CHAPTER 30. PSYCHOTHERAPIES

30.11 EVALUATION OF PSYCHOTHERAPY

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Psychotherapy is the most prevalent outpatient treatment for psychiatric disorders. Unlike other medical interventions, however, psychotherapy entails a particular kind of conversation between the therapist and the patient, and is not generally dependent on tangible technical interventions such as setting a bone or suturing a wound. Given the intangible nature of psychotherapy, it has been difficult to establish its scientific validity. To further complicate matters, since the introduction of psychotherapy a plethora of competing schools have emerged. Unlike many other areas of medicine, however, new psychotherapeutic techniques and ideologies were adopted before research evidence had been produced to support their superiority over current practices. Thus, the acceptance of a particular psychotherapeutic approach was dependent on the influence and charisma of the inventor of that approach.

Given this ambiguity and the need for scientific evidence, the new field of psychotherapy research emerged.

HISTORY

Psychotherapy research is focused on the empirical investigation of the processes and outcomes of psychotherapy. It aims to increase our knowledge regarding the nature of therapeutic interventions, the patients who will most benefit from those interventions, and the outcomes expected from those interventions. It is now well established that

psychotherapy achieves significant positive effects over and above control conditions. However, in order to determine how such effects are achieved, how to investigate specific therapies for specific disorders, and the variables that account for positive outcome, new research paradigms and enhanced collaboration between clinicians and researchers are necessary. The overarching goals of psychotherapy research are to improve the practice of psychotherapy, inform public policies regarding psychotherapy, and streamline the provision of mental health care.

The history of psychotherapy research can be understood by considering a sequence of developmental phases, each with its own central issues and achievements. The earliest scientific investigations of psychotherapy began in the 1920s as the first clinical researchers began to document their treatment results. Studies of nonpsychoanalytic treatments appeared in the 1930s, but there was little effort through the 1940s to study either psychoanalytic or nonpsychoanalytic treatments. However, competitors to the psychoanalytic paradigm made their appearance, and researchers such as Carl Rogers brought psychotherapy from private offices to be scientifically studied.

When Hans Eysenck's landmark 1952 review resulted in the claim that 67 percent of outpatients “spontaneously” improved in 2 years without treatment, psychotherapy researchers became even more motivated to search for scientific evidence regarding the efficacy of psychotherapy. Objective methods for measuring recorded events during therapy and controlled comparative outcome studies were developed utilizing Fisherian statistical methodology (random assignment to treatment conditions, null hypothesis testing with *t*-tests, analysis of variance, and correlations). The 1960s to the early 1980s saw the significant expansion and organization of psychotherapy research efforts. New methods were employed, most significantly the results of meta-analysis (an assessment of treatment effectiveness through averaging and combining results across studies). The first of these meta-analyses, presented by Mary L. Smith, Gene Glass, and Thomas Miller in 1980, showed a mean effect size for psychotherapy of 0.85, indicating that psychotherapy was very effective indeed. Finally, from 1984 to the present there has been a consolidation and reformulation of psychotherapy research that has begun to accept eclecticism and the relevance of models, stages, and averaged growth curves that in turn yield assessments of patients' progress leading to beneficial outcome.

Psychotherapy research remains bedeviled by the diversity of the variables investigated, the varying methods of appraisal, the heterogeneity of the patients studied, the differences in therapist training and skill, and the variations in clinical settings. However, there is now a substantial body of evidence that shows that: (1) there are effective psychological treatments for a large number of psychiatric disorders; (2) psychotherapeutic approaches either alone or in combination with psychotropic medications are more effective than placebo; and (3) psychotherapeutic treatments may be at least as effective as medications and may enhance the effects of

medication.

The question of whether psychotherapy works has become as useless as the question of whether surgery or antibiotics work. The main goal is to match the appropriate intervention applied by the appropriately trained practitioner to the appropriate pathological condition. Psychotherapy research can provide some guidance in this regard and can forge a link with providers of psychotherapy by furnishing information relevant to the current case in treatment.

CONSUMERS OF PSYCHOTHERAPY

A substantial proportion of the population (about 25 percent) meet the criteria for a psychiatric disorder in any given year, but the vast majority of those who do so (over 80 percent) do not get help from a mental health specialist. When evaluating the effectiveness of psychotherapy, an important issue is who receives such help, why they seek it, and how they get it.

Utilization of Psychotherapy Examining the characteristics of psychotherapy users through the use of a single national survey is difficult since only 3 to 5 percent of the general population will visit a mental health practitioner in a given year. However, based on the combined information from several large-scale, national surveys conducted in the 1980s, it has been shown that two thirds of those who make at least one mental health visit are female, and that 90 percent are white. The most educated are more likely to make a visit; about 50 percent of psychotherapy patients have had at least some college education. Age is also related to the probability of making a mental health visit: the youngest and oldest are the least likely to make an initial visit and over 50 percent of patients are between 21 to 40 years of age. Surveys indicate that income is not related to the likelihood of seeking mental health care. Having a diagnosable mental illness significantly increases the likelihood that a person will seek mental health care, and having multiple diagnoses increases the likelihood further. Patients with diagnoses such as schizophrenia, somatization, panic disorder, and major depressive disorder are more likely to seek professional help than are those with diagnoses such as obsessive-compulsive disorder, substance use disorders, dysthymic disorder and phobias. However, almost half of those seeking such care do not meet the criteria for a psychiatric diagnosis, and research indicates that the best predictor of seeking mental health care is level of distress, whether from a psychiatric illness, an interpersonal problem, or inadequate coping in a particular situation. A study in the 1990s of 500 persons seeking psychological treatment found that the most common patient complaints were interpersonal problems, depression, uncontrolled behavior, and anxiety.

Help-Seeking Behavior Given the frequent finding that most persons who need psychiatric help do not get it, it is important to establish how persons go about seeking psychotherapy. Models of help-seeking behavior focus on the series of decisions that

must be made, such as recognizing that a problem exists, deciding that seeking psychotherapy is appropriate, and contacting a professional helper. Research indicates that problem recognition is the most difficult and time-consuming step to achieve, and that some individuals have a significantly easier time accepting the need for psychotherapy than do others. However, the help-seeking process is complicated. For example, it has been found that adolescents experiencing suicidal ideation realized that they needed help, but were less likely than nonideating peers to obtain it. Most persons who seek professional care will first seek help from their family, friends, acquaintances, and others outside the mental health profession (such as primary care physicians and clergy). Others will look to nonprofessional sources, such as self-help groups (e.g., Alcoholics Anonymous). This help may reduce distress to the extent that professional care becomes unnecessary. The social network might either promote or discourage the individual from seeking professional mental health care; friends and family may be able to identify psychiatric problems and provide information about and encourage the use of such care, but they may also transmit attitudes that make formal help-seeking less likely.

Utilization Because research has established that the median effective dose of therapy is between 6 and 8 sessions, an important issue is whether a person who seeks therapy actually engages in treatment (defined here as at least 8 visits). This is related to the issue of equity and cost, as it has been shown that 44 percent of patients make less than 4 visits and account for 6.7 percent of outpatient psychotherapy expenditures, whereas 16.2 percent of patients make more than 24 visits and account for 57.4 percent of expenditures. Many possible factors have been investigated, including patient income, level of education, age, sex, race, and socioeconomic variables. Controlling for their increased likelihood of making an initial visit, females are not more likely than males to continue in therapy once they have made that initial visit. The most educated are more likely to make an initial visit as well as to enter therapy given such a visit; nonwhites are significantly less likely either to make an initial visit or to continue treatment after the initial visit. The youngest are the most likely to enter therapy given a visit, whereas those 61 and older are the least likely to enter therapy after the first visit. Income is not related to the likelihood of making at least one visit for mental health care but is positively related to the likelihood of engaging in therapy. Thus, research has shown that there is a frequent but not invariable relation between specific patient variables and length of treatment. In contrast, preparing patients for psychotherapy (e.g., via role induction interview) has not made a discernible difference in treatment engagement. Similarly, attempts to predict continuation in psychotherapy using psychological tests, measures of patient expectations, presenting problems, and social support have not been successful.

PATIENT, THERAPIST, AND TREATMENT VARIABLES RELATED TO OUTCOME

Conceptions of Outcome Reviews of studies of psychotherapy have identified at

least 800 different outcome measures, the most frequent of which, the Beck Depression Inventory, has been used in only 8 percent of these studies. Obviously, many outcome measures have only been used in a single study. The plethora of outcome measures illustrates three outcome issues: (1) selection of outcome measures varies according to the beholder; (2) outcome measures are of mixed psychometric quality; and (3) outcomes measures can be grouped into categories by their similarities. Each of these points will be considered in turn.

Stakeholders The enterprise of psychotherapy involves a variety of interested parties or stakeholders. The patient is most concerned about relief from personal distress. The therapist attends most closely to symptom amelioration and to correction or removal of the pathogen or causal condition thought to underlie the patient's symptomatic condition. The client—who often is the patient, but could also be a spouse, employer, or parent—usually is most concerned with better functioning. The purchaser attends most closely to the cost efficiency of methods and outcomes. Outcome has different meanings for each of these parties.

Psychometric Properties Psychometric investigations of outcome measures indicate that many measures tap a common domain of emotion and behavior. For example, studies of self-reported depression and anxiety inventories indicate that most measure a common domain of negative affect. Nevertheless, outcomes researchers continue to use inventories and measures as if they measure the variables indicated by their label; reliability and validity studies are clearly needed in this area.

Outcome Measures Most of the outcome assessments used in controlled studies of psychotherapy have used one or more symptom measures. This focus on symptoms as the category of choice in outcomes represents the focus of the clinician and contributes to the efforts of psychotherapy advocates to achieve parity with clinical trials of medications for similar disorders. The second most frequently studied domain of outcomes, although it can be found only in a minority of published studies, is functioning. Social functioning can include leisure, intimacy, and work functioning; each of these subdomains has been studied separately. The domain of well-being (or freedom from subjective distress) has received the least attention, although it is clearly of paramount importance to the patient.

Patient Variables A number of patient variables, such as education level and race, are related to the probability both of seeking and obtaining psychotherapy. Of even more interest to clinicians and researchers is predicting who will benefit from treatment. The relationship between the ultimate effectiveness of therapy and pretherapy patient characteristics, such as age, sex, social class, intelligence, personality, and diagnosis, has been extensively researched but few consistent relationships have been uncovered. This is partly because of the complexity and related difficulty of construct measurement. For example, patient expectations about treatment have been measured in naturalistic settings and experimentally manipulated

in the laboratory, and some studies suggested that patients who expect so will ultimately do better. Other research has not found this to be the case, however, and the validity of the measures and the manipulation of expectancy have been questioned. At first glance, it would seem that patient variables would be relatively easy to assess, but in fact most research in this area has had similar problems (e.g., only recently has the diagnosis of personality disorder achieved even marginally acceptable reliability).

Patient Characteristics Despite numerous studies, research has not shown a consistent relationship between treatment outcome and patient age, gender, or sociodemographic variables. A meta-analysis of over 500 studies found no correlation between age and psychotherapy outcome, and patient gender has also been shown to be unrelated to treatment effectiveness. As noted, other sociodemographic variables, such as education and race, are related to the probability both of seeking and obtaining psychotherapy, but there is no clear relationship between socioeconomic status and treatment outcome.

Research over the past 10 years has shown that there is a frequent but weak relationship between social class and length of treatment. However, the variables of sex, age, and diagnosis do not show this relationship. Although more black than white patients tend to terminate treatment early, there is no consistent pattern. Research aimed at investigating the preparation of patients for psychotherapy has not been successful in showing that patients so prepared (e.g., by a role induction interview) remain in treatment longer. Similarly, psychological tests and the study of patient expectations to predict continuation in psychotherapy have not been successful. However, the study of the interactional variables between the patient and therapist have revealed that those who dropped out liked the clinician less, felt less respected, experienced a weaker therapeutic alliance, viewed the psychotherapist as more passive, and viewed psychotherapy as being less potent that other helping interventions.

The relationship of patient characteristics to the outcome of psychotherapy has become one of the most critical areas in psychotherapy research. The patient as a factor in this interaction is complicated enough, and there are additional problems resulting from the wide variation in conceptions and assessments of outcome. Besides these, researchers have also been faced with the complications introduced by variations in the type of therapy offered, in the training and skill of the therapists studied, and in the kinds of patients treated. Based on these considerations the most recent research has shown no relations between outcome and the social class, age, and sex of the patient.

The degree of patient disturbance has been widely studied and has revealed a relation between more serious disturbances and poorer outcomes. Many other patient variables in relation to outcome have also been studied including ego strength; the personality attributes of affiliation, motivation, and intelligence; patient expectations; patient

attractiveness; and patient-therapist similarity. However, none appear to be as important as in-therapy process variables such as patient openness during therapy, which has been significantly associated with better outcomes. The continuation or outcome of psychotherapy clearly cannot be predicted based on patient variables alone.

Numerous patient variables have been proposed to be prerequisites for productively engaging in the work of psychotherapy, including ego strength, motivation, and intelligence. For example, it has long been presumed that psychoanalytic psychotherapy required intelligent, verbally facile, insightful patients. In like manner, most therapists would agree that motivation for treatment is essential. There is limited empirical evidence regarding the relationship between these variables and outcome, however, because they have been relatively infrequently studied and because, with the exception of intelligence, these variables tend to change as treatment progresses (i.e., they may be the focus of treatment). The available evidence suggests that the association between ego strength and outcome is positive but unimpressive and that the association between intelligence and therapeutic outcome appears to be positive but fairly small. Finally, there is not even a clear relation between treatment effectiveness and patient motivation.

Investigations of the relation between patient disturbance and outcome has yielded the most consistent findings and a relatively consistent relation between severity of disturbance and poorer outcome has been reported. Studies converge to suggest that “the rich get richer,” that is, patients with less disturbance at the beginning of treatment continue to be relatively healthier at the end of treatment than their more distressed peers. Regarding particular mental illnesses, the efficacy of specific psychotherapies for specific conditions has been established. For example, psychosocial family education has been shown to reduce familial distress and risk for relapse in schizophrenic patients receiving medication. There is evidence supporting the effectiveness of psychosocial interventions in the treatment of depressive and anxiety disorders as, for example, exposure-based procedures have been shown to be consistently effective in the treatment of panic disorder. An exciting area of research concerns psychotherapy with individuals with personality disorders. Although individuals with comorbid personality disorders and Axis I disorders tend to have poorer outcomes in general, relatively effective treatments are being developed.

Some of the best research regarding patient variables concerns the interaction of patient and therapist and therapy variables. The idea of matching patient and therapist on either demographic or personality characteristics has begun to be examined, but theoretical reasoning is still more plentiful than are empirical findings. The research into matching patients and therapists has been too recent and inconsistent to draw firm conclusions or, more importantly, to make recommendations, but some important findings are emerging. A 1995 study in Los Angeles County examined the effect of matching patient and therapist ethnicity in the treatment of over 13,000 Asian-

Americans, Mexican-Americans, African-Americans, and whites. In all ethnic groups, matched patients stayed longer in therapy, but matching was positively related to outcome only for the Mexican-American group.

Other studies have attempted to match patient characteristics and therapy intervention. By definition, such research requires standardized therapies so research is this area is still fairly new and conclusive statements cannot be made. One study examined patient variables of coping style (i.e., externalization and defensiveness) as patients interacted with different types of therapy for major depression. Results suggested that externalizing patients and patients low in defensiveness did better in cognitive therapy, whereas internalizing patients and patients high in defensiveness did better in supportive or self-directed therapy.

Methodological problems associated with research into patient variables are complex, but the field is improving because of the introduction of standardized treatments and the development of more reliable and valid measures. Particularly interesting and exciting are efforts to match patient variables with treatment processes to optimize outcome.

Diagnosis Psychotherapy for individual conditions continues to be studied and includes a variety of psychotherapeutic modalities for a variety of psychopathological conditions. Research emphasis has focused on “empirically validated” psychotherapies, which include cognitive and behavioral psychotherapy, interpersonal psychotherapy, and short-term dynamically oriented psychotherapy.

SCHIZOPHRENIA Psychosocial family education has been shown to reduce the risk for relapse in schizophrenic patients receiving medication. Familial distress can also be reduced by this intervention.

MOOD DISORDERS The empirical evidence supporting the role of psychotherapy and psychosocial interventions in the treatment of patients with depression has become increasingly established. Based partially on improved research design and data analysis, this body of research has established the efficacy of psychosocial treatments of depression in its acute phase. The role of cognitive therapy in the treatment of depression also has become firmly established by meta-analyses of the results of psychotherapy research and in a review of the American Psychiatric Association's *Practice Guidelines on Manic Depressive Disorder and Bipolar Disorder*. According to other researchers this form of psychotherapeutic intervention has even been shown to be superior to pharmacotherapy in many cases. This treatment has also been studied and judged to be effective in its application to some specific populations, for example, to treat depressed patients infected with human immunodeficiency virus (HIV). It has been suggested that alone or in combination with medication, psychotherapy is probably the most effective treatment for many individuals suffering from depression because of its lack of side effects, because of its

acceptance by certain patients, and because it deals with some of the social issues that may prolong depression or lead to relapse.

ANXIETY DISORDERS There is now evidence that psychosocial treatments are effective in the treatment of every anxiety disorder when compared to no treatment. However, many of these psychosocial interventions, which can be characterized as cognitive-behavioral with contributions from interpersonal and dynamic approaches, have limited clinical applicability and further research is needed. In panic disorder exposure-based procedures have been shown to be consistently effective. Meta-analyses of treatment outcome of panic disorder have also supported these findings. In addition, empirical studies of defense mechanisms in panic disorders have also been undertaken and have proven useful in the psychotherapy of this condition. Further research has been undertaken recently on the psychotherapeutic treatment of social phobia, generalized anxiety disorder, obsessive-compulsive disorder, specific phobia, and posttraumatic stress disorder. Combinations of exposure and cognitive therapies have shown some initial promise, and comparisons to pharmacotherapy have continued to show that psychotherapeutic treatments (most often cognitive-behavior therapy) demonstrate superior results.

SUBSTANCE ABUSE AND DEPENDENCE There are only a few well-controlled studies on the psychosocial treatment for substance abuse, but the existing data suggest that treatment for substance abuse should involve multiple modalities targeted to various specific problems in this population, including comorbid psychiatric disorders. Studies have shown that psychosocial treatments for substance abuse seem to be beneficial. In recent research supportive-expressive psychotherapy for patients with opioid dependence during methadone (Dolophine) maintenance treatment in community programs resulted in longer-lasting gains than did drug counseling. Specific recommendations based on empirical research indicate the usefulness of community reinforcement approaches with a subset of patients with cocaine dependence, family therapy for adolescents with substance abuse problems, and equivocal results with relapse prevention therapy, which perhaps is more effective for cocaine-dependent than for marijuana-dependent individuals.

PERSONALITY DISORDERS The psychotherapeutic treatment of individuals with personality disorders remains challenging and complex because of the heterogeneity and the variable severity of these disorders, and the observation that personality traits and their corresponding disorders are resistant to change and very difficult to modify. Individuals with a personality disorder in addition to an existing Axis I disorder have been shown to have poorer outcomes in general. In one study patients with major depression with a comorbid personality disorder were found to have more severe psychiatric disturbance at intake and they did not improve as much as those without a personality disorder. Although research findings support a poorer response to treatment for those with a personality disorder, the limited data that are available suggest that the presence of depression may be a positive prognostic indicator for

patients with antisocial personality disorder. Here too the efficacy of short-term psychotherapy is an area of increasing interest. In a 1994 study two forms of short-term psychotherapy were employed to treat patients with personality disorders and patients in both therapies improved significantly as compared to patients who were not treated in this way.

Therapist Variables Therapist variables—the qualities or characteristics of psychotherapists that contribute to the process and outcome of psychotherapy—have been frequently studied and most empirical studies have failed to demonstrate a significant correlation between therapist demographic variables and outcome. There is a modest relation between age similarity of therapist and patient and outcome. Most reviews of research on the topic of therapist gender have failed to support the concern that male therapists may inhibit the progress of female patients. There is some evidence that patients of female therapists may have greater symptomatic improvement, but most studies do not indicate an effect on treatment outcome based on the sex of the therapist or on a match between the sex of the therapist and the patient. The opinion that ethnic similarity and ethnic sensitivity of the therapist result in enhanced outcomes has only received limited support from the empirical literature.

Therapist characteristics such as personality and coping patterns, emotional well-being, values and beliefs, and cultural attitudes are difficult to study experimentally because they are not amenable to experimental control. Recent research has focused on therapist traits such as dominance, locus of perceived control, and therapist conceptual level. Some findings suggest that similarity of cognitive style and level may facilitate patients remaining in therapy and experiencing speedier improvement. The emotional well-being of the therapist has been studied in terms of degree of perceived therapist distress on disturbance and whether the therapist has undergone personal therapy. Positive therapist mental health can enhance treatment effectiveness, especially in high-functioning patients, and a therapist's emotional problems can impact negatively on therapeutic progress. However, because the reasons why patients go into psychotherapy are so varied, the role of personal therapy on effectiveness is also quite varied. The therapist's values, attitudes, and beliefs have come under scrutiny because of the concern that these traits may exert an unwanted influence on the practice of psychotherapy. Religious beliefs and other general attitudes and values have been studied. Many studies have found that psychotherapy improvement may be augmented by a complex pattern of similarity and dissimilarity. No reliable conclusions have been drawn to date regarding attributes such as gender, lifestyle, and socioeconomic background.

The theoretical orientation of psychotherapists has been shown to have differing effect sizes in a number of meta-analytic studies. However, since the effects of specific interventions have been difficult to separate from therapist orientation, conclusions about any particular therapeutic orientation are as yet premature. Three interrelated variables have been studied in relation to the therapist's professional background and

the effectiveness of therapy: level of professional training, amount of experience, and professional discipline. Research in these areas has yielded equivocal and contradictory results. Recently, however, a meta-analysis of graduate training in psychotherapy has found that treatment outcomes and treatment duration are associated with more training. Therapeutic styles are inexorably intertwined with therapeutic interventions. Interpersonal styles, verbal styles, nonverbal styles, and combined verbal and nonverbal patterns have all been studied, but no stable conclusions have emerged. Therapist interventions or technical procedures designed to bring about psychotherapeutic results relate to both therapist qualities and therapy processes. One such device for attaining therapeutic efficacy is the therapy or treatment manual. Because therapies that use therapy manuals can be empirically distinguished, they are often used in psychotherapy research. Results from studies employing therapy manuals show that a significant positive relation exists between compliance with a treatment manual and outcome of treatment. Additional research also shows that therapists' relationship skills and supportiveness may be diminished because of the therapists' focus on compliance with a manual so the use of these treatments may only be effective on certain types of patients. Specific therapist interventions have also been studied and include therapist directiveness; therapist self-disclosure; and therapist interpretations on transference, motives, and resistance, but no clear trends have emerged from these studies.

Treatment Process Variables: The Therapeutic Alliance Studying the effectiveness of psychotherapy entails identifying its curative elements, that is, determining what process variables are related to patient improvement. One aspect that has been repeatedly and consistently identified is the *therapeutic alliance*, sometimes called *therapeutic relationship, working alliance,* or *therapeutic bond*. For example, studies have shown that patients who dropped out of therapy prematurely liked the clinician less, felt less respected, viewed the psychotherapist as more passive, and generally experienced a weaker therapeutic alliance. Research reviews also have consistently concluded that a positive therapeutic relationship, whether measured from the perspective of nonparticipant observers or from the perspective of the patient or the therapist, is related to therapeutic effectiveness across a wide variety of therapeutic modalities and patient problems. A meta-analysis of 24 studies of the relation between working alliance and treatment outcome concluded that there is a consistent relation between the quality of the alliance and positive outcome. The quality of the alliance appears to be influenced by a variety of interpersonal and intrapersonal patient characteristics. Patients who have a better history of and capacity for social relationships tend to develop a better alliance than defensive and negativistic patients. Interestingly, problem severity does not appear to affect the quality of the alliance. An exciting area of research concerns tracking the alliance across therapy, including monitoring therapist interventions when there are problems in the alliance. There is convergent evidence that measures of the alliance early in treatment are more strongly related to eventual outcome than later measures. This appears to reflect the fluctuating nature of the quality of the relationship across therapy and the frequent finding that during longer-term treatments the alliance is often disrupted and must be attended to

in the course of successful treatment.

Current research is investigating whether the alliance mediates or moderates change. Carl Rogers proposed that the alliance was curative in and of itself, theorizing that the patient's experience of a nonjudgmental, warm, genuinely caring attitude on the part of the therapist mediated positive personality change. In contrast, Freud postulated that the relationship was a necessary precondition to or moderator of the work of psychoanalysis, which was responsible for positive change. Whether the relationship between the patient and the therapist is real or distorted has to do with the analytic concept of *transference*, which holds that the feelings that patients have toward therapists are always a mixture of attributes displaced onto the therapist from figures in the patient's past and the real characteristics of the therapist. Further research into the causes, uses, and effects of the alliance is clearly needed.

Patient Treatment Matching The aptitude-by-treatment-interaction approach to psychotherapy research attempts to identify the treatment strategies and procedures that produce optimal outcomes for individual patients. The aptitude-by-treatment interaction approach describes patients and therapists dimensionally with quantitative differences (e.g., resistive, impulsive, extroverted, directive, supportive). The questions addressed in aptitude-by-treatment interaction research include: (1) What procedures are important to effective treatment in different contexts? (2) Which patients are likely to respond therapeutically to therapist/therapy characteristics? and (3) How can patients be effectively assigned to therapies and their response monitored within those therapies?

The aptitude-by-treatment interaction model has been used to show that highly anxious, repressed patients are more responsive to emotion clarification on supportive approaches whereas externally cued patients respond better to more directive therapies such as cognitive behavioral psychotherapy. Also, supportive therapy has been shown to be more effective with patients having higher levels of distress; cognitive therapy has been shown to be more effective with patients presenting with lower levels of subjective distress. Research has provided evidence that depressed caregivers of older adults are differentially responsive to psychodynamic and cognitive behavior psychotherapy depending on the length of time in the caregiving role. Although largely unreplicated and few in number, these aptitude-by-treatment interaction studies support the principle of differential treatment selection.

Psychotherapy Combined With Pharmacotherapy A large proportion of patients who obtain treatment for mental disorders receive a combination of psychotherapy and medication. This blending of treatments is used widely for the treatment of depression, anxiety disorders, substance use disorders, schizophrenia, and some personality disorders. The American Psychiatric Associations Practice Guidelines on the treatment of depression and substance use disorders have embodied this combination of therapeutic approaches. Since the 1990s research on the relative

efficacy of pharmacotherapy and psychotherapy, both in comparison and in combination with one another, has greatly expanded. Double-blind, controlled clinical trials have been the standard research design employed to study medications alone. However, newer strategies, such as the four-group factorial design in which both treatments are evaluated individually against one another, against a control group, and against their combination and the six-group design in which the placebo effect is evaluated, have been developed. The addition of a supplemental treatment to a proven standard treatment is another research design useful in assessing the value of combined treatments.

There are three possible outcomes of comparative and combined psychotherapy-drug treatments: (1) no therapeutic effect (i.e., combined treatment provides the same effect as individual treatment; (2) positive effects (i.e., combined treatment is better than individual treatment either by an additive and synergistic effect)—greater than the sum of the two treatments—or by a facilitative interaction—the treatment is only effective when combined; and (3) negative effects, (i.e., combined treatment shows less improvement than individual treatments). The hypothesized clinical mechanisms of positive action of medications on combined treatments are that medications facilitate psychotherapeutic accessibility, medications influence ego functions for participation in psychotherapy, medications promote psychotherapeutic abreaction, and medications have a positive effect on attitude and expectations. The hypothesized clinical mechanisms of positive action of psychotherapy on pharmacotherapy are that psychotherapy facilitates compliance with medications, that psychotherapy itself is rehabilitative, and that psychotherapy teaches skills that can be used to prevent relapse. However, it has also been hypothesized that combined psychotherapy and pharmacotherapy may have some general negative effects, but little empirical research has been done in this area. In relation to psychotherapy, medications may produce a placebo effect that promotes authoritarianism, reduces symptoms such that psychotherapy is prematurely terminated, and may undermine useful defenses. On the other hand, in relation to pharmacotherapy, psychotherapy may undercut compliance.

A number of different strategies have been identified for combining treatment modalities. The combination of either individual, group, or family psychotherapy with psychopharmacotherapy has been studied. In addition, psychoeducational approaches, self-help groups, and medication groups have proved useful in some instances. These strategies have been shown to improve psychotherapy process and outcome as well as to enhance medication compliance, treatment adherence, the prevention of relapse, and the recurrence of illness.

EFFICACY, EFFECTIVENESS, AND EFFICIENCY

Psychotherapy has been evaluated from three research perspectives: efficacy, effectiveness, and efficiency. Each of these perspectives has a distinct purpose, methodology, and interpretative context.

Efficacy Efficacy studies typically address the sufficiency of a particular highly controlled treatment in a specific setting with a carefully selected set of patients having a specific disorder. Efficacy studies are designed to control extraneous mediating factors such as therapist training (e.g., degree of treatment structure, protocol compliance), other treatments (single, combined, or multiple), the roles of the therapist (e.g., assessment and selection, monitoring of patient progress), participant selection (homogeneous or comorbid presentations), and treatment parameters (duration, dose, modality). The *sine qua non* of efficacy research is random assignment to treatment and control conditions. What constitutes an appropriate control condition has received considerable attention. Among the control group alternatives are (1) the no-treatment control, (2) the waiting-list control, (3) the placebo-attention control, and (4) the "usual care," "best alternative treatment" control, also labeled the "minimal-treatment" control). Confidence in treatment efficacy increases as study comparisons reveal that a particular psychotherapy is better than no therapy, better than a nonspecific therapy, and better than an alternative therapy.

Over the past 15 years controlled clinical trials of psychotherapy have attempted to standardize therapy structure through the use of treatment manuals that provide a treatment rationale, goals, specification of treatment processes, and a sequence of action for conducting the psychotherapy. These manuals are efforts to standardize and operationalize treatments with greater specificity.

Prominent book-length examples of the treatment manual include David Barlow's *Anxiety and Its Disorders;* Aaron Beck, John Rush, Brian Shaw, and Chad Emery's *Cognitive Therapy of Depression;* Gerald Klerman, Myrna Weissman, Bruce Rounsaville, and Eve Chevron's *Interpersonal Psychotherapy of Depression;* Marsha Linehan's *Cognitive Behavioral Treatment of Borderline Personality Disorder;* Lester Luborsky's *Principles of Psychoanalytic Psychotherapy: A Manual for Supportive-Expressive Treatment;* and Hans Strupp and Jeffrey Binder's *Psychotherapy in a New Key: A Guide to Time-Limited Dynamic Psychotherapy*. Many more textbook and manual approaches take the form of methodological manuscripts in scientific journals. In 1995 the Task Force on Promotion and Dissemination of Psychological Procedures of the American Psychological Association drafted and published the empirical evidence to support these therapies; this list is periodically updated as new studies are published.

Psychotherapy manuals promote the use of a single conceptual framework for a therapy, and a set of prescribed techniques within that framework. Psychotherapy manuals are not so specific as to dictate the therapist's actions at each moment during the therapeutic interaction. Rather, they supply guidelines for the application of specific interventions and goals for sessions. Reactions to treatment-manual therapies include claims of excessive rigidity, of overlooking patient and therapist variability,

and of irrelevance to the clinical practice of psychotherapy. Defenders of treatment-manual therapies have cited the importance of codifying effective behaviors for treating specific problems, the manuals' value in training new therapists, and the development of even more improved psychotherapies. There is some evidence that studies using treatment manuals had larger effect sizes than studies that did not use them.

The specification of therapies in manuals led to an interest in the evaluation of adherence to those prescriptions. Efficacy studies typically have included a compliance review through video tapes or audiotapes of therapy sessions. This review often uses a scale developed to assess that particular textbook psychotherapy. Scales are available for cognitive therapy, interpersonal psychotherapy, time-limited dynamic psychotherapy, and supportive-expressive psychotherapy, among others.

Meta-analyses of psychotherapies collectively and of types of psychotherapy individually yield effect sizes of 0.75 to 0.85. Regardless of the outcome measure used, the means of the treated groups are at about three fourths of a standard deviation better than the means of the untreated groups. Meta-analyses of types of psychotherapy generally have not established the advantages of one type of therapy over another when considered across contexts, patients, and presenting problems.

Effectiveness Effectiveness studies are concerned with the delivery of psychotherapy in applied clinical settings. Psychotherapy may be only one component of an integrated intervention effort involving other health and social services. The experimental controls used in efficacy studies are usually absent in effectiveness studies. Patients may satisfy diagnostic criteria for multiple disorders. Moreover, the length of treatment may be determined more by patient motivation or resources or by the limitations of health care financing than by treatment prescription. Paradoxically, it seems that time-limited, planned short-term treatments are actually of longer median duration than naturally occurring traditional psychotherapies. Also, in effectiveness research, mental health professionals are likely to come from several disciplines and to vary in levels of training and experience. The goal of effectiveness research is to describe the response to the typical delivery of psychotherapy for patients who seek it, and to identify the treatment parameters that best predict patient response.

Some effectiveness studies begin with a program audit of a treatment package. These studies may include an assessment of the characteristics of settings and providers, the representativeness of the treatment samples, the treatment actually delivered, the barriers to treatment, and the costs of treatment. Examples include clinic studies of psychotherapy with children and adolescents, and a combination of medication, social skills training, and family education for patients with severe mental illness. Effectiveness studies often employ quasi-experimental designs and involve nonequivalent comparison groups in an attempt to make findings most relevant for actual practice.

Another approach to effectiveness studies is to describe the patterns of mental health service delivery assuming that efficacy studies have established the causal relation linking psychotherapy and outcome. This approach makes use of repeated measurements (multiwave data) in the course of psychotherapy, and uses the tenets of measurement reliability such as the “reliable change index” and “clinically significant change” to show how patients change over time. This has produced several models of patients' change in the course of psychotherapy, including the explication of a dose-response relation between the logarithm of the number of sessions and the normalized probability of improvement. A dose response of 50 percent (of patients improving) has been observed with approximately 8 sessions of psychotherapy; a dose reponse of 75 percent occurred with approximately 26 sessions; and improvement reached asymptope at approximately 85 percent after a little over a year of psychotherapy. The phase model has identified categories of change—subjective well-being, symptoms, and life functioning—that improve at different rates and in a probabilistically necessary causal sequence. Patients must first be remoralized (improvement in subjective well-being) before symptoms can improve, and symptoms must improve before life functioning can improve. Clinical trials of the treatment of depression with psychotherapy have shown that work functioning does not improve until the symptoms of depression have ameliorated. Other research using this approach to effectiveness research has shown that symptoms can be categorized as *acute, moderate,* and *chronic,* each with a different dose-response pattern.

The results of effectiveness studies are more generalizable to actual clinical practice than are the results of efficacy studies. However, because of the use of random assignment the results of efficacy studies may be less confounded by other influences than are the results of effectiveness studies. In defense of the Consumer Reports study, Martin Seligman has persuasively argued the relative merits of these approaches. That study showed that in actual practice psychotherapy was a very effective intervention for a wide variety of psychiatric conditions.

Efficiency The identification of patterns of change for aggregated cases of individual psychotherapy patients has provided a context for the study of individual patients and an assessment of the efficiency of treatment for each individual. Hierarchical linear modeling techniques have been used to show that a set of variables collected at intake could be used to predict the pattern of response of an individual psychotherapy patient. For some patients, the expected pattern of response is rapid and likely to require relatively few sessions of psychotherapy; for other patients the expected pattern of improvement is gradual and likely to require many sessions of psychotherapy to reach clinically significant change. Identification of these predictive patterns takes into account the variables—severity, previous experience with psychotherapy, difficulty of attending sessions—that mediate and moderate patient change. A particular treatment can be judged against its expected pattern of change, and a therapist's performance with severe or less severe cases can be more fairly judged against expected patterns of change. The monitoring of progress in

psychotherapy and the allocation of therapeutic resources (e.g., sessions) also are made more rational; patients are judged against an expected pattern of change instead of against a prototype or ideal pattern.

The field of psychotherapy research is represented by the international interdisciplinary Society for Psychotherapy Research, which has over 1300 members from about 40 countries. The Society holds an annual meeting, and individual chapters (e.g., North America, Europe, United Kingdom, South America) also hold regular meetings. These meetings provide a forum for the exchange of ideas and findings. Research methods and findings are published in the Society's journal, *Psychotherapy Research* and in the several editions of the *Handbook of Psychotherapy and Behavior Change*, which is edited by Alan Bergin and Sol Garfield.

On the basis of over 1000 controlled studies, it can be stated unequivocally that psychotherapy is efficacious for a broad range of psychiatric disorders. However, efficacy and effectiveness studies have not yet clearly shown one kind of psychotherapy to be consistently superior to another; the average outcomes of treatments (across therapists, patients, and settings) are fairly equivalent. Comparable average effects over a range of patients would also be true of antibiotics and antidepressants. The task remains to show differential outcomes for different treatments for different patients. Until specific treatments that are consistently superior for homogeneous groups of patients can be found, the focus must remain on concurrent assessments to provide feedback regarding a patient's response to current treatment. As in the rest of medicine, the idea here is to conduct research that will yield information that can be used as systematic feedback to shape treatment in a way that indicates the need for a different intervention when the patient is not benefiting and indicates the continuation of a beneficial course.

SUGGESTED CROSS-REFERENCES

Psychotherapy is discussed in Chapter 30, schizophrenia in Chapter 12, mood disorders in Chapter 14, anxiety disorders in Chapter 15, substance-related disorders in Chapter 11, and personality disorders in Chapter 24.

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