Published in final edited form as:

Psychotherapy (Chic). 2012 June ; 49(2): 97–100. doi:10.1037/a0027346.

Bridging the Gap Between Clinical Research and Clinical Practice: Introduction to the Special Section

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Abstract

This Special Section, developed by the American Psychology Association's Division 12 (Clinical) 2011 Committee on Science and Practice, highlights different ideas to help bridge the gap between clinical research and clinical practice, and notes recent innovations that help make research–practice integration feasible. The articles consider how to break down the barriers to enhance researcher–practitioner dialogue, as well as how to make ongoing outcome assessment feasible for clinicians. Moreover, the articles address how to promote training in evidence-based practice, and how to translate efficacy research into clinical practice and clinical insight into empirical study to better establish a two-way bridge between research and practice. Ultimately, we hope this series can speak to many different types of psychologists, whether they work mainly as researchers or practitioners, so they can see new ways to integrate and learn from both research and practice.

Keywords

research; practice; translation; outcome measurement; efficacy; effectiveness

Depending on whom you ask, you will get very different answers about how the field is doing at disseminating evidence-based treatments, and how effectively researchers and practitioners communicate and benefit from each other's work. The overarching goal of this Special Section is to highlight ways to build a bridge between researchers and practitioners, with an emphasis on practical applications to integrate research and practice. Too often, this is treated as a unidirectional issue with researchers feeling frustrated that their findings from basic science and randomized clinical trials are not being used in everyday practice. But, of course, the other direction is also paramount—how effectively do researchers partner with psychotherapists to learn from their experiences in practice, consider novel ways to communicate research findings, and codevelop interventions that have clear translational potential? Both sides can “win” with greater communication and connection. As Kazdin (2008) notes, “there are opportunities for a rapprochement between research and practice that will not only foster improved clinical care but will also develop and strengthen the knowledge base” (p. 147).

Concerns about the “scientist–practitioner gap” have been around for a long time (see Drabick & Goldfried, 2000; Kazdin, 2008). Not surprisingly, so too have efforts to address the gap, such as the now famous Boulder Model, which was designed to better integrate scientist and practitioner training in graduate programs for clinical psychology. Mischel (2008) points out that this model was developed fully half a century ago when few empirically supported interventions had been developed and “psychological science was still somewhere between its infancy and its turbulent adolescence” (p. i). Fortunately, much has changed since that time, and we suspect that most psychologists would agree that although psychology is a relatively young science, we have learned a lot about how to treat many different problem areas to help people make dramatic improvements in their lives. To what extent we have made headway on reducing the divide between research and practice is more controversial. In some respects, this is a question of whether you view the glass as half empty or half full.

On the one hand, those who feel optimistic cite the impressive evidence that many psychosocial interventions have a strong evidence base, indicating they are efficacious in controlled trials, effective in real world settings, and facilitate change that is cost-effective and enhances quality of life (see American Psychology Association Division 12's Web site detailing research-supported psychological treatments: <http://www.psychology.sunysb.edu/eklonsky/-division12/>). Moreover, the evidence for successful translation from efficacy to effectiveness has increased dramatically in recent years, with numerous studies showing comparable effect sizes across settings (see Addis et al., 2004; Barlow, Allen, & Basden, 2007; though see Henggeler, 2004). Further, these effects are substantial in many domains, suggesting considerable capacity to relieve suffering. For instance, Stiles, Barkham, Mellor-Clark, and Connell (2008) found a large effect size across a range of psychosocial treatments offered to patients receiving primary care services in the United Kingdom. Similarly, Minami et al. (2009) examined outcomes for treatment delivered at a university counseling center and found that “the treatment effect size estimate obtained at this counseling center ... was similar to treatment efficacy observed in clinical trials” (p. 309). These results provide support for the idea that patients receiving care outside of efficacy studies often show impressive outcomes.

On the other hand, those who feel pessimistic and view the scientist–practitioner gulf as widening (e.g., Mischel, 2008) argue that we have a long way to go to improve communication between researchers and practitioners to more effectively reduce the burden of mental illness. In particular, some have voiced concerns about whether clinicians are receptive to research on treatment outcome. Baker, McFall, and Shoham (2008) argue that “despite compelling research support for the merits of specific interventions for specific problems, clinical psychology, as a field, has failed ... to promote and disseminate them widely through training, or to ensure that they are available to the patients who need them” (p. 73; see also Crits-Christoph, Frank, Chambless, Brody, & Karp, 1995; Haas & Clopton, 2003; Hollon, Thase, & Marcovitz, 2002; Phillips & Brandon, 2004; Sanderson, 2003). Further, Chambless and Ollendick (2001) summarize and then consider counterpoints to some of the many arguments put forth by clinicians against the incorporation of empirically supported treatments, including the problematic idea that these intervention studies can be mostly ignored by those in practice because the research only reflects the narrow interests of a small, biased group of researchers and cannot translate into “real-world” practice.

Analogously, there are also reasons to feel both optimistic and pessimistic when judging whether researchers attend sufficiently to the work of clinicians. Westen, Novotny, and Thompson-Brenner (2004) argue that the field focuses too exclusively on the flow of knowledge from researchers to practitioners. They suggest that the emphasis on calls for greater dissemination of empirically supported treatments to clinicians, and assumptions that

effectiveness research necessarily follows laboratory-based randomized controlled trials, reflect a “unidirectional model of science and practice.” Arguing that the contributions of clinicians to the research endeavor are undervalued, they contend, “The implicit metaphor underlying this view is essentially a biomedical one (see Stiles & Shapiro, 1989), in which researchers develop new medications, which pharmaceutical companies then market to physicians, who are perceived as consumers” (p. 656).

As you will see in the articles in this Special Section, many people are working to enhance a more bidirectional model of science and practice. In addition to the important efforts to promote enhanced training in and use of research-supported psychological treatments, there are also exciting movements to increase clinicians' role in the research process. For instance, Louis Castonguay, Thomas Borkovec, and others have been developing Practice Research Networks that foster collaboration between clinicians and researchers to design naturalistic psychotherapy studies that take place in real-world clinical settings (see Castonguay et al., 2010). Westen and colleagues have made related attempts to use “practice as a natural laboratory” (Westen et al., 2004). More recently, as one of his key initiatives as President of Division 12, Marvin Goldfried has been surveying therapists about the factors that they find limit the effectiveness of using empirically supported treatments in their practice. This project is designed to enhance the clinicians' voice in research, and capitalize on their vast experience to generate testable hypotheses about ways to improve the effectiveness of interventions (see Goldfried, 2011).

To some extent, whether you see the glass as half full or half empty is a moot point. No one is arguing that we have effectively built a strong, two-way bridge between science and practice, and presumably we all want a full glass! Whether you are particularly concerned by the limited dissemination of evidence-based interventions, or you are a clinician who feels that many researchers are not developing interventions that you can effectively apply, or you just feel frustrated by the level of rancor in the science-practice debates, there is clearly a ways to go to improve communication among researchers and practitioners.

Moving Forward

Much has been tried before, and it is understandable that many practitioners and researchers are wary of yet another series of articles designed to reduce the gap. This problem does not have an easy fix, and arguments about what should count as evidence to guide evidence-based practice and the limits of randomized controlled trials for informing clinical practice are longstanding (see Chambless & Ollendick, 2001; Westen & Bradley, 2005; Westen et al., 2004, among others). However, as Kazdin (2008) notes, “Although efforts to bridge research and practice are not new, there are now special opportunities as improved treatments and measures have become available for clinical use and as the dialogue among those involved primarily in research or practice has increased (e.g., American Psychological Association, Presidential Task Force on Evidence-Based Practice, 2006; Goodheart, Kazdin, & Sternberg, 2006)” (p. 157). We agree that the time is right to provide a fresh perspective on how to bring researchers and practitioners closer together.

This Special Section is not about what people may be doing incorrectly and it is not meant to make anyone feel frustrated or guilty about the ways they are inadequate as a researcher or as a therapist. Instead, this set of papers is about the progress occurring in the field and how we can disseminate that progress more widely. Scientist–practitioner partnerships have been forming, conversations have been occurring, and data are being collected. This Special Section is about sharing some of the success stories and talking about how to make research–practice integration feasible. The articles address four key areas: how to enhance researcher–practitioner dialogue, how to make ongoing outcome assessment feasible for

practitioners, how to promote training in evidence-based practice, and how to translate efficacy research into clinical practice. Finally, the American Psychology Association's Division 12 (Clinical) Committee on Science and Practice offers a commentary on the special section by reflecting on the various levels of translation needed to better establish a two-way bridge between science and practice. Thus, we hope this series can both illustrate ways that clinicians can implement evidenced-based approaches in their practice, and also “ways researchers and clinicians may be able to collaborate to spin clinical yarn(s) into empirical gold” (Westen et al., 2004, p. 656).

Barry Wolfe (this issue, pp. 101–108) starts off the special section by using himself as a “guinea pig” to illustrate how researchers and practitioners can communicate more directly and seek common ground. In an entertaining two-chair dialogue, he highlights both the extreme versions of the research and therapist positions, and then seeks opportunities for synthesis and integration. Given his unusual background—he has been in independent practice for over 35 years, worked as a professor and scholar, and also administered grants on psychotherapy research at the National Institute of Mental Health for more than two decades—he is uniquely situated to highlight areas of convergence and divergence across clinical roles.

In the section on outcome assessment by practitioners, which outlines how to more readily incorporate ongoing assessment into clinical work, Soo Jeong Youn, David Kraus, and Louis Castonguay (this issue, pp. 115–122) and Michael Lambert (this issue, pp. 109–114) will each discuss the types of measures that can be used to help practitioners to collect their own data (see also Wise, 2004). Specifically, Youn and colleagues discuss the Treatment Outcome Package, whereas Lambert focuses on the Outcome Questionnaire sets (the OQ-Analyst), and they outline their programs for providing feedback for both clinicians and clients on progress throughout the course of therapy. In this way, clinicians can use a scientific approach to clinical care to monitor each client's progress and know if and when they need to change course (see Woody, Detweiler-Bedell, Teachman, & O'Hearn, 2002). This information is helpful for all types of clients and problem areas, and is especially critical when there is not a rich research literature to draw upon for a given case, so the interventions are necessarily based on less empirical evidence. These articles note how, in addition to enhancing clinical care, evaluating progress in a measurable way can have other important benefits for illustrating the value of an intervention to third-party payers, policymakers, and the general public, an important goal during this time of increasing demands for accountability (Goldfried, 2011). These papers provide clinicians with practical advice on how to integrate questionnaires into treatment as usual, and address concerns commonly raised by clinicians in independent practice, including how to increase client compliance and how to access the resources necessary to use these questionnaires.

Rachel Hershenberg, Deborah Drabick, and Dina Vivian (this issue, pp. 123–134) outline an evidence-based practice framework that can be applied to enhance graduate training in psychology so that the next generation of graduates will be less burdened by the schism between clinical practice and research. Using each of the components of evidence-based practice as a foundation (i.e., “best” research evidence, clinical expertise, and patient values and preferences), they describe areas of training to consider in this framework, such as coursework in assessment and intervention, opportunities for bridging practice and research in the training setting, supervision, and assessment and integration of client values and diversity into case conceptualization and treatment. Within each section, they provide practical approaches to enhance graduate training and promote better cohesion across clinical researcher and clinical practitioner roles.

In the section on optimizing translation of research findings into clinical practice, John Lochman and colleagues (this issue, pp. 135–142) outline their conceptual framework for the Coping Power Program, and how they have moved from efficacy to effectiveness research. This program, which targets the proximal risk factors for preadolescent children's aggressive behavior, is highlighted in this special section as an example of how to systematically adapt an established, well-validated program for different clinical contexts. For instance, after showing considerable success in controlled efficacy trials, the developers of the program are now examining variations in program delivery, including changes in dosage (e.g., varying number of sessions, inclusion of posttreatment booster sessions, and limiting parent involvement); format (e.g., group vs. individual treatment, and incorporating Internet programming); target population (e.g., age of children); and clinical setting (e.g., school-based vs. residential vs. outpatient clinics, etc.). Adaptations to other countries and languages are also described, along with discussion about how varying clinicians' training impacts program outcomes. Importantly, they report on attempted innovations that both improve and detract from outcomes to illustrate the value of carefully testing program modifications before widespread implementation. We include this piece as an exciting example of how a program that starts in the laboratory can be effectively adapted to meet the needs of practitioners, organizations, and families “on the ground.”

Last, the American Psychology Association's Division 12 (Clinical) Committee on Science and Practice offers a concluding commentary on the series (Vivian et al., this issue, pp. 143–151). This final article presents a model that outlines the many levels of translation needed to promote better integration of research and practice, and considers how each of these articles address unique and complementary translational goals. The article ends with a call for future research and practical initiatives so that the next half century will produce more optimists about our potential to reduce the scientist–practitioner gap. Our hope is that all psychologists, whether they work mainly as a researcher or practitioner, will see these worlds as integrated.

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