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THE EFFICACY OF INDIVIDUAL PSYCHOTHERAPY

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THE EFFICACY OF INDIVIDUAL PSYCHOTHERAPY:

**A Perspective and Review
Emphasizing Controlled Outcome Studies**

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Table of Contents

THE EFFICACY OF INDIVIDUAL PSYCHOTHERAPY: A PERSPECTIVE AND REVIEW EMPHASIZING CONTROLLED OUTCOME STUDIES

Introduction

Psychiatry's Scientific Mode and the Nature of Evidence

Observational Data on Psychotherapy

The Controlled Study

Discussion

Conclusions

Bibliography

THE EFFICACY OF INDIVIDUAL PSYCHOTHERAPY: A PERSPECTIVE AND REVIEW EMPHASIZING CONTROLLED OUTCOME STUDIES¹

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Introduction

For three decades the great debate concerning the value of psychotherapy has achieved no clear consensus. Recently, this debate has moved from the arena of scholarly interest to that of public attention, becoming a matter of major practical importance to all the mental health professions. While a great deal of professional time and interest is devoted to individual psychotherapy, an ever broadening range of efficacious pharmacologic treatments now provides the clinician with alternatives to traditional psychotherapy in treating many psychopathologic states. A crucial sociopolitical factor is now relevant. With the growing reliance on third-party financing of health care and the anticipation of national health insurance, treatment modalities are receiving closer and more public scrutiny. Demonstration of efficacy must satisfy not only clinicians, but increasingly policy makers and the public at large as well. Treatments not fitting a narrow biomedical approach to therapeutics are especially suspect. It is imperative that clinicians and clinical trainees become experts not only in the theory and

application of psychotherapy, but also about research bearing on the efficacy question and the theoretical and methodological issues relevant to this debate. This chapter provides a review of the data base for judging psychotherapy efficacy, and related concepts and special problems are also discussed.

In the hands of trained clinicians psychotherapy has taken many forms involving innovative experiments, new theory, and applications to an ever-increasing range of problems. New approaches that have been judged irresponsible by the mainstream of the mental health professions are not uncommon. Of greater concern has been the willingness of nonprofessionals and persons with no rigorous training and scant clinical backgrounds to become popular advocates of a plethora of psychosocial techniques offered as psychotherapy. No conceptual definition of psychotherapy can clearly differentiate “proper” psychotherapy from all other interpersonal strategies designed to be therapeutic. Nor are sufficient standards for education, training, experience, and performance available for readily distinguishing between a socially sanctioned expert and a self-appointed mental health care provider. We intend to provide a perspective for assessing treatment efficacy and to review results of relevant studies. This is best accomplished by avoiding the wide border between psychotherapy and pseudo-psychotherapy, and between the mainstream professional and self-appointed clinician. While not denying the legitimacy of many activities outside the core tradition of

psychotherapy, the purposes of this chapter are best served by a focus on dyadic psychotherapy used by highly trained clinicians in the treatment of common psychiatric and psychosomatic diseases in adults, specifically schizophrenia, affective illnesses, psychoneurotic and personality disorders, and psychosomatic illnesses.

The definition of psychotherapy used in this chapter will be clarified by the selection of studies for inclusion. As a general definition, we view psychotherapy as a treatment in which the relationship between patient and therapist provides, a context for understanding the psychological components of illness and the psychosocial matrix of its development. The therapist should be prepared to use the data generated in this setting to enable the patient to increase his self-understanding in the belief that insight into one's own psychology and psychopathology may induce therapeutic change. While there are major cognitive or intellectual components in developing self-understanding, most forms of psychotherapy presume that the emotional components of the therapeutic relationship are indispensable to accumulating information and assimilating insight. Hence, psychotherapeutic goals range from the in-depth understanding and intrapsychic restructuring that are the goals of psychoanalytic and psychodynamic treatments to the clarification and articulation of more observable processes (for example, behavioral, affective, and interpersonal patterns) that result in the maladaptive consequences for the patient that are the focus of more time-limited

psychotherapeutic strategies.

The technique of psychotherapy may vary from nondirective and interpretive to a more direct and advice-giving mode. The critical ingredient is the use of the therapeutic relationship to encourage a cognitive/affective reappraisal by the patient of himself and his situation as a prerequisite to therapeutic change. Thus, treatments based on other types of interpersonal techniques designed to alter behavior directly, such as behavioral therapy, social skills training, provision of a reassuring relationship, and social case work, are not reviewed as core psychotherapy.

Nevertheless, insofar as many of these other approaches incidentally involve a shift in the patient's understanding of important issues, the delineation of traditional psychotherapy is often imprecise. This is especially true since identification with the therapist may be an important (if unwitting) ingredient in the effectiveness of all these modalities, and each procedure waxes and wanes in its "purity," often containing aspects of other modalities.

Only controlled outcome studies will be reviewed here in detail, but the entire range of relevant information will be noted. Since the issues are complex and the data confusing, a context has been developed for weighing the validity of the various data bearing on this subject. To this end, it is essential to consider the nature of medicine and, in particular, of psychiatry.

Psychiatry's Scientific Mode and the Nature of Evidence

The empirical sciences gather information predominantly in one of two modes (or a mixture of both). The experimental mode is applicable to disciplines for which the relevant objects can be manipulated for scientific study. This mode provides an unequaled degree of precision and clarity; as a result those disciplines that can rely heavily on experimentation have become the prototype of valid scientific methodology. For many scientific disciplines, however, the objects of investigation do not lend themselves to such manipulation. In such circumstances, science must rely on careful and critical observations. In the case of astronomy, for instance, where the size of objects limits experimental manipulation, most laws derive from the recognition of stable and repetitive patterns. Rarely is any scientific discipline purely experimental or observational, although one modality often dominates. Experimental fields usually look to the observational domain to define important questions and hypotheses to be pursued experimentally. In the case of observational sciences, certain aspects of the relevant objects of study can frequently be subjected to experimental manipulations in a limited way or in the context of another discipline.

The location of a science on the observational-experimental continuum largely determines the range of information deemed relevant and the methods with which it is approached. Medicine is primarily an observational

science that in certain areas has been able to rely on a body of precise experimental work for supplementation. The limitation of experimental manipulation in medicine and human psychology comes from the complexity and adaptability of the human organism and from ethical considerations. The study of neuropathology is a prime example. In the case of humans, it is unethical to cause experimental lesions to observe functional consequences. Knowledge in neuropathology accrues from the careful and meticulous observation of various naturally-occurring lesions and their functional correlates. Where animal systems are sufficiently similar, experimental methods may be applicable and the knowledge gained inferentially applied to human neuropathology. In the case of psychiatry, however, where the primary concern is with higher and distinctively human functioning, animal models are more restricted in their applicability. It is due to these considerations that the great tradition of medicine has largely been one of careful observation. In the case of psychiatry, there is a second limitation that has a pervasive effect. This is the fact that the objects being studied, human beings, are self-conscious and form opinions, judgments, and reactions about the manipulations to which they are subjected. As a result, each subject's response is in part dependent on expectations rather than simply reflecting the consequences of the manipulation (for example, the placebo effect). Furthermore, human subjects may refuse to participate, and many informative manipulations in psychiatry are impractical because of the

limited number of people (scientists or subjects) willing to participate.

It is important to fully appreciate the fact that medicine (including psychiatry) is primarily an observational science. Recent preoccupation with a narrow biomedical model of disease has caused some critics to decry data not derived in a strict experimental mode. This position ignores the scientific base of modern medicine—clinical observation. It also fails to acknowledge the tremendous gap between a demonstrated function in isolation (for example, a single neuron preparation) and the overall harmony and interplay among human systems (such as social, psychological, and biological). With this understanding of medicine's fundamental position, clinical sciences will utilize the experimental mode wherever possible, and the interplay between hypothesis generation from observation and hypothesis testing in experimentation will be continuous.

Therapeutics often provides opportunities to mix scientific modes in clinical tests of efficacy. Psychopharmacologic investigations have been strikingly productive in this regard. In spite of the inherent limitations of medical research, rigorous efficacy tests of many drugs have been executed, resulting in an impressive body of information. Study paradigms rely on both manipulable experimental attributes (drug dose, placebo, random assignment, repeated trials, external replication) and clinical observations (subject selection, assessment of behavioral change, clinical context for

conduct of the experiment). A number of factors make such research more difficult in the case of psychotherapy. Difficult, however, does not mean impossible, and we will comment briefly on both necessary and unnecessary impediments to a more definitive testing of psychotherapeutic efficacy.

The following factors illustrate unavoidable problems in designing mixed modal experiments to assess the efficacy of psychotherapy:

1. Double-blind conditions for clinical trials have proven of inestimable value in tests of drug efficacy, but there is no apparent method for having patient and psychotherapist unaware of what treatment (if any) is being provided. Single-blind conditions are imaginable (that is, the therapist, but not the patient, knows what therapeutic modality is being used). However, the patient not being specifically informed and being actually uninformed are two different matters. Furthermore, single-blind studies have not proven superior to open studies (both patient and doctor know the treatment) in psychopharmacologic studies, since the clinician unwittingly and perhaps nonverbally communicates his expectations.¹⁸ At present, the best compensation for this problem is reliance on objective measures of change and independent (blind, if possible) raters of change. Objective measures are especially difficult where the aims of treatment are to alter subjective symptoms.
2. Placebo-controlled assessment of efficacy is a problem in psychotherapy since no one has been clever enough to create

the trappings of psychotherapy while making the essential therapeutic ingredients inert. The two alternatives are informative but limited. Comparing psychotherapy to no therapy (for example, waiting list) can show efficacy but cannot determine the mechanism (that is, placebo or psychotherapeutic effect). Comparing different forms of interpersonal clinical contacts may reveal comparative merits without determining the absolute extent of effect or the placebo contribution to effect. Here, we are using placebo to refer to any factors contributing to beneficial change other than those purported to be the therapeutic modality. Placebo traditionally means that the treatment is inert only with respect to the mechanism of action being studied— usually chemical. Placebo may be quite active, but by psychological mechanisms. In psychotherapy research, the experimental treatment is also assumed to depend on psychological mechanisms, so the distinction between active treatment and placebo is clouded.

3. Many forms of psychotherapy require months, with most benefits being realized late in treatment. Furthermore, individuals respond at remarkably different rates. It is difficult to justify withholding treatment from a control group of sick patients for long periods. Many aspects of a patient's status change with time, so prolonged clinical trials have more spontaneous variances (noise) and hence require larger numbers of subjects. The time required of clinicians to do psychotherapy, the length of a clinical trial, and the number of subjects required converge to make these studies expensive and logistically complicated.

4. Experimental designs undeniably alter to some extent the clinical circumstances in which a treatment is received, often improving care by bringing more resources, better follow-up, innovative treatment, and an aura of expectation. Changes in the therapeutic setting may, however, introduce anti-therapeutic artifacts in psychotherapy. Many argue that informed consent procedures, random assignments, research criteria for patient selection, explicit interest in special variables as reflecting change, and other routine considerations in clinical studies undermine the uniqueness and complexity of psychotherapy as clinically practiced. Crucial factors such as patient motivation, patient-therapist matching, and a strong belief shared by patient and therapist that the psychotherapy being done is the most desirable treatment option are obvious problems affected by research design.
5. Psychotherapy and therapist cannot be standardized and monitored in detail. One can imagine the problems to be encountered in drug studies if one could not determine the amount of drug per capsule, could not be sure whether other active drugs were mixed with the treatment drug, or be confident that the placebo was chemically inert. Problems such as compliance and metabolic variance do complicate drug research, but psychotherapy research cannot easily solve the “pre-packaging” problem.
6. Some experts such as Strupp¹⁰¹ contend that psychotherapy efficacy may be minimally dependent on the precise mode of treatment and maximally dependent on innate qualities of

the therapists. If so, psychotherapy efficacy research will be dependent on defining the innately gifted therapists. The inability to assure the quality of the therapist will consistently weaken the measured effect of therapy.

These formidable problems in the scientific testing of psychotherapeutic efficacy must be recognized. However, it is also important to emphasize that factors not intrinsic to research design have unfortunately hindered the scientific assessment of psychotherapy efficacy.

1. There has been a long tradition in psychiatry of appeals to authority, most obviously in the psychoanalytic movement. The preeminence of psychoanalysis in American academic psychiatry during the 1950s and 1960s created circumstances that substituted authority for science in validating theory. Less abstract is the fact that so long as everyone “knows” a treatment is good, there is little urgency in pursuing its evaluation. While psychodynamic psychiatrists may have been restrained by theoretical blinders, the problem is certainly not unique to them as the many charismatic proponents of alternative models amply demonstrate. (The authors have discussed the role of arrogance as an impediment to clinical science elsewhere.)
2. The claim that psychotherapy is far too complex and the necessary observations too numerous to permit scientific scrutiny has often been made without a realistic appreciation that the nature of experimentation is to extract and simplify from the complexity of the natural experience and, in a controlled

way, to examine the relationship between a few of the many variables involved. As such, experimentation neither threatens or supplants clinical observation, but may allow a more rigorous examination or confirmation of some limited aspects of the larger clinical experience. Such claims are also offered without the mathematical background to assess current techniques for statistical evaluation of multivariate designs.

3. The theoretically-oriented clinician tends to underestimate the extent that his presuppositions influence his clinical observations. Inference and observation have not always been differentiated, hence the field has collected a great deal of verifying "observation" without realizing how inferential and perhaps unreliable these clinical findings were.

4. An understandable human tendency exists on the part of the psychotherapist to shun experimental research because of the inherent threat of negative findings. If a pharmacotherapist finds, as a result of controlled trials, that a particular drug is not efficacious, he does not feel that his person has been indicted or his career jeopardized. He simply searches for an alternative pharmacologic intervention. In the case of the psychotherapist, however, who has all too often been trained exclusively in one modality, the prospect of finding the sort of treatment he offers to be of little or no value has major personal and professional ramifications. In this regard, Frank quoted Confucius as saying that "a wise man does not examine the source of his well-being."

Observational Data on Psychotherapy

The case report is the most common form of observation relating to psychotherapy outcome, particularly in the psychiatric literature. Its strength is in the detailed presentation of clinical material, and thus, it is more effective in illustrating an approach and generating hypotheses than in confirming them. Surveys are an extension of this sort of observation. The larger number of cases adds to the persuasive power. However, the lack of controls makes it impossible to assure that changes can be attributed to the treatment. This is particularly true given the fact that the natural history of psychiatric illnesses is highly variable and poorly specified.

The meaning of the survey data of psychotherapy outcome has been hotly debated for several decades. The challenge was first articulated by Eysenck and further argued by Eysenck and Rachman. These studies reported that approximately two-thirds of all neurotics improved substantially over a two-year period, irrespective of whether or not they received psychotherapy. This conclusion has been challenged by a number of investigators. A careful review of this debate is provided by Bergin and Lambert. Several issues are involved. The first is the spontaneous remission rate of untreated patients. Eysenck and Rachman maintain there is a two-thirds improvement rate over two years. Bergin and Lambert review a number of studies and find a median spontaneous remission rate of 43 percent. They note, however, a high

variability between the studies reviewed, ranging from 18 percent to 67 percent. Among other factors determining this variability is diagnosis. Although the literature does not provide definitive data, anxiety and depressive neuroses have the highest spontaneous recovery rates with lower recovery rates for hysterical, phobic, obsessive compulsive, and hypochondriacal disorders. A second problem in reviewing the survey literature is that different investigators use different criteria for improvement. Such inconsistency may have a major impact on results. Bergin and Lambert illustrate this by repeatedly calculating the collective improvement rate in five surveys of psychoanalytic treatment using several different sets of criteria, each of which seems reasonable. Yet, the overall percentage of improvement ranged from 44 percent to 83 percent, depending on the criteria used.

A third confounding factor is the possibility that psychotherapy may make some of the patient population worse (deterioration effect) and that this factor would interfere with discovering a significant improvement due to psychotherapy in other patients. Some data suggest such an effect.

The many sources of variability in survey data make it impossible to draw indisputable conclusions. However, it is fair to say that most recent assessments of the literature, such as Meltzoff and Kornreich, draw considerably more positive inferences about the effectiveness of

psychotherapy than the earlier and widely publicized reviews of Eysenck. These recent reviews conclude that most studies (80 percent according to Meltzoff and Kornreich) show moderate positive results to a greater degree than would be expected by chance. These reviews generally include group and family, as well as individual, modalities. At the same time, they note limitations in interpreting such data and express the hope that there will be a decline in this type of broad study.

The Controlled Study

The controlled experiment has the greatest potential for persuasively demonstrating the efficacy of therapy, particularly when built upon a firm foundation of careful observations. Controlled outcome studies vary immensely, however, in the quality of their design and execution, and the degree of confidence in the findings must vary with the adequacy of design.

Studies are improved to the extent that patients are homogeneous with respect to diagnosis, prognosis, duration and severity of illness, premorbid functioning, and prior treatment experience. Control patients should be comparable on these and other relevant variables and the control experience should minimize contaminating and biasing elements. Studies are further strengthened to the extent that the psychotherapy itself is highly specified, administered by experienced therapists, and of a duration and intensity likely

to maximize therapeutic change. Given the lack of firm correlation between the array of outcome criteria used, it is desirable to collect a broad range of data. Various sources should be utilized—patient self-reports, therapist reports, and ratings by independent evaluators. Information should also relate to a range of outcome dimensions—for example, symptoms, social and occupational functioning, contentment and satisfaction, personality change, and treatment utilization. It is also important that the patients chosen be acceptable candidates for the treatment in question and that the outcome dimensions examined include those most likely to be affected by the therapy. Although space does not permit a systematic presentation of the degree to which the reviewed studies meet each of these standards, these factors are considered in assessing the literature and are noted in cases where they are particularly critical.²

The investigations reviewed here include controlled outcome studies of individual psychotherapy in the core tradition for adults seeking treatment for the common diseases noted earlier. Excluded are studies that do not make a serious effort to use a control group of comparable subjects or that use subjects as their own controls (since the variable natural history of these illnesses and the order of treatments confound such efforts). Also excluded are studies that use individual treatment as a minimum contact control to test some other intervention.

A computerized literature search covering the last three years was conducted. Earlier work was identified from previous reviews. Of these several hundred potentially relevant reports, only the following met the preceding criteria for inclusion in this discussion.

Controlled Outcome Studies of Schizophrenia

The most influential work in the area is that by May, Tuma, and coworkers. Over 200 hospitalized schizophrenics in the mid-prognostic range participated in these studies. Treatment was administered by psychiatric residents or psychiatrists without extensive experience and it consisted of one of five modalities—psychotherapy alone, psychotherapy plus neuroleptics, neuroleptics alone, electroconvulsive therapy (ECT), and a control group with only general treatment in a psychiatric ward. Although the therapists were inexperienced, all psychotherapy was supervised by experienced psychoanalysts, who strongly believed in the efficacy of the treatment they were supervising. The therapy was primarily ego-supportive in nature with an emphasis on defining reality. There was a minimum of depth interpretations and a substantial focus on current problems and confronting the patient with the reality of his own behavior, as well as the clarification of perceptual distortions. The therapists were seen as acting as suitable models for interjection. Therapy was to be given on an average of not less than two hours weekly, with an absolute minimum of one hour. For non-

psychotherapy cohorts, a serious attempt to minimize time spent with the doctor was effective, resulting in considerably less doctor contact than experienced by patients in psychotherapy. Treatment continued for one year or until discharge from the hospital, although treatment could be ended after six months, if the treating physician and supervisor agreed that a given case was a treatment failure with little likelihood of responding for the duration of the study. Patients were followed for up to five years. This investigation is impressive in its attempt to assess patients on a wide range of outcome variables. Rating scales, such as the Menninger Health/Sickness Scale and the Cammarilo Assessment Scale were used to evaluate affective contact, anxiety, ego strengths, insight, motivation, object relations, identity, and sexual adjustment. Behavioral ratings were made by nursing staff. Ratings were made on idiosyncratic symptoms for each patient. Other ratings and psychological tests assessed cognitive functioning, thought disorder, and affective state. Duration of the index hospitalization, as well as number of days in the hospital from the first admission or from the index discharge over the subsequent five-year period were assessed. Antipsychotic drugs proved significantly superior to psychotherapy, which was, in general, no more effective than the treatment given to the control group. On many variables ECT was intermediately effective. Drugs plus psychotherapy worked slightly better than drugs alone. This work is impressive evidence that psychotherapy administered in the hospital by inexperienced therapists to mid-prognostic-

range schizophrenics (not selected for psychotherapy suitability) is not effective. The generalizability of this work has been challenged in the belief that a more selective group of patients or more experienced therapists would have made a difference. Nevertheless, this investigation was a telling assessment of what was then the most common psychotherapeutic experience available to the hospitalized schizophrenic patient.

Karon and Vandebos randomized thirty-six hospitalized schizophrenics to psychotherapy alone, psychotherapy plus drugs, or drugs alone. The patients were primarily poor inner-city blacks, two-thirds of whom never had been previously hospitalized. The therapy-without-medication group received an active psychoanalytic therapy stressing oral dynamics and utilizing "direct interpretations." Sessions were held five days a week until discharge and usually once per week thereafter. The group receiving both therapy and drugs was given a psychoanalytic therapy "of an ego-analytic variety" conducted three times per week and eventually reduced to once weekly. The third group was hospitalized in a public institution in which phenothiazines were used as the primary treatment. Treatment was available for all groups for twenty months, and the therapy groups received an average of approximately seventy sessions. Of the twelve psychotherapists participating in the study, four were regarded as experienced and eight as inexperienced. Outcome variables included a clinical status interview, projective tests, the Porteus maze, and tests for vocabulary and intelligence.

The two psychotherapy groups had significantly shorter hospital stays and performed significantly better on the clinical status interview as well as on a number of performance tests. Differences relative to the experience level of the therapists demonstrated some advantages for the more experienced therapists. These results have been challenged on methodological and statistical grounds by May and Tuma, to which the authors have provided a rebuttal. In addition to the small sample size and statistical issues, the most telling inadequacy is the difference in the hospital experience of the three groups (that is, non-psychotherapy groups were treated in state hospitals). The problems are sufficient to weaken the merits of this study, and a larger scale replication attempt is warranted.

Messier and coworkers reported a follow-up of an earlier study of hospitalized schizophrenics conducted by Grinspoon and coworkers. The original study compared Thioridazine and placebo in twenty patients, all of whom received twice-weekly analytically-oriented psychotherapy for two years from senior staff psychiatrists in an active milieu. A vast superiority for the Thioridazine group was demonstrated. All patients received psychotherapy, but its efficacy could not be assessed. The follow-up study attempted to evaluate the impact of psychotherapy by comparing the twenty patients in the original study with twenty-one other patients chosen at the same time, but assigned to stay in the state hospital where neuroleptics were the main treatment modality and psychotherapy was uncommon. Outcome

criteria included psychotic symptoms, employment, recreational functioning, living situation, and capacity to live outside of the hospital. There were no significant differences between the state hospital group on the one hand and the psychotherapy alone, psychotherapy plus Thioridazine, or the combined psychotherapy groups on the other. There were several serious methodologic problems in this study. The no-therapy controls, in fact, had an extremely different hospital experience than did the psychotherapy patients. They had been treated in a state hospital, whereas the psychotherapy patients were treated in a special research ward with an active therapeutic milieu. Furthermore, patients were not assigned to groups in a strictly random manner, in that patients transferred to the research ward were only those who consented to participate in the research project and whose families agreed to be involved in the treatment. If patient or family refused, they were assigned to the state hospital control group. Furthermore, all the patients were chronic, having been hospitalized for three or more years. Hence, they are hardly representative of patients most likely to demonstrate benefits from psychotherapy. For these reasons, the results of this study are severely compromised and difficult to interpret.

Rogers and coworkers studied thirty-two hospitalized schizophrenics, half of whom had been hospitalized over eight months. Patients were randomized to psychotherapy or no psychotherapy conditions, and an attempt was made to minimize the use of medication in therapy patients. The

experience and orientation of the therapist was highly variable and poorly controlled, but approximated Rogers's client-centered therapeutic approach. Therapy lasted from four months to two and one-half years with sessions held, on the average, twice a week. Outcome variables included symptomatology, work behavior, hospitalization status, the Minnesota Multi-phasic Personality Inventory (MMPI), and the Q-sort. There was no significant difference between client-centered therapy patients and controls, but a few trends favored the former. This research was designed to study process variables and the mechanisms of change in psychotherapy, and the assessment of outcome was ancillary. The use of medication and assignment of psychotherapists were poorly controlled, hence the results of this study relevant to efficacy are compromised.

Bookhammer and associates compared fourteen hospitalized schizophrenics treated with Rosen's "direct analysis" with thirty-seven controls. All patients were suffering from their first attack of overt psychotic symptoms at the time of the study. Control patients received a wide range of treatments (probably including interpersonal therapies) in various facilities, with no attempt to standardize or define their treatment experience. All patients were evaluated periodically for five years by the investigative team, who judged signs and symptoms, patient's attitude toward himself, interpersonal relationships, contact with reality, useful work, and the amount of time spent out of the hospital. No significant differences were found. One

may conclude that “direct analysis” did not prove superior to a hodgepodge of other treatments, but one may not judge whether all forms of treatment were equally effective or equally ineffective.

Marks and associates compared psychotherapy and token economy in twenty-two chronic hospitalized schizophrenics, all of whom received both treatments in a crossover design. Patients were evaluated with respect to work, social, and conceptual competence, word association tests, symbolic literal meaning test, and several tests of speed and maintenance of work set. The two treatments had similar effects, showing significant improvement on twelve of eighteen variables. The authors then compared thirteen subjects whose medication was held constant, prior to and during the study, with patients participating in a drug study conducted a short time before this investigation. Both studies covered a similar period of time, used a crossover design, and had similar behavioral assessment (especially of ward behavior). The drug study revealed no difference between drug and placebo treatment in these chronic patients. Comparing the results of the two studies on the nine measures common to both, patients receiving token economy treatment or psychotherapy showed significantly more improvement on eight of the nine measures than patients in the drug/placebo study conditions. The drug study included eleven patients who participated in the later therapy study as well and thus were serving as their own controls. The post hoc nature of this comparison cannot answer questions as to the adequacy of randomization

and comparability of the control conditions between studies. Thus, these results are hardly persuasive. The aforementioned studies evaluate psychotherapy in hospitalized patients and do not relate to the role of psychotherapy in the outpatient setting.

Only two of the six studies reviewed purport to demonstrate efficacy for individual psychotherapy with hospitalized schizophrenics, and serious methodologic flaws in these leave the verdict unsettled. The work of May and associates in the 1960s was an exceptionally accomplished initiative, but whether the negative findings are applicable to more experienced therapists and schizophrenic patients judged suitable for psychotherapy is not yet determined. No controlled study of individual psychotherapy in the outpatient context has been reported to date. The most relevant study to mention, therefore, was conducted by Hogarty and co-workers.¹ They examined the role of individual social casework and vocational counseling, termed “major role therapy,” in the aftercare of schizophrenic patients. Although not fitting even the broad definition of psychotherapy used in this review, their work demonstrates several points important in conceptualizing and designing studies of psychotherapy in the outpatient setting. After randomizing 374 newly discharged schizophrenics to chlorpromazine or placebo aftercare, each group was further randomized to either no psychological treatment or “major role therapy” (MRT). Patients were treated for two years or until relapse. MRT had no demonstrable value during the first

six months, but for the seven to twenty-four-month period it significantly reduced the relapse rate independent of drugs. At eighteen and twenty-four months, a significant interaction appeared between MRT and drugs on measures of symptoms, social and occupational adjustment, and overall functioning among the subgroup of patients completing the study without relapse. For medicated patients, MRT improved functioning, especially in interpersonal relations and overall functioning. Unmedicated patients, however, did better without MRT! These findings were achieved despite the small difference—less than one social work-contact per month—between MRT and non-MRT groups. Two major implications are: (1) long duration of treatment may be necessary to demonstrate benefits from some interpersonal treatments; and (2) beneficial effects of psychological therapy may only be apparent in patients receiving medication. False negatives (type II error) may be obtained in studies of too brief a duration or where psychotherapy is not evaluated in combination with drug treatment. This latter point has been reinforced by the recent demonstrations by Goldstein and coworkers of a drug-family therapy interaction.

Regarding schizophrenia, the authors find the reports of skilled clinicians working intimately with their patients extremely informative as to the phenomenology of schizophrenia and, to a lesser extent (since it is necessary to allow for theoretically based bias), informative regarding the intrapsychic and psychodynamic components of schizophrenia. The focus of

this review is efficacy of psychotherapy as treatment, not as a clinical method for observation. Here the survey data contribute little, and only a half dozen controlled studies of dyadic psychotherapy have been reported. Considering the complexity of psychotherapy and the heterogeneity of schizophrenia, these few studies could not be definitive even if results were consistent and methods without serious flaw. These contrast with twenty-nine controlled studies of antipsychotic drug therapy in 3,519 outpatients and scores of such studies on inpatient units. The results of psychotherapy on schizophrenia to date have not been consistent, but the modest benefits noted in several studies are outweighed by the negative results in the others. Also of note is the fact that in the negative studies more patients have been studied by better methods.

Since some mental health professionals consider it axiomatic that “talking therapies” do not favorably alter the course of schizophrenia, it is worth noting several recent reviews of a broader range of interpersonal treatment techniques for schizophrenia, including milieu group and family therapy. These reports find stronger evidence for treatment efficacy than do the studies reviewed in this chapter. Many of these broader studies mix individual psychotherapy with other psychological treatments, and drugs are less likely to be excluded as a component of treatment.

Finally, the clinician judging which treatment modalities may be

attempted with schizophrenic patients is cognizant of the limited effects of all present treatments (including pharmacotherapy) and the formidable morbidity endured for decades by those patients with chronic forms of this illness. While some treatment effects may seem modest or even trivial, the humane and financial benefits that accrue to patients who become slightly more able to maintain relationships, slightly more likely to hold a job, and slightly more likely to recognize and avoid pathogenic stresses, are enormous when illness begins in young adulthood and may last sixty years. The monetary savings that would be associated with reducing unemployment in discharged schizophrenics from 67 percent to 60 percent are so vast that even the cost containment expert for third-party payers should be eager to avoid prematurely closing the door on rationally derived, potentially beneficial therapeutic techniques. In the absence of definitive answers from controlled studies, the clinician weighs all available data with judgment and intuition. It is worth keeping in mind that only 10 to 20 percent of all medical therapeutics have been proven effective in controlled studies.

Controlled Outcome Studies of Affective Disorders

There are no controlled outcome studies of individual psychotherapy with manic patients. There are, however, three well-designed investigations of psychotherapy efficacy in depressive disorders.

The Boston-New Haven Collaborative Depression Project studied 150 depressive female outpatients, randomized to either high-or low-contact groups. Each group was further randomly assigned to amitriptyline, placebo, or no medication. Most of these neurotically depressed women had one previous depressive episode, and only 5 percent had bipolar affective illness. Each patient had an acute depressive episode of significant severity but had responded to four to six weeks of amitriptyline therapy prior to inclusion into the study. The study focused on the aftercare phase of treatment. The high contact group received therapy consisting of at least one hourly session per week with an experienced social worker. It focused on identifying current maladaptive patterns of interpersonal functioning and altering them. There was little attempt to reconstruct early experiences in the patients' lives. All patients were seen for a monthly fifteen-minute visit with a psychiatrist to assess clinical status and to adjust medication. This was the only clinical session for the low-contact group. Duration of treatment was eight months. This design permits evaluating drug effects in aftercare (drug versus placebo), psychotherapy effects (high versus low contact), the effectiveness of each treatment group versus no treatment, and drug/psychotherapy interactions. Patients receiving amitriptyline had less depressive symptomatology early in treatment and fewer relapses into depressive episodes. A tendency to fewer relapses in psychotherapy patients was not statistically significant, but measures of occupational and interpersonal functioning revealed significant

benefit from the fifth to the eighth month of psychotherapy. Since amitriptyline did not affect these variables, this study neatly demonstrates that pharmacotherapy and psychotherapy may have their major effects on different aspects of psychopathology, a demonstration that affirms expectations based on common sense and uncontrolled clinical observation. Treatment was not controlled following the eight-month trial, and six and twelve months follow-up did not find persisting group differences.

Weissman and coworkers report on a study of eighty-one acute unipolar, non-psychotic depressed patients, randomized to individual psychotherapy alone, psychotherapy plus amitriptyline, amitriptyline alone, and nonscheduled treatment with a maximum of one visit per month. Treatment lasted sixteen weeks. Psychotherapy was similar to the Boston-New Haven Project, but differed in two respects. First, it was administered by psychiatrists rather than social workers. Second, by a careful examination of what actually occurred in psychotherapy sessions in the Boston-New Haven Project, a manual was developed that prescribed the psychotherapy used with a degree of specificity uncommon in this sort of research. Again, the therapy focused on the social context of the depression and the identification of maladaptive patterns of interpersonal functioning. This time, psychotherapy was as effective as drugs in reducing depressive symptoms and relapse—both to a significantly greater degree than nonscheduled treatment. There was a trend favoring the combination of therapy and drugs. This work suggests an

efficacy of psychotherapy in treatment of acute depressive symptomatology equal to that of medication, over and above any effect on interpersonal adjustment, which was not assessed in this report.

Rush and coworkers randomized forty-one significantly depressed outpatients to either cognitive therapy or treatment with imipramine for twelve weeks. All patients were at least moderately depressed on the Beck Depression Inventory, most had multiple prior depressive episodes and reported suicidal ideation. Over one-third had been depressed more than one year and nearly one-quarter had previous psychiatric hospitalizations. All patients were unipolar. The technique for cognitive therapy was highly specified and elaborated in a treatment manual, and averaged one and one-half sessions per week. The focus of the therapy involved altering negative and pessimistic cognitive attitudes of the patient toward himself and the environment. Cognitive psychotherapy was significantly more effective than imipramine in reducing depressive symptoms, as judged by the patient, the therapist, or an independent clinical evaluator. This difference was maintained at three months follow-up and persisted as a trend at six months. Furthermore, 68 percent of the drug group reentered treatment for depression during the follow-up period as compared to only 16 percent for the cognitive therapy group.

These three studies were especially well designed to test efficacy of

special forms of psychotherapy and to contrast these effects with those of an established effective treatment. The investigators assured that both pharmacotherapy and psychotherapy were conducted according to standards, and both therapeutic approaches were superior to minimal or no treatment. Psychotherapy showed a beneficial effect on psychosocial aspects of course of illness, but also rivaled or surpassed antidepressant medication on symptom and relapse measures in two of the studies. Future studies are required to determine if these findings are generalizable to more severely ill patients, to mildly depressed patients, or to patients with bipolar affective disorder. Also, whether other forms of psychotherapy are effective in treating moderately to moderately-severe depressed patients awaits demonstration.

Although only three studies can be cited, the evidence strongly affirms the efficacy of special forms of psychotherapy in outpatient depressives. These studies illustrate the applicability of carefully designed, controlled studies of psychotherapy efficacy and should prove as influential as they have proven informative. Investigations of depression have an advantage in being able to select relatively homogeneous patient cohorts for study, to focus on a more limited range of change criteria, and to use briefer periods of treatment than seem plausible in schizophrenia, where heterogeneity of patients and pervasiveness and chronicity of psychopathology create a greater challenge. Nonetheless, these study paradigms may be fruitfully applied in testing treatment effects in other psychiatric disorders.

Controlled Outcome Studies of Psychosomatic Disorders and Psychological Sequelae of Physical Disease

The following studies relate to the use of individual psychotherapy to treat either illnesses traditionally seen as psychosomatic in nature or as the adverse consequences of physical illness.

Grace and coworkers studied the impact of a form of “superficial psychotherapy” designed to alleviate the stress of patients suffering from chronic ulcerative colitis. Two groups of thirty-four patients each were matched with respect to age, sex, severity of ulcerative colitis, duration of illness prior to therapy, age of onset, and X-ray changes. Patients ranged in age from fifteen to fifty-four years; 60 percent were classified as severely ill. The duration of illness ranged from one month to over ten years. One group of patients received psychotherapy of unspecified intensity and duration. The second group was treated medically, with an emphasis on diet and antispasmodic agents. All patients were observed for at least two years. All psychotherapy patients were treated by the senior author. Outcome was assessed in terms of deaths, operations performed, symptoms of colitis, complications, time spent in hospitals, visits to physicians, and X-ray changes. Although outcome evaluations were performed by the authors, who knew the treatment assignments, the potential for bias was somewhat mitigated by the fact that several outcome measures were primarily objective criteria requiring a minimum of interpretation and, in the case of X-ray changes, the

X-rays were read by radiologists unaware that a study was being conducted. Although no tests of statistical significance were performed on the data, large differences favoring the psychotherapy group were found for nearly all of the outcome measures. An additional group of the 109 patients with ulcerative colitis treated at the same hospital but not included in the study was also examined. They received standard medical treatment, and although significantly less ill than the study patients, their outcome more closely resembled the control group than the psychotherapy group on most measures.

O'Connor and associates studied 114 patients suffering from ulcerative colitis of at least five years' duration. The psychotherapy group consisted of 57 patients referred for psychiatric treatment. The majority had a diagnosis of personality disorder, although one-third of this group were diagnosed as schizophrenic (criteria unspecified). The psychotherapy ranged from formal psychoanalysis for six patients to short-term therapy of less than twenty sessions directed at current conflicts for 13 patients. The remaining portion of the sample received psychoanalytically-oriented therapy twice weekly for one to two years. The control group was matched with the therapy patients for severity of ulcerative colitis, sex, age of onset, and use of steroids. It is important to note that the groups were not matched for psychopathology, given the fact that the therapy group were all referred for psychiatric treatment and the control patients were not. It is not surprising that

psychopathology was markedly more severe in the therapy group. The patients were followed for at least seven years after the initiation of therapy. Outcome measures included periodic protoscopic examinations and ratings of bowel symptoms. Psychological criteria were derived from ratings in occupational functioning, sexual adjustment, family relationship, and self-esteem. Also evaluated were hospitalizations, amount of steroid therapy, amount of surgery, and mortality rate. It was found that patients with a schizophrenic diagnosis did very poorly regardless of treatment and clearly worsened over the course of the study. When the schizophrenic patients were removed from the analysis, the psychotherapy patients were found to improve over the entire course of follow-up, while the control patients worsened. In spite of the symptomatic advantage for psychotherapy patients in both somatic and psychological domains, the mortality and surgical rates were approximately equal in treated and untreated groups. While this study suggests an advantage for psychotherapy in patients with ulcerative colitis, there are a number of significant methodologic flaws. No tests of statistical significance were performed on the data, the length of the follow-up period was not uniform, and, most importantly, the patients were not assigned in a random manner. If psychopathology and ulcerative colitis interact negatively, this design may underestimate psychotherapy benefits.

Glen studied forty-five patients with confirmed diagnoses of duodenal ulcers. The therapy group received once weekly psychotherapy based on the

method of Alexander, concentrating initially on disturbing life situations and later on events of early life and dreams. The control group received standard medical treatment consisting of advice on diet and alkali use. All patients were treated for approximately six months and evaluated for a two-year period. Unfortunately, the only outcome criterion reported was histamine-induced maximal acid output. The result was in favor of the psychotherapy group, but not significantly so. In contrast to the studies of O'Connor and associates and Grace and associates, where a wide range of relevant outcome criteria were evaluated, this study demonstrates the loss of a large body of potentially valuable information when assessment is limited to a single variable.

Schonecke and Schuffel demonstrated no benefit for psychotherapy combined with either bromazepam, placebo over bromazepam, or placebo alone in the treatment of functional abdominal disorders. Outcome focused on abdominal symptoms, depression, anxiety, and a personality inventory. Although both groups improved on a number of outcome measures, there was no significant advantage for either group. However, the design of this study is grossly inadequate for evaluating the potential benefits of psychotherapy in that the therapy consisted of a total of only 60 minutes over a six week period. Few clinicians would anticipate tangible results from such minimal contact.

Although there are methodologic flaws in each of these studies, it is

illuminating to note that the two studies that evaluated outcome with a broad range of clinically relevant measures demonstrated an advantage for psychotherapy. Conversely, the studies that were limited to a single narrow outcome measure or used an unreasonably brief trial of psychotherapy had negative results. While it is difficult to draw firm conclusions from so few studies, the methodologically adequate studies do demonstrate a value for psychotherapy in at least some psychosomatic disorders.

Two studies examined the efficacy of individual psychotherapy in managing the psychological sequelae of physical illnesses. Gruen studied seventy patients in an intensive care unit following their first myocardial infarction. The therapy group was seen for thirty-minute sessions five or six days a week throughout the hospitalization. The initial phase of therapy consisted of a nonprobing discussion of the patient's feelings and reactions to the hospital, during which time the therapist assessed the patient's strength and coping mechanisms. In a context of empathic concern and reassurance, the therapist then began to help the patient explore his fears and anxieties and to clarify unrealistic attitudes toward his illness and his future. The patient was encouraged to articulate and resolve conflicts, develop his coping strategies, and utilize existing resources. Measures of outcome included time spent in the hospital, in the intensive care unit, and on the monitor. Other somatic measures included the amount of angina, arrhythmias, and heart failure. In addition, physicians and nurses made ratings of depressive

behavior, nervous and anxious behavior, refusals of treatment, violations of orders, and weak and exhausted behavior. Affects were also evaluated with a number of psychological tests. Follow-up interviews were carried out approximately four months after the infarction, usually in the patient's home. At follow-up, the patient's physician was also asked to assess the patient's functioning. The follow-up interviews were rated for level of anxiety and the degree to which the patient had resumed a normal life compared with the physician's judgment of the patient's capabilities. The results demonstrated a wide range of significant advantages for the psychotherapy group. These included less time in the hospital, in the intensive care unit, and on the monitor; fewer patients with evidence of congestive heart failure and supraventricular arrhythmias; less evidence of weakness and depression in the nurses' ratings; and less depression in the physicians' ratings. Several ratings from psychological tests also showed a significant benefit for the treatment group. At follow-up, the psychotherapy group showed significant advantages both in anxiety ratings and level of activity.³

Godbole and Verinis studied sixty-one inpatients at a rehabilitation hospital, who were referred for psychiatric consultation. The patients were predominantly older women, widowed or divorced, with an average age of sixty-nine years. All had major physical disabilities and the majority had multiple physical diagnoses. The psychiatric diagnosis was either reactive depression or life situational reaction. Patients were randomly assigned to

either no therapy or one of two therapy conditions. Both forms of therapy consisted of ten-to fifteen-minute sessions three times a week for two to four weeks. One type was characterized as brief supportive psychotherapy, the second was brief psychotherapy utilizing a confrontation statement according to the method of Garner. Both therapists and nurses responsible for the care of the patients completed a series of rating scales describing aspects of the patients' behavior, including psychiatric and physical symptomatology, personal interaction with others, and self-care. Patients completed scales measuring depression and self-concept. In addition, a record was kept of the discharge plans for each patient with the assumption that those patients returning home were more improved than those who had to be rehospitalized or continued in aftercare facilities. On the basis of ratings by both the nurses and the therapists, patients in either form of brief psychotherapy improved significantly more than the no therapy group, and the confrontation approach was significantly more effective than the other two methods in improving the patients' ratings of depression and self-concept. Both types of psychotherapy were significantly more effective in returning patients to their homes than no therapy, the brief supportive psychotherapy being most effective in this regard.

Thus, in addition to the studies of psychosomatic illnesses per se, these two investigations support the efficacy of psychotherapy as part of the overall management of medical illnesses and their sequelae.

Controlled Outcome Studies of Psychoneuroses and Diagnostically Mixed Groups

Most of these studies suffer from the lack of homogeneous or well-specified patient groups, but diagnoses of psychoneuroses or personality disorders predominate. Some studies include psychotic patients.

Frank and his colleagues are pioneers in this area. In a series of reports, they compare patients receiving individual or group psychotherapy with low-contact controls. Individual therapy was one hour weekly and group therapy was one and one-half hours per week. The minimal contact group saw a psychiatrist for no more than one-half hour every two weeks. The minimal treatment condition was intended as an alternative to a pure no treatment control, which was regarded by these investigators as difficult to implement and ethically questionable. All patients were diagnosed as psychoneurotic or suffering personality disorder other than antisocial personality. Alcoholism and organic brain disease were exclusion criteria. There were eighteen patients in each of the three groups. Twenty-three patients who dropped out of therapy before the fourth meeting were replaced in their original groups and were analyzed as a separate cohort. Treatment was offered for six months, with 89 percent of the patients having at least four months of treatment. Both the individual and group therapy focused on current interpersonal difficulties and the feelings they aroused. Two outcome measures were used: (1) a discomfort scale consisting of the patient's self-

rating of forty-one common complaints; and (2) a social ineffectiveness scale consisting of fifteen categories of behavior involving interpersonal relationships rated by trained observers following interviews with the patient and a relative. Evaluations were made at six months, one year, two years, five years, and ten years. At the end of the six-month experimental period, the three groups and dropout group all showed a similar and significant decrease on the discomfort scale. This improvement occurred very early in the six-month period and was interpreted as a nonspecific response to any offer of treatment. On the social ineffectiveness scale, however, there was significantly greater mean improvement, and a higher percentage of patients improved in the individual and group therapy cohorts compared with the minimal treatment or dropout groups at six months. By the time of the five-year follow-up, all three groups demonstrated progressive, negatively accelerated improvement. As a result, at five years, there were no significant differences between treatment conditions on either outcome measure. By the time of the ten-year follow-up, there was again a significant advantage in social effectiveness for the individual and group therapy patients over the minimal contact controls. This seems to be the result of a return of the minimal contact group to levels approaching their scores immediately following the treatment; whereas the other two groups maintained their improvement at a steady level between five and ten years. Follow-up evaluations were completed on 50 to 65 percent of the original cohorts. This work suggests that social adequacy

may be specifically responsive to psychotherapy, as opposed to subjective discomfort. This again demonstrates the importance of assessing more than one dimension of outcome in evaluating the efficacy of psychotherapy. Combined with the results of the Boston-New Haven Collaboration Depression Project, it suggests that interpersonal functioning may be a dimension of outcome particularly sensitive to psychotherapeutic interventions. Finally, this work also demonstrates the value of long-term follow-up assessment in determining the full impact of psychotherapy on patients' lives.

Sloane and associates studied 94 outpatients, randomized to either behavioral therapy, psychotherapy, or waiting list status (no treatment). All persons eighteen to forty-five years of age applying for treatment at a university psychiatric outpatient clinic were considered for the study. Patients were excluded if they seemed "too mildly ill"; were too seriously disturbed to risk a waiting period; evidenced signs of psychosis, mental retardation, or organic brain disease; or were judged to be primarily in need of drug therapy. Patients were also excluded if psychotherapy was not considered to be the treatment of choice. Of a total of 119 patients, 98 met the criteria and were accepted for this study. They were predominantly white women in their early twenties, roughly two-thirds of whom suffered from a psychoneurosis and the other third from a personality disorder. Treatment consisted of hour-long sessions on a weekly basis for four months. A list of

stipulative definitions of each therapy was developed indicating procedures common to both treatments and those that were allowable only within one or the other modality. Thus, for example, elements characteristic of the psychotherapy included infrequent direct advice, interpretation of transference and resistance, the use of dreams, the interpretation of symptoms, and the eliciting of childhood memories. Behavioral therapy was characterized by the lack of these elements, plus the use of specified behavioral techniques.

All therapists participating in the study were highly experienced in the modality of treatment they were providing. Outcome measures included a list of three target symptoms developed individually for each patient and a structured interview assessing general level of functioning and overall improvement. Several personality tests were also administered. The patients and independent evaluators also rated work, social, sexual, and overall adjustment. Patients were evaluated initially, at the end of the four-month treatment period, and after one year.

At the end of treatment, both the psychotherapy and behavioral therapy groups improved significantly more on the target symptoms than did the waiting list group. The psychotherapy and behavior therapy groups did not significantly differ from the waiting list group in work or social adjustment. The behavior therapy group showed a significant advantage on the global

measure. Results of the one-year follow-up are difficult to interpret since well over half of the waiting list patients subsequently received psychotherapy, and many of the patients assigned to a treatment group received varying amounts of additional therapy after the four-month period.

This study is outstanding in many ways, such as, the use of highly experienced therapists, selection of patients judged to be good candidates for psychotherapy, careful characterization of treatment modalities, careful implementation of random assignment, and inclusion of numerous clinically relevant outcome criteria including some specifically tailored for the individual patient. This study demonstrates that psychotherapy is helpful in improving target symptoms of particular importance to specific patients. The lack of effect on more general adjustment measures is surprising, but may reflect the brevity of the therapy. Investigations that do provide strong evidence for such a generalized effect, such as the work by Frank and his coworkers and the Boston-New Haven Collaborative Depression Project, continued active treatment for six months or more.

Koegler, Brill and associates studied 299 patients drawn from applicants to a psychiatric outpatient clinic. All patients were white females between twenty and forty years of age. Exclusion criteria included psychosis, severe depression, disabling physical illness, and sociopathic disorders. The most common diagnoses were personality disorders, psychoneuroses,

psychosomatic disturbances, and borderline schizophrenic states. Patients were randomly assigned to one of six conditions: individual psychotherapy, Meprobamate, prochlorperazine, phenobarbital, placebo, or waiting list (no treatment). Psychotherapy consisted of a fifty-minute session at least once a week for an average of five months. The treatment was primarily psychoanalytically oriented and generally nondirective. Patients in each of the three drug groups were seen for fifteen-minute visits either weekly, biweekly, or monthly. All treatment was administered by psychiatric residents. Patients were evaluated initially, after five and ten weeks of treatment, at the end of treatment, and at follow-up averaging twenty-one months posttreatment. Outcome measures included a symptom check list and rating of change completed by therapists and the patients' ratings of change on twelve dimensions, including symptoms, self-satisfaction, and social and occupational functioning. At termination, a close relative also rated change over the course of therapy with respect to symptoms and overall functioning. In addition, the MMPI was administered initially and at termination. Finally, a social worker rated several aspects of general adjustment and work adjustment based on written reports about the patient. Although no differences between groups were apparent at five and ten weeks, by the end of treatment patients receiving either psychotherapy or Meprobamate were significantly more improved on self-ratings than the other groups. Meprobamate and psychotherapy patients also showed a significant

advantage in social work evaluations and some aspects of the MMPI. In addition, there were numerous nonsignificant trends in the data that favored psychotherapy and Meprobamate patients over patients in the other groups. The impression from the data is that Meprobamate and psychotherapy seemed superior to the other treatments. There was overall improvement in all treated groups, contrasting with a lack of improvement in the waiting list group. At the time of follow-up, there were no longer significant differences between groups, but a tendency remained for the psychotherapy group to be the most improved.

Lorr and coworkers studied 150 male patients applying for treatment at Veterans' Administration clinics who were judged suitable for intensive individual psychotherapy. Exclusion criteria included psychiatric hospitalization or psychotherapy during the previous three months, history of neurologic disorder or alcohol addiction, patients who could not discontinue current medication for the study, and patients over fifty-five years of age. Patients were randomly assigned to either psychotherapy or no psychotherapy. Each of these groups was further divided into one of three medication conditions, either chlordiazepoxide (Librium), placebo, or no pill. The no psychotherapy-no pill group was placed on a waiting list. Psychotherapy consisted of fifty-minute interviews once a week. All patients, except the waiting list group, also saw a separate clinician for regulation of medications. All treatments were continued for four weeks. Therapists, which

included staff members and trainees, had widely different levels of experience. Ratings were collected from the patients, the therapists, and the physicians on a range of outcome dimensions, including degree of discomfort, level of symptoms, feelings and attitudes, patient self-assessment of social and psychological change, and global ratings of improvement. Both physicians and patients rated active drug treatment significantly more helpful than placebo. For all groups receiving either active medication or placebo, there was no indication that psychotherapy improved outcome. However, the psychotherapy only group did better than the waiting list group, and the improvement in the psychotherapy only patients was in a pattern indistinguishable from patients also receiving active drugs. The results of this study are consistent with the hypothesis of Frank and associates that the early effects of treatment are rather nonspecific and occur in a similar fashion with any serious offer of help made to the patient. Thus all forms of treatment—active medication, psychotherapy, and placebo showed significant benefits to the patient as compared to the waiting list condition. The length of treatment, four weeks, is better suited to demonstrate specific drug effects than specific psychotherapy effects.

Morton studied forty subjects referred by vocational counselors at a university center. Although psychotic patients were excluded, the personal and social adjustment of these subjects was judged by the counselors to be significantly impaired. All subjects were seen for an initial diagnostic

interview that systematically explored fourteen areas of adjustment. Subjects were matched, based upon the results of this interview, an incomplete sentence test, and a problem checklist. One member of each matched pair was randomly assigned to psychotherapy, the other to a waiting list control condition. The psychotherapy consisted of three sessions conducted within a three-week period. The therapy utilized the Thematic Apperception Test (TAT) to elicit and elaborate areas of conflict and maladaptation. Following the therapy, both experimental and control subjects were re-interviewed by the experimenter and the vocational counselor who had made the original referral. The subjects also completed an incomplete sentence test and a problem checklist. The final interview by the vocational counselor and the experimenter was essentially a survey interview designed to elicit the subject's awareness of any change that had taken place since the initial interview. Initial and terminal interviews were tape recorded. Outcome measures included the incomplete sentence test, the problem checklist, a global rating of adjustment by the vocational counselor, a similar rating by the experimenter, and global ratings made by three independent raters based upon the tape recorded initial and terminal interviews. A significant advantage for the psychotherapy group was found on the pooled global ratings of change and the incomplete sentence test, with a trend favoring psychotherapy on the problem checklist. The vocational counselors judged some improvement in 93 percent of the experimental group, but in only 47

percent of the control subjects.

Fairweather and coworkers investigated the effect of individual and group psychotherapy as components of therapeutic inpatient programs. The ninety-four patients who participated were equally divided among long-term psychotics (over one year previous hospitalization), short-term psychotics (less than one year previous hospitalization), and nonpsychotics. Each of these three diagnostic groups was equally divided into four experimental conditions. Group C was provided an individual work assignment and a plan for post-hospital living by a rehabilitation team. Group I had the same treatment as Group C, plus individual psychotherapy two to four hours per week. Group G received the same treatment as Group C, plus group psychotherapy twice per week. Group GG received group psychotherapy and participated in group work situations in the context of a group living environment. Psychotherapy was described in this study as “psychoanalytically oriented.” Both experienced and inexperienced therapists were used. Evaluations were made shortly following a patient’s transfer to the experimental ward and a second time shortly before he left the ward, either at time of discharge or after six months of treatment. Instruments used included a Ward Behavioral Scale, the MMPI, the Q-Sort, the Holland Vocational Preference Inventory, and the TAT. A follow-up questionnaire was completed six months after the patient left the experimental program either by a person with whom the patient was living or, if the patient was hospitalized, by a staff

psychologist. This questionnaire assessed the amount of time employed, the amount of time in the hospital, alcohol use, antisocial behavior, number of friends, verbal communication, general adjustment, problem behavior, and degree of illness.

Patients receiving individual psychotherapy remained hospitalized significantly longer than patients belonging to the other three groups. There was little difference between groups on the MMPI, but interactions between treatment and diagnosis were apparent on some scales. In general, these suggested that long-term psychotic patients did better without psychotherapy, while non-psychotic and short-term psychotic patients benefited from psychotherapy. There were no significant differences between groups on the Ward Behavior Scale, the Vocational Preference Inventory, and the Q-Sort. The TAT showed no significant differences overall, but again interactions between treatment and diagnosis were present. Group therapy methods were advantageous with nonpsychotic patients, and all psychotherapy approaches benefited short-term psychotics. When long-term psychotics were treated, however, individual psychotherapy showed differential benefit. On the follow-up questionnaire, only the amount of employment significantly differentiated treatment groups. All psychotherapy groups showed a higher percentage of employment than the control condition. This was most pronounced with the individual psychotherapy and the group living conditions.

When all measures are considered, there is the suggestion that nonpsychotic and short-term psychotic patients show more adaptive change with psychotherapy, while long-term psychotic patients change more adaptively without it. The authors use differences in the variance of outcome measures among groups to argue that psychotherapeutic approaches result in more change, both positive and negative, than control treatment. However, the validity of this line of reasoning is highly debatable. With the exception of the follow-up questionnaire, there is a heavy reliance on various psychological tests as outcome criteria. Scores on these tests are not easily translated into meaningful clinical change, thus limiting the value of this study for assessing clinical efficacy of psychotherapy. This investigation illustrates the importance of diagnosis to the impact of psychotherapy, and the need for well-defined patient groups in clinical trials.

The following studies are sufficiently flawed methodologically or have such narrow outcome criteria of questionable clinical relevance that they receive only brief comment. Argyle and coworkers failed to demonstrate a benefit for psychotherapy or social skills training on a social skills rating scale. In this case, the outcome measure is extremely narrow and oriented toward specific goals and theoretical assumptions more appropriate for social skills training than for psychotherapy. Furthermore, its relation to other aspects of patient functioning was undetermined. Shlien and associates demonstrate an advantage for psychotherapy on a Q-Sort procedure. In addition to limiting

outcome to a single measure far removed from daily life, this study leaves many important methodological considerations unspecified, including the manner of assignment to treatment condition and comparability of patients in each group. Barron and Leary and Levis and Carrera found no advantage for psychotherapy on MMPI scores. Again, outcome is limited to a test score without assessing the clinical status of patients. Furthermore, the former study made no attempt to use random assignment, whereas the latter did not specify how patients were assigned to groups and provided no characterization of the patient group.

Another series of studies has compared different forms of psychotherapy with one another or with behavioral therapy. Since neither treatment in these studies has established efficacy, and control groups not receiving treatment were not used, they add little to the question of psychotherapy's value. Furthermore, most of them have not persuasively demonstrated an advantage of one approach over the other—behavioral therapy versus traditional psychotherapy,* reflective versus leading therapy, and cathartic versus traditional therapy. The one exception in this regard is Siassi, who found a persistent and significant advantage for psychodynamic psychotherapy (in a group of patients judged to be good candidates for psychodynamic treatment) when compared to a range of eclectic, reality-oriented therapies.

Each of the reasonably adequate studies on predominantly psychoneurotic outpatient populations demonstrates some significant benefits for individual psychotherapy. The nature of that gain differs somewhat among studies and does not always persist at follow-up. Furthermore, these studies may underestimate the potential for psychotherapy since therapy is usually of a relatively brief duration (from a few weeks to six months), often used with extremely heterogeneous populations (substantial portions of whom may be ill suited for therapy), and frequently implemented by inexperienced therapists or trainees.

Many process studies (not reviewed here) have begun the critical task of identifying the attributes of patients, therapists, and the treatment process that maximize therapeutic benefits and minimize ineffective or harmful results. These issues are far from resolved. At present, there is persuasive evidence that psychotherapy is efficacious in a substantial number of psychoneurotic and personality disordered patients. The next generation of studies may better define which psychotherapies are most promising with which patients and determine the limits of therapeutic generalizability.

Discussion

Despite widespread interest in dyadic psychotherapy, few carefully designed and controlled studies of its efficacy have been undertaken. This

reflects not only the very considerable complexity of the task, but also a prolonged willingness of psychotherapy advocates to ignore the scientific requirement to demonstrate results. Times have changed, and with an ever increasing public and professional assumption that little or no evidence supports psychotherapy as a treatment, the social, professional, and financial base for interpersonal treatments is in jeopardy. Old arguments against scientific scrutiny of psychotherapy are giving way to careful study of some aspects of treatment for some patient types.

The authors have emphasized that medicine is a predominantly observational science, hence the experimental results reviewed in this chapter must be clarified and extended by the rich body of case reports and surveys. Concerning several classes of illness (affective, psychosomatic, psychoneurotic, and personality disorders), there is a confluence of evidence supporting the efficacy of psychotherapy. The many reports of patients being helped by psychotherapy are supported by the majority of methodologically adequate studies examining the same issues under the controlled circumstances these reports lack. The most important present questions are: (1) which subgroup of patients in these categories are most likely to benefit, and which (if any) may suffer a detrimental effect; (2) precisely which psychotherapies are effective, and what training, experience, and setting are required for their optimal administration; (3) under what circumstances is psychotherapy superior to alternative treatments, additive and/or synergistic

with other treatments, and inferior to them; (4) what are the cogent patient/therapist matching considerations; and (5) upon what aspects or mechanisms of psychotherapy is benefit dependent. There is considerable evidence that psychotherapy works, but why it works is still argued from doctrine rather than data.

The efficacy of dyadic psychotherapy in schizophrenia has been more difficult to establish, and both the observational and experimental data are inconsistent. Some anecdotal reports describe considerable success with psychotherapeutic strategies, but many clinicians are unimpressed with their own experiences treating schizophrenics with psychotherapy. The controlled studies have been in hospital settings and have failed to demonstrate any strong effect. One exception, in addition to observational data, suggests that if such therapy can be helpful it requires selected patients and experienced therapists. The term schizophrenia covers an extraordinarily broad range of psychopathology comprising many aspects of human functioning. Many psychotherapeutic innovations will require study before the field can securely define what is therapeutic for which aspect of psychopathology in what phase of illness, and so forth. The vigorous pursuit of these studies is mandated by the following considerations: (1) the potentials of interpersonal therapeutic approaches for schizophrenic patients have barely been touched by scientific study (hence any closure on the issue is premature); (2) no alternative treatment provides definitive relief to the schizophrenic patient, especially in

the long-term deterioration of interpersonal and intrapsychic functioning; (3) while antipsychotic drugs are clearly effective in reducing positive symptoms and relapse rates, it is urgent to determine if combining psychotherapeutic approaches with drug treatment can enhance benefits and reduce drug exposure and the risk of tardive dyskinesia; and (4) schizophrenia is so common and severe an illness that the broadest range of etiologic and treatment research must be encouraged.

If the case for psychotherapy can be made with at least moderate persuasive power for many diagnoses, why is it currently under such severe attack? Medicine is an applied science. Consequently, patients seeking relief from their suffering require treatment based on the best available information even in the absence of certainty. The requirement for scientific rigor is a laudable development in psychiatry, but it can result in a distorted perspective that precludes reasonable action based upon significant but imperfect knowledge. In spite of its limitations, the data on psychotherapy indicate benefits for many patients, often where there is no alternative treatment. In medicine, many treatments are accepted despite the lack of rigorous experimental validation because they possess an intuitive rationale persuasive to professionals and laymen alike. Taking a thorough medical history and coronary bypass surgery are examples. Other maneuvers may be so well grounded on indisputable facts of anatomy, physiology, or chemistry that they are persuasive, at least to those educated in the field. Only 10 to 20

percent of medical procedures are based on evidence from controlled studies. Psychotherapy is handicapped in this regard. Its mode of action often seems improbable and nearly mystical to many. Lacking a well-established basic science of mental and behavioral phenomena, psychotherapeutic strategies are all too often justified by appeals to highly abstract and debatable models that are acceptable only to some subset of professionals. While some of these difficulties are intrinsic and unavoidable, many psychotherapeutic interventions can be related to less abstract and relatively atheoretical concepts. Thus, it seems reasonable that a person with impaired patterns of relating to others can be helped by ongoing interaction with an individual trained to recognize those patterns, help the patients appreciate their nature and consequences, and assist in developing more adaptive modes. Such formulations not only make psychotherapy more intuitively acceptable but can articulate clinically tangible hypotheses about how therapy operates that can be tested by workers from various theoretical backgrounds.

While some experts may argue that only rigorously validated treatments should be employed, the authors believe that the intuitive rationale and the danger and invasiveness of a treatment must be considered. Hemodialysis, for example, has no intuitive relationship to schizophrenic functioning, and it is a highly invasive procedure with considerable risk. Thus, it is reasonable to require experimental demonstration of efficacy before hemodialysis becomes an accepted treatment for schizophrenia. Psychotherapy, on the other hand, is

not invasive in the same sense, is relatively safe, and can be intuitively related to many problems of the mentally ill. The authors believe clinicians are justified in using such a treatment until subsequent research definitively resolves the question of its efficacy.

Even when careful research in psychotherapy is carried out, a major impediment to confidence in the results is that the personality of the therapist is extremely important in ways that are difficult to define. Most medical treatments can be specified in terms of a technique with little reference to the provider beyond an assurance of a basic level of competence. For example, the ability to perform a splenectomy requires a set of skills that can be rather clearly specified. Thus, it is relatively easy to determine that a residency in surgery provides adequate training in those skills. Consequently, although all surgeons are not equally skilled, the public is justified in assuming that physicians completing designated training programs have a basic competence in the surgical treatment of illness. In assessing the efficacy of splenectomy, one is able to examine the outcome of cases treated by a group of trained surgeons and have reasonable confidence that the results were generalizable to the surgical profession at large. For psychotherapy, these crisp distinctions are lacking. Not only is it difficult to specify a precise “correct” technique for a given patient, but it is generally assumed that the personal attributes of the therapist are extremely important in determining outcome quite apart from technique. Thus, in contrast to the example of surgery, there are three

important gaps in our knowledge. First, it is not known what aspects of technique are specifically therapeutic for a given patient. The future generation of process studies should help clarify this issue. Second, there are no criteria for determining the personal attributes a person must have to be an effective therapist for a specific patient. And third, it is consequently difficult to know if a given training program provides the necessary education and experience to ensure that its graduates are competent in psychotherapy. The resulting problem for research is that a given study may say more about the efficacy of psychotherapy as practiced by a specific person(s) than about psychotherapy as a generalizable technique of treatment.

The professional psychotherapist finds himself surrounded by lesser trained and untrained self-appointed experts. The public must have some consistent basis for placing trust in the health professions, and third-party payers justly demand guidelines for determining when psychotherapy is a legitimate treatment of illness by qualified health professionals. While not offering a detailed proposal, the authors suggest the following guidelines regarding this issue.

1. As health care practitioners, it is perilous to claim expertise in areas that cannot be integrated within the framework of a broad medical model encompassing sociologic, psychological, and biologic data relevant to health and disease. The scope of this chapter was limited to psychosocial intervention in

disease states, but psychotherapy within a medical model would also include prevention. The authors do not consider the plethora of human interventions into normal functioning (troubled or not), whether these be traditionally valued (for example, academic counseling, pastoral counseling) or the self-actualizing and personal growth movements whose popularity rose during the 1970s, to be the legitimate domain of the health professions.

2. Expertise in psychotherapy is often assumed of graduates of programs in medicine, psychology, and social work. Sociology and psychology are taught in these fields, but programs vary tremendously and little or no training in psychotherapy may be provided. The public deserves some cross-disciplinary collaboration in establishing minimal requirements for the training of those practicing psychotherapy.

3. To the extent that psychotherapy is offered to patients (persons with a diagnosable illness), it should be provided in a medical framework. It is no longer justifiable to treat with a limited repertoire those with mental illness. The depressed patient may need psychotherapy (not necessarily by a physician), but clinical judgment concerning pharmacotherapy, ECT, genetic counseling, family or group therapy, occupational guidance, and other considerations must be continuously integrated in clinical care. Treatment of psychiatric illness within a medical framework can no longer permit exclusive and doctrinaire treatment approaches, and collaboration between physician

and psychotherapist should not merely be “medical screening.”

The confusion as to the medical legitimacy of mental health efforts has resulted in an unacceptable compromise of partial financial support for a diffuse array of alleged treatments. To counterbalance the possibility that at times payments are made for psychological interventions of questionable legitimacy, the truly mentally ill suffer from inhumane restrictions on the health care they receive. If the mental health profession fulfills its responsibility to clearly demarcate the domain of appropriate treatments for legitimate mental illnesses, there is no scientific rationale for excluding psychiatric patients from full access to health care. The poor prognosis cancer patient is not offered thirty days maximum inpatient care and a limited number of outpatient visits, but the poor prognosis schizophrenic patient is forced out of the public’s consciousness and pocketbook as quickly as possible. A pragmatic as well as a humanitarian rationale applies here. Health care planners have been preoccupied with direct costs and have ignored the social and financial burdens associated with unemployment, inability to manage a household, and so forth. If the financiers of health care paid social security disability, welfare, and unemployment benefits, they might be more eager to assure the adequacy of inpatient and outpatient treatment for mental illness. Various psychotherapies seem particularly likely to improve functioning in these areas of “hidden” health costs.

Conclusions

Considering the full range of evidence, there is a strong case that the core tradition of psychotherapy for adults suffering from common disorders offers clinical benefits for many patients. With the lack of comprehensive alternatives, this justifies continued support for psychotherapy at this time. Yet, there is no room for complacency. Support in the future requires extensive efforts to determine what elements of therapy are effective and with which patients. Process studies can provide useful hypotheses to help focus and specify future outcome studies. Since controlled studies are most meaningful when imposed on an extensive body of clinical observation, the traditional core of psychotherapy with its wealth of information should be the top priority of such focused investigation. In addition, this is the most prevalent type of psychotherapy currently being practiced. Innovative techniques are certainly to be encouraged, but validating nearly one hundred years of clinical effort deserves our most urgent attention.

Bibliography

Alexander, F., *Psychosomatic Medicine: Its Principles and Applications*. New York: W.W. Norton, 1950.

Argyle, M., et al. "Social Skills Training and Psychotherapy: A Comparative Study," *Psychological Medicine*, 4 (1974): 435-443.

Ashby, J.D., et al. "Effects on Clients of a Reflective and a Leading Type of Psychotherapy," *Psychology Monograph*, 71, no. 453: 1957.

- Barron, F., and Leary, T. F. "Changes in Psychoneurotic Patients With and Without Psychotherapy," *Journal of Consulting Psychology*, 19 (1955): 239-245.
- Bergin, A. E. "The Evaluation of Therapeutic Outcomes," in Bergin, A. E. and Garfield, S. L., eds., *Handbook of Psychotherapy and Behavior Change*. New York: John Wiley, 1971, pp. 217-270.
- , and Lambert, M. J. "The Evaluation of Therapeutic Outcomes," in Garfield, S. L. and Bergin, A. E., eds., *Handbook of Psychotherapy and Behavioral Change: An Empirical Analysis*. 2nd ed., New York: John Wiley, 1978, pp. 139-190.
- Bergin, A. E., and Suinn, R. M. "Individual Psychotherapy and Behavior Therapy," *Annual Review of Psychology*, 26 (1975): 509-556.
- Bookhammer, R. S. "A Five-year Clinical Follow-up of Schizophrenics Treated by Rosen's Direct Analysis," *American Journal of Psychiatry*, 123 (1966): 602-604.
- Brill, N. Q., et al. "Controlled Study of Psychiatric Outpatient Treatment," *Archives of General Psychiatry*, 10 (1964): 581-595.
- Butcher, J. N., and Koss, M. P. "Research on Brief and Crisis-Oriented Psychotherapies," in Garfield, S. L. and Bergin, A. E., eds., *Handbook of Psychotherapy and Behavioral Change: An Empirical Analysis*. 2nd ed., New York: John Wiley, 1978, pp. 725-768.
- Carpenter, W. T., and Heinrichs, D. W. "The Role for Psychodynamic Psychiatry in the Treatment of Schizophrenic Patients," in Strauss, J., ed., *Psychotherapy of Schizophrenia*. New York: Plenum Press, 1980, pp. 231-247.
- Cartwright, D. S. "Effectiveness of Psychotherapy: A Critique of the Spontaneous Remission Argument," *Journal of Counseling Psychology*, 20 (1956): 403-404.
- . "Annotated Bibliography of Research and Theory Construction in Client-Centered Therapy," *Journal of Counseling Psychology*, 4 (1957): 82-100.
- Cristol, A. "Studies of Outcome of Psychotherapy," *Comprehensive Psychiatry*, 13 (1972): 189-200.

- Davis, J. M., et al. "Important Issues in the Drug Treatment of Schizophrenia," *Schizophrenia Bulletin*, 6 (1980): 70-87.
- Di Giuseppe, R., et al. "A Review of Rational Emotive Psychotherapy Outcome Studies," *Counseling Psychologist*, 7 (1977) 64-72.
- Dittmann, A. T. "Psychotherapeutic Processes," in Farnsworth, P. R., McNemar, O., and McNemar, Q., eds., *Annual Review of Psychology*, 16. Palo Alto: Annual Reviews, 1966, pp. 51-78.
- Evans, F. J. "The Placebo Control of Pain: A Paradigm for Investigating Non-specific Effects in Psychotherapy," in Brady, J. P., et al. eds., *Psychiatry: Areas of Promise and Advancement*. New York: Spectrum, 1977, pp. 129-136.
- Eysenck, H. J. "The Effects of Psychotherapy: An Evaluation," *Journal of Consulting Psychology*, 16 (1952): 319-324.
- . *Handbook of Abnormal Psychology*. London: Pitman, 1960.
- . "The Effects of Psychotherapy," *International Journal of Psychiatry*, 1 (1965): 97-178.
- . *The Effects of Psychotherapy*. New York: International Science Press, 1966.
- . "The Non-Professional Psychotherapist," *International Journal of Psychiatry*, 3 (1967): 150-153.
- Fairweather, G. W., et al. "Relative Effectiveness of Psychotherapeutic Programs," *Psychology Monograph*, 74, no. 492: 1960.
- Feinsilver, D. B., and Gunderson, J. G. "Psychotherapy for Schizophrenics: Is It Indicated? A Review of the Relevant Literature," *Schizophrenia Bulletin*, 6 (1972): 11-23.
- Fiske, D. "Findings on Outcome in Psychotherapy. The Shaky Evidence is Slowly Put Together," *Journal of Consulting and Clinical Psychology*, 37 (1971): 314-315.
- Frank, J. D. "What We Don't Know About Psychotherapy," *Today in Psychiatry*. Abbott

Laboratories.

- . *Persuasion and Healing: A Comparative Study of Psychotherapy*. New York: Schocken, 1973.
- . "Therapeutic Components of Psychotherapy: A 25 Year Progress Report of Research," *Journal of Nervous and Mental Disease*, 159 (1974): 325-342.
- , et al. "Why Patients Leave Psychotherapy," *Archives of Neurology and Psychiatry*, 77 (1957): 283-299.
- Frank, J. D., et al. "Patients' Expectancies and Relearning as Factors Determining Improvement in Psychotherapy," *American Journal of Psychiatry*, 115 (1959): 961-968.
- Garner, H. H. "Psychotherapy Applied to Comprehensive Medical Practice," *Illinois Medical Journal*, 135 (1969): 289-295.
- Gelder, M. G., and Marks, I. M. "Severe Agoraphobia: A Controlled Prospective Trial of Behavior Therapy," *British Journal of Psychiatry*, 112 (1966): 309-319.
- Gelder, M. G., et al. "Desensitization and Psychotherapy in the Treatment of Phobic States: A Controlled Inquiry," *British Journal of Psychiatry*, 113 (1967): 53-73.
- Glen, A. I. M. "Psychotherapy and Medical Treatment for Duodenal Ulcer Compared Using the Augmented Histamine Test," *Journal of Psychosomatic Research*, 12 (1968): 163-169.
- Godbole, A., and Verinis, J. S. "Brief Psychotherapy in the Treatment of Emotional Disorders in Physically 111 Geriatric Patients," *Gerontologist*, 14 (1974): 143-148.
- Goldstein, M. J., et al. "Drug and Family Therapy in the Aftercare of Acute Schizophrenics," *Archives of General Psychiatry*, 35 (1978): 1169-1177.
- Grace, W. J., et al. "The Treatment of Ulcerative Colitis," *Gastroenterology*, 26 (1954) 462-468.
- Grinspoon, L., et al. "Long-Term Treatment of Chronic Schizophrenia," *International Journal of Psychiatry*, 4 (1967): 116-128.

- Grinspoon, L., et al. *Schizophrenia: Pharmacotherapy and Psychotherapy*. Baltimore: Williams & Wilkins, 1972.
- Gruen, W. "Effects of Brief Psychotherapy During the Hospitalization Period on the Recovery Process in Heart Attacks," *Journal of Consulting and Clinical Psychology*, 43 (1975) 223-232.
- Gunderson, J. G. *Drugs and Psychosocial Treatment of Schizophrenia Revisited: The Effects of Psychosocial Variables on Outcome of Schizophrenia*. Fifth International Symposium on Psychotherapy. Oslo, Norway, August 13-17, 1975.
- Herrington, B. S. "Klerman Weighs Role in Therapy Efficacy Study," *Psychiatric News*, 15 (1980): 10.
- Hogarty, G. E., and Goldberg, S. C. "Drug and Sociotherapy in the Aftercare of Schizophrenic Patients," *Archives of General Psychiatry*, 28 (1973): 54-64.
- Hogarty, G. E., et al. "Drug and Sociotherapy in the Aftercare of Schizophrenic Patients. II. Two-Year Relapse Rates," *Archives of General Psychiatry*, 31 (1974): 603-608.
- Hogarty, G. E., et al. "Drug and Sociotherapy in the Aftercare of Schizophrenic patients. III. Adjustment of Non-relapsed Patients," *Archives of General Psychiatry*, 31 (1974) 609-618.
- Hollon, S., and Beck, A. T. "Psychotherapy and Drug Therapy: Comparisons and Combinations," in Garfield, S. L. and Bergin, A. E., eds., *Handbook of Psychotherapy and Behavioral Change: A n Empirical Analysis*, 2nd ed., New York: John Wiley, 1978, pp. 437-490.
- Imber, S. D., et al. "Improvement and Amount of Therapeutic Contact: An Alternative to the Use of No-Treatment Controls in Psychotherapy," *Journal of Consulting Psychology*, 21 (1957): 309-315.
- Imber, S.D., et al. "A Ten-Year Follow-up Study of Treated Psychiatric Outpatients," in Less, S., ed., *An Evaluation of the Results of the Psychotherapies*. Springfield, Ill.: Charles C Thomas, 1968, pp. 70-81.

- Karon, B. P. and Vandenbos, G. R. "Experience, Medication and the Effectiveness of Psychotherapy with Schizophrenics: A Note on Drs. May & Tuma's Conclusion," *British Journal of Psychiatry*, 116 (1970): 427-428.
- . "The Consequences of Psychotherapy for Schizophrenic Patients," *Psychotherapy: Theory, Research, and Practice*, 9 (1972): 111-119.
- Kellner, R. "The Evidence in Favor of Psychotherapy," *British Journal of Medical Psychology*, 40 (1967): 341-358.
- . "Psychotherapy in Psychosomatic Disorders: A Survey of Controlled Outcome Studies," *Archives of General Psychiatry*, 32 (1975): 1021-1028.
- Klerman, G. L., et al. "Treatment of Depression by Drugs and Psychotherapy," *American Journal of Psychiatry*, 131 (1974): 186-191.
- KOEGLER, R. R. "Brief-contact Therapy and Drugs in Outpatient Treatment," in Wayne, G. J. and Koegler, R. R., eds., *Emergency Psychiatry and Brief Therapy*. Boston: Little, Brown, 1966, pp. 139-154.
- Koegler, R. R., and Brill, N. Q. *Treatment of Psychiatric Outpatients*. New York: Appleton-Century-Crofts, 1967.
- Lambert, M. J. "Spontaneous Remission in Adult Neurotic Disorders: A Revision and Summary," *Psychological Bulletin*, 83 (1976): 107-119.
- Lambert, M. J., Bergin, A. E., and Collins, J. L. "Therapist-induced Deterioration in Psychotherapy," in Gurman, A. S., and Razin, A. M., eds., *Effective Psychotherapy: A Handbook of Research*. New York: Pergamon Press, 1977, pp. 452-481.
- Levene, H., et al. "A Training and Research Program in Brief Psychotherapy," *American Journal of Psychotherapy*, 26
- Levis, D. J., and Carrera, R. "Effects of Ten Hours of Implosive Therapy in the Treatment of Outpatients," *Journal of Abnormal Psychology*, 72 (1967): 504-508.

- Lorr, M., et al. "Early Effects of Chlordiazepoxide (Librium) Used With Psychotherapy," *Journal of Psychiatric Research*, 1 (1963): 257-270.
- Luborsky, L. "Another Reply to Eysenck," *Psychological Bulletin*, 78 (1972): 406-408.
- Luborsky, L., and Spence, D. P. "Quantitative Research on Psychoanalytic Therapy," in Garfield, S. L. and Bergin, A. E., eds., *Handbook of Psychotherapy and Behavioral Change: An Empirical Analysis*, 2nd ed. New York: John Wiley, 1978, pp. 331-368.
- Luborsky, L., et al. "Comparative Studies of Psychotherapies: Is It True That 'Everybody Has Won and All Must Have Prizes?'" *Archives of General Psychiatry*, 3 (1975): 995-1008.
- Malan, D. H. "The Outcome Problem in Psychotherapy Research: A Historical Review," *Archives of General Psychiatry*, 29 (1973): 719-729.
- Malan, D. H., et al. "Psychodynamic Changes in Untreated Neurotic Patients. Apparently Genuine Improvements," *Archives of General Psychiatry*, 32 (1975): 110-126.
- Marks, J., et al. "Reinforcement versus Relationship Therapy for Schizophrenics," *Journal of Abnormal Psychology*, 73 (1968): 397-402.
- May, P. R. A. *Treatment of Schizophrenia*. New York: Science House, 1968.
- . "Psychotherapy and Ataraxic Drugs," in Bergin, A. E. and Garfield, S. L., eds., *Handbook of Psychotherapy and Behavior Change*. New York: John Wiley, 1971. pp. 495-540.
- . "Schizophrenia: Overview of Treatment Methods," in Friedman, A. M., Kaplan, H. I., and Sadock, B. J., eds., *Comprehensive Textbook of Psychiatry*, vol. 2. Baltimore: Williams & Wilkins, 1975, pp. 923-938.
- , and Tuma, A. H. "The Effect of Psychotherapy and Stelazine on Length of Hospital Stay, Release Rate and Supplemental Treatment of Schizophrenic Patients," *Journal of Nervous and Mental Disorders*, 139 (1964): 362-369.
- . "Treatment of Schizophrenia: An Experimental Study of Five Treatment Methods," *British Journal of Psychiatry*, in (1965): 503-510.

- . "Methodological Problems in Psychotherapy Research: Observations on the Karon-VandenBos Study of Psychotherapy and Drugs in Schizophrenia," *British Journal of Psychiatry*, 117 (1970): 569-570.
- May, P. R. A., et al. "Schizophrenia—A Follow-up Study of Results of Treatment," *Archives of General Psychiatry*, 33 (1976): 474-478.
- May, P. R. A., et al. "Schizophrenia—A Follow-up Study of Results of Treatment: II. Hospital Stay Over Two to Five Years," *Archives of General Psychiatry*, 33 (1976): 481-486.
- Meltzoff, J., and Kornreich, M. *Research in Psychotherapy*. New York: Atherton Press, 1970.
- Messier, M., et al. "A Follow-Up Study of Intensively Treated Chronic Schizophrenic Patients," *American Journal of Psychiatry*, 125 (1969): 1123-1127.
- Morton, R. B. "An Experiment in Brief Psychotherapy," *Psychology Monograph*, 69, no. 386: 1955.
- Mosher, L. R., and Keith, S. J. "Research on the Psychosocial Treatment of Schizophrenia: A Summary Report," *American Journal of Psychiatry*, 136 (1979): 623-631.
- . "Psychosocial Treatment: Individual, Group, Family, and Community Support Approaches," *Schizophrenia Bulletin*, 6 (1980): 10-41.
- Nichols, M. "Outcome of Brief Cathartic Psychotherapy," *Journal of Consulting and Clinical Psychology*, 42 (1974): 403-410.
- O'CONNOR, J. F., et al. "An Evaluation of the Effectiveness of Psychotherapy in the Treatment of Ulcerative Colitis," *Annals of Internal Medicine*, 60 (1964): 587-602.
- Orlinsky, D. E., and Howard, K. I., "The Relation of Process to Outcome in Psychotherapy," in Garfield, S., and Bergin, A., eds., *Handbook of Psychotherapy and Behavior Change: An Empirical Analysis*, 2nd ed. New York: John Wiley, 1978, pp. 283-330.
- Parloff, M., et al. *Assessment of Psychosocial Treatment of Mental Disorders: Current Status and Prospects*. National Technical Information Service (PB287640), Washington, D.C.: Government Printing Office, 1980.

- Patterson, V., et al. "Treatment and Training Outcomes With Two Time-Limited Therapies," *Archives of General Psychiatry*, 25 (1971): 161-167.
- Patterson, V., et al. "A One-Year Follow-Up of Two Forms of Brief Psychotherapy," *American Journal of Psychotherapy*, 31 (1977): 76-82.
- Pierlott, R., and Vinck, J. "Differential Outcome of Short-Term Dynamic Psychotherapy and Systematic Desensitization in the Treatment of Anxious Out-Patients. A Preliminary Report," *Psychologica Belgica*, 18 (1978): 87-98.
- Rachman, S. *The Effects of Psychotherapy*. Oxford: Pergamon Press, 1971.
- . "The Effects of Psychological Treatment," in Eysenck, H., ed., *Handbook of Abnormal Psychology*. New York: Basic Books, 1973, pp. 805-861.
- Rogers, C. R., et al. *The Therapeutic Relationship and Its Impact*. Madison: University of Wisconsin Press, 1967.
- Rush, A. J., et al. "Comparative Efficacy of Cognitive Therapy and Pharmacotherapy in the Treatment of Depressed Outpatients," *Cognitive Therapy and Research*, 1 (1977): 17-37.
- Rush, A. J., and Beck, A. "Adults with Affective Disorders," in Hersen, M., ed., *Behavior Therapy in the Psychiatric Setting*. Baltimore: Williams & Wilkins, 1978, pp. 286-330.
- Schonecke, O., and Schuffel, W. "Evaluation of Combined Pharmacological and Psychotherapeutic Treatment in Patients with Functional Abdominal Disorders," *Psychotherapy and Psychosomatics*, 26 (1975): 86-92.
- Shlien, J. M. "Time-Limited Psychotherapy: An Experimental Investigation of Practical Values and Theoretical Implications," *Journal of Counseling Psychology*, 4 (1975) 318-322.
- Siassi, I. "A Comparison of Open-Ended Psychoanalytically-Oriented Psychotherapy with Other Therapies," *Journal of Clinical Psychiatry*, 40 (1979): 25-32.
- Sloane, R. B., et al. *Psychotherapy versus Behavior Therapy*. Cambridge: Harvard University Press,

1975.

Sloane, R. B., et al. "Short-Term Analytically Oriented Psychotherapy versus Behavior Therapy," *American Journal of Psychiatry*, 132 (1975): 373-377.

Small, L. *The Briefer Psychotherapies*. New York: Bruner/Mazel, 1971.

Strupp, H. H. "The Outcome Problem in Psychotherapy Revisited," *Psychotherapy*, 1 (1963): 1-13.

----. "The Outcome Problem in Psychotherapy: A Rejoinder," *Psychotherapy*, 1 (1964): 101.

----. "Specific vs. Nonspecific Factors in Psychotherapy and the Problem of Control," in Strupp, H. H., ed., *Psychotherapy: Clinical, Research and Theoretical Issues*. New York: Jason Aronson, 1973, pp. 103-121.

----, and Bergin, A. E. "Some Empirical and Conceptual Bases for Coordinated Research in Psychotherapy: A Critical Review of Issues, Trends and Evidence," *International Journal of Psychiatry*, 7 (1969): 18-90.

Strupp, H. H., Hadley, S. W., and Gomes-Schwartz, B. *Psychotherapy for Better or Worse: An Analysis of the Problem of Negative Effects*. New York: Jason Aronson, 1977.

Uhlenhuth, E. H., et al. "Combined Pharmacotherapy and Psychotherapy: Controlled Studies," *Journal of Nervous and Mental Disorders*, 148 (1969): 52-64.

Weissman, M. "The Psychological Treatment of Depression. Evidence for the Efficacy of Psychotherapy Alone, in Comparison with, and in Combination with Pharmacotherapy," *Archives of General Psychiatry*, 36 (1979): 1261-1269.

----, et al. "Treatment Effects on the Social Adjustment of Depressed Patients," *Archives of General Psychiatry*, 30 (1974): 771-778.

Weissman, M., et al. "Follow-Up of Depressed Women after Maintenance Treatment," *American Journal of Psychiatry*, 133 (1976): 757-760.

Weissman, M., et al. "The Efficacy of Drugs and Psychotherapy in the Treatment of Acute

Depressive Episodes," *American Journal of Psychiatry*, 136 (1979): 555-558.

Notes

- 1 Dr. Morris Parloff, chief, Psychiatry and Behavioral Intervention Section, Clinical Research Branch, National Institute of Mental Health, was generous in making available unpublished material, critically reviewing an earlier draft of this manuscript, and offering suggestions to the authors.
- 2 Some reports fail to mention important aspects of the research design and its execution. This is reflected in the absence of key information in the reviews of some of the following studies.
- 3 While the severity of the infarction may be a factor, there was no specific matching for this variable. Presumably, it was handled by the random factor. This probably reflects the fact that it is difficult to initially rate the severity of the infarction accurately.