
What Kind of Research Can We Realistically Expect from the Practitioner?



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This article attempts to revitalize the scientist-practitioner model of psychotherapy by focusing on the research component of the model. Specifically, it takes a realistic look at the types of research that can be conducted by clinicians in an effort to motivate them to engage regularly in clinical

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research. Towards this end, five experienced scientist-practitioners explore the advantages, disadvantages, and potential of practitioner-initiated research. The problems and solutions for such research are discussed, and recommendations are offered. © 2002 Wiley Periodicals, Inc. *J Clin Psychol* 58: 1241-1264, 2002.

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Introduction

Perhaps the most well-known and most often-reported piece of evidence to document the existence of the gap between science and practice is the lack of research activity on behalf of practitioners (Barlow, 1981; Cullari, 1996; Talley, Strupp, & Butler, 1994). For a variety of reasons, practitioners are not typically involved with research, or alternatively they do not incorporate the thinking of researchers into their practice (Spengler, Strohmmer, Dixon & Shivy, 1995), which presents obstacles to actualization of the scientist-practitioner model. This article explores problems, advantages, and possibilities of practitioner-related research for the purpose of making it accessible to psychologists who are functioning primarily as clinicians. Such an effort obviously has to consider the specific limitations that clinicians as researchers face. These limitations include lack of time, lack of research funding, limited or no research training, limited motivation for research or few specific clinical research interests, and research limitations imposed by the naturalistic work setting.

Thus, discussion will focus on research that (a) is interesting to clinicians, their clients, and third parties, (b) is methodologically suitable to be conducted in real settings, and (c) is feasible to be conducted by clinicians in a systematic way. This article is based on a discussion group presented at the 2000 Annual Meeting of the Society for Psychotherapy Research in Chicago, Illinois. All participants are seasoned scientist-practitioners who were invited to contribute to issues of naturalistic research based on their related experiences. For the purposes of this article participants responded to the following short statement and related questions:

Despite the dominant philosophy of scientist-practitioner training and practice, it has been a consistent observation that the majority of clinicians do not get involved in research. Why is it important to have practitioners conducting research and what are the potential benefits and advantages of such research? What are the disadvantages and difficulties in practitioner-initiated research? What solutions do you propose, and what types of research questions and methodologies do you suggest to practitioners?

Participants were instructed to cover all aspects of the questions in their text, and place the emphasis in their responses wherever they wanted. Subsequently, contributors dealt with the same subject using slightly different structures and content emphasis, but in a complementary way. The basic parameters of this discussion are introduced by Marvin Goldfried (State University of New York at Stony Brook) and Louis Castonguay (Penn State University) who equally cover all three major issues/questions posed by the editor. Goldfried capitalizes on his life-long commitment to the scientist-practitioner model and provides an overview of the basic factors contributing to the issues under discussion, introducing the ideas of discovery-oriented and case-study research, and the value of collaboration between clinician and researcher. Castonguay complements these efforts, using autobiographical examples to highlight the importance of the scientist-practitioner role in an informative and entertaining way. Castonguay's contribution concludes with the description of a state-based research network for practitioners.

Michael Lambert (Brigham Young University), William Stiles (Miami University), and Joannis Nestoros (University of Crete) draw upon their own work and place their emphasis in their discussion on the most important question (i.e., recommendations to practitioners). Lambert describes the pros, cons, and the methods of what he defines as “patient-focused research”; that is, research concerned with the treatment outcome of the individual client. Stiles successfully makes the case for another important kind of practitioner-initiated research; that is, “interpretive research” (as opposed to hypothesis-testing research). Nestoros builds on his medical background to show how psychopharmacology and psychotherapy practice and research can be integrated in a scientist-practitioner approach to the treatment of severe mental disorders. Nestoros’ description of psychotherapy research with psychotic disorders focuses on the particularly interesting “client as co-author” model of case study research. The article concludes with final comments. It is hoped that these preliminary contributions will provide the foundation and inspiration to practitioners to consider, explore, and engage in various forms of naturalistic clinical research.

Georgios K. Lampropoulos

Marvin R. Goldfried

My comments on how clinical practice can inform clinical research are based on my active involvement in both of these activities. In the clinical realm, I maintain a limited practice of psychotherapy, teach the clinical practicum in our graduate program, and supervise psychotherapy within the Psychology Department Psychological Center. My research activities have involved conducting psychotherapy process and outcome studies, serving on an NIMH study section, and teaching the graduate course on psychotherapy theory and research within our clinical training program. In essence, I have been fortunate enough to live in both of these worlds, and to have obtained a perspective from each vantage point on how we may best understand and change human functioning. It is within this context that I have responded to the three questions that have been posed to us.

Why Is It Important to Have Practitioners Conducting Research and What Are the Potential Benefits and Advantages of Such Research?

Clinical work—particularly psychotherapy—may be viewed from both a clinical and empirical perspective. The former provides a close-up, individualized, but uncontrolled view of the phenomenon, whereas the latter allows us to make more general statements by exercising some degree of empirical control. By virtue of the first-hand nature of clinical observations, the practice setting can provide a very rich source of hypotheses for controlled empirical investigation. By having our research grow out of clinical observations rather than solely being based on past research findings, we increase the likelihood of studying relevant and important phenomenon. Otherwise, noted Bannister and Fransella (1971), we face the danger that research is totally “born out of the literature and, no doubt, will be buried in it” (p. 193).

In the 1970s, when behavior therapy began to recognize the importance of cognitive factors for understanding and changing human functioning—giving rise to what is now called cognitive-behavior therapy—it was in the clinical setting that such recognition began (Goldfried & Davison, 1994). Specifically, it was the result of practicing behavior therapists experiencing difficulties in using the originally available behavioral interventions that led to the development of more cognitive procedures. Only later did research findings offer confirmation of what originally had been observed clinically.

Neal Miller was once asked by Bergin and Strupp (1972) about how he managed to be so very successful in his research endeavors. In describing a research process that one rarely reads about in the literature, Miller emphasized that the first phase of research involves the “discovery” of a phenomenon, only after which the “confirmation” of its existence should be pursued. He confessed that he had in the past wasted a considerable amount of time by designing and implementing research studies to test something that was simply not there. The discovery phase as implemented by Miller involved taking shortcuts, following hunches, and trying out different ways of gaining an impressionistic understanding of the phenomenon. Only after he had convinced himself that something was there would he embark on devising a more tightly controlled investigation—so as to convince his colleagues.

In short, we may think of the clinical setting as consisting of the context of discovery, highlighting hypotheses that are worth investigating by researchers who operate within the context of confirmation. The distinction between the context of discovery and the context of confirmation in conducting psychotherapy research has been described in detail by Greenberg (1991).

What Are the Disadvantages and Difficulties in Practitioner-Initiated Research?

The idea that the clinical setting may be the starting point for research often works better in theory than in practice. There unfortunately is a long history of tension between clinicians and researchers, even to the point of outright antagonism. For example, one clinician came to the conclusion that it is only feasible to carry out research in psychotherapy if it is done “in the mechanical way that is so fashionable among many of our colleagues who are too frightened and too inept to establish an interpersonal relationship of the therapeutic variety with the patient” (Lehrer, 1981, p. 42). Many clinical researchers have comparable disdain for practitioners, viewing them as being totally disinterested in research findings and more involved in doing what feels comfortable for them.

With practitioners that are more favorably disposed toward clinical research, an important issue becomes that of time and motivation. This point has been underscored by Borkovec, who has been actively involved in enlisting the cooperation of therapists into a practice–research network (Goldfried, Borkovec, Clarkin, Johnson, & Parry, 1999). The initial motive that many of these practitioners had for participating in the network was a desire to reconnect with their scientific roots. Although that prompted them to join the group initially, Borkovec acknowledges that their motivation wanes, and more creative methods of keeping them involved are needed (e.g., financial incentives, continuing education credit). Parry, who has been involved in a comparable practice–research network in the United Kingdom, has similarly underscored the difficulty in maintaining ongoing motivation.

There are numerous other realistic limitations that simply do not make it feasible for the practitioner to conduct the kind of process-and-outcome research that currently characterizes the field. The current model of clinical trials necessitates a large number of participants and is often feasible only with external funding and collaboration among several researchers. Even if the practitioner had learned research methodology during his or her training, much of it is likely to have undergone changes and refinements since that time. Psychotherapy process research, which often most closely parallels the clinical interests of practitioners, is often far too labor-intensive to be feasible in a clinical setting where a certain number of contact hours must be met.

What Solutions Do You Propose, and What Types of Research Questions and Methodologies Do You Suggest to Practitioners?

With pressures for accountability coming from insurance companies, and with the field making attempts to document empirically supported therapies, there appears to be a renewed interest in forming a collaboration between researchers and clinicians. Perhaps more than ever in the past, this climate is more conducive to having clinicians become more actively involved in the research process. Because there are realistic factors that limit practitioners' ability to conduct the kind of research now done by clinical researchers, their research involvement must take a different form.

Certainly, one area in which practitioners can contribute to the research literature is with case studies. Indeed, there exist methodologies that make this feasible without unreasonable time demands being made on the clinician or client (e.g., Kazdin, 1981). By providing a series of replicated case studies, ordinary clinical practice can blend into "research," involving the pooling of clinical observations that practicing therapists often find so helpful when conferring with colleagues. A good way to think of this line of research has been suggested by Maletzky (1981), who observed: "It is a lonely and sometimes frightening task to face a patient and try to help; what a comfort it would be if our colleagues' experiences could always accompany us!" (p. 287).

Given the need for methodological and technical expertise in conducting any form of research within the clinical setting, it is reasonable to expect that this would be possible only through a collaboration between practitioner and researcher. One example of how this has been done is described by Sobell (1996), who worked together with practicing clinicians in developing and implementing a research program on the treatment of addictions. Practicing clinicians, having experience in working with addicted patients, were active participants in the development of the treatment procedures as well as their eventual implementation. This project proved to be a partnership in which there was an unusual degree of motivation and excitement by all involved.

Another way in which clinicians can provide an invaluable contribution to the research process is by providing feedback to clinical researchers regarding how well empirically supported or evidence-based interventions work in actual practice. When a drug has been approved by the FDA and is subsequently used for treatment, additional information is often fed back regarding how well it fares in the real clinical setting. Within the field of psychotherapy, the practitioner can provide similar feedback to researchers. This can readily be implemented within the context of continuing education workshops, which often present advances in treatment based on available research findings. After attending such workshops, clinicians can provide feedback as to how well these empirically based procedures work in real clinical settings, and what changes might need to be made and studied in order to enhance their effectiveness.

The need for collaboration between clinician and researcher cannot be over emphasized. As I indicated at the very outset, clinical observation and empirical research are but two different ways of looking at the same phenomenon. Some years ago, Garner, Hake, and Erikson (1956) wrote an article on research methodology that emphasized how our study of any given psychological phenomenon is constrained by the methodology that we used to study it. In order to learn more about the phenomenon without the confounding influence of our methods, they suggested that more than a single methodology be used—what they called "converging operations." I would suggest that clinical observation and empirical research be thought of in precisely this way. This is a very strong conviction I have held for some time, and have put it in the past as follows:

If one views the split between clinicians and researchers from outside the entire system, it becomes more evident that both groups are deluding themselves in thinking that they alone will advance the field. Stated more positively, it is perhaps more productive to conclude that both groups very much need each other. The experience and wisdom of the practicing clinician cannot be overlooked. But because these observations are often not clearly articulated, may be unsystematic or at times idiosyncratic, and are typically kept informal, it is less likely that these insights can add to a reliable body of knowledge. The growing methodological sophistication of the researcher, on the other hand, is in need of significant and ecologically valid subject material. Our knowledge about what works in therapy must be rooted in clinical observations, but it must also have empirical verification. For the researcher and clinician to ignore the contributions that each has to make is to perpetuate a system in which no one wins. (Goldfried & Padawer, 1982, p. 33)

Louis G. Castonguay

Why Is It Important to Have Practitioners Conducting Research and What Are the Potential Benefits and Advantages of Such Research?

To answer this question one needs to remind him/herself of the philosophical basis upon which applied psychology rests. Many individuals can and do practice psychotherapy. In fact, the title "therapist" is not legally protected. What distinguishes psychologists from the many other individuals that provide helping relationships is the fact that our practice (and the theories that guide it) is anchored in, or at least is influenced by, empirical findings. Of course, this does not mean that an "empirically inspired" practice always prescribes the best type of psychological interventions—practice based on other world views or epistemological assumptions (such as the counsel of a clergyman) may at times be of equal if not superior value. However, when one chooses to become a psychologist, he/she is ethically obliged to take into consideration relevant empirical findings in assessing and treating psychopathology.

One might also concede that we tend to be especially good at the things that we know particularly well. As Beutler once said about psychotherapy integration: "one can usually integrate . . . only those things with which one is familiar, skilled or comfortable" (quoted in Norcross, 1986, p. 87). Following the same logic, I would argue that the best way to know about clinical research is to do clinical research. Pursuing the argument a step further, I would also venture to say that the best way (although by no means the only one) for clinicians to take empirical findings into account in their day-to-day practice is by conducting research.

I continue to read empirical papers, as a clinician, primarily because the research that I have conducted with my colleagues and students has forced me to consider issues that were either absent from, or contradictory to, other sources of information available to me, such as classic books, treatment manuals, and clinical supervision. Over the years, my research efforts have suggested, for example, that the use of prescribed techniques in cognitive therapy may interfere with the process of change (Castonguay, Goldfried, Wiser, Raue, & Hayes, 1996), that in the same approach the client's emotional experiencing and the exploration of the past are associated with therapeutic change (Castonguay et al., 1996; Castonguay, Pincus, Agras, & Hines, 1998; Hayes, Castonguay, & Goldfried, 1996), that the therapist's focus on external circumstances, thoughts, and actions relate positively with outcome in psychodynamic therapy (Castonguay, Hayes, et al., 2000), and that different approaches may emphasize different ways of confronting a client's subjective view (i.e., "you are not responsible for your problems" vs. "you are responsible for your problems"), which may in turn have a different impact on outcome (Castonguay et al., 1990).

Conducting research has also led me to think about the clinical and theoretical implications of several psychometric, statistical, and methodological issues. For instance, having worked with instruments and coding systems that are less than perfectly reliable has led me to think twice before accepting unambiguous inferences (mine or those of my colleagues) about the process of change. In addition, I am now much less enthusiastic when I hear clinical prediction based on “significant findings” because I have seen in my own data that statistically significant results often explain only a small part of the variance, and that a significant effect can disappear when other variables are controlled for. Struggling with issues of internal validity also led me to question the meaning of what I previously considered obvious clinical observations (e.g., is the improvement of my clients mostly due to my “skillful” use of techniques or to factors related to history, maturation, regression to the mean, etc.?). These are important safeguards against the adoption of a complaisant and arrogant attitude in dealing with the complexity of psychotherapy. On the other hand, my first-hand experience with clinically significant changes, large effect sizes, and replications has allowed me to become more confident (again as a clinician and a researcher) about preliminary studies.

Conducting research has forced me to adopt a more balanced view toward many theoretical assertions, clinical observations, and empirical findings. Unexpected findings that emerge from both quantitative and qualitative analyses also led me to challenge my assumptions about what is happening in therapy and what facilitates change (or interferes with it). Not surprisingly, my research efforts have led me to change the way I practice and teach psychotherapy (Castonguay, 2000). I have remained a cognitive-behavior therapist, but I put more emphasis on the exploration of emotion and attachment patterns than I did during graduate school, when I was relying primarily on the advice of my supervisors and the reading of clinical literature. Moreover, I now deal with alliance ruptures in a way that is closer to interpersonal and humanistic therapy than cognitive therapy (see Constantino, Castonguay, & Schut, 2001). My practice has in turn influenced my research. Along with some of the research findings mentioned above, my experience with successful and unsuccessful cases has substantially informed the studies on integrative therapy for depression (Castonguay, Schut, Aikins, et al., 2000) and generalized anxiety disorder (Newman, Castonguay, Borkovec, & Molnar, in press) in which I am currently involved.

The synergistic effect of research and practice is quite clear in my professional life—to unearth an old cliché, research has made me a better clinician and practice has made me a more adept researcher. While such synergy is hardly surprising to me (both enterprises are complementary methods to better understand and facilitate change) it never ceases to fascinate me when I experience it and perhaps even more so when I see it taking place in the professional growth of my students.

What Are the Disadvantages and Difficulties in Practitioner-Initiated Research?

Researchers and clinicians live in different worlds. Considering the time required to design, conduct, and publish studies, it is easy to understand why clinicians may be reluctant to become actively involved in research. Such time requirements directly compete with their ability to generate income. No matter how important this real and pragmatic concern is, it still may not be the only reason for clinicians’ reluctance to engage in research. After all, it is not necessary for clinicians to spend several hours per week to be involved in some aspects of clinically relevant research. Some of the roots of this reluctance can also be found, I believe, in graduate training—it is in part the consequence of

a disrespectful attitude from faculty and students toward the true meaning of the scientific-practitioner model.

In research-oriented clinical psychology programs, it is not infrequent for students to be confronted with a dismissive attitude toward clinical work on the part of faculty members. This was certainly my experience at Stony Brook. During the first class I attended in graduate school, a very well-known faculty member argued that there were essentially three ways of acquiring knowledge: (a) accepting views of authority (e.g., religious dogma, theoretical writings such as Freud's); (b) attending to one's own subjective experience (i.e., phenomenology), and (c) observing facts (i.e., scientific knowledge, which according to my esteemed professor was the only real path toward truth!). Drawing from every bit of courage I could find and with a strong French Canadian accent (I was barely speaking English when I began graduate school), I audaciously commented that this view was "epistemologically naïve." Taking me aside at the end of the class, the professor told me that although I was obviously a smart person (his words, not mine), he was nonetheless concerned with my way thinking. "Louis," he said to me, "there are two types of psychologists: Those who like ideas and those who don't. Those who like ideas go into research and those who don't go into private practice."

A more subtle, yet perhaps more pervasive, disregard toward the Boulder model can be seen in the lack of full commitment to applied research in several major psychology departments. It would seem fair to say that most respected programs have at least one faculty member with expertise in information processing or learning theories. Many of these programs, however, do not have faculty in psychotherapy research (even though one could argue that this represents an important need for society, let alone a strong preference for undergraduate students thinking of a career in psychology). As a consequence, too many research projects conducted by clinical and counseling students have a tenuous link with clinical practice. Experiencing the reinforcements associated with clinically meaningful research (as well as learning ways to cope with the pain it involves) during graduate school is likely to be the best strategy for clinicians to continue to conduct research, even if only in a part-time way. And as I argued above, conducting research may be the best way to insure that one's practice is influenced by research. I have never met a clinician who told me that he/she has no interest whatsoever in research (in my view, this would be the equivalent of meeting somebody who openly acknowledge that he/she is not open-minded!).¹ I have met a fair number of clinicians, however, who when asked to fill out forms, assign questionnaires to their clients, or provide audiotapes of their sessions, showed less than grandiose enthusiasm (to say the least) about research. Understandably, factors such as limited time and a fear of negative evaluation certainly

¹As one anonymous reviewer pointed out, this may simply show that I do not hang out with psychoanalytic therapists, as many of them are not interested in psychotherapy research. As noted out elsewhere (Schut & Castonguay, 2001), however, maybe these therapists (and I count many friends among them) should become more cognizant of recent empirical advances. Several well-established research programs on the process and outcome of psychodynamic therapy have indeed provided strong support to many of Freud's theoretical assumptions (with regard to the nature and impact of transference, for instance). Empirical investigations have also challenged clinical notions that have been perceived as irrefutable in many psychodynamic milieus (such as the intrinsically mutative power of interpretations). Moreover, research has also demonstrated that therapeutic processes and methods first emphasized in the psychodynamic tradition may be responsible in part for the effectiveness of other treatment approaches (such as the working alliance, among others). The richness and clinical relevance of these findings led us to conclude that any doctoral program (psychodynamically oriented or not) anchored in the Boulder model should expose students to psychodynamically informed research (Schut & Castonguay, 2001). In line with the argument developed in this article, I would venture to go one step further and argue that any psychodynamic training programs, even those not devoted to the teaching of traditional scientific methods, should make place in their curriculum for the clinically informative knowledge that has emerged from the empirical investigation in psychodynamic therapy.

play a role in their reluctance. I am also convinced, however, that practitioners in general would be more inclined to participate in research projects if they had been mentored, as I was, by a psychotherapy researcher who continually referred to his findings when developing a treatment plan and constantly generated research ideas from his day-to-day clinical observations.

Some graduate students, who later become psychologists, also have a responsibility for the shaky bridge between science and practice. These are the students who are applying for a Ph.D. despite *rather than* because they will be conducting research. "I love research" is the most important and pervasive lie of a graduate school applicant. (For students applying to Penn State another lie is "I love small towns!") By knowingly entering into a Ph.D. program (as opposed to a Psy.D. program) without a real interest in research, these students show disrespect to the scientific side of the boulder model. I have never heard a Ph.D. candidate in philosophy say "I love philosophy, but I refuse to read Hegel, Sartre, or Kant because their work is irrelevant or too complicated!" I have never heard a medical student say "I love medicine but I can't stand the sight of blood!" Yet, I have met an astonishing number of graduates or ex-graduates of Ph.D. programs in clinical psychology who have told me that they are bored by research methods and are paralyzed (by fear and/or anger) by statistical analyses.

One of the problems, of course, is that the types of diplomas that allow one to become a psychologist are confounded with professional and, to a certain extent, social prestige. Most undergraduate students (at least those who come to my office) believe that a Ph.D. will help them land a better job—or at least make their parents more proud of them! In my view, however, the main conceptual difference between a Ph.D. and Psy.D. is a matter of emphasis on empirical research. To put it simply, the proportion of time students want to devote toward conducting research (in contrast to seeing clients) during and after graduate school should be the main criteria for their decision as to what type of doctorate they will earn. As for faculty members, our responsibility is to convey, with respect, the different aspects of training that will be emphasized in this two types of training (and of course the different sorts of careers toward which they are likely to lead). Without providing accurate and complete information about the intricacies and complexities of our profession, we are leaving students vulnerable to making the wrong choice for their careers.

What Solutions Do You Propose, and What Type of Research Questions and Methodology Do You Suggest to Practitioners?

Addressing the potential roots of the shaky bridge between research and practice may be appropriate for future generations of psychologists but this will not have a direct impact on the psychologists who are currently practicing and who are not paying attention and/or participating in research. In my view, the key to make this happen is to establish Practice Research Networks, such as the one that has been developed by the Pennsylvania Psychological Association (PPA-PRN). Created by T. Borkovec, S. Ragusea, and R. Echemendia, the PPA-PRN is an attempt to establish collaborative efforts between clinicians and clinical researchers interested in developing internally and externally valid research. The call for such a rapprochement and collaboration came from both researchers and clinicians. As eloquently described by Borkovec and his colleagues,

The establishment of a PRN could offer the promise of a truly functional integration of practitioner and scientist roles. Within a PRN, clinicians could reengage their scientific roots, generate clinically meaningful research questions, and participate in the design and conduct of

research, whereas clinical scientists could expand their research agenda to include ecologically valid settings and become increasingly sensitive to the importance of addressing clinically relevant issues within the basic research questions customarily of interest to them. The eventual goal would be a profession in which, together, clinicians would routinely become scientists in their clinical work and clinical scientists would routinely ponder and pursue the applied implications of the research they conduct. (Borkovec, Echemendia, Ragusea, & Ruiz, 2001, p. 156)

The PPA-PRN has already led to the creation of a research infrastructure, as well as a first investigation involving more than 50 therapists and 220 clients across the state (see Borkovec et al., 2001). In addition to obtaining interesting findings, this first study allowed for the identification of factors that could facilitate the therapists' engagement in research efforts, such as the need for financial incentives (for both therapists and clients), a minimal amount of time required for participation, and the use of clinically relevant assessment materials.

For me personally, the most important factors related to the practitioners' involvement in research clearly emerged during a meeting of the PPA-PRN, which was attended by more than 80 clinicians and several researchers. The meeting was an eye-opening event and showed me how I had underestimated the level of convergence across clinicians and researchers with respect to the primary target of interest (i.e., what works in psychotherapy and how it works), as well as the importance of developing a true collaboration. It became clear to me that simply asking clinicians to provide data within the context of an already developed research protocol would preclude the establishment of a long and productive relationship. This amounts to what I now call "empirical imperialism"—and this may well be the major factor contributing to the reluctance of clinicians to fill out questionnaires that I have faced in the past! It became clear that clinicians wanted and needed to be involved in every step of a research project, from the generation of idea to the publication of the data. In other words, they need to be considered as full participants and not as apprentices or helpers. What convinced me of this was the almost unanimous and (gut-level) reaction of clinicians to a proposal of creating a committee that would evaluate the scientific merits of projects that clinicians would be interested in conducting within the PRN infrastructure. It was as if the clinicians were saying "Look, we are interested in conducting research for the sake of conducting research, but the last thing we want is to put ourselves in a situation similar to what we experienced during graduate school, which was to be told by members of dissertation committees (most of them not interested in clinical work) what to do to conduct a methodologically acceptable, statistically sophisticated, yet labor-intensive and clinically meaningless study." This is a reflection of a phenomenon I call "idolatry of methods and ignorance of substance."

I must admit that my first reaction to this reluctance toward a scientific committee that would essentially give advice on ways to conduct the best possible studies was a rather dismissing one. My immediate thought was: "What is the point of conducting research if it's not likely to be published in a decent journal? And if one wants to publish in a respected peer-review journal one needs to focus on issues of internal validity." But then it dawned on me that there might be more to conducting research than the constant quest for the (almost unachievable) first-tier journal publication. (After all, what I consider to be my best studies are generally rejected from this type of journal!) I later came to the conclusion that the best way of dealing with this issue was to eliminate the concept of a committee that would provide external feedback and/or decisions with regard to the viability of a specific study. Rather, a PRN should implement regular meetings between researchers and clinicians where systematic cost-benefit analyses are conducted about the pros and cons of conducting studies that meet different levels of internal and external

validity. The more valid a study is, the more likely that it will be complex and time-consuming, but also the more likely that it will be publishable.

The issue is not whether scientifically rigorous studies can be conducted in natural settings (see, e.g., Borkovec & Castonguay, 1998). The issue is how much time and effort clinicians are able to expend on research activities that may not be remunerative and yet be fulfilling (at least more fulfilling than filling out questionnaires assigned by someone else). A less-than-perfect study may not provide definite answers (then again, which study does?!), but it could provide support (albeit limited) to some constructs or intervention methods, question the validity of strongly held assumptions, open new avenues of investigations, and foster new ways of thinking about psychotherapy. One might also argue that if such a study originated from a clinical concern and if the findings (however tentative they may be) shed light on, or raise new questions about clinical reality, clinicians will be motivated to get involved other projects. More importantly, perhaps, becoming involved in such a study may increase clinicians' eagerness to keep in touch with empirical findings. Considering the voluminous amount of information that research has provided over the last 50 years in terms of outcome, process of change, and client/therapist characteristics (see Castonguay, Schut, & Constantino, 2000), it is truly sad that this research has had a limited impact on the clinical practice. As recently argued by Kopta, Lueger, Saunders, and Howard (1999), it may well be that "the psychotherapy research field is beginning to be in a position to advance (or rescue?) the professional and economic interests of psychotherapy practice" (p. 443).

Michael J. Lambert

Despite the fact that training in clinical and counseling psychology emphasizes scientific foundations and socializes practitioners to be scientists, few service providers maintain an active program of research. Nevertheless, some research can complement and strengthen practice, heightening the satisfaction that practitioners feel in their work while improving the quality of their services. Although some types of research (such as clinical trials) are not feasible for the individual provider to conduct, certain strategies are well suited to routine practice and can have practical as well as theoretical importance. Here the focus is on "patient-focused research," and its advantages for the practice of psychotherapy.

Patient-focused research encompasses studies that address questions about the response of individual patients to the treatments offered by individual providers. This method is ideal for the practitioner because it addresses questions of primary interest in day-to-day practice: "Is this particular patient responding to this treatment?"; "How long will this patient need services?"; "Shall I change treatment strategies?"; etc. In order to conduct this research, the provider needs to address several important conceptual and methodological issues essential to this research domain. A program of research in this area requires the provider to generate a definition of outcome, a method of tracking patient treatment response, a way of defining an adequate and inadequate treatment response, and a method of signaling the provider about the patient's treatment response in relation to expected recovery. A brief summary of this method of conducting research in routine practice will illuminate its advantages and shortcomings for the psychologist in practice.

Outcome in our research program is defined as change in the patient's symptomatic state (mainly, anxiety and depression), interpersonal problems, social role functioning, and quality of life. These dimensions encompass mental states and functional abilities that are of vital importance to the patient, related family members and friends, as well as to society in general. These dimensions are measured with a 45-item self-report scale that has good psychometric qualities, is brief (7 minutes), sensitive to treatment effects over

time, and inexpensive (Outcome Questionnaire; Lambert et al., 1996). The Outcome Questionnaire (OQ-45) is administered weekly to patients, usually prior to each treatment session. Treatment response is measured through the use of cut-off scores for "reliable" and "clinically significant change" (Jacobson & Truax, 1991) and through the use of "expected recovery curves" (Finch, Lambert, & Schaalje, 2001). Thus, we have developed criteria for comparing the patients' actual treatment response (intake score minus change at the session of interest) compared to benchmark change for patients with the same level of initial disturbance, as well as markers for meaningful improvement and deterioration at termination. These data are integrated into an early warning system that alerts therapists (a) when a patient is responding to treatment by improving in a typical manner, or (b) is "off-track," and (c) if the patient's response to treatment has resulted in his or her return to a normal state of functioning. The data that have been used for developing expected recovery curves are based on the treatment response of over 10,000 patients who have undergone a course of treatment in settings across the nation.

Use of these recovery curves and related feedback to practitioners has been shown to improve the ultimate outcome for patients whose initial treatment response is poor (Lambert, Whipple, et al., 2001; Lambert, Whipple, Vermeersch, et al., 2002). They have also proved useful in identifying, early on, patients who are most likely to show the greatest gains at termination and follow-up (Haas, Hill, Lambert, & Morrell, in press). Application of these research tools by the clinician allows him or her to demonstrate that the treatment offered is supported by empirical evidence, and provides an additional source of information for making practice decisions. Integration of this type of monitoring into routine practice has advantages over simply using empirically supported therapies based on clinical-trials research (e.g., Chambless et al., 1998) as these treatments are only hypothesized to be the treatment of choice for a particular client and may not be sufficient for the client that is currently undergoing treatment. In this sense, a clinician has evidence that a treatment is working for a client rather than relying on the presumed appropriateness of an initial treatment decision.

Many research questions can be addressed by the individual clinician who monitors patient treatment response using this methodology or related systems: "How many sessions does it take for my patients to achieve reliable/clinically significant change?"; "What percentage of my patients are poor responders?"; "Does using expected recovery curves and signal alerts for slow responding patients improve outcomes for these patients at termination (compared to business as usual)?"; "Are outcomes improved by providing feedback to patients about their response to treatment (compared to no feedback)?"; "What is the dose-effect of the treatment I offer compared to benchmark data from other clinicians?". Of course many more questions can and should be addressed, especially those that seem important to the provider. In general, those questions that seem most important to us involve comparisons between the outcomes of patients seen by a therapist in comparison to other therapists, especially if the data collected eventually lead to changes in therapy practices. Research conducted by the individual provider puts him or her in a position to improve the quality of care offered to patients, based on his or her research activities, rather than through mere reference to published studies done in near "laboratory" conditions.

There are many advantages to the practitioner who undertakes this type of research. For example, it can result in benefit for the patient and can be undertaken with little modification to routine practice. It becomes a routine part of practice, rather than a single research study and thereby the research is integrated with practice. Just as patients do not resent having their blood pressure monitored on a weekly basis for the purpose of managing cardiovascular disease, patients do not, in general, find it aversive to have their

mental/emotional state retested on a week-by-week basis, especially if they are given feedback and see the assessments as benefiting them. Most research in this area can be conducted without formal research designs, although random assignment will be extremely helpful for some important questions. For example, it is a relatively simple matter to use a feedback system with randomly selected patients while withholding the information from the "controls." This type of data can be used for both scientific purposes (like deciding if feedback effects patient outcome), as well as for accounting purposes that could result in effective marketing (Lambert, Okiishi, Finch, & Johnson, 1998).

There are also limitations to this type of research. Many of the most important research questions require large numbers of patients and therefore data collection must be continuous. Some research questions will require sophisticated statistical solutions to deal with missing data, varying treatment lengths and a range of covariates. These methods are beyond the scope of most practitioners, who will, therefore, need to find a consultant to assist with data analysis. Finally, the OQ-45 and similar measures, while brief, do not provide an extensive analysis of outcome from multiple sources and methods. This undoubtedly results in a limited picture of treatment response, and one that is of dubious value for a minority of patients who are inclined to distort their actual psychological status. The use of a single measure like the OQ-45 ignores many changes that might be of particular interest to a practitioner who is interested in questions of theoretical importance. However, the practicing clinician is free to add additional measures of treatment response, but at the likely cost of overburdening themselves and their patients.

Despite these problems, patient-focused research of the kind suggested here promises to be relatively easy to implement, rewarding to both the therapist and patient, intellectually stimulating, and informative to the field as a whole. Whether initiated by the provider or dictated by other societal forces, the age of accountability has arrived and can be a welcome supplement to even the highest level of professional practice. Hopefully, it will be embraced by the scientist-practitioner who is uniquely positioned to incorporate assessment of treatment response and research methodology into routine clinical practice.

William B. Stiles

Practitioners Produce Research Ideas; Researchers Consume Them

The familiar lament that practitioners do not contribute or attend to psychotherapy research overlooks a crucial role they play. As I have argued elsewhere (Stiles, 1992), practitioners, not researchers, are the main producers of research ideas. Most psychotherapeutic approaches were not developed in laboratories, discussed at scientific meetings, published, certified safe and effective, and finally offered to the public. On the contrary, the theories that psychotherapy researchers investigate were developed by practitioners, based on their clinical observation and experience with innovative interventions. Most approaches were practiced long before they were formally researched, and psychotherapy research is interesting because it studies approaches that are being practiced.

Researchers consume ideas. In Popper's (1934/1959) classic account, scientific hypothesis testing can only falsify or fail to falsify the ideas that guided the study. Support for an empirical hypothesis amounts to affirming the consequent, a classical logical fallacy; failure to support the hypothesis, however, disconfirms the theory (by *modus tollens*). Critics have pointed out that the Popperian account is overly simplistic on a variety of grounds (e.g., Meehl, 1990), but even the critics agree that the logic of scientific hypothesis testing is to discredit ideas rather than to produce them. Arguably, researchers need a continual infusion of new ideas to keep them in business.

Fortunately for those of us who do psychotherapy research, practitioners have been producing ideas far faster than researchers can consume them. There is a backlog of hundreds of alternative psychotherapeutic approaches to investigate—more than enough to fill the careers of all current psychotherapy researchers, their graduate students, and their graduate students' graduate students.

Hypothesis Testing versus Interpretive Research

Scientific research compares theories with observations. In good research, the theories (i.e., people's ways of understanding and talking about events) are thereby changed—strengthened, weakened, qualified, or elaborated.

Theories are composed of statements (usually verbal statements in psychology, though they could be mathematical). In the hypothesis-testing research, a researcher extracts or derives one statement—or a very few statements—from a theory and attempts to compare this statement with observations. If the observations match the statement (i.e., if the researchers' experience of the events they observe resembles their experience of the statement; Stiles, 1981), then people's confidence in the statement is substantially increased, and this, in turn, yields a small increment of confidence in the theory as a whole.

In interpretive (qualitative) research, researchers use a different strategy for comparing observations with theories. Rather than trying to assign a firm confidence level to a particular derived statement, interpretive research tests many statements at once. A case study, for example, may simultaneously compare a large number of observations of a particular individual with a correspondingly large number of statements derived from a clinical theory. For a variety of familiar reasons (selective sampling, low power, potential biases, etc.), the increment or decrement in confidence in any one statement may be very small. Nevertheless, because so many statements are examined, the increment (or decrement) in people's confidence in the whole clinical theory may be comparable to that stemming from a statistical hypothesis-testing study.

Interpretive research can thus be confirmatory as well as exploratory—supporting the generality of a theory, albeit not the generality of isolated tenets. Interpretive and hypothesis-testing research are merely alternative strategies for scientific quality control on ideas (Stiles, 1993).

Hypothesis-Testing Is Boring; Interpretive Research Is More Fun

In good hypothesis-testing research, then, the hypothesis is a narrow, focused fragment of a conceptualization that practitioners are already using. The reports of the research are written for other researchers, who need detailed technical accounts of the manipulations and measurements to assess whether the results bear on the theory. Such reports necessarily include much detail that is only tangentially relevant to practice and, except for the method, little that is new to practitioners. Not surprisingly, practitioners have long described these reports as narrow, tedious, and boring and as overemphasizing methodology and statistics (e.g., Morrow-Bradley & Elliott, 1986).

Of course, some psychotherapists may enjoy spending part of their time as researchers, and vice-versa (I do!). As illustrated elsewhere in this article and special section, people who are primarily practitioners can usefully participate in and contribute to hypothesis-testing research part-time or as volunteers. But their participation entails stepping out of their role as practitioners and mastering the specific skills and elaborate lore that surround any particular program of research.

Interpretive research may be more interesting for practitioners, and practitioners may be particularly well equipped to contribute to it. Theoretically based case studies involve many of the same activities and skills as clinical practice, including careful attention to what people say and how they say it, understanding multi-layered thoughts and feelings and putting these into words, and integrating evidence into a coherent formulation and assessing its fit with theoretical tenets. Furthermore, the holistic focus typical of interpretive studies may help overcome the complaint that research is narrow and boring.

Case-Based Interpretive Research on the Assimilation Model

Interpretive research on the assimilation model (Stiles, 1999; Stiles et al., 1990) offers an illustration. The assimilation model describes how problematic experiences (e.g., traumatic memories, dysfunctional relationships) are addressed, understood, and transformed into resources in successful psychotherapy. A series of interpretive case studies (e.g., Varvin & Stiles, 1999) has yielded a provisional sequence of stages or levels through which the problematic experiences seem to pass. These are embodied in the assimilation of problematic experiences scale (APES; see Stiles, 1999): (0) Warded off/symptomatic expression, (1) Unwanted thoughts/active avoidance, (2) Vague awareness/emergence, (3) Problem statement/clarification, (4) Understanding/insight, (5) Application/working through, (6) Resourcefulness/problem solution, (7) Integration/mastery.

The assimilation model and the APES have been, and are being, developed, modified, and elaborated, based mainly on intensive case studies (Stiles, 1999). Like all scientific findings, assimilation results require replication and extension—new observations that may (or may not) be judged as encompassed by the model (replication) or as suggesting changes or additions (extension). In an evolving case-based research paradigm called *assimilation analysis* (see Stiles, 1999; Varvin & Stiles, 1999), investigators identify problem themes in therapy transcripts and track how they change across sessions.

Assimilation analysis is well suited for practitioners. The main materials required are tape recordings (or, better, audio files or transcriptions) of a significant stretch of therapeutic dialogue (several sessions at least) and permission from the client. Cases can be drawn from an investigator's own practice. The procedure involves (a) familiarization and indexing the material, by close reading of the transcripts or listening to the tapes and taking systematic notes, (b) identifying common themes or salient voices in the client's discourse, (c) selecting passages to represent each theme's development, and (d) describing the process, which may include replicating or challenging previous results and/or elaborating the model and the APES (see, e.g., Varvin & Stiles, 1999). The descriptions are thus grounded in familiarity with the whole case, so observations can be understood in context, rather than in isolation.

Written reports of interpretive assimilation research can usefully focus on whatever is interesting or new to the theory, as it arises in the observations. Practitioner-investigators may start with only a knowledge of the model and an intent to understand how it applies in a particular new case. A decade's experience has suggested to me that interpretive analysis of virtually any case can yield new and interesting elaborations of the model (Stiles, 1999).

Identifying Assimilation Markers in Case Material

A more focused research approach using case material available to practitioners is to identify and describe *markers*, in-session events that signal some clinically significant

phenomenon and that can be reliably recognized. Validated markers can be clinically useful guides to clients' progress and current therapeutic requirements. To illustrate, within the assimilation model, the "fear of losing control" marker appears to signal APES level 1, the emergence of unwanted thoughts (Honos-Webb et al., 1999). To identify assimilation markers, collections of passages representing the same assimilation stage can be examined to identify commonalities in the change process at that stage. Investigators use clinical sophistication, intuition, and pattern recognition to identify and describe recurring patterns. Then they return to the transcripts to select multiple examples of possible markers, which are in turn scrutinized to yield fine-grained descriptions. Characterizations of markers can be refined by repeated cycling between the theoretical description and examining new examples excerpted from the clinical material. The work requires careful attention to detail, but it is likely to be interesting to practitioners because it focuses on clinical understanding of the client and the case material, drawing directly on skills developed in clinical practice.

A Closing Caution about Rigor in Theory and Observation

Theory and observation can be considered as competitors for an investigator's allegiance, and good research of any sort involves maintaining a balance. In interpretive research, excessive allegiance to theory is represented by conceptions that are impermeable to observations. Psychoanalytic case studies have sometime been accused of this sort of distortion, in which contrary evidence does not change the theory but is explained away or ignored. On the other hand, excessive allegiance to observation in interpretive research can yield accounts that stand alone. Stand-alone case accounts may be poignant, powerful, or inspiring, but if they are not firmly linked with an explicit theory, they cannot contribute to a cumulative understanding. Balancing allegiance requires that the theory is explicit, the method specifies how the observations are linked with the theory, and the results permeate the theory, strengthening some parts but weakening or modifying other parts, so that the theory looks different after the encounter (Stiles, 1993).

Joannis N. Nestoros

In my very first clinical supervision session as a first-year resident in psychiatry at McGill University in Montreal, I was told by my supervisor that "every diagnostic and therapeutic procedure is a research project." He was a psychopharmacologist and he was referring to the process of arriving at an accurate diagnosis according to the DSM-II criteria (applicable back then in 1973), which was going to lead to the prescription of the right kind of medication. Further, it was absolutely clear to him that both the diagnosis and the medication had to be modified according to the patient's response. He knew that every individual case is different. Therefore, clinicians must be willing and able to accept unexpected or unexplainable developments in their patient's symptomatology and response to treatment and to modify their hypotheses accordingly. All of the above, of course, apply to psychotherapy as well. Psychotherapists, whether they are aware of it or not, act at all times as researchers who collect, classify, and interpret data concerning the hypotheses involved in their interaction with clients. The more psychotherapists are aware of this research aspect, especially the ever-present hypothesis-testing element of their work, the more they will accentuate and develop it. The more they understand the very nature of research, the better therapists will be.

In the past 28 years I have been involved both in clinical practice and research. My clinical practice involves psychotherapy and/or pharmacotherapy of severely disturbed

psychiatric patients, mostly in the context of schizophrenia paranoid type and schizoaffective disorder. Although my research in the 1970s and the early 1980s was in clinical psychopharmacology and basic neuroscience, since then I have focused my interest on psychotherapy research with psychotic patients seen in my private practice. I treat these patients using a specific integrative/eclectic model for individuals with schizophrenic symptoms (Nestoros, 1993, 1997a, b; Nestoros & Vallianatou, 1990/1996), which was gradually developed based on training in eclectic psychotherapy at the Department of Psychiatry, McGill University (1973–1977), my research and clinical experience the last two decades with this population, and the literature on schizophrenia and the psychotherapy integration movement (Hawkins & Nestoros, 1997).

Some of the key concepts in this approach have their origins in a neurophysiological model of anxiety (Nestoros, 1980b, 1984). For example, this model attributes to high levels of anxiety a strategic role in the development of paranoid schizophrenic symptoms. The first line of evidence came from studies in which high doses of diazepam rapidly ameliorated positive and negative schizophrenic symptoms within a few hours to a few days (Nestoros, 1980a; Nestoros, Suranyi-Cadotte, Spees, Schwartz, & Nair, 1982). This rapid improvement of schizophrenic symptoms was also observed with cholecystokinin (Nair, Bloom, & Nestoros, 1982). In similar pre-post outcome research that measured the reduction of schizophrenic symptoms after a psychotherapeutic session, a statistically significant reduction of schizophrenic symptoms was also found (in cases where both the client and the therapist rated the psychotherapeutic session as successful; Nestoros & Zgantouri, 2000). I interpret these outcome findings in both pharmacotherapy and psychological therapy to be mostly the result of anxiety reduction. Although the time course of this phenomenon is still under study, such findings can change the way we conceptualize the very nature of schizophrenic symptoms (Nestoros, 1993, 1997a, b).

The foregoing discussion provided examples of how research and practice are compatible and can be combined in one's professional activities. The psychotherapy of individuals with schizophrenic symptoms presents a good model for psychotherapy research in general, because of the wealth of information about the role of the various biological, psychological, social, and cultural factors involved and their interaction. Further, the study of psychiatric outpatients with schizophrenic symptoms by their treating clinicians (in my case in private practice for the past 22 years) offers additional advantages.

First, it is a very naturalistic clinical situation where both the suffering person and the therapist are highly motivated to ameliorate a severe clinical problem (distressing symptoms, such as hallucinations or delusions, anhedonia, and inability to work or socialize). The severity of the clinical situation and the strong need for cure can motivate therapists and clients to actively participate in treatment as well as treatment research. Second, since individuals with schizophrenic symptoms usually need and undergo long-term treatment, they get to establish strong therapeutic relationships. Taken together, the severity and length of the treatment of schizophrenia can create a favorable context for rich data collection for a long period of time and with a variety of research methodologies. Psychotic clients are generally willing to collaborate with extensive psychological measurement, allow sessions to be video or audio taped, and disclose diaries, drawings, poems, and other material valuable for the understanding and cure of psychotic disorders.

For example, one of my clients who I have periodically treated since 1987 has provided me with more than a thousand pages of written material reflecting his way of thinking during the various stages of getting psychotic and recovering. He has had thus far five psychotic episodes, all fully documented. Now, he is symptom-free without taking medication. This client has allowed the audio-taping of his treatment and has given permission to use all of the above data for research and teaching purposes. Furthermore,

he has happily presented himself in scientific meetings and discussed on videotape what in his opinion made him psychotic and which were the psychotherapeutic processes that facilitated his recovery.

I have found from experience that the most fascinating way of carrying out research in clinical practice is to collaborate with the client by giving him the status of a co-researcher. I believe that successful psychotherapy also needs this kind of collaboration. That is, if the client does not acquire the co-researcher role (i.e., actively and skillfully engaging in exploring and improving himself or herself with the help of the therapist), little progress can be made even by the most skilled therapist.

I had the great fortune to be the psychotherapist of a young man, who acquired the above co-researcher role. This young man, whose pseudonym is Eric, was in psychotherapy with me in Montreal from 1978 to 1982 and was treated for a total of 295 individual sessions lasting 60 minutes each. His girlfriend, who is now married to him, was also treated for 76 individual psychotherapy sessions of the same duration, and they received 52 sessions of couple therapy as well. Eric has had many severe psychotic episodes with florid positive symptoms and grave negative symptoms. He had his first auditory hallucinations at the age of 8 years old. Soon visual hallucinations occurred and he started to believe that he was "a superior being." At the age of 15 he had his first psychiatric treatment. In most of his adolescent years and as an adult he often believed that he was Jesus Christ, the reincarnation of Hitler, the god Dionysos, or Marilyn Monroe, and he believed that he was followed by the CIA. From the age of 21 to the age of 25 he lived with a 60-year-old same-sex lover, whom he delusionally believed to be his biological father. Eric also made a serious suicidal attempt. He had a promiscuous homosexual life including working as a male prostitute in a studio in New York.

From 1980 to 1982, Eric and I collaborated in creating a 400-page book, his autobiography, titled *Eric's Odyssey*. The purpose of that project was to help Eric clarify the mechanisms that made him psychotic and the psychotherapeutic mechanisms that were responsible for his improvement. This book was partly created from clinical necessity, since I was making plans to return to Greece and I knew of no other psychotherapist in Montreal treating individuals with schizophrenic symptoms at the time. Thus, Eric had to rely on this "manual" to help him remain well. Initially, I helped him to write chapters about certain topics, such as his most florid psychotic episode in 1977, his childhood experiences, and his relationships with his parents. Then we used what he wrote as material for his psychotherapy sessions. In collaboration with the therapist, he modified the material until it reached a point that met the following two criteria: (a) it really expressed in his own words and to his full satisfaction the events of his life and his thoughts and emotions about these events (with the emphasis on the mechanisms that produced and ameliorated psychotic symptomatology), and (b) it included information that was necessary for the reader to understand which were the real events of Eric's life and which were Eric's or my comments, interpretations, hypotheses, etc., concerning these events. This book was written in the English language. Eric remained symptom-free without medication (actually, he was treated the whole time only with psychotherapy) and fully functioning (he runs a foster house for elderly people with his wife), without needing to use this book after it was finalized in 1982. Thus far, this work has appeared in print in its Greek translation as part of another book (Nestoros, 1993, pp. 17–417). In that section of the above textbook, Eric appears as the first author. In conclusion, this book was developed in close collaboration with the client both for clinical purposes and as an extensive case study (which is currently further analyzed with quantitative process research that uses transcribed sessions).

Descriptive pre-experimental case studies such as the one with Eric is only one way that clinicians can contribute to research knowledge, particularly in areas that have been neglected, such as the psychotherapy of schizophrenia, and the development of new interventions, such as integrative treatment models for psychoses (see Nestoros, 1997a). Clinicians can examine their ideas and initial discoveries in additional case studies to see if they are applicable to other clients as well (Nestoros, 1993). Of course, having a homogeneous practice in terms of population treated and treatment applied, such as integrative psychotherapy for psychoses, presents an advantage in terms of generalization of findings. Quasi-experimental and experimental research can follow pre-experimental case studies, such as quantitative case studies (time series analysis; e.g., Nestoros, Kalaitzaki, & Zgantouri, 1999), medium to large N naturalistic pre-post outcome effectiveness research (e.g., Nestoros, Zgantouri, Kalaitzaki, & Vallianatou, 2000), and qualitative process research (e.g., Zgantouri & Nestoros, 1999, 2000).

These types of research can be selectively carried out by the interested clinician to answer specific questions of interest. For example, aside from my duties as the director of a graduate program in clinical psychology, I maintain a homogeneous private practice with schizophrenic patients whom I study on a regular basis. Of major importance in my work as a clinician is the measurement of the effectiveness of the integrative psychotherapy for psychotic disorders, as well as the understanding of the processes that take place in this treatment. Although there are several ongoing research questions and projects carried out in this clinical population by a small team of doctoral students working under my supervision, I believe that private practitioners can pursue small independent projects of interest, either by themselves or perhaps with the collaboration of a researcher. Such explorations can be particularly valuable for under-studied areas such as innovative treatments for clinically representative, complex, and severe disorders (e.g., the integrative psychotherapy of schizophrenia). Some of the process and outcome measures used in various schizophrenia treatment research projects with my private practice clients include the Greek versions of the MMPI, SCL-90, the Brief Psychiatric Rating Scale (BPRS), the State-Trait Anxiety Inventory, the Sense of Coherence Scale, 28 Visual Analogue Scales, the Scales for the Assessment of Negative and Positive Symptoms (SANS and SAPS), the Session Evaluation Questionnaire (SEQ), and the Therapist-Patient Relationship Scales with Schizophrenic Patients (TPSS). Audiotapes and videotapes of sessions with these patients are also analyzed. In general, the outcome of psychotherapy is periodically and systematically evaluated for all patients (more than 80) and throughout their long-term treatments (all more than two years).

Most of the schizophrenic patients (with rare exceptions) find the use of the aforementioned research measurements also useful for their therapy, because they help them to observe and understand themselves better. Even clients initially perceived as nonpsychologically minded may find the use of process and outcome measures useful. Furthermore, research cooperation is often an indication of client engagement and progress in therapy. As for myself, I am still fascinated by how much I continue to learn as a clinician from looking at the data from these cases, even after 22 years of experience in psychotherapy with individuals suffering from schizophrenic symptoms. For example, I am most impressed by the amount of distress individuals with schizophrenic symptoms report in their initial sessions, even though the psychotherapeutic approach is most supportive. In fact, in the rare cases in which the patient is extremely distressed, the therapist has to reduce patient's anxiety and tension to a level that a psychometric evaluation is feasible. In such cases, it may be more appropriate for the scientist-practitioner to consider alternative sources for data collection, such as videotapes of the psychotherapy sessions. Research methodologies, particularly in practitioner-initiated research should

be clinically sensitive and suitable for the question of interest and the context of the investigation (Nestoros, 1997b).

In closing, we are reaching a phase in psychotherapy research that raises high hopes that research findings will influence the way psychotherapy is practiced, even in less researched domains such as the psychotherapy of schizophrenia. In this effort, clinicians have a lot to offer by initiating, conducting, or participating in such research. However, we should not forget that many of the skills of a good psychotherapist may not be obtained through research, but in a process of "personal development" and through carrying psychotherapy cases under good supervision.

Final Comments: Georgios K. Lampropoulos

Participants in this article have eloquently described the difficulties and advantages of practitioner-related research. They provided important ideas, solutions, and recommendations regarding these issues. The first major challenge of practitioner-initiated research is balancing clinical importance, research feasibility, and basic scientific standards. Participants in this discussion have attempted to move toward these objectives by identifying those research areas and methodologies most appropriate for naturalistic research by practitioners. Representative research models of this kind include, but are not limited to, (a) innovative qualitative or quantitative (pre-experimental, quasi-experimental, or experimental) case studies, where the focus is to describe and pretest or test new interventions, new hypotheses, and unusual clinical phenomena (Davison & Lazarus, 1994; Fishman, 2000; Hayes, Barlow, & Nelson-Gray, 1999; Messer, 2000; including new integrative approaches, e.g., Lampropoulos & Nicholas, 2001); (b) small *N* quasi-experimental or experimental designs, where the practicing clinician can pre-test or test specific hypotheses of interest (e.g., a 2×2 aptitude-treatment interaction design with four participants; Heiby, 1986); (c) medium *N* effectiveness research, where a clinician can evaluate his or her own practice over a period of time (e.g., Lambert et al., 1998; Nestoros et al., 2000; Persons, Bostrom, & Bertagnolli, 1999); and (d) large *N* clinical utility programmatic research through local practitioner networks, where a group of clinicians in one or more naturalistic settings can evaluate their clinical practices (i.e., effectiveness of same or different models of therapy, manualized or not manualized), as well as test specific hypotheses in quasi-experimental designs (Arnkoff, Glass, Opazo, Caspar, & Lampropoulos, 2000; Borkovec et al., 2001; Pekarik & Mangione, 1999).

The second major issue in practitioner-initiated research is its role in the interplay between efficacy and effectiveness research. Both highly controlled experimental/efficacy research and naturalistic, clinical utility research may serve a purpose and have a place in research agendas. As an example of the interplay between efficacy and effectiveness research, naturalistic observations and exploratory research may facilitate the development of new treatments/hypotheses to be subsequently tested in highly controlled efficacy designs. The cycle of research development, in turn, should again involve reevaluation in clinically representative conditions.

Although academic departments and research centers will continue producing the bulk of time- and effort-consuming experimental quantitative efficacy research, practitioners may increasingly play an important role in collaborating and conducting effectiveness, qualitative, small *N*, and case-study research. It is hoped that the issues and proposals discussed in this paper will motivate clinicians to explore and initiate research projects that could improve their practice and the enterprise of psychotherapy as a whole. Finally, researchers are invited to collaborate with clinicians to further develop the exist-

ing research methodologies and make them user-friendly and suitable for clinical utility research.

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