022-006X.63.6.966>
- Hall, K. L., & Rossi, J. S. (2008). Meta-analytic examination of the strong and weak principles across 48 health behaviors. *Preventive Medicine: An International Journal Devoted to Practice and Theory*, 46, 266–274. <http://dx.doi.org/10.1016/j.ypped.2007.11.006>
- Hall, S. M., Tsoh, J. Y., Prochaska, J. J., Eisendrath, S., Rossi, J. S., Redding, C. A., . . . Gorecki, J. A. (2006). Treatment for cigarette smoking among depressed mental health outpatients: A randomized clinical trial. *American Journal of Public Health*, 96, 1808–1814. <http://dx.doi.org/10.2105/AJPH.2005.080382>
- Hollis, J. F., Polen, M. R., Whitlock, E. P., Lichtenstein, E., Mullooly, J. P., Velicer, W. F., & Redding, C. A. (2005). Teen reach: Outcomes from a randomized, controlled trial of a tobacco reduction program for teens seen in primary medical care. *Pediatrics*, 115, 981–989. <http://dx.doi.org/10.1542/peds.2004-0981>
- Howard, K. I., Kopta, S. M., Krause, M. S., & Orlinsky, D. E. (1986). The dose-effect relationship in psychotherapy. *American Psychologist*, 41, 159–164. <http://dx.doi.org/10.1037/0003-066X.41.2.159>
- Howard, K. I., Lueger, R. J., Maling, M. S., & Martinovich, Z. (1993). A phase model of psychotherapy outcome: Causal mediation of change. *Journal of Consulting and Clinical Psychology*, 61, 678–685. <http://dx.doi.org/10.1037/0022-006X.61.4.678>
- Huey, S. J., Jr., & Jones, E. O. (2013). Improving treatment engagement and psychotherapy outcomes for culturally diverse youth and families. In F. A. Paniagua & A.-M. Yamada (Eds.), *Handbook of multicultural mental health* (pp. 427–444). San Diego, CA: Elsevier Academic Press. <http://dx.doi.org/10.1016/B978-0-12-394420-7.00022-9>
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, 59, 12–19. <http://dx.doi.org/10.1037/0022-006X.59.1.12>
- Johnson, J. L., Prochaska, J. O., Paiva, A. L., Fernandez, A. C., Dewees, S. L., & Prochaska, J. M. (2013). Advancing bodies of evidence for population-based health promotion programs: Randomized controlled trials and case studies. *Population Health Management*, 16, 373–380. <http://dx.doi.org/10.1089/pop.2012.0094>
- Kazdin, A. E. (2018). *Innovations in psychosocial interventions and their delivery: Leveraging cutting-edge science to improve the world's mental health*. New York, NY: Oxford University Press. <http://dx.doi.org/10.1093/med-psych/9780190463281.001.0001>
- Kazdin, A. E., & Rabbitt, S. M. (2013). Novel models for delivering mental health services and reducing the burdens of mental illness. *Clinical Psychological Science*, 1, 170–191. <http://dx.doi.org/10.1177/2167702612463566>
- Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. E., . . . Zaslavsky, A. M. (2005). Prevalence and treatment of mental disorders, 1990 to 2003. *The New England Journal of Medicine*, 352, 2515–2523. <http://dx.doi.org/10.1056/NEJMs043266>
- Krebs, P., Norcross, J. C., Nicholson, J. M., & Prochaska, J. O. (2018). Stages of change and psychotherapy outcomes: A review and meta-analysis. *Journal of Clinical Psychology*, 74, 1964–1979.
- Krebs, P., Prochaska, J. O., & Rossi, J. S. (2010). A meta-analysis of computer-tailored interventions for health behavior change. *Preventive Medicine: An International Journal Devoted to Practice and Theory*, 51, 214–221. <http://dx.doi.org/10.1016/j.ypped.2010.06.004>
- Laforge, R. G., Velicer, W. F., Levesque, D. A., Fava, J. L., Hill, D. J., Schofield, P. E., . . . Conner, M. (1998). Measuring support for tobacco control policy in selected areas of six countries. *Tobacco Control*, 7, 241–246. <http://dx.doi.org/10.1136/tc.7.3.241>
- Levesque, D. A., Ciavatta, M. M., Castle, P. H., Prochaska, J. M., & Prochaska, J. O. (2012). Evaluation of a stage-based, computer-tailored

- adjunct to usual care for domestic violence offenders. *Psychology of Violence*, 2, 368–384. <http://dx.doi.org/10.1037/a0027501>
- Levesque, D. A., Van Marter, D. F., Schneider, R. J., Bauer, M. R., Goldberg, D. N., Prochaska, J. O., & Prochaska, J. M. (2011). Randomized trial of a computer-tailored intervention for patients with depression. *American Journal of Health Promotion*, 26, 77–89. <http://dx.doi.org/10.4278/ajhp.090123-QUAN-27>
- Lichtenstein, E., & Hollis, J. (1992). Patient referral to a smoking cessation program: Who follows through? *The Journal of Family Practice*, 34, 739–744.
- Linnan, L. A., Emmons, K. M., Klar, N., Fava, J. L., LaForge, R. G., & Abrams, D. B. (2002). Challenges to improving the impact of worksite cancer prevention programs: Comparing reach, enrollment, and attrition using active versus passive recruitment strategies. *Annals of Behavioral Medicine*, 24, 157–166. http://dx.doi.org/10.1207/S15324796ABM2402_13
- Lipschitz, J. M., Paiva, A. L., Redding, C. A., Levesque, D., Rossi, J. S., Weisberg, R. B., & Prochaska, J. O. (2018). Development and preliminary psychometric evaluation of decisional balance and self-efficacy measures for managing anxiety in a national sample of clinically anxious adults. *American Journal of Health Promotion*, 32, 215–223. <http://dx.doi.org/10.1177/0890117116669493>
- Livesley, W. J., & Larstone, R. (Eds.). (2018). *Handbook of personality disorders: Theory, research, and treatment* (2nd ed.). New York, NY: Guilford Press.
- Luborsky, L., Diguier, L., Seligman, D. A., Rosenthal, R., Krause, E. D., Johnson, S., . . . Schweizer, E. (1999). The researcher's own therapy allegiances: A "wild card" in comparisons of treatment efficacy. *Clinical Psychology: Science and Practice*, 6, 95–106. <http://dx.doi.org/10.1093/clipsy/6.1.95>
- Luborsky, L., & Singer, B. (1975). Comparative studies of psychotherapies. Is it true that "everyon has one and all must have prizes"? *Archives of General Psychiatry*, 32, 995–1008. <http://dx.doi.org/10.1001/archpsyc.1975.01760260059004>
- Luepker, R. V., Murray, D. M., Jacobs, D. R., Jr., Mittelmarm, M. B., Bracht, N., Carlaw, R., . . . Folsom, A. R. (1994). Community education for cardiovascular disease prevention: Risk factor changes in the Minnesota Heart Health Program. *American Journal of Public Health*, 84, 1383–1393. <http://dx.doi.org/10.2105/AJPH.84.9.1383>
- Lundahl, B. W., Kunz, C., Brownell, C., Tolleson, D., & Burke, B. L. (2010). A meta-analysis of motivational interviewing: Twenty-five years of empirical studies. *Research on Social Work Practice*, 20, 137–160. <http://dx.doi.org/10.1177/1049731509347850>
- Lushniak, B. D., Samet, J. M., Pechacek, T. F., Norman, L. A., & Taylor, P. A. (2014). *The Health consequences of smoking—50 years of progress. A report of the Surgeon General*. US Department of Health and Human Services. Retrieved from <https://www.hhs.gov/surgeongeneral/reports-and-publications/tobacco/index.html>
- Mellinger, G. D., Balter, M. B., Manheimer, D. I., Cisin, I. H., & Parry, H. J. (1978). Psychic distress, life crisis, and use of psychotherapeutic medications: National household survey data. *Archives of General Psychiatry*, 35, 1045–1052. <http://dx.doi.org/10.1001/archpsyc.1978.01770330019001>
- Merikangas, K. R., He, J. P., Burstein, M., Swendsen, J., Avenevoli, S., Case, B., . . . Olfson, M. (2011). Service utilization for lifetime mental disorders in U.S. adolescents: Results of the National Comorbidity Survey-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, 50, 32–45. <http://dx.doi.org/10.1016/j.jaac.2010.10.006>
- Mokdad, A. H., Marks, J. S., Stroup, D. F., & Gerberding, J. L. (2004). Actual causes of death in the United States, 2000. *Journal of the American Medical Association*, 291, 1238–1245. <http://dx.doi.org/10.1001/jama.291.10.1238>
- Munder, T., Gerger, H., Trelle, S., & Barth, J. (2011). Testing the allegiance bias hypothesis: A meta-analysis. *Psychotherapy Research*, 21, 670–684. <http://dx.doi.org/10.1080/10503307.2011.602752>
- Muñoz, R. F., Bunge, E. L., Chen, K., Schueller, S. M., Bravin, J. I., Shaughnessy, E. A., & Pérez-Stable, E. J. (2016). Massive open online interventions: A novel model for delivering behavioral-health services worldwide. *Clinical Psychological Science*, 4, 194–205. <http://dx.doi.org/10.1177/2167702615583840>
- National Institute on Drug Abuse. (2013, March). *Substance abuse in the military*. Retrieved from <https://www.drugabuse.gov/publications/drugfacts/substance-abuse-in-military>
- Noar, S. M., Benac, C. N., & Harris, M. S. (2007). Does tailoring matter? Meta-analytic review of tailored print health behavior change interventions. *Psychological Bulletin*, 133, 673–693. <http://dx.doi.org/10.1037/0033-2909.133.4.673>
- Norcross, J. C., Hogan, T. P., Koocher, G. P., & Maggio, L. A. (2017). *Clinician's guide to evidence-based practices: Behavioral health and addictions* (2nd ed.). New York, NY: Oxford University Press. <http://dx.doi.org/10.1093/med:psych/9780190621933.001.0001>
- Norcross, J. C., Pfund, R. A., & Prochaska, J. O. (2013). Psychotherapy in 2022: A Delphi poll on its future. *Professional Psychology: Research and Practice*, 44, 363–370. <http://dx.doi.org/10.1037/a0034633>
- Norcross, J. C., & Wampold, B. E. (Eds.). (2019). *Psychotherapy relationships that work: Evidence-based therapist responsiveness*. New York, NY: Oxford University Press.
- Ogles, B. M., Lambert, M. J., & Sawyer, J. D. (1995). Clinical significance of the National Institute of Mental Health Treatment of Depression Collaborative Research Program data. *Journal of Consulting and Clinical Psychology*, 63, 321–326. <http://dx.doi.org/10.1037/0022-006X.63.2.321>
- Okiishi, J., Lambert, M. J., Nielsen, S. L., & Ogles, B. M. (2003). Waiting for supershrink: An empirical analysis of therapist effects. *Clinical Psychology & Psychotherapy*, 10, 361–373. <http://dx.doi.org/10.1002/cpp.383>
- Öst, L. G., Havnen, A., Hansen, B., & Kvale, G. (2015). Cognitive behavioral treatments of obsessive-compulsive disorder. A systematic review and meta-analysis of studies published 1993–2014. *Clinical Psychology Review*, 40, 156–169. <http://dx.doi.org/10.1016/j.cpr.2015.06.003>
- Owen, J., & Hilsenroth, M. J. (2014). Treatment adherence: The importance of therapist flexibility in relation to therapy outcomes. *Journal of Counseling Psychology*, 61, 280–288. <http://dx.doi.org/10.1037/a0035753>
- Paul, G. L. (1967). Strategy of outcome research in psychotherapy. *Journal of Consulting Psychology*, 31, 109–118. <http://dx.doi.org/10.1037/h0024436>
- Prochaska, J. J., Gill, P., & Hall, S. M. (2004). Treatment of tobacco use in an inpatient psychiatric setting. *Psychiatric Services*, 55, 1265–1270. <http://dx.doi.org/10.1176/appi.ps.55.11.1265>
- Prochaska, J. O. (1979). *Systems of psychotherapy: A transtheoretical analysis*. Chicago, IL: Dorsey.
- Prochaska, J. O. (2003). Treating entire populations for behavior risks for chronic diseases. *Homeostasis in Health and Disease*, 42, 1–12.
- Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, 51, 390–395. <http://dx.doi.org/10.1037/0022-006X.51.3.390>
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change. Applications to addictive behaviors. *American Psychologist*, 47, 1102–1114. <http://dx.doi.org/10.1037/0003-066X.47.9.1102>
- Prochaska, J. O., DiClemente, C. C., Velicer, W. F., & Rossi, J. S. (1993). Standardized, individualized, interactive, and personalized self-help programs for smoking cessation. *Health Psychology*, 12, 399–405. <http://dx.doi.org/10.1037/0278-6133.12.5.399>

- Prochaska, J. O., & Norcross, J. C. (2010). *Systems of psychotherapy: A transtheoretical analysis* (7th ed.). Pacific Grove, CA: Wadsworth/Cengage.
- Prochaska, J. O., & Norcross, J. C. (2018). *Systems of psychotherapy: A transtheoretical analysis* (9th ed.). New York, NY: Oxford University Press.
- Prochaska, J. O., & Prochaska, J. M. (2016). *Changing to thrive*. Center City, MN: Hazelden.
- Prochaska, J. O., Redding, C. A., & Evers, K. E. (2015). The transtheoretical model and stages of change. In K. Glanz, B. K. Rimer, & K. V. Viswanath (Eds.), *Health behavior: Theory, research, and practice* (pp. 125–148). San Francisco, CA: Jossey-Bass.
- Prochaska, J. O., & Velicer, W. F. (2004). Integrating population smoking cessation policies and programs. *Public Health Reports*, *119*, 244–252. <http://dx.doi.org/10.1016/j.phr.2004.04.003>
- Prochaska, J. O., Velicer, W. F., Fava, J. L., Rossi, J. S., & Tsoh, J. Y. (2001). Evaluating a population-based recruitment approach and a stage-based expert system intervention for smoking cessation. *Addictive Behaviors*, *26*, 583–602. [http://dx.doi.org/10.1016/S0306-4603\(00\)00151-9](http://dx.doi.org/10.1016/S0306-4603(00)00151-9)
- Prochaska, J. O., Velicer, W. F., Fava, J. L., Ruggiero, L., Laforge, R. G., Rossi, J. S., . . . Lee, P. A. (2001). Counselor and stimulus control enhancements of a stage-matched expert system intervention for smokers in a managed care setting. *Preventive Medicine*, *32*, 23–32. <http://dx.doi.org/10.1006/pmed.2000.0767>
- Prochaska, J. O., Velicer, W. F., Redding, C., Rossi, J. S., Goldstein, M., DePue, J., . . . Plummer, B. A. (2005). Stage-based expert systems to guide a population of primary care patients to quit smoking, eat healthier, prevent skin cancer, and receive regular mammograms. *Preventive Medicine: An International Journal Devoted to Practice and Theory*, *41*, 406–416. <http://dx.doi.org/10.1016/j.ypmed.2004.09.050>
- Prochaska, J. O., Velicer, W. F., Rossi, J. S., Redding, C. A., Greene, G. W., Rossi, S. R., . . . Plummer, B. A. (2004). Multiple risk expert systems interventions: Impact of simultaneous stage-matched expert system interventions for smoking, high-fat diet, and sun exposure in a population of parents. *Health Psychology*, *23*, 503–516. <http://dx.doi.org/10.1037/0278-6133.23.5.503>
- Project MATCH Research Group. (1993). Project MATCH: Rationale and methods for a multisite clinical trial matching patients to alcoholism treatment. *Alcoholism: Clinical and Experimental Research*, *17*, 1130–1145. <http://dx.doi.org/10.1111/j.1530-0277.1993.tb05219.x>
- Project MATCH Research Group. (1997). Matching alcoholism treatments to client heterogeneity: Project MATCH posttreatment drinking outcomes. *Journal of Studies on Alcohol*, *58*, 7–29. <http://dx.doi.org/10.15288/jsa.1997.58.7>
- Ricks, D. F. (1974). Supershrink: Methods of a therapist judged successful on the basis of adult outcomes of adolescent patients. In D. F. Ricks, A. Thomas, & M. Roff (Eds.), *Life history research in psychopathology: III*. Minneapolis, MN: University of Minnesota Press.
- Rogers, E. M. (2010). *Diffusion of innovations*. New York, NY: Simon & Schuster.
- Rosenzweig, S. (1936). Some implicit common factors in diverse methods of psychotherapy: "At last the Dodo said, 'Everybody has won and all must have prizes.'" *American Journal of Orthopsychiatry*, *6*, 412–415. <http://dx.doi.org/10.1111/j.1939-0025.1936.tb05248.x>
- Selye, H. (1974). *Stress without distress*. Philadelphia, PA: J. B. Lippincott.
- Sliter, H. (2009). Treatment barriers and stages of change among adolescents in psychotherapy. *Electronic Thesis or Dissertation*. Retrieved from <http://etd.ohiolink.edu/>
- Smith, M. L., & Glass, G. V. (1977). Meta-analysis of psychotherapy outcome studies. *American Psychologist*, *32*, 752–760. <http://dx.doi.org/10.1037/0003-066X.32.9.752>
- Smith, M. L., Glass, G. V., & Miller, T. I. (1980). *The benefits of psychotherapy*. Baltimore, MD: Johns Hopkins University Press.
- Soto, A., Smith, T. B., Griner, D., Domenech Rodríguez, M., & Bernal, G. (2018). Cultural adaptations and therapist multicultural competence: Two meta-analytic reviews. *Journal of Clinical Psychology*, *74*, 1907–1923. <http://dx.doi.org/10.1002/jclp.22679>
- Sue, D. W., Sue, D., Neville, H. A., & Smith, L. (2019). *Counseling the culturally diverse* (8th ed.). New York, NY: Wiley.
- Swift, J. K., Callahan, J. L., Cooper, M., & Parkin, S. R. (2018). The impact of accommodating client preference in psychotherapy: A meta-analysis. *Journal of Clinical Psychology*, *74*, 1924–1937.
- Swift, J. K., & Greenberg, R. P. (2012). Premature discontinuation in adult psychotherapy: A meta-analysis. *Journal of Consulting and Clinical Psychology*, *80*, 547–559. <http://dx.doi.org/10.1037/a0028226>
- Tsoh, J. Y. (1996). Stages of change, dropouts, and outcome in substance abuse treatment. *Dissertation Abstracts International: Section B: The Sciences and Engineering*.
- Velicer, W. F., Fava, J. L., Prochaska, J. O., Abrams, D. B., Emmons, K. M., & Pierce, J. P. (1995). Distribution of smokers by stage in three representative samples. *Preventive Medicine*, *24*, 401–411. <http://dx.doi.org/10.1006/pmed.1995.1065>
- Velicer, W. F., Redding, C., Paiva, A., Meier, K., Oatley, K., Babbitt, S., . . . Mauriello, L. (2012). Project Best: Tailored interventions for multiple risk factor prevention for adolescents. *International Journal of Behavioral Medicine*, *19*, S308.
- Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods, and findings*. New York, NY: Routledge.
- Wampold, B. E., Flückiger, C., Del Re, A. C., Yulish, N. E., Frost, N. D., Pace, B. T., . . . Hilsenroth, M. J. (2017). In pursuit of truth: A critical examination of meta-analyses of cognitive behavior therapy. *Psychotherapy Research*, *27*, 14–32. <http://dx.doi.org/10.1080/10503307.2016.1249433>
- Wampold, B. E., & Imel, Z. E. (2015). *The great psychotherapy debate: The research evidence for what works in psychotherapy* (2nd ed.). New York, NY: Routledge. <http://dx.doi.org/10.4324/9780203582015>
- Webb, C. A., Derubeis, R. J., & Barber, J. P. (2010). Therapist adherence/competence and treatment outcome: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *78*, 200–211. <http://dx.doi.org/10.1037/a0018912>
- Wierzbicki, M., & Pekarik, G. (1993). A meta-analysis of psychotherapy dropout. *Professional Psychology: Research and Practice*, *24*, 190–195. <http://dx.doi.org/10.1037/0735-7028.24.2.190>

Received May 5, 2019

Revision received September 18, 2019

Accepted September 20, 2019 ■