*Annu. Rev. Psychol. 1999. 50:441–69*


# INDIVIDUAL PSYCHOTHERAPY OUTCOME AND PROCESS RESEARCH: Challenges Leading to Greater Turmoil or a Positive Transition?

*S. Mark Kopta*

Department of Psychology, University of Evansville, Evansville, Indiana 47722; e-mail: mk35@evansville.edu

*Robert J. Lueger and Stephen M. Saunders*

Department of Psychology, Marquette University, Milwaukee, Wisconsin 53201; e-mail: 6282LUEGERR@marquette.edu and saunderss@vms.csd.mu.edu

*Kenneth I. Howard*

Department of Psychology, Northwestern University, Evanston, Illinois 60208; e-mail: k-howard@nwu.edu

KEY WORDS: psychological treatments, outcomes, managed mental health care, mental disorder, empirically supported psychotherapies

ABSTRACT

Psychotherapy is facing challenges that relate to the emergence of managed health care, the possibility of a national health care system, and advances in biological psychiatry. These situations have created pressure to achieve a more accurate assessment of psychotherapeutic effectiveness. Psychotherapy has been proven to be generally effective; however, there is uncertainty as to why. The field is currently experiencing apparent turmoil in three areas: (*a*) theory development for psychotherapeutic effectiveness, (*b*) research design, and (*c*) treatment technique. This chapter reviews the dynamics within each of the areas and highlights the progress made in treating mental disorders. We conclude that recent advances in research design may provide a transition that will bring psychotherapy closer to becoming a unified paradigm with an acceptable theory of effectiveness.



0084-6570/99/0201-0441$08.00

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# INTRODUCTION

The field of psychotherapy research has faced many new challenges during its brief life. The first challenge was the publication of Eysenck's (1952) review of 24 studies which concluded that psychotherapy is no more effective with neurotics than is spontaneous remission. His article stimulated years of controversy among academics and clinicians about the effectiveness of psychotherapy. It also inspired a successful, directed effort by researchers to confirm empirically that psychotherapy generally produces beneficial effects (e.g. Elkin et al 1989, Lambert & Bergin 1994, Lipsey & Wilson 1993, McNeilly & Howard 1991, Smith & Glass 1977).

The emergence of managed health care, the looming possibility of a national health care system, and recent advances in biological psychiatry pose new challenges for the field of psychotherapy. These events have created pressure for more accurate assessment of psychotherapeutic effectiveness. For example, many (e.g. Barlow 1994, Broskowski 1995) believe that the effectiveness of specific psychological treatments must be empirically validated to justify reimbursement by insurance and managed care companies and by government agencies that are demanding more accountability.

In this chapter we review the progress made from 1989 through early 1998 in improving the assessment of psychotherapy research. In preparing this re-

view we were motivated by a realization that the psychotherapy research field is beginning to be in a position to advance (or rescue?) the professional and economic interests of psychotherapy practice. In the past, the gap between psychotherapy research and clinical practice has been wide (e.g. Goldfried & Wolfe 1996, Morrow-Bradley & Elliott 1986), with clinicians seeing little value in research which was perhaps too often performed for scholarly interest rather than for clinical application. At present, however, the focus of research is increasingly on justifying psychotherapy as a legitimate treatment and explaining how psychotherapy alleviates psychological suffering. Within this movement, an awareness exists that research findings must become more generalizable to clinical practice (e.g. Beutler et al 1996, Campbell 1996, Fensterheim & Raw 1997, Goldfried & Wolfe 1996, Strupp 1997).

Hundreds of studies have shown that psychotherapy works better than nothing. What is not so clear is whether psychotherapy works for reasons specified by theory.

Unfortunately, instead of giving the appearance of developing a more unified paradigm, psychotherapy is experiencing a period of conceptual-theoretical turmoil. More than ever, cherished "truths" as well as traditional research methodologies are being questioned. Three areas of apparent turmoil are (*a*) theory development for psychotherapeutic effectiveness, (*b*) research design, and (*c*) treatment techniques. This chapter reviews the dynamics within each of these areas and highlights the progress made in treatments for specific clinical disorders.

Contemporary developments in the psychotherapy research field have been well summarized by Bergin & Garfield (1994a). Also, *Psychotherapy Research,* the official quarterly journal of the Society for Psychotherapy Research (SPR), was introduced in 1991 as a response to the dramatic interest in and expansion of psychotherapy research over the past few years. This growth has greatly increased membership in SPR as well as the quantity and quality of research presented at its meetings and in the literature.

## THREE AREAS UNDER STRESS: THEORY DEVELOPMENT FOR EFFECTIVENESS

### *Outcome Research*

UNIQUE INGREDIENTS VERSUS COMMON INGREDIENTS AND THE DODO BIRD CONTROVERSY A primary issue for outcome researchers has been whether the different psychotherapies each contain unique active ingredients, as medications are purported to do, or whether a set of common factors accounts for psychotherapy's benefits. The traditionally accepted unique-ingredients theory implies that different psychotherapies produce different specific effects for different types of patients.

However, researchers have repeatedly failed to find convincing evidence that different psychotherapies are differentially effective. Meta-analyses—which statistically combine and compare the effect sizes of treatment, placebo, and control groups—continually report no differences among different types of therapies (e.g. Smith & Glass 1977, Grissom 1996, Wampold et al 1997). Occasionally, when differences are found, they disappear after methodological confounds are taken into account; for example, Robinson et al (1990) discovered that researcher allegiance influenced the superiority of some treatment classes over others for depressed patients.

The aforementioned dilemma (that the different psychotherapies produce equivalent outcomes) has been labeled the "dodo bird verdict" (Luborsky et al 1975) after the dodo bird in *Alice in Wonderland* who proclaimed, "Everybody has won and all must have prizes." Exactly what the dodo effect means has been open to a variety of explanations. It seems clear though that no one believes all psychotherapies are equally effective for all disorders. Giles' edited book, *Handbook of Effective Psychotherapy* (1993), presents several experts' attempts to solve the equivalence paradox and concludes with a critique of their positions by Elliott et al (1993), who assert that researchers should focus on the specific effects of specific psychotherapies on specific types of patients.

Among those who expect treatment differences, the consensus is that the lack of evidence is caused by faulty design strategies. The most frequent design criticism of comparative studies is that they are not built to detect interaction effects with variables other than type of treatment; instead, they focus on outcomes among treatments alone, omitting the investigation of such moderating variables as setting, patient characteristics, and therapist skill. As one example of the influence of moderating variables, variance attributable to therapist differences has been found to be greater than variance attributed to treatment differences (e.g. Crits-Christoph et al 1991, Crits-Christoph & Mintz 1991). Wampold's analogy (1997) cleverly summarizes the issue of comparing different psychotherapies without considering the moderating influence of therapist skill and other factors:

> We suspect that a great deal of the variance in success of (basketball) teams is due to the players' ability, institutional support, and motivation and very little is due to whether the teams play man-to-man defense or zone defense. If the goal is to identify the most important factors related to winning records so coaches could build the best teams possible, it would make little sense to arrange studies that examine the type of defense used by homogenizing players' abilities, institutional support, and so forth. Why then are we trying to homogenize therapy and therapists, when we know that these very variables contribute to much variance in outcomes, so that we can examine differences between treatments, when treatment differences historically have accounted for so little variance? (p. 34)

Still the task of empirically assessing the specific psychotherapies to cover all the possible influential interactions is a daunting one. Beutler (1991) presents a schema indicating that, to evaluate all relevant differences among treatment types, about 1.5 million interactions between potentially important patient, therapist, and therapy variables would have to be studied.

Some authors assert that, even if the different psychotherapies are generally equivalent in effectiveness, they still have value as legitimate treatments for psychological disorders. Concluding from one of the most sophisticated meta-analyses to date, Wampold et al (1997) argue that psychotherapy equivalence is a reality and that the active-ingredients model borrowed from medicine is not a useful analogy. Howard et al (1997) also do not rule out the possibility of treatment equivalence. However, they accept the medication analogy. They note that equivalent psychotherapies can be viewed like equivalent drugs such as antibiotics, which affect patients differently depending on the clinical characteristics and responsiveness of the patient.

Psychotherapy equivalence also suggests that common beneficial ingredients among the different treatments are mostly or completely responsible for the similar outcomes. Providing a list of 30 (e.g. catharsis, therapeutic alliance, rationale, and cognitive learning), Lambert & Bergin (1994) mention that these common factors are active ingredients shared by a variety of psychotherapies. Some writers consider factors common to different forms of psychotherapy to be sufficient and necessary (e.g. Frank & Frank 1991, Patterson 1984), whereas others (e.g. Crits-Christoph 1997, Garfield 1991) view them as playing a substantial role in patient improvement but often in conjunction with unique ingredients. Explaining psychotherapeutic effects on the basis of common ingredients begs the question of how we then distinguish psychotherapy from other interventions, such as pastoral counseling or psychic advising. Furthermore, accepting the common-ingredients theory in its entirety would discourage theory development that could lead to new, more effective treatments. Still, the search for unique effective ingredients has thus far been unsuccessful. For instance, although attempts have been made, no one has yet validated the hypothesized unique active ingredients of cognitive therapy for depression (Jacobson et al 1996).

IDENTIFYING EMPIRICALLY SUPPORTED THERAPIES The increased momentum to empirically validate the different psychotherapeutic approaches is a response to political and economic forces as well as to the growth of biological psychiatry. This momentum has resulted in the establishment of the American Psychological Association Task Force on Promotion and Dissemination of Psychological Procedures (American Psychological Association Task Force, 1995). Its mission has been to identify a set of criteria that characterize effective treatments and to determine which of 400-plus therapies satisfy these cri-

teria. Beutler (1998) has reviewed the circumstances leading to the focus on identifying empirically supported therapies as well as the creation of the task force. Briefly, he listed the following events as influential: (*a*) courts and legislative bodies are moving in the direction of defining without reference to empirical findings the types of psychotherapies that can be practiced and reimbursed; (*b*) managed health care programs are shifting from cost to empirical validation as the criterion for reimbursement; (*c*) medical and primary-care organizations have already established treatment guidelines that give priority to drug treatments over psychotherapy, e.g. the practice guidelines of the American Psychiatric Association (1993) and the Agency for Health Care Policy and Research publication *Depression in Primary Care Guidelines* (1993).

The task force's efficacy criteria were adapted from those used by the US Food and Drug Administration. Three categories of treatment efficacy were used to identify treatments as follows: 22 "well-established" treatments, 7 "probably efficacious" treatments, and the remainder "experimental" treatments (those not qualifying for at least "probably efficacious" rating); efficacious and probably efficacious treatments were identified for 21 syndromes listed in the *Diagnostic and Statistical Manual of Mental Disorders IV* (DSM-IV) of the American Psychiatric Association (1994). Behavioral treatments dominated the two efficacious categories. An update in 1996 added 27 more treatments to the two categories with all but 5 being behavioral. The committee producing these lists has asserted that the lists are incomplete, should not be used by third-party payers to make reimbursement decisions, and are not meant to replace clinical judgment in recommending the best treatment for patients.

Not surprisingly, reactions to the guidelines and to the general concept of empirically supported treatments have been mixed. Criticisms include the following: (*a*) empirical validation strategies reinforce the inappropriate "medicalization" of psychotherapy (Goldfried & Wolfe 1998, Wampold et al 1997); (*b*) omitting quasi-experimental studies, the task force criteria require only randomized clinical trials, which do not represent psychotherapy as practiced in the field or require a large number of single case design studies (Beutler 1998, Goldfried & Wolfe 1998); (*c*) the DSM-IV standard for categorizing patient types has problems with reliability as well as validity and provides patient categories that are too heterogeneous (Garfield 1996, Goldfried & Wolfe 1998); and (*d*) most psychotherapies used in real clinical settings are not on the validation list (e.g. eclectic, long-term psychodynamic therapies; Seligman 1995).

Supporters of the effort to identify empirically validated therapies often make their case by asking hypothetically, "What if we don't move in this direction?" For example, Beutler (1998) asserts that psychotherapy's scientific base would be abandoned, likely resulting in a loss of credibility with policymak-

ers, other health care professionals, and the public. Barlow (1996) warns that if the profession does not promote evidence of psychotherapeutic effectiveness, the existence of psychotherapy in the health care system will be threatened. Emphasizing that practice guidelines that identify empirically supported treatments "are here to stay" (p. 290), Nathan (1998) notes their potential to enhance psychotherapeutic effectiveness as well as strengthen treatment accountability. In a special volume of *Clinical Psychology: Science and Practice*, a majority of contributors (e.g. Barlow 1996, Chambless 1996, Crits-Christoph 1996, Nathan 1996, Wilson 1996) agreed that despite the current limitations on identifying empirically supported therapies, the endeavor—including the task force's efforts—is worthwhile and in the best interests of the psychotherapy profession. In his article in that volume, Kazdin (1996) provides an accurate perspective on this issue: "By and large, there is general agreement that validated treatments are worthwhile and important, but agreement breaks down after that in deciding how to go about identifying and selecting these treatments" (p. 16).

## *Process Research*

Process research attempts to identify the active ingredients of psychotherapy and the mechanisms of change. The rationale of this process research is that by increasing the understanding of human change processes, greater control can be obtained in the effective design and delivery of therapeutic interventions. The study of process variables and process-outcome relationships has recently been overshadowed by the much stronger focus on outcomes assessment.

The fourth edition of the *Handbook of Psychotherapy and Behavior Change* (Bergin & Garfield 1994a) features the third (Orlinsky et al 1994) in a series of comprehensive chapters that have reviewed psychotherapy process-outcome studies. In their chapter, Orlinsky et al cite five process variables that have consistently demonstrated robust relationships with outcome in the research literature: (*a*) overall quality of the therapeutic relationship, (*b*) therapist skill, (*c*) patient cooperation versus resistance, (*d*) patient openness versus defensiveness, and (*e*) treatment duration.

Other compilations of research findings have challenged traditionally accepted assumptions and models about process-outcome relationships. One of the most comprehensive of these is the volume by Russell (1994), which covers recent research and future directions of process research. Several of the book's chapters are referenced later in the review.

### LINKING PROCESS TO OUTCOME: THE DRUG METAPHOR AND ALTERNATIVES

Despite the wealth of data on process-outcome relationships, several authors have noted that the number of conclusions that can be drawn from process-outcome studies is disappointing (cf Shapiro et al 1994b). In reviewing meth-

ods of linking processes and outcomes, Lambert & Hill (1994) identified three approaches: (*a*) correlating the frequency or proportion of an occurrence of a process variable with an outcome measure, (*b*) using sequential analyses to study the immediate effects (minioutcomes) of process variables, and (*c*) considering longer patterns of process variables.

Stiles & Shapiro (1994) argued that the reason for the poor yield of process-outcome studies is that the primary research design is based on the drug metaphor, with its correlational approach to linking process and outcome at the end of therapy. Specifically, the drug metaphor operates from the "more-is-better" assumption that process variables represent the active ingredients of psychotherapy. In their criticism of the drug metaphor, Stiles & Shapiro (1994) asserted that therapists vary their intervention techniques based on feedback from and about the client, giving more of an ingredient when they perceive greater need on the part of the client. However, these variations can result in near-zero correlations when greater amounts are given to clients with poorer as well as to clients with better outcomes. Stiles (1996) concluded that the more-is-better assumption is appropriate only when the clients are not already getting enough of a critical ingredient; he also suggested that process research adopt developmental models or empirical approaches that do not rely on the correlational model to assess process-outcome relationships.

Greenberg & Newman (1996) edited a special section of the *Journal of Consulting and Clinical Psychology* devoted to new directions in the psychotherapy change process. Most of the studies that were included in this special section used the sequential approach to studying process-outcome relationships; they consisted of statistical analyses of various complexities, such as log-linear, path, and hierarchical linear modeling. The topics of the studies included the resolution of unfinished business, the resolution of ruptured therapeutic alliances, the contributions of generic model components to session outcomes, and the processes of cognitive therapy.

THE THERAPEUTIC ALLIANCE Advances in understanding the therapeutic alliance (the working relationship between patient and therapist) and its relationship to psychotherapy outcome have continued during the last decade of research. Horvath & Greenberg (1994) edited a book in which researchers from programs investigating the alliance presented a review and synthesis of their work. The contributors indicated that major advances include the following: (*a*) recognition of the central role of the alliance in successful therapies, (*b*) more complete and precise explication and operationalization of the construct, (*c*) increased attention to pretreatment and process variables that promote a positive alliance, and (*d*) greater understanding of the changing nature and purpose of the alliance over the course of treatment, as well as of alliance ruptures.

Randomized clinical trials repeatedly find that a positive alliance is one of the best predictors of outcome. For example, Krupnick and associates (1996) analyzed data from the large-scale National Institute of Mental Health Treatment of Depression Collaborative Research Program that compared treatments for depression; their analysis indicated that the therapeutic alliance was predictive of treatment success for all conditions. In another large study of diverse therapies for alcoholism, the alliance was also significantly predictive of success (Connors et al 1997).

The positive association between scores on measures of early treatment alliance and outcome is found repeatedly (Horvath & Symonds 1991), despite the variety of alliance conceptualizations and instruments used to measure it (Horvath & Greenberg 1994). Different programs of research have emphasized different aspects of the alliance. For example, Luborsky (1994) conceptualized the alliance from the psychoanalytic perspective and measured it as two parts: the patient experiencing the therapist as helpful and the patient sensing that therapy is a collaborative effort. In contrast, Bordin (1994) emphasized the pan-theoretical nature of the alliance, arguing that—regardless of the modality—the alliance always involves agreement on tasks and goals as well as a sense of compatibility or bonding. This latter viewpoint has been confirmed in the Working Alliance Inventory (Horvath 1994). Both Luborsky's and Bordin's programs have consistently found a predictive association between alliance and outcome.

Studies of the predictors of the development of a positive alliance have emphasized both pretreatment and in-treatment process variables. The research suggests that clients with healthy object relations (Piper et al 1991), generally satisfying social relationships, and lack of hostility or dominance in their interpersonal attitudes (e.g. Muran et al 1994) are prone to develop positive alliances. As noted earlier, in a study comparing the effectiveness of different therapies for depression (i.e. cognitive, interpersonal, and medication), the presence of a therapeutic alliance was a predictor of a favorable outcome for each treatment (Krupnick et al 1996).

## THREE AREAS UNDER STRESS: RESEARCH DESIGN

Traditionally held in the highest esteem, the randomized clinical trial (RCT) randomly assigns members of a relatively homogeneous group of patients to different treatment conditions to control for potentially confounding independent variables. The RCT is concerned with empirical validation and thus focuses on internal validity. However, several investigators argue that this approach should be replaced by naturalistic designs, which can provide results more applicable to real clinical practice, therefore strengthening external validity.

## *Consumer Reports Survey*

*Consumer Reports* magazine (*CR*; 1995) reported that most of the 2900 treated readers responding to its survey about whether psychotherapy helps received benefits from psychotherapy and were satisfied with the treatment they received. Among the other findings were the following: (*a*) there were no differences in effectiveness between the different psychotherapy types, again confirming the dodo effect; (*b*) long-term psychotherapy produced more improvement than short-term therapy; and (*c*) medication plus psychotherapy contributed no more benefits than psychotherapy alone.

In his praise of the *CR* survey, Seligman (1995) asserted that the findings provide crucial public confirmation of psychotherapy's general effectiveness and value. Seligman's article triggered considerable criticism and debate in the professional community. The *American Psychologist* (October 1996) devoted an entire issue to the controversy. Some of the criticism was directed toward the *CR* design, including for example that no control group was used to rule out factors such as regression toward the mean (Mintz et al 1996), spontaneous remission, or the influences of simply talking to a friend (Hollon 1996, Jacobson & Christensen 1996); that only a small percentage (4%) of the original sample responded to the mental health survey (Brock et al 1996, Jacobson & Christensen 1996); and that outcome was assessed only from the patient's perspective (Strupp 1996). Seligman noted and defended many of the survey's flaws in his original article and later rebutted critics in the *American Psychologist* special issue (1996a,b). Seligman's (1996b) defense of the *CR* survey was perhaps best summarized by Seligman himself:

> …none of the criticism I have seen is about what *CR* did but what they *might* have done with a great deal more money and time: a longitudinal study, using blind diagnosis, with a more representative sample of Americans, for example. But in the limits imposed by a cross-sectional survey of *CR*'s readership, this was first-rate journalism and creditable science as well. (p. 1086)

In his concluding comments, Seligman (1995) proposed an ideal survey design that includes a sufficiently large sample, pre- and postassessment methodology, and multidimensional outcome measures.

## *Randomized Clinical Trials*

Additional controversy over Seligman's (1995) article relates to his comments that the RCT—or, as he calls it, the efficacy study—is inadequate for empirically validating psychotherapy as practiced in real clinical settings. His argument, as well as those by others (e.g. Hollon 1996, Howard et al 1996), is that the efficacy study does not represent what happens in routine clinical practice. For example, unlike in the RCT, in actual clinical practice, manuals are not

used, patients rarely suffer from a singular disorder, numbers of sessions are not limited and predetermined, and patients are not randomly assigned to treatments. Howard et al (1995) add that, because of attrition, randomization seldom equates groups and rarely controls for patient-treatment interactions. Consequently, the randomized experiment usually becomes an inadequately designed quasi-experiment.

Some authors disagree. Jacobson & Christensen (1996) propose that despite their limitations, RCTs can provide clinically relevant effectiveness information by varying such factors as treatment length, therapist experience, whether a manual is used, and whether the therapy has a specific theoretical orientation or is eclectic. There is also disagreement about the value of information from RCTs for practicing psychotherapists (Persons & Silberschatz 1998). The consensus (e.g. Crits-Christoph 1997, Hollon 1996, Howard et al 1996, Seligman 1996a) is that RCTs provide valuable information about psychotherapeutic efficacy—for example, whether a type of psychotherapy can possibly work under certain conditions or the identification of a specific active ingredient—but that the degree to which such findings have value for actual clinical application is questionable.

### *Effectiveness Studies*

Seligman and others (e.g. Howard et al 1996, Wampold 1997) recommend effectiveness studies for understanding how psychotherapy works in actual clinical settings; in this case, uncontrolled treatments are applied in self-correcting fashion to patients who typically suffer from multiple problems. Most effectiveness designs have emanated from the dosage model (Howard et al 1986). Dose-effect studies have confirmed a positive rate of effect (i.e. percentage of patients improved or normalized probability of improvement for one patient) across dose (i.e. number of sessions), with diminishing returns at higher dosage levels. Information obtained from these studies includes the following: (*a*) Psychological symptoms demonstrate different improvement rates across sessions that can be categorized into three response classes—acute distress (fastest), chronic distress (intermediate), and characterological (slowest) (Barkham et al 1996b, Kopta et al 1994); (*b*) for most clinical syndromes, 16 sessions provide at least a 50% chance for recovery to normal functioning (Barkham et al 1996b, Kadera et al 1996, Kopta et al 1994) and 26 (Kadera et al 1996) to 58 sessions (Kopta et al 1994) provide a 75% chance.

Dose-effect designs as well as RCT designs use grouped data to provide information about an "average" patient; however, patterns of improvement across sessions for specific patients have been shown to vary substantially from the general linear trend (Kadera et al 1996, Barkham et al 1993). At the clinical practive level, the therapist needs to know, "Is this patient's condition

responding to the treatment that is being applied now?" Two groups of researchers (Howard et al 1995, Tingey et al 1996) have presented a single case application of the dosage model, the dose-outcome design. Here, the patient's progress toward reaching clinically significant improvement on some outcome measure is tracked across sessions. Going further, Howard et al (1996) developed patient profiling, which models the patient's expected course of improvement based on pretreatment clinical characteristics by using a hierarchical linear modeling strategy. The patient's progress (as indicated by the dose-outcome method) can now be compared with his/her expected progress, which serves as the outcome criterion for decision making. With these strategies, treatment can be adjusted if the patient's response to therapy moves in an undesirable direction.

## *Advances in Establishing Outcome Criteria*

Clinical significance (Jacobson et al 1984)—that is, when a patient's functioning moves into the range of functioning for a sample of nonpatients or normals—is one of the most frequently used outcome criteria. Methodological extensions concerning the concept were proposed and discussed in a special section of *Psychotherapy Research* (Summer 1996). As one example, Tingey et al (1996) proposed a social validation method that included distinguishing different normative samples for clinically significant improvement: mildly symptomatic ("normal") and asymptomatic ("healthy").

Influenced by dosage model findings, Howard and his colleagues (1993) validated a phase model of improvement. They found that psychotherapeutic improvement occurs in three sequentially dependent phases: first, greater well-being is experienced, then symptoms remit, and finally life functioning improves.

The two dimensions for outcome—amount of benefit and phase—allow for the selection of specific outcome goals emanating from an empirical foundation. These goals can range from a return to normal well-being, requiring fewer treatment sessions, to the achievement of healthy life functioning, requiring considerably more sessions.

## *A Positive Transition*

At first look, outcome research design appears to be experiencing turmoil similar to that of theory development and the empirical validation of treatments. However, even though some things appear to be declining (e.g. the universal acceptance for the RCT design and the importance of meta-analyses), something else may be emerging. More specifically, since the last *Annual Review of Psychology* chapter on psychotherapy (Goldfried et al 1990), designs are now available that can address the current vital issues of outcome research:

(*a*) which psychotherapies can work as specified by theory under controlled conditions; (*b*) which psychotherapies work as practiced in actual clinical settings; (*c*) to use Paul's (1967) famous question, "Which treatments are most effective for which patients under which conditions?" and (*d*) which psychotherapies work most efficiently.

For (*a*), creative RCTs have been used (e.g. Jacobson et al 1996) and proposed (Jacobson & Christensen 1996, Crits-Christoph 1997) that are able to distinguish unique active ingredients if indeed they exist. To answer (*b*), dose-effect studies can discover lawful outcome relationships across sessions for patients treated by different therapies as practiced in real clinical settings. Concurrently tracking control groups over time in these studies would allow for clinically relevant treatment effectiveness to be validated. More advanced survey methods such as those proposed by Seligman (1995) can also provide valuable information. Using dose-outcome designs to group individual patients by treatment type and similar dose-response patterns, researchers can answer Paul's patient-focused question in (*c*). These methods best address the complexity of the unique individual clinical situation.

Regarding (*d*)—with cost containment a concern for managed health care and biological psychiatry asserting that medication is faster, cheaper, and more effective than psychotherapy (e.g. Klein 1996)—outcome studies now need to distinguish which psychotherapies are more efficient in addition to which ones are simply effective. The best designs to do that are in the form of dose-effect strategies that provide an index of the rate of improvement for groups of patients and the use of growth curves rather than change scores.

In moving from demonstrating efficacy to proving effectiveness, Shadish and associates (1997) describe the technology transfer model, which can guide the dissemination of scientific findings into clinical practice. The model includes five phases that feature efficacy and effectiveness strategies: (*a*) pilot testing of a therapy for feasibility and risk; (*b*) evaluation in randomized clinical trials to see whether the therapy is efficacious under ideal conditions; (*c*) treatment of specific populations to measure the impact of the therapy with distinct, well-defined patients; (*d*) demonstration studies of the therapy being implemented and assessed in public health contexts; and (*e*) evaluation of the therapy as it is used in clinical practice.

## THREE AREAS UNDER STRESS: TREATMENT TECHNIQUE

The need to clarify and improve treatment technique exists along two lines: (*a*) the relationship between psychotherapy and pharmacotherapy and (*b*) the conceptualization of psychotherapy integrationism and its role as a recognized type of psychological treatment.

## *Psychotherapy and Pharmacotherapy*

Modern psychopharmacology continues to grow and evolve as evidenced by the increasing number of psychotropic medications that reach the marketplace, the expanding range of medications that are demonstrating efficacy in the treatment of mental disorder, and the increasing interest in psychopharmacological agents by the public. Today, a significant proportion of patients receive a combination of medication and psychotherapy. Consequently, an understanding of the comparative and interactive effects of pharmacotherapy and psychotherapy is necessary to maximize effectiveness in mental health care.

Comparative studies of psychotherapy versus pharmacotherapy have most aggressively investigated the treatments' effects on depression and panic disorder; usually psychotherapy is represented by cognitive behavior therapy. With regard to depression, the most cited results were reported by the National Institute of Mental Health Treatment of Depression Collaborative Research Program (TDCRP; Elkin et al 1989). Two hundred fifty unipolar depressed patients at three sites were randomly assigned to one of four conditions: cognitive-behavior therapy (CBT), interpersonal therapy (IPT), imipramine (a tricyclic antidepressant) plus clinical management (IMI-CM), and pill placebo with clinical management (PLA-CM). Results (Elkin et al 1989, Gibbons et al 1993) were generally as follows: (*a*) all four conditions resulted in significant improvement; (*b*) neither form of psychotherapy was superior to the other; (*c*) the only significant treatment difference for all patients occurred between IMI-CM and PLA-CM; (*d*) for the more severe cases, IMI-CM and IPT produced more improvement than PLA-CM whereas CBT did not; and (*e*) IMI-CM generally produced more rapid effects than the other conditions.

A lively debate about the meaning and general applicability of the findings was featured in a special section of the *Journal of Consulting and Clinical Psychology* (February 1996). The authors, in reviewing additional research studies as well as TDCRP, provided a spectrum of conclusions regarding CBT. Jacobson & Hollon (1996) asserted, "We still consider CBT to be a viable alternative to pharmacotherapy in the treatment of even severe outpatient depression (the TDCRP notwithstanding)…." (p. 79). Elkin et al (1996) stated that a conclusion cannot be reached yet, whereas Klein (1996) argued that CBT is not an effective treatment.

In contrast to the situation for depression, there is evidence that panic disorder's response to psychotherapy is greater than its response to some medications. Clark et al (1994) found that CBT (cognitive therapy plus in vivo self-exposure) produced significantly greater remission rates (90%) than imipramine (55%), applied relaxation (50%), and a wait-list control experience (7%). Likewise, Klosko and his colleagues (1990) reported that there was more panic remission for CBT (87%) than either pill placebo (36%) or wait-

list (30%) conditions; however, the same differences were not found when remission with Alprazolam (50%), a benzodiazepine, was compared with the placebo and wait-list conditions. In a review of research studying the combined effects of benzodiazepines and exposure-based cognitive therapy, Spiegel & Bruce (1997) concluded that there was no convincing evidence that this treatment combination improves outcomes. Whereas CBT has been shown as successful in preventing relapse (e.g. Ballenger 1993, Chambless & Gillis 1993), many patients relapse after drug discontinuation (Gorman 1994). However, methodological concerns regarding the validity of CBT's success have been raised, for example, investigator allegiance biasing results (Jacobson & Hollon 1996), panic remission as an insufficient measure of outcome (Shear & Maser 1994), and exclusion of a pill placebo condition (Klein 1996).

### *Specific Theoretical Orientations Versus Integration*

There are three distinct threads that focus on the issue of treatment selection. First, specific theories of psychotherapy delineate unique active ingredients working through particular, sequenced interventions. This thread is tied to the desire to identify effective treatments and to the development of practice guidelines to be used in treatment selection. The second thread is the movement toward integration, in which the putative active ingredients for each theory are delineated and an attempt is made to bring these processes under a single, more generic, theoretical umbrella. The final thread is eclecticism, the use of theoretically different interventions with selection based on the needs of a particular patient.

An increasingly popular view is that the long-term dominance of the major psychotherapies has ended and that integrationism and eclecticism is now the direction for technical advances in treatment. Indeed, more therapists identify themselves as eclectic than any other individual orientation. At least five handbooks on psychotherapy integration have been published in the 1990s (e.g. Norcross & Goldfried 1992, Stricker & Gold 1993). There is also a national society (Society for the Exploration of Psychotherapy Integration) as well as associated journals (e.g. *Journal of Psychotherapy Integration*). Some attempts have been made to provide guidelines for the selection of interventions (e.g. Beutler & Clarkin 1990, Gaw & Beutler 1995). Still, many authors assert that the effectiveness of integrative approaches has not been proven (e.g. Lambert 1992, Norcross 1993), that there is little consensus about what integrationism is, and that progress in this area has stalled (Norcross 1997).

## PROGRESS IN TREATING SPECIFIC DISORDERS

The efficacy of psychotherapy for adult disorders has been the topic of special sections of journals over the past 10 years. Several compendia of treatments

have been presented in book format, including edited volumes by Barlow (1993) and Mavissakalian & Prien (1996) and Roth & Fonagy's (1996) book. The latter book was commissioned by England's Department of Health in response to the growing influence of the evidence-based medicine movement. A special section of the *Journal of Consulting and Clinical Psychology* (February 1998) included 13 articles on empirically supported therapies. Several of these articles focused on therapies for specific disorders and are reviewed below. Our review summarizes evidence for efficacy, effectiveness, and efficiency of treatments for the variety of psychological disorders.

## *Depression*

Knowledge about the most effective way to treat depression is advancing (see reviews by Dobson 1989, Docherty & Streeter 1993, Hollon et al 1993, Robinson et al 1990). This knowledge is aided by increasingly sophisticated statistical analyses, including growth curve and random regression modeling (e.g. Gibbons et al 1993). Also relatively new are the studies of the process of outcome or the shape of change of outcome in treatments of depression (e.g. Barkham et al 1996a,b).

COGNITIVE THERAPY Cognitive therapy (CT) focuses on altering the maladaptive, depression-causing thoughts, beliefs, attitudes, and behaviors of patients. CT is the most widely studied psychotherapy for depression, and its efficacy has been established by a number of research programs (e.g. DeRubeis et al 1990, Whisman et al 1991). There is also evidence that CT offers relapse prevention benefits not found with pharmacotherapy (e.g. Evans et al 1992), which would be predicted by the hypothesized mechanism of change (i.e. that patients change long-standing maladaptive attitudes and perceptions).

Uncertainty remains about the mechanism of effect of CT and about its relative effectiveness when compared with other treatments; however, and more specifically, conclusions (beyond "it works well") are still being pursued (cf DeRubeis & Crits-Christoph 1998). Jacobson and colleagues (1996) conducted a component analysis of CT, comparing behavioral activation (BA) alone, BA and cognitive restructuring to modify automatic thoughts, and the complete CT treatment package. They found that BA and BA plus cognitive restructuring were as effective as CT. It is also uncertain whether CT is more effective than other psychotherapies. For example, the TDCRP research team (i.e. Elkin et al 1989) found that interpersonal therapy (IPT) was equally effective, and the Sheffield group reported that psychodynamic-interpersonal therapy (IP) was generally as effective (e.g. Barkham et al 1996a, Shapiro et al 1994a).

OTHER THERAPIES Researchers have also evaluated a variety of alternative psychotherapies and modes of treatment. IPT (Shapiro et al 1994) has been investigated, although not as extensively as CT. IPT emphasizes interpersonal

problems as the root of depressive disorders; treatment focuses on improving the interpersonal deficits. In large-scale, controlled, experimentally rigorous studies, IPT has been found to be as efficacious as other treatments, including CT (e.g. Barkham 1996a, Elkin et al 1989).

Behavior therapy for depression emphasizes behavioral activation and increasing pleasant event experiences (e.g. Lewinsohn et al 1980). Although it has received relatively little attention as a stand-alone intervention, behavior therapy is a major emphasis of the cognitive-behavioral treatment program used in the TDCRP and numerous other studies. As a singular treatment, however, there is evidence of its efficacy. As noted above, in their component analysis of CBT, Jacobson et al (1996) found that behavior therapy was as effective as CT in alleviating depression.

PREDICTING RESPONSIVENESS TO TREATMENT Studies examining predictors of treatment response or failure have proliferated, as have prospective studies examining the matching of patients to treatments (e.g. Beach & O'Leary 1992, Beutler et al 1991). Researchers have attempted to delineate the relevant aspects of effective therapy for depression. Burns & Nolen-Hoeksema (1991, 1992) found that while patient motivation and compliance with the requirements of CT are predictive of success, the quality of the therapeutic relationship is also predictive. Castonguay and colleagues (1996) found that improvement was predicted by level of therapeutic alliance and the patient's emotional involvement, but not by process variables unique to CT. Blatt and colleagues (1995, 1996) reanalyzed the TDCRP data set to investigate potential predictors of patient responsiveness to treatment. They found that patients' pretreatment level of perfectionism was negatively correlated with clinical improvement and that perfectionism interacted with the quality of the therapeutic alliance. Mohr and colleagues (1990) examined the relationship between pretherapy patient variables (interpersonal problems and level of distress) and outcome, defined as either negative change, no change (nonresponse), or positive change. While negative change was predicted by high levels of interpersonal difficulty and low levels of distress, nonresponders displayed moderate levels of both, and positive responders displayed high levels of both.

LIMITATION The primary limitation of concluding that CT and other therapies for depression have clinical utility is the lack of evidence that these treatments—with proven clinical trial efficacy—are effective in actual clinical settings (see also Hollon et al 1993).

## *Anxiety Disorders*

EFFICACY Efforts to identify efficacious treatments have achieved greater success for anxiety disorders than for any other major class of diagnosis (cf Roth & Fonagy 1996). In a review of psychosocial treatments for the variety of

anxiety disorders, Barlow & Lehman (1996) declared, "Evidence now exists on the effectiveness (i.e. efficacy) of psychosocial treatment approaches for every anxiety disorder when compared with no treatment or credible psychosocial placebos" (p. 727). DeRubeis & Crits-Christoph (1998) provided a similar review of anxiety disorder treatments. They classified the well-specified treatments for 10 disorders, including 6 anxiety disorders, into 3 categories of empirical support for treatment efficacy: (*a*) efficacious and specific, (*b*) efficacious, and (*c*) possibly efficacious.

For panic disorder, CT and panic control therapy (PCT) have been shown to be efficacious and specific (cf Arntz & van den Hout 1996, Beck et al 1994, Clark et al 1994). Two other treatments, exposure (Williams & Falbo 1996) and applied relaxation (Barlow et al 1989, Ost 1988), are supported by evidence indicating that they are efficacious with panic patients. Barlow & Lehman (1996) note that 80% of patients who receive CT or PCT are panic free at the end of treatment. In September 1991, the National Institute of Mental Health convened a panel of experts who reviewed the treatment outcome literature comparing CBT, other psychosocial treatments, drug treatments, and control conditions; they concluded that CBT is an effective treatment for panic disorder (Wolfe & Maser 1994).

For agoraphobia, only exposure therapy has been shown to be efficacious and specific; unfortunately, only a few efficacy studies have been recently reported for this disorder (cf DeRubeis & Crits-Christoph 1998). For generalized anxiety disorder (GAD), one efficacious and specific treatment has been identified, CT. A review (Chambless & Gillis 1993) of CT for GAD included nine studies. Two more recent studies (Barlow et al 1992, Durham et al 1994) supported the summary conclusion that CT is superior to wait-list control conditions and to other more active treatments such as pill placebos and nondirective therapy. One treatment, applied relaxation (Borkovec & Costello 1993), has been shown to be efficacious with GAD. This is a difficult disorder and these findings represent considerable progress in recent years.

Epidemiological studies indicate that social phobia is the most prevalent diagnosable disorder. Two treatments have been shown to be efficacious for social phobia, exposure alone (Turner et al 1994) and exposure plus cognitive restructuring (Feske & Chambless 1995, Heimberg et al 1995). Barlow & Lehman (1996) note that there is a developing consensus that a combination of exposure to social situations and cognitive therapy may be the most powerful treatment for social phobia.

Obsessive-compulsive disorder (OCD)—a difficult-to-treat disorder with very low spontaneous remission rates—has one efficacious and specific treatment, exposure plus response prevention (ERP; Fals-Stewert et al 1993, Foa et al 1992). Cognitive therapy (Emmelkamp & Beens 1991, Van Oppen et al 1995) is the only possibly efficacious treatment for OCD.

For post-traumatic stress disorder (PTSD), only exposure (Foa et al 1991) has been shown to be efficacious. Two other treatments, stress inoculation therapy (Foa et al 1991) and eye movement desensitization and reprocessing (EMDR; Wilson et al 1995) have been shown to be better than wait-list control groups in the treatment of patients who have experienced trauma. Inclusion of EMDR in a list of possibly efficacious treatments has been controversial (see Renfry & Spates 1994).

EFFECTIVENESS AND EFFICIENCY Despite the impressive evidence for the efficacy of treatments for anxiety disorders, there is very little evidence for their effectiveness in real clinical settings. Furthermore, little is known about the efficiency of treating anxiety disorders (see Gould et al 1995 for a review of the cost-efficiency of treating panic disorders).

## *Eating Disorders*

The eating disorders include bulimia nervosa (BN), anorexia nervosa (AN), and binge-eating disorder (BED), a newly-proposed DSM category. They are characterized by severely impaired cognitions centered on weight and severely maladaptive eating behavior. As a consequence, most of the research involving these disorders has focused on cognitive and behavioral interventions, which have recently been examined in a number of large-scale, controlled studies (e.g. Fairburn et al 1991, 1993, 1995).

BULIMIA NERVOSA Most of the psychotherapy research on eating disorders has been conducted on BN. Originally thought to be resistant to treatment (Russell 1979), research indicates that BN does respond to psychotherapy (Garfinkel & Goldbloom 1993, Hartman et al 1992). The most widely researched treatment is cognitive behavior therapy (CBT), which has repeatedly proven superior to other therapy modalities (e.g. Fairburn et al 1989, 1991, 1993) and has emerged as the treatment of choice (cf Walsh et al 1997).

Other treatments for BN have been less researched but have demonstrated promise for being effective. Similar to findings in the depression literature, interpersonal psychotherapy (IPT) has been shown to be as effective as CBT. Fairburn and colleagues (1991, 1993) compared CBT with IPT, which focuses on the interpersonal problems surrounding bulimic behavior. At the end of treatment, CBT was clearly superior, but the treatments were equally effective over the course of long-term follow-up.

ANOREXIA NERVOSA AND BINGE EATING DISORDER Anorexia nervosa is usually treated on an inpatient basis because of the medical necessity of restoring healthy weight (Beumont et al 1993). However, with recent restrictions on

length of inpatient care (Baran et al l995), the small pool of outpatient care research (e.g. Gowers et al 1994) needs to be expanded.

BED might be considered a sub-category of BN, wherein the patient engages in excessive, seemingly uncontrolled eating but not in the purging behaviors. Research suggests that both CBT and IPT are effective treatments of BED (Smith et al l992, Wilfley et al l993).

## *Substance Abuse*

A previous *Annual Review of Psychology* chapter on individual psychotherapy (Goldfried et al 1990) did not include a section on treatment of substance use disorders, perhaps because the field was dominated by uncontrolled comparisons of poorly specified treatments (Floyd et al l996). We review the increasing number of studies that have used stringent experimental design procedures.

PSYCHOLOGICAL INTERVENTIONS FOR SUBSTANCE ABUSE DISORDERS There is considerable evidence that alcohol-abusing patients who undergo treatment drink less frequently and consume less when they do drink. Inpatient treatment does not appear to be superior to outpatient treatment (e.g. McKay & Maisto l993), although length of treatment is positively associated with better outcomes (Moos et al l990). The treatments that have been most systematically investigated are twelve-step-based counseling, psychodynamic therapy, and CBT. Holder et al (l99l) reviewed the extant studies and concluded that CBT was slightly more efficacious, but other studies suggest an equivalency of treatments (e.g. Cooney et al l99l). Similarly, in a recent large-scale study, both supportive-expressive psychodynamic psychotherapy and CT were found to be efficacious with opiate dependence (Woody et al l990, l995).

TREATMENT MATCHING STUDIES The alcohol and drug use literature is growing rapidly with studies examining the effects of trying to match patient characteristics to the most efficacious treatment. Mattson et al (l994) reviewed 30 experimental studies and found evidence supporting this practice.

A larger-scale matching study (Project MATCH l997) was recently completed and is generating numerous reports. This study was a clinical trial wherein two groups of patients (one receiving outpatient therapy and the other receiving care after either inpatient or day treatment) were randomly assigned to one of three individualized treatments lasting l2 weeks: cognitive behavioral coping skills treatment (CBCST), motivational enhancement therapy, or twelve-step facilitation therapy (TSF). Significant and sustained improvements in drinking outcomes were observed for all three groups. Only one pretreatment patient attribute, psychiatric severity, interacted with treatment, as

clients low in severity did better in TSF than CBCST; high-severity clients did equally well in all treatments.

### *Personality Disorders*

The use of psychotherapy to treat personality disorders is largely in the discovery phase of research, with a few exceptions. To be sure, theoretical approaches to treatment have been presented from cognitive (Beck & Freeman 1990), interpersonal (Benjamin 1993), psychodynamic (Clarkin et al 1992), and behavioral (Linehan 1993) perspectives. One of these treatments, dialectical behavior therapy for borderline personality disorder (Linehan et al 1991), has met the criteria for a probably efficacious therapy. Other outcome studies of psychotherapy with personality-disordered patients have been reported (e.g. Hull et al 1993, Stevenson & Meares 1992). However, the greatest attention has been directed to the assessment of personality as part of psychological therapies (e.g. Pilkonis 1997, Shea 1997), the identification of interpersonal and intrapersonal styles as risk factors or vulnerabilities receiving attention in psychotherapy (cf Ouimette et al 1994), and the influence of personality disorders as comorbid conditions that influence treatment outcomes (e.g. Shea et al 1990).

### *Serious Mental Illness*

The term "serious mental illness" has developed favor as a rubric to include disorders such as the schizophrenias, schizo-affective disorders, and bipolar disorders that formerly were termed chronic mental illnesses (Coursey et al 1997). Psychological therapies have more typically been offered as adjuncts to the psychopharmacological management of primary symptoms in these disorders. Many if not most of the psychotherapies involve modalities other than individual psychotherapy, such as couples, group, or family interventions (Bedell et al 1997). Although the results of psychodynamic psychotherapy continue to be reported, this treatment has generally been found to be ineffective with persons having serious mental illness (Scott & Dixon 1995). Supportive therapies that strengthen the therapeutic alliance, educate, strengthen adaptive defenses, and offer praise for successes have fared better (Rockland 1993). Social skills training (Benton & Schroeder 1990) is the only treatment that meets the efficacy criteria used by the empirically supported therapy advocates; it has been judged to be probably efficacious for the treatment of persons with schizophrenia (DeRubeis & Crits-Christoph 1998).

## CLOSING COMMENTS

We now know that psychotherapy is generally effective but we are uncertain as to why. Researchers are currently trying to validate psychotherapy's specific

effectiveness and hypothesized operations for change; at the same time, the search for an acceptable guiding theory continues.

The traditional view that the different psychotherapies—similar to medication treatments—contain unique active ingredients resulting in specific effects has not been validated. The nature of the relationship between psychotherapy and pharmacotherapy continues to be uncertain. The most frequently practiced and most rapidly growing brand of treatment, eclectic therapy, is still poorly defined as well as inadequately researched; yet, this movement in clinical practice may be the phenomenon that best defines psychotherapy's maturation process.

Although the aforementioned situations are evidence of a profession in turmoil, there is the possibility for a positive transition here. New research designs are emerging that can uncover needed knowledge, and established ones (RCT) are becoming more sophisticated in their application. The order of events described in this review (from unexpected findings to critical debate to new methodologies) has led in some cases to paradigm shifts. It is premature to declare that a paradigm shift is beginning to take place because presently there is little clue as to its form. However, some have implied that psychotherapy may be in a "pre-paradigm-shift phase" (Bergin & Garfield 1994b). The picture should become clearer as researchers apply the newer methodologies to psychotherapy as practiced in actual clinical settings.

ACKNOWLEDGMENT

We are grateful to Wolfgang Lutz for his helpful and insightful comments.



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