20

Integrating Research and Practice

LOUIS G. CASTONGUAY, MICHAEL J. CONSTANTINO, AND HENRY XIAO

The history of modern psychotherapy can be traced through many discontents and dismissals. Debates have flourished for years about the validity and usefulness of divergent theoretical models, as well as the role of different facets of treatment, such as relationship variables, technical factors, and participant characteristics. From our perspective, though, the most troublesome schism in our field has been the disconnect between researchers and practitioners. Most of these professionals belong to different communities of knowledge seekers, with relatively few engaging in fruitful collaboration despite converging interests and complementary expertise (Castonguay, 2011). This disconnect reflects *une indifference maladroite* (a clumsy indifference), which comes at a high price for understanding the complexity of psychopathology and improving the effectiveness of mental healthcare.

The consequences of this indifference, or practice–research gap, are manifold. In one direction rests the sad realization that the field has let the knowledge of clinicians drop through the holes of a colander (Kazdin, 2008). At its worst, this indifference might take the form of an empirical imperialism (Castonguay, 2011), where treatment and training guidelines rest primarily on the work of researchers. The irony, if not danger, of such unidirectional knowledge translation is its questionable assumption that the most valid information guiding practitioners to conduct therapy comes almost exclusively from individuals who tend to see few, if any, patients.

In the other direction resides the disconcerting, but persistent, belief that clinical judgment trumps empirical evidence and the corresponding notion that systematic research is largely irrelevant to the everyday clinical situation. Yet, the data are clear—clinical

predictions based solely on human judgment can be inaccurate, even when made by seasoned professionals (Garb, 2005), and data-supported predictions outperform clinical judgment alone (Hannan et al., 2005). Furthermore, naturalistic research robustly indicates that therapists differ in their effectiveness (Baldwin & Imel, 2013); yet therapists have been shown to overestimate their own success (Walfish et al., 2012). This unidirectional dismissal of research evidence can also prove dangerous to the patients we treat (Boswell et al., 2017).

The goal of this chapter is not to describe the reasons for the practice–research gap—much has already been written about this sad state of affairs (e.g., Goldfried & Wolfe, 1996; Parloff, 1982). Rather, our optimistic aim is to demonstrate the integration of research and practice by multiple efforts in collaboration and information sharing. This aim squares with that of recent initiatives, such as the "two-way" bridge project initiated by the American Psychological Association's Division 12 (Society of Clinical Psychology). This project, among others, highlights the practitioner's voice in the research process by surveying their experiences in delivering empirically supported treatments. (ESTs; e.g., Goldfried, 2011a, 2011b; Teachman et al., 2012). Through this mechanism, which mirrors the one in place in medicine, practitioners provide feedback on empirically supported treatments to other practitioners and researchers. This voice can illuminate the nuances of treatment efficacy and can help adapt and test ESTs to meet the demands of clinical reality.

We describe here several facets of *practice-oriented research* that rely, more or less tidily, on bidirectional partnership between researchers and practitioners. We believe that such partnership is an optimal vehicle to embody and actualize the integration of research and practice—an integration that might enhance the effectiveness and applicability of psychotherapy. We also believe that *research–practice integration* may hold promise for stimulating meaningful advances in *psychotherapy integration* more broadly as the inputs from such advances will come from many conceptual, clinical, and epistemological angles.

DEFINING PRACTICE-ORIENTED RESEARCH

Most research has been guided by the researchers' interests, which are largely shaped by graduate training, peer review, and institutional reward structures. It is no wonder that researchers pursue projects that are likely to earn them academic tenure, federal grants, and journal citations rather than the gratitude of clinical practitioners. From the beginning, then, although researchers and practitioners may share keen interest in the subject of psychotherapy, the nature of psychotherapy research is often driven by questions that may not be at the forefront of clinicians' preoccupations. Statements of directly applicable practice implications are usually restricted to a few aspirational lines in the discussion section of a journal article—a section that many practitioners may never reach, if they start to read the article at all.

With the academic landscape and reward structure, the researcher's overarching goal is often to maximize internal validity, which increases the perceived scientific rigor of the work. Internal validity is inherently stronger when research is conducted in controlled settings and under standardized conditions. These methodological controls include specific patient inclusion and exclusion criteria, manualized treatment protocols, and systematic checks for therapist adherence and competence to the method under study. Historically, when clinicians are involved in a research study, their primary task has been to implement with fidelity (according to predetermined parameters) procedures designed and manualized by the investigators.

Contrary to this top-down approach, *practice-oriented research* (POR) is conducted within naturalistic clinical settings where clinicians are practicing as usual. It addresses questions that are of utmost relevance to clinicians' concerns, and efforts are made, both in study design and implementation, to avoid major impositions and burdens on clinical routine (e.g., no attempted manipulations of therapist behavior, limited patient exclusion criteria, no onerous measurement battery). To achieve these goals,

this bottom-up approach relies on various levels of practitioner involvement beyond the delivery of externally scripted procedures. In fact, most POR has emerged from collaboration between researchers and practitioners where the knowledge and expertise of *both* participants are valued as necessary assets for scientifically rigorous and clinically impactful studies.

Although POR represents a philosophical and methodological shift from most traditional research on psychotherapy, these two empirical strategies are not inherently antagonistic. To the contrary, one could argue that both are necessary for developing a comprehensive and translatable knowledge base (Barkham & Margison, 2007; Barkham et al., 2010; Sobell, 1996). Because of their complementary nature, these scientific strategies can compensate for the other's limitations; for example, POR emphasizes external or ecological validity, while traditional designs emphasize internal validity. Furthermore, when similar findings are obtained (about between-therapist effects, for example) in each of the two epistemological routes, we can place more confidence in the results. In addition, having more research guided by diverse sources of expertise and interest will, by necessity, broaden the scope of our scientific radar.

Whereas practitioners can certainly learn from full-time researchers (e.g., about process–outcome correlations, patient factors that moderate an effect of treatment on an outcome), there are also clinical phenomena and realities to which full-time clinicians have unique access. Thus, POR provides opportunities to define, measure, and investigate topics that might otherwise remain unexplored were clinicians not involved in deciding what to study and how best to study it.

POR can take many forms (Castonguay, Barkham, Lutz, & McLeavey, 2013). These empirical efforts have been differentiated into three, more or less, distinct types: patient-focused, practice-based, and practice–research network (PRN). In what follows, we provide a few examples of findings that have emerged from the first two types of POR. We then pay special attention to PRN studies as they tend to involve more extensive collaboration between researchers and clinicians and fruitful integration of psychotherapy research and practice.

PATIENT-FOCUSED RESEARCH

This type of POR centers on typically large samples of patients receiving psychotherapy in naturalistic settings. Spurred by the work of Kenneth Howard, it marked a departure from the predominant attention of traditional outcome research, or what has frequently be referenced as "randomized clinical trials." Rather than investigating what types of therapy work (typically in comparison to other types and in a tightly controlled and therefore less ecologically valid manner), patient-focused research examines *how* change occurs over treatment, either for a given patient or on average across patients.

An exemplar of patient-focused research is a study of the dose–effect model, which examines the relation between the number of sessions attended and patient improvement. In an early study, Howard and colleagues (1986) found that patients, on average, demonstrated a decrease in symptoms with every session, with 50% judged as "improved" by their eighth session. The researchers also found that improvement occurred, on average, more rapidly in the earlier sessions, with perhaps diminishing returns later. These findings not only inform practitioners about a particularly beneficial window of change in practice, but can also inform treatment policies within healthcare systems. In fact, when the first author of this chapter (LGC) presented these results at an administrative meeting during the first week of his clinical internship, the clinic administrators changed the policy on session limit from six to eight.

Further specifying change patterns in routine practice, another study by Howard and colleagues (1993) revealed that significant improvement takes place within two sessions with respect to patient-rated well-being. Reductions in symptomatic distress and improvements in life functioning, however, occur more gradually.

This study also showed that change in psychotherapy is generally contingent on the success of the previous phase of improvement: decrease of *general* distress (or remoralization) precedes the decrease of specific symptoms (or remediation), which in turn precedes the decreases of maladaptive functioning (or rehabilitation). Clinicians might draw on these results to shape a patient's expectation about the course and outcome of his or her therapy and to develop a treatment plan that capitalizes on these change sequences.

The dose–effect and phase models have varied across later studies. They are, for example, affected by the patient's severity level (e.g., Lambert, Hanson, & Finch, 2001; Stulz & Lutz, 2007). The dose–effect association can also be moderated by treatment setting, further indicating the need to gather data from diverse settings (Lambert et al., 2001).

The investigation of patient change patterns has also provided valuable tools to meet clinicians' most important ethical duty to "do no harm." Unfortunately, between 5% and 10% of adult patients will deteriorate during the course of treatment (albeit not always because of treatment), with an even higher harm rate for patients with substance abuse (Castonguay et al., 2010; Lambert, 2010). There is also evidence that clinicians tend to underestimate the rate of deterioration in their own caseloads and, to make matters worse, that they are inaccurate in predicting which of their own patients are likely to deteriorate (Hannan et al., 2005).

Multiple practice-oriented investigations, however, have shown that providing therapists with feedback about their patients' progress can help mitigate the deterioration problem. In a landmark study, Lambert and colleagues (2001) showed that routinely monitoring outcome and providing progress feedback (including alert signals for patients at risk of deteriorating) during routine care significantly reduced deterioration (and increased improvement) for patients failing to progress (i.e., not-on-track patients). In a subsequent investigation, adding clinical support tools (i.e., brief strategies to facilitate alliance quality, patient motivation, social support, and possible need for medication) to the therapist feedback for their not on track patients further decreased deterioration and promoted improvement (Whipple et al., 2003).

These are only a few examples of studies conducted in naturalistic settings (with no manipulation of the types of therapy) that have demonstrated the value of outcome monitoring and clinical feedback (see Lambert, Whipple, & Kleinstäuber, 2019). As a whole, the findings suggest that routinely collecting a patient's outcome data, feeding back the information to the therapist, and offering support tools improves outcomes for that particular case, particularly for patients at risk for deterioration. Put differently, patient-level feedback can improve patient-level outcomes.

Although this patient-level research says little about improving therapists' *overall* effectiveness across all patients, it does point to the ability to affect change with *individual* patients for whom outcomes are routinely monitored. Such practices can be implemented without imposing drastic changes to the way clinicians practice, such as shifting theoretical orientations or adhering closely to manualized interventions. Rather, therapists of all theoretical persuasions can request that their patients regularly complete a brief measure over the course of treatment. Then, to maximize the effect, therapists commit to using such information to improve psychotherapy, as opposed to viewing it as ancillary, or even irrelevant, assessment information (de Jong et al., 2012).

PRACTICE-BASED RESEARCH

Displaying a broader palette of investigations, practice-based research has focused less intensively on how patients change and more on how different components of clinical practice can influence such change. The first of these components is the *therapist* him- or herself. In a typical RCT, therapist differential effectiveness represents a variable (or noise) to be reduced—or at least controlled—in order to keep everything equal except the treatments being compared. By contrast, therapists have been viewed in POR as legitimate contributors

to outcome, with the recognition that *therapist-level* results can and should inform training, practice, and healthcare policy (Boswell et al., 2017).

Empirical research has now robustly confirmed what many have repeatedly observed but would rarely admit publicly: therapists differ from each other in their average effectiveness across the patients in their caseloads. More specifically, this so-called *therapist effect* explains approximately 5–8% of outcome variance (Castonguay & Hill, 2017). This effect is even more pronounced in naturalistic settings compared with RCTs (where standardized treatment delivery is emphasized) and for patients with greater impairment (where the challenge of the case may render general variability in therapist skill more clinically vital than with less severe or more "straightforward" cases; Barkham et al., 2017). Put bluntly, not all therapists are the highly effective generalists that they believe themselves to be (Walfish et al., 2012).

Some studies have also suggested that therapists may possess relative strengths and weaknesses *within their own practice* depending on their patients' presenting problem; that is, many clinicians may be particularly effective at treating certain problems or personalities than others, even if they are unaware of this specialization (Kraus et al., 2011). Although it remains unclear whether therapist effects are primarily a matter of general competence or domain-specific skills (Constantino et al., 2017; Wampold et al., 2017), it seems reasonable to suggest that therapists (and their patients) could benefit from identifying what therapists are particularly good at (and perhaps what they could teach others) and what they are less good at (and thus can learn from others). Only by knowing their outcomes can clinicians harness information about their own efficacy in relation to other clinicians—and their own strengths and weaknesses in relation to themselves—to improve their practice.

Research advances have also been made in identifying potential determinants of between-therapist differences in effectiveness. To date, at least four of such promising variables may account for part of the therapist effect: facilitative interpersonal skill, self-doubt, deliberative practice, and fostering good therapeutic relationships (Wampold et al., 2017). Although, again, such work on therapist effects determinants is just emerging, the following tentative implications can be derived:

> As ways to increase their effectiveness, therapists should strive to become better at developing, maintaining, and repairing the alliance with clients. They should also make use of and enhance their verbal and emotional expressiveness, motivational skills (persuasiveness and hopefulness), warmth and empathic attitude, and problem focus. Moreover, they should adopt and/or maintain a sense of humility toward their ability to help their clients. When not working with clients, therapists should also repeatedly and consistently devote time to improve their work, such as thinking about difficult cases, preparing and reflecting upon sessions, and attending training workshops. (Hill & Castonguay, 2017, p. 328).

It is difficult to imagine clinicians not being interested in the practice-based findings that have emerged so far demonstrating the importance of therapists themselves! It is also difficult to underestimate the practical implications of these findings, including how we select candidates into graduate programs, which competencies we teach, which videotaped examples and live models students might emulate, who should teach coursework, who should supervise students, and so forth.

In addition to investigating the effectiveness of therapists, practice-based researchers have examined the effectiveness of *services*, *centers*, and *practices*. Some studies conducted in the United Kingdom have focused on the naturalistic delivery of theoretical orientations that have tended to receive less attention in RCTs, such as person-centered and psychodynamic-interpersonal therapies (Gibbard & Hanley, 2008; Paley et al., 2008). This is an example of how the complementarity of practice-oriented research and traditional research (where cognitive-behavior therapy [CBT] approaches have been given predominant emphasis) can

increase the breadth of scientific investigations in psychotherapy. Two large studies conducted in the United Kingdom have found the outcomes of CBT, person-centered therapy, and psychodynamic therapy to be fairly similar in National Health Service routine practice (Stiles et al., 2006, 2008).

Assessing the effectiveness of treatment centers or practices, however, has not been restricted to the work of UK practice-based researchers. For example, as part of a 40-year-old practice and training infrastructure based in Argentina (Aiglé Foundation), clinicians have conducted several studies, on their own and in collaboration with researchers from other countries, on the impact of therapy (as delivered in natural settings) for specific disorders (see Fernández-Alvarez, Gómez, & Garcia, 2015). For at least two decades, in the United States, Persons and colleagues have examined the impact of cognitive therapy for depression in private practice (Persons et al., 1988, 2006).

Other researchers have examined the outcomes of a residential treatment for adolescents and young adults with substance abuse problems. They discovered, first, that their services did not address a specific problem of their patients (i.e., high level of anger). They then demonstrated that the implementation of a therapeutic approach specifically targeting this problem (rational-emotive behavior therapy) substantially improved their therapists' ability to reduce it (Adelman, 2006; Adelman et al., 2015).

Practice-based research, however, has not been restricted to the measurement of treatment effectiveness. Mirroring other efforts to understand how therapy works, process studies have drawn on datasets collected in practice settings, examining the contribution of relationship variables, characteristics of the therapist, characteristics of the patient, and interactions among such factors. As a case in point, some research conducted at the Aiglé Foundation in Argentina has investigated the role of process and participant characteristics, such as the focus of therapy, alliance quality, therapist personal style, and the interaction between therapist and patient characteristics (Fernández-Alvarez et al., 2015).

Within the previously mentioned residential treatment setting where clinicians delivered rational-emotive behavior therapy, another study demonstrated that a positive association between alliance quality and patient outcome was moderated by patient attachment history. Specifically, the facilitative effect of a good alliance was stronger for patients with more problematic attachment, thereby suggesting a corrective interpersonal experience for patients most in need of one (Zack et al., 2015). Underscoring the importance of such process studies conducted in practice settings, this study suggests that two constructs historically emphasized in psychodynamic therapy (attachment and alliance) might explain part of how CBT works, again underscoring the way in which practice-based research can promote treatment and theory integration.

Practice-based research has also been conducted on training psychotherapy. As a prime example, Koerner created a participatory research community allowing clinicians to learn evidence-backed interventions (e.g., behavioral activation skills, two-chair techniques) in their own clinical settings (for details, see Koerner & Castonguay, 2015). This type of research is particularly noteworthy considering the paucity of studies that have been conducted on training (Hill & Knox, 2013), especially in clinicians' own settings.

One could argue that almost all translational research is practice-based research. Moving research evidence from science to service, from the (lab) bench to the bedside, necessarily involves practitioners in collaboration with researchers. *Translation(al) research* inclusively refers to the process of moving research-supported discoveries into established practice and policy. The thousands of translational studies in healthcare and hundreds in psychotherapy involve first *dissemination*, entailing raising awareness of resources and their availability, particularly the supporting research evidence, and then *implementation*, which involves getting research-supported methods routinely used in practice. The consistent take-home lesson from these legions of naturalistic studies is that effective

translation involves both practitioners and researchers working together from the beginning (Norcross et al., 2017; Straus et al., 2010). Researchers unilaterally imposing methods onto practitioners is not likely to be an optimal way to foster therapeutic change; neither is clinicians practicing in the absence of, or in conflict with, robust research.

PRACTICE-RESEARCH NETWORK

Practice-based research covers a broader range of topics than patient-focused studies, but PRNs have gone even further in expanding the scope of investigations. PRNs are defined as a formal collaboration among a system of practitioners and clinical scientists to investigate questions of high relevance to the practitioner while drawing on the methodological know-how of the researchers. Networks can vary in size, but all have in common the goal to conduct salient research in ecologically valid settings to promote clinically actionable results (Borkovec et al., 2001).

PRNs directly address a wide array of phenomena of interest to practitioners who, as equal partners, have a voice on the selection, design, implementation, and dissemination of joint empirical projects. In its optimal form, the PRN is an antidote to empirical imperialism. Going beyond research translation (from the controlled environments of academia to the murky ground of clinical reality), PRNs foster a synergetic combination of expertise and experience, a shared ownership of ideas and data, and a full respect for epistemological complementarity.

PRN infrastructures have evolved in a diversity of mental health communities, and we describe next a sample of empirical fruits that have emerged from four clinical settings (training clinics, private practices, community centers, and university counseling centers) and two professional organizations (American Psychiatric Institute for Research and Education, National Drug Abuse Treatment Clinical Trials Network).

Training Clinic PRNs

Early in graduate school, most psychotherapy trainees learn the hard way that research and clinical work are demanding activities and that they are also mostly unrelated. Both of these activities require their own separate time, each is aimed at meeting distinct academic and professional goals, and when students are engaged in one of them they are frequently navigating in a conceptual land foreign to the other. Conducting statistical analyses and preparing for a therapy session do not just feel like wearing two hats; it feels more like wearing different parts of an outfit that, for the most part, do not match.

Such a dichotomous way of learning, however, is not necessary for the early professional development of clinical researchers. Systematically integrating clinical and research activities protects the most precious commodity of graduate students (time) and fosters an early attachment to the scientist-practitioner or scholar-practitioner model.

One way to achieve such integration is to transform psychology training clinics into a PRN in which students can conduct their master's and doctoral theses (or any research) at the same time—and in the same environment—where they complete their supervised clinical work. An example of a training clinic PRN is the one created in the adult track of the clinical psychology program at Penn State University (Castonguay et al., 2015). This infrastructure is anchored in key components: (1) the adoption and standardized implementation of assessment instruments that are helpful to clinical case formulations *and* that are essential to research in many labs, (2) the creation of a clinic/research committee to review research proposals from the perspective of multiple stakeholders (students, faculty, clinic staff, local practitioners), and (3) an agreement with the Office of Research Protection, which allows for Institutional Review Board approval for requests to access data collected in the clinic. We next describe a few exemplar research projects emanating from the Penn State training clinic PRN.

One master's thesis (Nordberg et al., 2014) focused on whether specific change patterns observed in managed care could also reflect the change profiles of patients seen by novice therapists. Replicating previous findings (Stulz et al., 2007), the results indicated that a substantial number of patients begin therapy with a high level of depression, but that they eventually split into two groups: one in which patients showed rapid response as therapy progressed, and another in which patients maintained their high level of distress. Furthermore, the study identified clinical factors that predicted membership in the second group, such as high levels of suicidality and social conflicts.

Another master's thesis examined trainee self-reported use of empirically supported interventions (via the Multitheoretical List of Therapeutic Intervention; McCarthy & Barber, 2009) in relation to patient-rated session helpfulness (Boswell, Castonguay, & Wasserman, 2010). The intervention profiles correlated neither with their self-identified theoretical preference nor the theoretical orientation espoused (and taught) by their supervisors. By contrast, the use of some techniques did relate to the patients' perceived session helpfulness—but in a nuanced way. Specifically, patients whose therapist *typically* used high levels of common factor relational interventions (e.g., warmth, acceptance) perceived sessions to be less helpful than when the therapist shifted to using more cognitive-behavioral interventions in those sessions. Although these findings are preliminary and unique to one treatment setting, they provide an example of how research conducted within a training clinic PRN can begin to reveal ways in which clinician behavior relates to patients' session outcomes. Replication, of course, is warranted.

Importantly to the core mission of PRNs, such studies were conducted under both research and clinical oversight. The clinical research committee approval of these studies attested that they were investigating clinically relevant issues in a way that did not disturb the clinical routine nor impose undue burdens to therapists, patients, and clinical staff. In addition, also consistent with the PRN mission, such findings can directly inform future practice in this, or perhaps similar, training settings (Castonguay, Pincus, et al., 2015).

Private Practice PRNs

PRNs primarily involving independent practitioners form a conduit for them to reconnect with their interest in conducting research (Borkovec et al., 2001). This has certainly been one of the motivations of the members of the Pennsylvania Psychological Association (PPA) PRN, which emerged after years of friendly but heated dialogues about the value of knowledge derived from research between Tom Borkovec, a full-time academician, and Steve Ragusea, a full-time clinician. As a way to settle their debate, they agreed to test whether it would be possible to find therapists interested in collecting data in their independent practices that would also be relevant to it. At the launch of their infrastructure, they gathered practitioners from across the state for a meeting, created committees related to specific topics (e.g., assessment measures, ethics), and set up a collaborative process to select, design, and implement research projects and to analyze and disseminate the results.

For the first PPA-PRN study, more than 50 clinicians investigated the feasibility of adopting a standardized outcome measure in their day-to-day practice. They also aggregated the data obtained to assess patient improvement, as well as to examine variables related to such change. They met their primary goal of feasibility by successfully implementing the routine outcome monitoring process across several independent practices, a process that has since been established as an evidence-based practice (Boswell et al., 2015; Lambert et al., 2019). While being cautious about the implications of their findings, they found evidence for the positive impact of therapy conducted in private practice. They also identified factors that may foster or interfere with therapeutic benefits, such as the number of patients in a therapist's caseload and patients' interpersonal problems prior to treatment (Borkovec et al., 2001; Ruiz et al., 2004).

For the second PPA-PRN study (Castonguay, Boswell, Zack, et al., 2010), a smaller group of

therapists designed a research project centered on a inquiry voiced by one of the clinicians: "At the end of every session, I would like to know if there are things that happened that my client found helpful and/or hindering." Then, for the next 18 months, practitioners invited their new patients to participate in a study in which they would document helpful or hindering events that took place during the prior session. Therapists also documented what they saw as helpful or hindering. Analyses of close to 1,500 events revealed that, for both therapist and patients, the most frequent type of helpful event was an increase in patients' self-awareness. The second most frequent helpful event for therapists (who represented a variety of theoretical orientations) were those that involved the strengthening of the therapeutic relationship. Results also indicated that the most prominent focus or content of helpful events (reported by the patients and the therapists) was the therapeutic interaction. Interestingly, relatively few hindering events were reported, but the most prominent focus of these events (reported by both patients and therapists) was, again, the therapeutic interaction.

When therapists were interviewed about their participation in this PRN study (Castonguay, Nelson et al., 2010), one of the benefits was that the helpful/hindering event form completed by their patients provided them with helpful feedback about how to be best attuned to those patients' needs. This is an example of a clinically syntonic investigation that, to us, is an optimal characteristic of POR. (A clinically syntonic study is one that simultaneously serves both research and clinical purposes.)

The results of the interviews conducted with the clinicians guided the choice and design of a third PPA-PRN study: feedback provided by patients at the end of every session. Rather than using open-ended questions about helpfulness, a decision was made to use the Multitheoretical List of Therapeutic Intervention as a measure of interventions used by therapists and a brief measure of session impact. Preliminary findings showed that the interventions (rated by the therapists and the patients) that were more strongly and consistently related to positive impact were interventions common to most, if not all, orientations (Castonguay et al., 2014).

The three studies conducted to date in the PPA-PRN were designed and implemented by a relatively small number of therapists. This has imposed obvious limitations on uncovering the scope of clinicians' interests, not only in terms of sample sizes and statistical power to test some questions, but also in the variety of interests and expertise among the PRN membership. Fortunately, a large private practice PRN has been developed in Canada, which sheds some light on these matters (Tasca et al., 2015).

In a flagship study, 41 survey items were developed following focus groups comprising 82 psychotherapists and then administered to more than 1,000 participants, mostly practicing clinicians, to be rated on perceived importance to clinical work. Unsurprisingly, the respondents were most interested in the therapeutic relationship, mechanisms of change, therapist and patient factors, and professional development. The lowest ranked items may have been perceived as externally driven or imposed, such as technological interventions, progress monitoring, manuals, and matching patients and therapists; these issues are perhaps comparatively distant from the actual process of therapy. Thus, the use of PRNs becomes even more clearly synergistic: just as clinicians have room to voice unique insights and interests, dissemination of research to practitioners can become more organic.

Community Center PRNs

Another example of partnership, the Practice & Research: Advancing Collaboration (PRAC; Garland & Brookman-Frazee, 2015), has convened researchers and clinicians working in publicly funded community centers. The first phase of this project examined the treatment of children with disruptive behavior problems in naturalistic settings. After months of work on the questions, methods, and feasibility of the study, the collaboration collected data on more than 3,000 therapy sessions conducted by more than 80 therapists and with more than 200 patients across six clinical sites. One of the goals

of this ambitious study was to investigate how much the interventions used in clinical routine are consistent with evidence-based principles of change for children with disruptive behavior problems and their families.

Perhaps not surprisingly, the coding of more than 1,200 sessions showed a generally low level of convergence between usual care and evidence-based practice. A possible exception was cognitive-behavioral and behavioral therapists who, consistent with other findings (Stewart & Chambless, 2007), showed higher level of compliance with cognitive and behavioral techniques, which are often considered to be empirically supported (Brookman-Frazee et al., 2010). However, as a sign of openness to a diversity of knowledge and action, a second-phase PRAC is focused on the training and supervision, in community settings, of evidence-based practices (Garland & Brookman-Frazee, 2015).

University Counseling Center PRNs

If the inclusion of six clinical sites allowed for the planning and implementing of ambitious studies in the PRAC partnership, so, too, has the adoption of standardized assessment instruments by more than 500 university counseling centers that are members of the Center for Collegiate Mental Health (CCMH). CCMH is a large PRN infrastructure that has relied on the shared interest of stakeholders (clinicians, faculty members, graduate students, administrators, information science and technological experts, industry partners, and funders) in understanding the mental health difficulties of college students. It has described services delivered in counseling centers, developed clinical tools to inform practitioners' work, provided information that can assist counseling centers' self-advocacy purposes, and conducted research relevant to the needs of and treatment provided to college students (Castonguay, Locke, & Hayes, 2011; Locke et al., 2012). Although each counseling center owns the data it collects as part of its routine care, data across centers are aggregated in a repository centrally managed at Penn State University. At this time, the aggregation has produced a sample size of more than 150,000 new patients per year, as well as several thousands of psychotherapists.

The early research efforts conducted in CCMH focused on the psychometric validation of its main assessment tools, difficulties experienced by minority students, and predictors of utilization of counseling services (McAleavey et al., 2015). More recently, psychotherapy has taken center stage. One study showed that students who received counseling over a 6-week period reported a significant reduction of academic distress (Lockard et al., 2012). Over the same period, a group of students recruited via a research pool at the same university did not. Going one step further, another study provided evidence—for the sake of skeptical members in our field, as much as for the sense of self-efficacy of CCMH stakeholders—that individual psychotherapy in a counseling centers produces substantial improvement in a broad array of psychological problems (McAleavey et al., 2019). Despite the fact that treatments are of shorter duration in counseling centers, the level of change observed for distressed patients is similar to what has been observed in RCTs, with more change occurring for individuals experiencing the highest levels of distress.

Other CCMH studies have examined patient factors that relate to the process of change (e.g., Boswell et al., 2012; Nordberg et al., 2016), and yet others have investigated problems in mental care treatment: dropout and session nonattendance (e.g., Xiao, Castonguay, et al., 2017; Xiao, Hayes, et al., 2017).

Recent studies have also explored questions related to between-therapist effects, and these have provided new directions to CCMH stakeholders to improve its services. For example, Hayes and colleagues (2016) found that some therapists are more effective with racial and ethnic minority patients than with white patients, that others show the reverse pattern, and that some are highly effective with both racial/ethnic groups. Another study demonstrated that between-therapist variability explains a particularly large amount of outcome variance in the treatment of a clinical problem that is

significant on college campuses: alcohol abuse (Youn et al., 2015).

From a research perspective, the findings of these studies help us to specify the therapist's contribution to outcomes above and beyond what we can glean from the population of patients at large. From a practice perspective, these findings can inform best therapeutic practices. We hope to identify "super-shrinks" (those, for example, with multicultural expertise and with particular competence in treating alcohol problems), examine their clinical work, and use the results of these examinations as the basis for future clinical guidelines in terms of training, practice, and research.

Professional Organization PRNs

A number of PRNs have emerged from professional and scientific organizations, and we highlight the infrastructure (and some empirical contributions) of two of them. The American Psychiatric Institute for Research and Education (APIRE) was originally conceived as a means to gather systematic and longitudinal data to inform the development of the American Psychiatric Association's practice guidelines (West et al., 2015). Starting with nearly 800 psychiatrists, the APIRE is now a PRN that largely recruits clinician participants through randomly selected samples from the American Medical Association Physician Masterfile. As stated by West and colleagues (2015), the engagement of practitioners in this research partnership has led to valuable scientific benefits.

> Our experience in developing the PRN and conducting practice-based research has demonstrated that involving clinicians in the research enterprise significantly enhances the quality of the research. In addition to their primary contribution of participating in and implementing the actual studies which are fielded, our clinician collaborators have helped us to strengthen our research enterprise and efforts by: (i) Identifying and selecting topics that are clinically relevant and important; (ii) ensuring that studies are designed to optimize feasibility and success; and (iii) facilitating dissemination of findings. The input and participation of our clinician collaborators have proven to be particularly valuable in improving the quality, feasibility, and strength of our studies through their generous contributions of time, expertise, and valuable insights to strengthen our research. (p. 153).

Among its research initiatives, the APIRE PRN has fostered the investigation of specific patient disorders and their treatments, including treatment-resistant patients with schizophrenia and children and adolescents with attention deficit hyperactivity disorder, depression, and posttraumatic stress disorder (PTSD). These studies have allowed for empirical analysis on what kinds of treatments, including therapy and medications, were being used and where there was room for improvement in administering evidence-based treatments. For example, among treatment-resistant patients with schizophrenia, two-thirds of psychiatrists considered long-acting injectable medications to be effective for treatment, but fewer than one-fifth of their patients were actually prescribed these medications (West et al., 2008). Additional studies have examined patient characteristics and psychiatric treatments across public and private treatment settings, comorbidity patterns in routine psychiatric care, and race/ethnicity variations in diagnosis and treatment.

The National Institute on Drug Abuse (NIDA) has also maintained a PRN in the form of its National Drug Abuse Treatment Clinical Trials Network (Tai et al., 2010). Much of the extensive research (more than 270 published journal articles as of 2011) that has emerged from this infrastructure focuses on the efficacy of pharmacologic treatments, but there are also several studies providing research on psychotherapeutic and behavioral treatments. These include research on the process and effectiveness of brief strategic family therapy for adolescents with substance abuse and delinquency problems (Szapocznik et al., 2015).

Research within this Clinical Trial Network is structured to be collaborative, efficient, and effective. Projects can start with discussion and planning at a regional "node," such as around a clinic-based practitioner or university-based researcher. Collaboration occurs both within

these nodes between researchers and providers and also between nodes, as many research projects seek at least three nodes to increase external validity. This partnership is exemplified in its steering committee, comprising equal representation of practitioners and researchers at each node. When a potential project is ready for implementation, the NIDA is responsible for approval and support. Finally, clinical training for research protocols and data/statistical efforts are overseen by a centralized management.

FUTURE DIRECTIONS

As surveyed in this chapter, POR has focused on many dimensions of psychotherapy and a wide range of variables (e.g., patient and therapist characteristics, relationship and technical factors). Although the complexity of psychotherapy intrinsically calls for the investigation of many issues, we believe that it is more important to end this chapter by emphasizing the need to develop further practitioner and researcher partnerships than to identify specific topics for future investigations. There are three reasons to do so.

First, because the three authors of this chapter "live" in Babel towers of academia, proposing a list of research topics would be a perpetuation, albeit nonmalevolent, of empirical imperialism—where researchers have historically driven the agenda of what should be studied. We believe that delineating of contents of future POR is best done collaboratively by clinicians and researchers together. And this also applies to the delineation of directions regarding how to do future practice-oriented research. Fortunately, the voices of both clinicians and researchers (from countries across three continents) have been pulled together in a recent series of papers created to guide future partnerships by identifying benefits, obstacles, and strategies to cope with them and general recommendations for designing and implementing POR in various clinical settings (Castonguay & Muran, 2015).

The second reason to emphasize the need for more POR is that this type of investigation offers a unique pathway for the actualization of scientific knowledge about psychotherapy. As previously mentioned, POR complements some of the restrictions and limitations of traditional research. Encouraging this knowledge acquisition is therefore likely to be a fruitful strategy to build more robust, broader, and more valid empirical foundations for our field (Barkham & Margison, 2007; Barkham et al., 2010).

The third reason is that, in the mainstream territories of practice and training guidelines, POR may also promote the viability of psychotherapy integration. It is well known that the credibility of a professional tradition is based in part on its scientific foundations. It is also well established that a large percentage of clinicians identify themselves as integrationists, but integrative therapies have received less research attention than prominent "pure-form" treatments. By promoting the full engagement of practitioners in the design and implementation of research, especially within their own work environments, many future studies will investigate topics directly related to integrative practice. We believe that the futures of POR and psychotherapy integration are closely linked and that such nesting can only benefit the science-practitioner and scholar-practitioner models underlying our field.

References

Adelman, R. W. (2006). The angry adolescent and constructivist REBT. In P. Cummins (Ed.), *Working with anger: A constructivist approach* (pp. 99–113). London: Wiley & Sons.

Adelman, R. W., Castonguay, L. G., Kraus, D. R., & Zack, S. E. (2015). Conducting research and collaborating with researchers: The experience of clinicians in a residential treatment center. *Psychotherapy Research, 25*, 108–120.

Baldwin, S. A., & Imel, Z. E. (2013). Therapist effects: Findings and methods. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (pp. 258–297). Hoboken, NJ: Wiley.

Barkham, M., Lutz, W., Lambert, M. J., & Saxon, D. (2017). Therapist effects, effective therapists, and the law of variability. In L. G. Castonguay

& C. E. Hill (Eds.), *Therapist effects: Toward understanding how and why some therapists are better than others* (pp. 13–36). Washington, DC: American Psychological Association Press.

Barkham, M., & Margison, F. (2007). Practice-based evidence as a complement to evidence-based practice: From dichotomy to chiasmus. In C. Freeman & M. Power (Eds.), *Handbook of evidence-based psychotherapies: A guide for research and practice* (pp. 443–476). Chichester, UK: Wiley.

Barkham, M., Stiles, W. B., Lambert, M. J., & Mellor-Clark, J. (2010). Building a rigorous and relevant knowledge base for the psychological therapies. In M. Barkham, G. E. Hardy, & J. Mellor-Clark (Eds.), *Developing and delivering practice-based evidence: A guide for the psychological therapies* (pp. 21–61). Chichester: Wiley.

Borkovec, T. D., Echemendia, R. J., Ragusea, S. A., & Ruiz, M. (2001). The Pennsylvania practice research network and future possibilities for clinically meaningful and scientifically rigorous psychotherapy research. *Clinical Psychology: Science and Practice, 8*, 155–167.

Boswell, J. F., Castonguay, L. G., & Wasserman, R. H. (2010). Effects of psychotherapy training and intervention use on session outcome. *Journal of Consulting and Clinical Psychology, 78*, 717–723.

Boswell, J. F., Kraus, D. R., Constantino, M. J., Bugati, M., & Castonguay, L. G. (2017). The implications of therapist effects for routine practice, policy, and training. In L. G. Castonguay & C. E. Hill (Eds.), *Therapist effects: Toward understanding how and why some therapists are better than others* (pp. 309–323). Washington, DC: American Psychological Association Press.

Boswell, J. F., Kraus, D. R., Miller, S., & Lambert, M. J. (2015). Implementing routine outcome assessment in clinical practice: Benefits, challenges, and solutions. *Psychotherapy Research, 25*, 6–19.

Boswell, J. F., McAleavey, A. A., Castonguay, L. G., Locke, B. D., & Hayes, J. A. (2012). Previous mental health service utilization and change in counseling clients' depressive symptoms. *Journal of Counseling Psychology, 59*, 368–378.

Brookman-Frazee, L., Haine, R. A., Baker-Ericzen, M., Zoffness, R., & Garland, A. F. (2010). Factors associated with use of evidence-based practice strategies in usual care youth psychotherapy. *Administration and Policy in Mental Health and Mental Health Services Research, 37*, 254–269.

Castonguay, L. G. (2011). Psychotherapy, psychopathology, research and practice: Pathways of connections and integration. *Psychotherapy research, 21*, 125–140.

Castonguay, L. G., Barkham, M., Lutz, W., & McAleavey, A. A. (2013). Practice-oriented research: Approaches and application. In M. J. Lambert (Eds.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (6th ed.) (pp. 85–133). New York: Wiley.

Castonguay, L. G., Boswell, J. F., Constantino, M. J., Goldfried, M. R., & Hill, C. E. (2010). Training implications of harmful effects of psychological treatments. *American Psychologist, 65*, 34–49.

Castonguay, L. G., Boswell, J. F., Zack, S., Baker, S., Boutselis, M., Chiswick, N., . . . Grosse Holtforth, M. (2010). Helpful and hindering events in psychotherapy: A practice research network study. *Psychotherapy, 47*, 327–344.

Castonguay, L. G., Eubanks-Carter, C., Goldfried, M. R., Muran, J. C., & Lutz, W. (2015). Research in psychotherapy integration: Relevance of the past and necessity for the future. *Psychotherapy Research, 25*, 365–382.

Castonguay, L. G., & Hill, C. E. (2017). (Eds.). *Therapist effects: Toward understanding how and why some therapists are better than others.* Washington, DC: American Psychological Association Press.

Castonguay, L. G., Locke, B. D., & Hayes, J. A. (2011). The Center for Collegiate Mental Health: An example of a practice-research network in university counseling centers. *Journal of College Student Psychotherapy, 25*, 105–119.

Castonguay, L. G., & Muran, J. C. (2015). Fostering collaboration between researchers and clinicians through building practice-oriented research: An introduction. *Psychotherapy Research, 25*, 1–5.

Castonguay, L., Nelson, D., Boutselis, M., Chiswick, N., Damer, D., Hemmelstein, N., . . . Borkovec, T. (2010). Clinicians and/ or researchers? A qualitative analysis of therapists' experiences in a practice research network. *Psychotherapy, 47*, 345–354.

Castonguay, L. G., Pincus, A. L., & McAleavey, A. A. (2015). Practice-research network in a psychology training clinic: Building an infrastructure to foster early attachment to the

scientific-practitioner model. *Psychotherapy Research, 25,* 52–66.

Castonguay, L. G., Youn, S. J., McAleavey, A. A., Boswell, J. F., Boutselis, M., Braver, M., . . . O'Leary, W. (2014, June). *The use of empirically based techniques in day-to-day practice: Does it matter and if so, for whom?* Paper presented at the annual meeting of the Society for Psychotherapy Research, Copenhagen, Denmark.

Constantino, M. J., Boswell, J. F., Coyne, A. E., Kraus, D. R., & Castonguay, L. G. (2017). Who works for whom and why? Integrating therapist effects analysis into psychotherapy outcome and process research. In L. G. Castonguay & C. E. Hill (Eds.), *Therapist effects: Toward understanding how and why some therapists are better than others* (pp. 55–68). Washington, DC: American Psychological Association Press.

de Jong, K., van Sluis, P., Nugter, M. A., Heiser, W. J., & Spinhoven, P. (2012). Understanding the differential impact of outcome monitoring: Therapist variables that moderate feedback effects in a randomized clinical trial. *Psychotherapy Research, 22,* 464–474. doi: 10.1080/10503307.2012.673023

Fernández-Alvarez, H., Gómez, B., & García, F. (2015). Bridging the gap between research and practice in a clinical and training network: Aigle's program. *Psychotherapy Research, 25,* 84–94.

Garb, H. N. (2005). Clinical judgment and decision making. *Annual Review of Clinical Psychology, 1,* 67–89.

Garland, A. F., & Brookman-Frazee, L. (2015). Therapists and researchers: Advancing collaboration. *Psychotherapy Research, 25,* 95–107.

Gibbard, I., & Hanley, T. (2008). A five-year evaluation of the effectiveness of person-centred counselling in routine clinical practice in primary care. *Counselling and Psychotherapy Research, 8,* 215–222.

Goldfried, M. R. (2011a). Building a two-way bridge between research and practice. *The Clinical Psychologist, 63,* 1–3.

Goldfried, M. R. (2011b). Generating research questions from clinical experience: Therapists' experiences in using CBT for panic disorder. *The Behavior Therapist, 34,* 57–62.

Goldfried, M. R., & Wolfe, B. E. (1996). Psychotherapy practice and research: Repairing a strained relationship. *American Psychologist, 51,* 1007–1016.

Hannan, C., Lambert, M. J., Harmon, C., Nielsen, S. L., Smart, D. W., Shimokawa, K., & Sutton, S. W. (2005). A lab test and algorithms for identifying clients at risk for treatment failure. *Journal of Clinical Psychology: In Session, 61,* 155–163.

Hayes, J. A., McAleavey, A. A., Castonguay, L. G., & Locke, B. D. (2016). Psychotherapist effects with white and racial/ethnic minority clients: First, the good news. *Journal of Counseling Psychology, 63,* 261–268.

Hill, C. E., & Castonguay, L. G. (2017). Therapist effects: Integration and conclusions. In L. G. Castonguay & C. E. Hill (Eds.), *Therapist effects: Toward understanding how and why some therapists are better than others* (pp. 325–341). Washington, DC: American Psychological Association Press.

Hill, C. E., & Knox, S. (2013). Training and supervision in psychotherapy. In M. J. Lambert (Eds.), *Bergin and Garfield's Handbook of psychotherapy and behavior change* (sixth edition) (pp. 775–812). New York: Wiley.

Howard, K. I., Kopta, M., Krause, M. S., & Orlinsky, D. E. (1986). The dose-effect relationship in psychotherapy. *American Psychologist, 41,* 159–164.

Howard, K. I., Lueger, R. J., Maling, M. S., & Martinovich, Z. (1993). A phase model of psychotherapy: Causal mediation of outcome. *Journal of Consulting and Clinical Psychology, 61,* 678–685.

Kazdin, A. E. (2008). Evidence-based treatment and practice: New opportunities to bridge clinical research and practice, enhance the knowledge base, and improve patient care. *American Psychologist, 63,* 146–159.

Koerner, K., & Castonguay, L. G. (2015). Practice-oriented research: What it takes to do collaborative research in private practice. *Psychotherapy Research, 25,* 67–83.

Kraus, D. R., Bentley, J. H., Alexander, P. C., Boswell, J. F., Constantino, M. J., Baxter, E. E., & Castonguay, L. G. (2016). Predicting therapist effectiveness from their own practice-based evidence. *Journal of Consulting and Clinical Psychology, 84,* 473–483.

Kraus, D. R., Castonguay, L. G., Boswell, J. F., Nordberg, S. S., & Hayes, J. A. (2011). Therapist effectiveness: Implications for accountability and patient care. *Psychotherapy Research, 21,* 267–276.

Lambert, M. J. (2010). *Prevention of treatment failure: The use of measuring, monitoring, and*

feedback in clinical practice. Washington, DC: American Psychological Association.

Lambert, M. J., Hansen, N. B., & Finch, A. E. (2001). Patient-focused research: Using patient outcome data to enhance treatment effects. *Journal of Consulting and Clinical Psychology, 69*, 159–172.

Lambert, M. J., Whipple, J. L., & Kleinstäuber, M. (2019). Collecting and delivering feedback. In J. C. Norcross & M. J. Lambert (Eds.), *Psychotherapy relationships that work* (3rd ed.). Volume 1. New York: Oxford University Press.

Lambert, M. J., Whipple, J. L., Smart, D. W., Vermeersch, D. A., Nielsen, S. L., & Hawkins, E. J. (2001). The effects of providing therapists with feedback on client progress during psychotherapy: Are outcomes enhanced? *Psychotherapy Research, 11*, 49–68.

Lockard, A. J., Hayes, J. A., McAleavey, A. A., & Locke, B. D. (2012). Change in academic distress: Examining differences between a clinical and nonclinical sample of college students. *Journal of College Counseling, 15*, 233–246. doi: 10.1002/j.2161-1882.2012.00018.x

Locke, B. D., Bieschke, K. J., Castonguay, L. G., & Hayes, J. A. (2012). The Center for Collegiate Mental Health (CCMH): Studying college student mental health through an innovative research infrastructure that brings science and practice together. *Harvard Review of Psychiatry, 20*, 233–245.

McAleavey, A. A., Lockard, A. J., Castonguay, L. G., Hayes, J. A., & Locke, B. D. (2015). Building a practice research network: Obstacles faced and lessons learned at the center for collegiate mental health. *Psychotherapy Research, 25*,134–151.

McAleavey, A. A., Youn, S. J., Xiao, H., Castonguay, L. G., Hayes, J. A., & Locke, B. D. (2019). Effectiveness of routine psychotherapy: Methods matters. *Psychotherapy Research, 29*, 139–156.

McCarthy, K. S., & Barber, J. P. (2009). The Multitheoretical List of Therapeutic Interventions (MULTI): Initial report. *Psychotherapy Research, 19*, 96–113.

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: Oxford University Press.

Nordberg, S. S., Castonguay, L. G., Fisher, A. J., Boswell, J. F., & Kraus, D. (2014). Validating the rapid responder construct within a practice research network. *Journal of Clinical Psychology, 70*, 886–903,

Nordberg, S. S., Castonguay, L. G., McAleavey, A. A., Locke, B. D., & Hayes, J. A. (2016). Enhancing feedback for clinical use: Creating and evaluating profiles of clients seeking counseling. *Journal of Counseling Psychology, 63*, 278–293.

Paley, G., Cahill, J., Barkham, M., Shapiro, D. A., Jones, J., Patrick, S., & Reid, E. (2008). The effectiveness of psychodynamic-interpersonal psychotherapy in routine clinical practice: A benchmarking comparison. *Psychology and Psychotherapy: Theory, Research and Practice, 85*, 157–175.

Parloff, M. B. (1982). Psychotherapy research evidence and reimbursement decisions: Bambi meets Godzilla. *The American Journal of Psychiatry, 139*, 718–727. doi: 10.1176/ajp.139.6.718

Persons, J. B., Burns, D. D., & Perloff, J. M. (1988). Predictors of dropout and outcome in cognitive therapy for depression in a private practice setting. *Cognitive Therapy and Research, 12*, 557–575.

Persons, J. B., Roberts, N. A., Zalecki, C. A., Brechwald, W. A. G. (2006). Naturalistic outcome of case-formulation-driven cognitive-behavioral therapy for anxiety depressed outpatients. *Behaviour Research and Therapy, 44*, 1041–1051.

Ruiz, M. A., Pincus, A. L., Borkovec, T. D., Echemendia, R. J., Castonguay, L. G., & Ragusea, S. A. (2004). Validity of the inventory of interpersonal problems for predicting treatment outcome: An investigation with the Pennsylvania Practice Research Network. *Journal of Personality Assessment, 83*, 213–222. doi: 10.1207/s15327752jpa8303_05

Sobell, L. C. (1996). Bridging the gap between scientists and practitioners: The challenge before us. *Behavior Therapy, 27*, 297–320.

Stewart, R. E., & Chambless, D. L. (2007). Does psychotherapy research inform treatment decisions in private practice? *Journal of Clinical Psychology, 63*, 267–281.

Stiles, W. B., Barkham, M., Mellor-Clark, J., & Connell, J. (2008). Effectiveness of cognitive-behavioural, person-centered, and psychodynamic therapies in UK primary care routine practice: Replication with a larger sample. *Psychological Medicine, 38*, 677–688.

Stiles, W. B., Barkham, M., Twigg, E., Mellor-Clark, J., & Cooper, M. (2006). Effectiveness of cognitive-behavioural, person-centred, and psychodynamic therapies as practiced in UK

National Health Service settings. *Psychological Medicine, 36,* 555–566.

Straus, S. E., Richardson, W. S., Glasziou, P., & Haynes, R. B. (2010). *Evidence-based medicine: How to practice and teach EBM* (4th ed.). London: Elsevier.

Stulz, N., & Lutz, W. (2007). Multidimensional patterns of change in outpatient psychotherapy: The phase model revisited. *Journal of Clinical Psychology, 63,* 817–833.

Stulz, N., Lutz, W., Leach, C., Lucock, M., & Barkham, M. (2007). Shapes of early change in psychotherapy under routine outpatient conditions. *Journal of Consulting and Clinical Psychology, 75,* 864–874.

Szapocznik, J., Muir, J. A., Duff, J. H., Schwartz, S. J., & Brown, C. H. (2015). Brief strategic family therapy: Implementing evidence- based models in community settings, *Psychotherapy Research, 25,* 121–133.

Tai, B., Straus, M. M., Liu, D., Sparenborg, S., Jackson, R., & McCarty, D. (2010). The first decade of the National Drug Abuse Treatment Clinical Trials Network: Bridging the gap between research and practice to improve drug abuse treatment. *Journal of Substance Abuse Treatment, 38*(Suppl. 1), S4–S13.

Tasca, G. A., Sylvestre, J., Balfour, L., Chyurlia, L., Evans, J., Fortin-Langelier, B., . . . Wilson, B. (2015). What clinicians want: Findings from a psychotherapy practice research network survey. *Psychotherapy, 52,* 1–11.

Teachman, B. A., Drabick, D. G., Hershenberg, R., Vivian, D., Wolfe, B. E., & Goldfried, M. R. (2012). Bridging the gap between clinical research and clinical practice: Introduction to the special section. *Psychotherapy, 49,* 97–100. doi: 10.1037/a0027346

Walfish, S., McAlister, B., O'Donnell, P., & Lambert, M. J. (2012). An investigation of self-assessment bias in mental health providers. *Psychological Reports, 110,* 639–644. doi: 10.2466/02.07.17.

Wampold, B. E., Baldwin, S. A., Grosse Holtforth, M., Imel, Z. E. (2017). What characterizes effective therapists? In L. G. Castonguay & C. E. Hill (Eds.), *Therapist effects: Toward understanding how and why some therapists are better than others.* (pp. 37–53). Washington, DC: American Psychological Association Press.

West, J. C., Marcus, S. C., Wilk, J., Countis, L. M., Regier, D. A., & Olfson, M. (2008). Use of depot antipsychotic medications for medication nonadherence in schizophrenia. *Schizophrenia Bulletin, 34,* 995–1001.

West, J. C., Mościcki, E. K., Duffy, F. F., Wilk, J. E., Countis, L., Narrow, W. E., & Regier, D. A. (2015). APIRE Practice Research Network: Accomplishments, challenges, and lessons learned. *Psychotherapy Research, 25,* 152–165.

Whipple, J. L., Lambert, M. J., Vermeersch, D. A., Smart, D. W., Nielsen, S. L., & Hawkins, E. J. (2003). Improving the effects of psychotherapy: The use of early identification of treatment failure and problem solving strategies in routine practice. *Journal of Counseling Psychology, 58,* 59–68.

Xiao, H., Castonguay, L. G., Janis, R. B, Youn, S. J., Hayes, J. A., & Locke, B. D. (2017). Therapist effects on dropout from a college counseling center practice research network. *Journal of Counseling Psychology, 64,* 424–431.

Xiao, H., Hayes, J. A., Castonguay, L. G., McAleavey, A. A., & Locke, B. D. (2017). Therapist effects and the impacts of therapy non-attendance. *Psychotherapy, 54,* 58–65.

Youn, S. J., Xiao, H., Janis, R., Castonguay, L. G., Hayes, J., & Locke, B. (2015, June). *Therapist effects in naturalistic settings.* Paper presented at the annual meeting of the Society for Psychotherapy Research, Philadelphia, PA.

Zack, S. E., Castonguay, L. G., Boswell, J. F., McAleavey, A. A., Adelman, R., Kraus, D., & Pate, G. A. (2015). Attachment history as a moderator of the alliance outcome relationship in adolescents. *Psychotherapy, 52,* 258–267.