Comparative Studies of Psychotherapies

Is It True That "Everyone Has Won and All Must Have Prizes"?

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Tallies were made of outcomes of all reasonably controlled comparisons of psychotherapies with each other and with other treatments. For comparisons of psychotherapy with each other, most studies found insignificant differences in proportions of patients who improved (though most patients benefited). This "tie score effect" did not apply to psychotherapies vs psychopharmacotherapies compared singly—psychopharmacotherapies did better. Combined treatments often did better than single treatments. Among the comparisons, only two specially beneficial matches between type of patient and type of treatment were found.

Our explanations for the usual tie score effect emphasize the common components among psychotherapies, especially the helping relationship with a therapist. However, we believe the research does not justify the conclusion that we should randomly assign patients to treatments—research results are usually based on *amount* of improvement; "amount" may not disclose differences in *quality* of improvement from each treatment.

The subtitle you will recognize since it is from Alice in Wonderland—it was the dodo bird who handed down this happy verdict after judging the race. It was also the subtitle of that classical paper by Saul Rosenzweig, "Some implicit common factors in diverse methods of psychotherapy." Our title implies what many of us believe—that all the psychotherapies produce some benefits for some patients. What we do not know is whether or not there are psychotherapies that produce substantially better results and are especially suited to certain patients. Here, when we use the word "know," we are not using it

in the clinical sense where we believe a great deal is known, but in the controlled research sense where we believe we are just beginning. We "know," for example, that psychoanalysis works better with patients who have high ego-strength, but we can find only a little research evidence for this of the kind considered in this review.

Comparative studies of psychotherapies is not an area where one or two decisive experiments can be telling—one must rely on the verdict of a series of at least passably controlled studies. Ideally, one would want to have an impeccable definitive study that would settle the question of comparative worth once and for all, but it is not possible, since *every* study has some uniqueness of sample characteristics measuring instruments, and other less easily defined aspects. A consensus of many studies is what we must hope for.

The best way to summarize the studies is to consider them separately for each of the main types of comparisons that have been done; eg, group vs individual psychotherapy, time-limited vs unlimited psychotherapy, client centered vs other traditional psychotherapies, and behavior therapy vs psychotherapy. For each type of comparison, a convenient "box score" is given with the number of studies in which the treatments were significantly better or worse, or "tie score"—our term for not significantly different statistically.

Only studies in which some attention was paid to the main criteria of controlled comparative research were included. The research quality of each study was scored according to 12 criteria (see Criteria). Each departure from each criterion was scored -1, somtimes -½. Many of these criteria were derived from those of Fiske et al.² These 12 criteria were only to be considered as guidelines, since the sum of the weights cannot be matched point for point with the validity of the study. In fact, for a particular study a single criterion may be absolutely crucial in determining its validity; for example, the use of random assignment in a study may have produced significantly dif-

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Table 1.—List of Treatments Compared			
Treatment	Qual- itv*	Out- come†	Refer- ences
Group vs individual psycho- therapy	D-	_	Unicos
Decreasing order of effectiveness from group & individual therapy, to individual therapy, to group therapy			Baehr ⁹ 1954
Similarities of results of group & individual generally greater than differences	В	0	Barron & Leary ¹⁰ 1955
Changes on discomfort & social ineffectiveness scales were independent of type of therapy	В	0	Imber et al ¹¹ 1957
Little difference in effectiveness	В	0	Haimowitz & Haimowitz ¹² 1952
No difference in effectiveness	D	0	Thorley & Craske ¹³ 1950
Group therapy, better adjustment ratings Rehospitalization rates did	В	+	O'Brien et al ¹⁴ 1972
not differ		0	Gelder
Slightly less improvement in group than individual therapy in rapidity of change (rating by patients on main phobia, ratings by psychiatrists on anxiety & depression)	A ,	_	et al ¹⁵
No difference in general improvement or in separate areas (adjustment & symptoms)	D	0	Peck ¹⁶ 1949
No differences between psychodrama added to individual plus routine treatment vs "controls" receiving individual plus routine treatment	D	0	Slawson ¹⁷ 1965
Little difference between regular hospital treat- ment with individual vs regular hospital treatment with group treatment	А	0	Boe et al 18 1966
Patients treated by brief or intensive group therapy showed more reduction in California ethnocentrism scale than patients treated by individual psychotherapy	B+	+	Pearl ¹⁹ 1955
Group with diazepam, imipramine hydrochloride, or placebo vs brief individual supportive	B-		Covi et al ²⁰ 1974
therapy with diazepam, imipramine, or placebo Time-limited vs time-unlim-		0	
ited treatment Compared to patients in long unlimited treatment, patients in brief time- limited treatment showed severe decline in affect differentiation (on TAT), but no difference on therapist rating,	С	_	Henry & Shlien ²¹ 1958
behavioral index, and			

List of Treatments Com	pared (Contin	ued)
Treatment	Qual- ity*	Out- come†	Refer- ences
Time-limited & short-term groups improved more than long-term samples (on Rotter Test & Maslow Security-Insecurity Inventory)	В-	+	Muench ²² 1965
Time-limited client-centered treatment compared favorably with longer, unlimited treatment, on most outcome measures	С	0	Shlien ²³ 1957
Time-limited treatment (20 sessions) vs unlimited treatment (median: 37 sessions)	В	0	Shlien et al ²⁴ 1962
70% of patients treated for 6 mo vs 74% who dropped out in the first month showed decrease in discomfort	В	0	Frank et al ²⁵ 1959‡
"Ideal" long-term treatment, brief supportive treat- ment, & environmental manipulation produced high but not different level of change	D	0	Pascal & Zax ²⁶ 1956‡
Time-limited patients (maximum of 8 sessions) improved more than those in long-term treatment Client centered ("Rogerian")	A -	+	Reid & Schyne ²⁷ 1969
vs other traditional psycho- therapies Client centered vs psycho- analytic: no difference in degree of experiencing & level of self-observation	В	o	Cart- wright ²⁸ 1953
Client centered vs psycho- analytic vs Adlerian psychotherapy: patients reported no difference in amount of change	B-	0	Heine ²⁹ 1953
Client centered ("Reflec- tive") vs "leading" therapy ("Neo-Freudian"): no difference	D	0	Baker ³⁰ 1960
Client centered ("Reflec- tive") yielded lower improvement ratings than "leading" therapy	С	_	Ashby et al ³¹ 1957
Client centered vs Adlerian	В	0	Shlien et al ²⁴ 1962
Psychotherapy vs behavior			
therapy Results of behavior therapy vs matched psychother- apy controls 29 severe agoraphobias with behavior therapy, no difference from	С		Cooper et al ^{32,33} 1965, 1963
matched psychotherapy controls 12 limited "other phobias" improved more with behavior therapy than matched sample with		0	
psychotherapy At 1-yr follow-up, the 12 "other phobias" no difference between behavior therapy &		+	
psychotherapy		0	

Treatment	Qual- ity*	Out- come†	Refer- ences
10 behavior therapy vs 10	В		Gelder &
conventional psycho-			Marks ³⁴
therapy (all severe agoraphobics)		0	1966
At the end of 1 yr, not		U	
different (all severe			
agoraphobics)		_ 0	
17 students (who went to	B-		Crighton
health services spon- taneously) desensitization			Jehu ³⁵ 1969
vs group therapy			1909
Both treatments improved			
but no difference in			
improvement on feelings			
about exams, sleep disturbance, or grades		0	
16 desensitization, 16 group,	B+		Gelder
10 individual at end of 6	0,		et al ¹⁵
mo desensitization did best			1967
(severe agoraphobics in			
sample did poorly) At end of 2-yr follow-up,		+	
no differences		0	
Behavior therapy ("operant-	C+		King
interpersonal" therapy)		+	et al ³⁶
did best (hospitalized			1960
schizophrenics) vs			
verbal therapy, recre- ational therapy, & no			
therapy			
Group desensitization vs	С		Lazarus ³⁷
group interpretation	- 127		1961
(plus relaxation) for			
matched pairs of agoraphobics & claustro-			
phibics		0	
Group desensitization vs		,	
group psychotherapy for			
all patients		+	
10 implosive therapy vs 20 conventional therapy vs	D	+	Levis & Carrera ³⁸
10 no treatment; implo-			1967
sive therapy showed shift			
from pathology, conven-			
tional therapy not more effective than on waiting			
list 3 mo			,
7 systematic desensitization,	В	0	McReyn-
7 insight-oriented			olds ³⁹
psychotherapy, & 14			1969
relaxation therapy 20 behavior therapy (4.1			Marks &
sessions per week) vs	<u> </u>	0	Gelder ⁴⁰
20 controls in psycho-			1965
therapy (2.4 sessions			
per week) (all phobics)			
58 behavior therapy patients treated (in first 5 mo)	С		Patterson
improved more than 69			et al ⁴¹ 1971
others in psychoanalytic			13/1
psychotherapy		+	
Patients in both samples			
in second period improved equally (inexperienced			
therapists did better with			
behavior therapy; with			
experience, effectiveness			
of both treatments equal)		0	
31 behavior therapy vs 30	B+		Sloan
insight-oriented therapy;	דט⊤		et al
at 4 mo, no difference;		0	1974
at 1 yr, no difference		0	(unpul
			lished

			ued)
Treatment	Qual- ity*	Out- come†	Refer- ences
13 behavior therapy vs 13 supportive psychotherapy	В	0	Zitrin et al 1974 (unpub- lished data)
Psychopharmacotherapy alone vs psychotherapy alone Phenothiazine and/or group psychotherapy (schizophrenics)	С	+	Gorham ⁴² 1964
Stelazine vs psychotherapy, on length of hospital stay, release rate, & supplemental treatment (schizophrenics)	В	+	May & Tuma ^{43,44} 1964 & 1965
Trifluoperazine vs group psychotherapy- adjunctive therapy	D	+	Evangela- kis ⁴⁵ 1961
Chlordiazepoxide vs psychotherapy	С	+	Lorr et al ⁴⁶ 1963
Psychopharmacotherapy alone vs psychotherapy alone Penothiazine & antidepressants vs psychotherapy	D	+	Overall & Tupin ⁴⁷ 1969
Drug groups (meprobamate, prochlorperazine, phenobarbital) vs psychotherapy	В	0	Koegler & Brill ⁴⁸ 1967
Amitriptyline hydrochloride vs psychotherapy	A	+	Klerman et al ^{49,50} 1974, 1973
Chlorpromazine vs psychotherapy	В	+	Hogarty & Goldberg ⁵¹ 1973
Psychotherapy plus psychopharmacotherapy vs psychopharmacotherapy alone Chlorpromazine, alone & as adjunct to group psychotherapy	D	+	Cowden et al ⁵² 1956
Chlorpromazine & group therapy (hospitalized chronic schizophrenics)	D	+	King ⁵³ 1958
Phenothiazine and/or group psychotherapy (schizophrenics)	С	+	Gorham et al ⁴² 1964
Stelazine & psychotherapy vs stelazine on length of hospital stay, release rate, & supplemental treatment (schizophrenics)	В	0	May & Tuma ^{43,44} 1964 & 1965
Chlorpromazine & group psychotherapy (schizophrenics)	С	0	King ⁵⁴ 1963
Trifluoperazine hydrochloride & group psychotherapy-adjunctive therapy	D	0	Evangela- kis ⁴⁵ 1961
Psychotherapy plus drug vs drug alone	D-	0	Overall & Tupin ⁴⁷ 1969
Chlordiazepoxide used with psychotherapy	С	+	Lorr et al ⁴⁶ 1963
Antidepressants (amitriptyline) and psychotherapy (relapse rate) (social adjustment)	Α	0 +	Klerman et al ^{49,50} 1974, 1973
Chlorpromazine & sociotherapy	В	+	Hogarty & Goldberg ⁵¹ 1973

Table 1.—List of Treatments C			
Treatment	Qual- ity*	Out- come†	Refer- ences
Psychotherapy plus pharmacotherapy vs psychotherapy alone			
Phenothiazine & group psychotherapy vs group therapy (schizophrenics)	С	+	Gorham et al ⁴² 1964
Stelazine & psychotherapy vs psychotherapy effect	В	+ -	May & Tuma ⁴³ ,44
on length of hospital stay, release rate, & supple- mental treatment (schizophrenics)			1964, 1965
Reserpine alone & as adjunct to psychotherapy (schizophrenics)	D	+	Cowden et al ⁵² 1956
Psychotherapy & phenothiazine pharmaco- therapy (chronic schizophrenics)	B+	+	Grinspoon et al ^{55,56} 1967, 1968 Shader et al ⁵⁷ 1969
Psychotherapy plus chlorpromazine vs psychotherapy (schizophrenics)	D	0	Gibbs et al ⁵⁸ 1957
Chlordiazepoxide used with psychotherapy vs psychotherapy (outpatients)	С	+	Lorr et al ⁴⁶ 1963
Meprobamate & chlorpromazine with psychotherapy (outpatients)	С	0	Lorr et al ⁵⁹ 1961
Psychotherapy and drug (meprobamate) vs psycho- therapy (neurotic outpatients)	С	+	Rickels et al ⁶⁰ 1966
Psychotherapy & imipramine vs psychotherapy (depressive reactions) (neurotics)	D	+	Daneman ⁶¹ 1961
Diazepam, phenobarbital, & placebo: combined treatment better than psychotherapy & placebo (neurotics)	В	+	Hesbacher et al ⁶² 1970
Trifluoperazine-group psychotherapy-adjunctive therapy vs group therapy (mixed inpatients)	D	+	Evangela- kis ⁴⁵ 1961
Psychotherapy plus phenothiazine & antidepressants vs	C te)	+	Overall & Tupin ⁴⁷ 1969
psychotherapy (mixed inpatien Amitriptyline & psychotherapy vs psychotherapy	A	+	Klerman et al ⁴⁹ 1974
Psychotherapy plus chlordiazapoxide hydrochloride (Librium) vs psychotherapy with placebo	В	+	Podobnikar ⁶³ 1971
Psychotherapy plus pharmacotherapy vs psychotherapy for inexperienced therapists (schizophrenics) Psychotherapy plus pharmacotherapy vs	В		Karon & Vandenbos ⁶⁴ 1970
psychotherapy alone for experienced therapists Psychological therapy (combined		0	
usually with medical regimen) vs medical regimen alone (for psychosomatic conditions)	В-	<u>.</u> 1.	Prown 9
Eczema: dermatological & psychiatric treatment vs dermatological treatment	8-	+	Brown & Bettley ⁶⁵ 1971

List of Treatments Compa	ared (Contin	ued)
Treatment	Qual- ity*	_	Refer- ences
Peptic ulcer: 32 medication, diet, & group psychological training vs 22 medication & die	D	+	Chappell & Stevenson66 1936
Ulcerative colitis: 34 superficial psychotherapy & diet & medication vs 34 diet & medication	В	+	Grace et al ⁶⁷ 1954
Duodenal ulcer (augmented histamine test): 21 medical therapy vs 24 psychotherapy	B−	0	Glen ⁶⁸ 1968
Bronchial asthma: 33 group psychotherapy & medication vs inhalants & medication vs inhalants	D	+	Groen & Pelser ⁶⁹ 1960
Recovery from heart attack: psychotherapy plus medical regimen vs medical regimen	В	+	Gruen 1974 (unpub- lished data)
Asthma: <u>hypnosis & relaxation</u> vs drugs	В—	+	Maher- Loughman et al ⁷⁰ 1962
Ulcerative colitis: 57 psychotherapy & drugs vs 57 drugs alone	D	+	O'Conner et al ⁷¹ 1964
Warts (subjects who had failed with physical treatment): 7 hypnosis therapy & 14 suggestion applied on only one side of the body	D	+	Sinclair- Gieban et al ⁷² 1959
Hypertension: group psychotherapy & medical management vs medical management§	D-		Titchener et al ⁷³ 1959
Dermatoses: hypnotherapy & resort treatment vs resort treatment	D	+	Zhukov ⁷⁴ 1961
Psychotherapy vs control 34 superficial psychotherapy vs 34 (matched) treated with diet & medication (patients in hospital with ulcerative colitis)	В	+	Grace et al ⁶⁷ 1954
44 individual psychotherapy matched in pairs with 44 (90 days no treatment)	В	+	Morton ⁷⁵ 1955
10 group therapy, 10 no treatment (chronic hospital soiling behavior)	В	+	Tucker ⁷⁶ 1956
Group therapy vs no treatment, (mainly hospitalized schizophrenics)	С	+	Coons ⁷⁷ 1957
Group therapy (2 times a week, 13 weeks) vs 1 group no therapy, but consultation with nurses, vs 1 group no therapy, no consultation (44 closed-ward women)	B	+	Jensen ⁷⁸ 1961
sample with psychiatrist (outpatient department) vs 1 sample with nurse (day care center) vs 1 sample with general practitioners (psychiatric aftercare, schizophrenic women	C 1)	+	Sheldon ⁷⁹ 1964
37 group treatment with psychiatrist & social worker vs 23 no systematic psychotherapy: better rehospitalization rates & highly significant difference in number granted absolute discharge (mostly schizophreni	B cs)	+	Shattan et al ⁸⁰ 1966

Table 1.—List of Treatments	Compa	red (C	ontinued)
Treatment	Qual- ity*	Out- come†	Refer- ences
Counseling biweekly,	С		Stotsky
emphasizing vocational			et al ⁸¹
counseling vs no counseling			1955
(chronic schizophrenics),			
Q-sort, & work adjunct & trial visit measures		+	
Psychiatric symptoms, ward		7	
adjustment & personality			
measures		0	
	B-		Day 92
Group therapy & electric	В-		Peyman ⁸² 1956
convulsive shock vs no treatment (chronic			1956
schizophrenics)		+	
Group therapy (chronic		7	
schizophrenics) vs no treatme	nŧ	_	
		+	Chlian
Treated samples vs 2	В	+	Shlien et al ²⁴
untreated samples on	hia\		
Q-sort measure (mostly neuro	·		1962
2 conventional treatment	D	_	Levis &
samples vs control sample		0	Carrera ³⁸
Implosive therapy vs control			1967
on some measures, eg,			
drop of Minnesota			
Multiphasic Personality			
Inventory score into normal			
range (patients with relative-		,	
ly severe signs of pathology)		+	
Operant-interpersonal	С		King
treatment improved more			et al ³⁶
than other samples on			1960
most measures (locked			
ward schizophrenics)		+	
Verbal therapy group vs			
control (locked ward schizophrenics)		^	
		0	
3 group therapy groups vs 1	В	0	MacDonald
control (no treatment)			et al ⁸³
group: no difference in releases from hospital &			1964
number transferred to			
locked ward nor in rule			
infractions (schizophrenics)			
Counseled students vs controls	С	0	Volsky
(not counseled)			et al ⁸⁴
			1965
Treated (psychotherapy) vs	В		May &
untreated (basic hospital			Tuma44
care): no difference in			1965
rehospitalization rate or			
time in hospital in 3 yr		_	
after initial admission		0	
No difference in Health-		_	
Sickness Rating Scale		0	

^{*} See text p 999.

ferent patient samples to be compared.

All studies were graded according to how well they fit the criteria of controlled comparative studies on a scale from A to E. An A indicates the main criteria of search design were mainly satisfied; B, one or two were partially deficient; C, three or four were partially deficient; D, three or four were partially deficient and one was seriously deficient; and E, the deficiencies were sufficiently serious so that the results were not worth considering and the study, therefore, was not included. (The grades for each study are noted in Table 1.) The primary purpose of our

List of Treatments Compared (Continued)			
Treatment	Qual- ity*	Out- come†	Refer- ences
31 behavior therapy vs 30 psychotherapy vs 33 waiting list: on 3 target symptoms after 4 mo all 3 samples improved, 2 treated samples more than waiting list sample. No differences between these samples at 4 mo or 1 yr	В	+	Sloane et al 1974 (unpub- lished data)
Treated samples (client centered and Adlerian) improved more (in selfideal correlations) than waiting list controls (nonpyschotic)	В	+	Shlien et al ²⁴ 1962
Psychoanalytically oriented psychotherapy vs waiting list controls: more improvement on most measures (nonpsychotic) No difference on follow-up	B-	+ 0	Brill et al ⁸⁵ 1964
Psychoanalytically oriented psychotherapy vs waiting list controls: more improvement on some measures (mixed diagnoses)	В	+	Endicott & Endicott ⁸⁶ 1964
2 therapy samples (group therapy & individual therapy) vs 23 waiting list controls	В	0	Barron & Leary ¹⁰ 1955
Psychotherapy samples improved more than controls (P <.01) (schizophrenics)	В	+	Karon & Van- denbos ⁶⁴ 1970
Sociotherapy vs control (schizophrenics)	В	0	Hogarty & Goldberg ⁵¹ 1973
Psychotherapy vs control (schizophrenics)	c–	0	Walker & Kelley ⁸⁷ 1960
Psychotherapy (client centered) vs wait for treatment	С	+	Rogers & Dymond ⁸⁸ 1954
Psychotherapy (client centered) vs controls (routine hospital treatment on a variety of measures at termination)	В		Rogers et al ⁸⁹ 1967
(schizophrenics) At 1-year follow-up, psychotherapy patients had spent more time out of hospital		0 +	

[‡] Both studies less formally structured at outset as time-limited than true for other studies.

grading system was not to provide highly reliable subdivisions of grading so much as it was to weed out the worst studies. Nevertheless, it was reassuring to find that the independent grading judgments on the scale by two of us (L.L. and B.S.) on 16 randomly selected studies yielded a correlation of .84.

Criteria

1. Controlled assignment of patients to each group: Regardless of which methods was used, the aim was to achieve comparability of the groups on the important dimensions. (For psychotherapy

[†] Treatment (underlined) significantly better (P < .05 or better) than compared treatment (+); treatments not significantly different (0); treatment (underlined) significantly worse (P < .05 or better) (-).

[§] This was only difference: change for two groups for systolic blood pressure; but study was borderline in design, especially because of uncontrolled assignment of patients.

studies, one crucial dimension is initial severity of the patient's illness.)

- (a) Random assignment: This is a risky way to assign patients, despite its use in most studies. Unless the groups are then checked for comparability (as in b), random assignment gives little assurance of comparability.
 - (b) Matching of total groups: A fairly adequate method.
- (c) Matching in pairs: This is the most powerful way of assigning patients.

No difference in composition of the groups by the end of therapy by virtue of different amount of kind of dropouts.

- 2. Real patients were used. This is important enough so that our present review only includes those with real patients.
- 3. Therapists for each group were equally competent. Very few studies give information on which to judge this, although most studies probably try to take this obvious factor into account.
- 4. Therapists were not inexperienced. A high percentage of the studies used inexperienced therapists, since it is easier to get inexperienced therapists to agree to carry out one's study. However, the research is to be considered moderately impaired when only inexperienced therapists were used.
- 5. Treatments were equally valued. This is a crucial criterion. It is violated routinely when a treatment was compared with a control in which no treatment was offered. However, even when two treatments were compared in some studies, the treatments were often presented in ways that create different impressions of the extent to which they were valued—either to the therapists or patients in each form of treatment.
- 6. The outcome measures took into account the target goals of the treatment. Few studies did this *explicitly*. Probably all studies that use a therapist- or patient-rating of outcome take this into account as a matter of course (weight $-\frac{1}{2}$).
- 7. Treatment outcome was evaluated by independent measures. Most studies used the therapist as the main source of outcome information. Some also used the patient; only a few used more independent outcome measures. Because of the difficulty of making a judgment about which outcome measures are inherently best, it is difficult to weight this criterion very highly (see Luborsky' on suggested independent clinical measures).
- 8. Information was obtained about other concurrent treatments, both formal and informal, and these are not unequal in the compared treatments. The most frequent instance in which this is important is the patient's taking of a variety of prescribed and unprescribed drugs during comparative treatment studies. When there is no information on this (as is often the case) and when the compared treatments were associated with different amounts of the incidental, concurrent treatments, the study is impaired (weight $-\frac{1}{2}$).
- 9. Samples of each of the compared treatments were independently evaluated in terms of the extent to which they fit the designated type (weight $-\frac{1}{2}$).
- 10. Each of the compared treatments was given in equal amounts (ie, length or frequency).
- 11. Each treatment was given in reasonable amount (and in an amount that is appropriate to the treatment) so that one can presume (or show) that a reasonable amount of benefit might have occurred.
- 12. Sample size was adequate. This is moderately important, especially where random assignment had been used. Small sample sizes can be tolerated when a matching method has been used for assignment.
- 13. Other specific defects: A variety of other defects that may be critical for particular studies.

All included studies dealt with young adults or adults, and the majority of them were nonpsychotic patients. Since studies of patients seem more likely to have rele-

vance to the problems of practitioners than studies of nonpatients, this review will consider only research in which bona fide *patients* were in *bona fide treatment*—excluded were role-playing studies and those using student volunteers.

Within these limits, the present review is more complete than any; it combines many of the studies of the three most complete reviews: Bergin, Meltzoff and Kornreich, and Luborsky et al, With additional types of comparisons that have not been reviewed before. The difficulties encountered in locating and evaluating the relevant research are impressive. Therefore, it is not surprising that some previous reviewers have presented biased conclusions about the verdict of this research literature on the relative value of certain forms of psychotherapy (eg, two replies to one of these reviewers, Luborsky, No. 100.

Since we tried to do a complete review-within the limits noted-we can now complete our introduction with an historical perspective. From a tabulation of the publication dates of the studies (Table 1), we learn that the entire field of controlled comparative treatment research got its start only in the middle and late 1950s: the bulk of the studies were done in the last two decades. Within this period, each type of comparison had its special era. Group vs individual treatment comparisons started as far back as 1949 and continued to the present, but most of them were done in the decade of the 1950s. The time-limited vs timeunlimited comparison was done mostly in the late 1950s and early 1960s. The client centered vs other psychotherapy comparisons began in the 1950s and extended to the first half of the 1960s. The psychotherapy vs behavior therapy comparisons only began in 1960, with most studies being done in the late 1960s and some continuing to the present. The psychotherapy vs pharmacotherapy comparisons were represented by three studies done in the late 1950s, with most of them being done in the 1960s and continuing until the present. The psychotherapy vs medical regimen for psychosomatic illnesses covers the longest time span, beginning in 1936, although studies are sparse in the entire period. The psychotherapy vs no psychotherapy comparison started in the 1950s and was well represented then, but the vogue was over by the first half of the 1960s.

It would have been of special interest to compare quantitative comparative treatment research as a whole with other kinds of therapy research. One way of doing this would have been to follow the procedure of Hoon and Lindsley⁹⁰ of counting publications indexed under Psychological Abstracts Annual Index for psychoanalysis, behavior therapy, client centered therapy, and psychology as a whole (total annual abstracts beginning with the abstracts of 1927). It is clear that there has been no falling off of publication rate in psychoanalysis. In fact, starting in the early 1960s there has been a slight upward trend. (Nevertheless, as we will mention later on, there are hardly any quantitative comparative treatment studies within this.) The most dramatic rise is for behavior therapy beginning in the early 1960s. Client centered therapy publication rate has remained approximately the same almost since its start.

Finally, it is satisfying to note that the research quality

of the studies, in terms of our quality ratings, for most types of comparisons has improved some in the last few decades. The simplest way to demonstrate this was to divided all studies into quality ratings A and B vs C and D, and then note the mean pulbication date in each category—the Cs and Ds tend to be somewhat older.

Psychotherapy vs Group Psychotherapy

For comparative studies of individual vs group psychotherapy, the gains for each treatment were usually reported to be similar—in nine comparisons. Only two comparisons showed a slight advantage for individual treatment, and two an advantage for group treatment (but one of these only in terms of improvement in ethnocentrism). The only study with schizophrenic patients (O'Brien et al¹⁴) showed an advantage for group treatment. A box score summarizes these results and makes plain that most of the 13 comparisons (one study provided two comparisons) showed no significant difference between these treatments. In view of the general opinion that group psychotherapy is less intensive, the results are a surprise.

Box Score

Group was better	2
Tie	9
Individual was better	2

Time-Limited vs Time-Unlimited Psychotherapy

Since Otto Rank, treatments that are structured at the outset as time-limited have been thought by some practitioners to be as good as the more usual time-unlimited treatment. The eight available controlled comparative studies are mostly (five out of eight) consistent with this view in that there is no significant difference between the two. Only in Henry and Shlien²¹ was time-limited psychotherapy shown to be inferior in one criterion; that is, patients showed a decline in affect differentiation on the Thematic Apperception Test. In two studies, time-limited psychotherapy was shown to be better (Muench²² and Reid and Schyne²⁷). Our conclusion, therefore, is that usually differences in this treatment dimension seemed to make no significant difference in treatment results.

Box Score

Time-limited was better	2
Tie	5
Time-unlimited was better	1

Client Centered vs Other Traditional Psychotherapies

Of 11 studies comparing results of different schools of treatment (ie, client centered, psychoanalytic, and Adlerian), only four of the 11 found a significant difference between one school's treatment and another. However, except for five studies of client centered psychotherapy, there are not enough comparative studies in any one category to draw conclusions about a specific school of treatment. Furthermore, some studies were not acceptably controlled (and not included among the 11); for example, Ellis, on with only one therapist (himself) practicing two different treatments, reported that rational emotive therapy yielded better results than psychoanalytically ori-

ented therapy.

The comparisons of client centered with other psychotherapies disclosed a similar phenomenon—most (four out of five) showed "ties," regardless of what other school it was compared with (ie, psychoanalytic, neo-Freudian, or Adlerian).

Box Score

Client centered (ie, "nondirective")	
was better	0
Tie	4
Other traditional psychotherapies	
were better	1

Behavior Therapy vs Psychotherapy

There are 19 controlled comparisons in 12 studies dealing with patients, although there are many more with student volunteers. (Also not reviewed is the large literature on treatment comparisons for people who have specific "habit" disturbances, eg, smoking, bed-wetting, drug-taking, and overeating rather than pervasive personality and adjustment disorders that lead them to seek psychotherapy.) Of these, behavior therapy emerged as superior to the other psychotherapies in six comparisons, and as no different in 12. Those that showed some form of behavior therapy to be superior include Gelder et al. 15 Cooper and others,32 King et al,36 Lazarus,37 Levis and Carrera,38 and Patterson et al.41 The 13 comparisons where they were not significantly different include Gelder et al¹⁵ (in patients with more complex symptoms), Cooper et al32 (general change measures as opposed to specific improvement in phobias), Gelder and Marks,34 Lazarus,37 Marks and Gelder, 40 McReynolds, 39 and others (R. B. Sloane, MD, J. Wolpe, MD, A. Cristol, MD, et al and C. M. Zitrin, MD, D. F. Klein, MD, C. Lindemann, PhD, et al, unpublished data).

Box Score

Behavior therapy (usually densensitization	
was better)	6
Tie	13
Psychotherapy was better	0

Thus, we see similarly that in most of the comparisons of behavior therapy with other psychotherapies (ie, 13 out of 19), the differences in the amount of benefits they provide for patients are not significant.

All six treatment comparisons where a form of behavior therapy was superior utilized very brief therapies, and five of the six were comparisons based on relatively poor research quality; ie, ratings of C and D. There is a trend for behavior therapy to achieve benefits earlier while more traditional psychotherapies move at a slower rate. The more rapid initial gains of behavior therapy may appear because it is more directive or because it is more often structured as time-limited treatment, or both—according to Shlien et al,²⁴ time-limited treatment yielded earlier onset of improvement.

In the two studies with patients with circumscribed and mild phobias, desensitization did better (Gelder et al¹⁵ and Cooper et al³²). More studies are needed in which behavior therapies are applied to patients who have generalized maladjustments (as in Sloane et al).

Most of the behavior therapy studies we have listed deal only with one form of behavior therapy, systematic desensitization. More comparative studies within the behavior therapies need to be done with other specific behavioral techniques, such as a study by Boulougouris et al92 comparing desensitization and flooding for phobias that showed a significant advantage for flooding. Similarly, the typical result for the comparison of behavior therapy vs other psychological treatments (other than psychotherapy) is probably consistent with Marks et al93 who compared behavior therapy with hypnosis and found no significant difference. Morganstern⁹⁴ notes that in the comparison of systematic desensitization and implosion, of nine studies. six were tied and three showed systematic desensitization to be better. (These studies were mostly with student volunteers.) The brief review by Peter Nathan, PhD (at the 1973 Society for Psychotherapy Research meeting, Philadelphia), also suggests that the trend for results of comparisons of behavior therapies with each other will be "tie scores." Another larger review (B. E. Wolfe, PhD, unpublished data) on the behavior therapies in the treatment of the habit disorders comes to a similar conclusion.

Psychopharmacotherapy vs Psychotherapy

Many of these controlled comparisons have been surveyed in the reviews by May⁹⁵ and Uhlenhuth et al⁹⁶; our own review includes those that fit our criteria. The studies are in three main types of comparisons; psychotherapy vs pharmacotherapy, psychotherapy plus pharmacotherapy vs psychotherapy alone, and psychotherapy plus pharmacotherapy vs pharmacotherapy alone, with box scores for each below:

Box Score

Psychopharmacological agent was	
better	7
Tie	1
Psychotherapy was better	0
Box Score	
Psychotherapy plus pharmacotherapy	
was better	6
Tie	5
Pharmacotherapy alone was better	0
Box Score	
Psychotherapy plus pharmacotherapy	
was better	13
Tie	3
Psychotherapy alone was better	0

The studies in these three comparisons include many more inpatients (of whom the majority are schizophrenic) than is true for our other comparisons. Of course we wondered whether or not a division into inpatient vs outpatient or a diagnostic categorization would make a difference in these results. The findings shown in Table 2 suggest there is no obvious difference. However, it is likely that for many, if not most, of these studies the selection of the patients, even for the outpatient groups, favored those who would benefit from pharmacotherapy; ie, patients who would expect to be given medication rather than psychotherapy and psychotherapy that is unreasonably restricted in length.

One other conclusion is noteworthy: a few studies reported that pharmacotherapy effects occur earlier and may decline in time, while psychotherapy effects are slower to develop but may increase in time (eg, Shlien et al²³).

Psychotherapy Plus a Medical Regimen vs Medical Regimen Alone For Psychosomatic Conditions

For a variety of psychosomatic symptoms—ulcer, colitis, asthma, and dermatoses—the comparisons are overwhelmingly in favor of combined treatment—psychotherapy plus a medical regimen. Of 11 studies where the target of treatment was change in a psychosomatic symptom, nine showed a significant advantage for psychotherapy plus a medical regimen, or psychotherapy as opposed to a medical regimen alone (two of these studies are primarily some form of psychotherapeutic treatment alone).

Box Score

Psychotherapy plus medical regimen	
was better	9
Tie	1
Medical regimen was better	1

Why do the results for comparative studies of psychosomatic symptoms favor psychotherapy so strongly? In addition to the fact that combined treatment is being compared with a single treatment, most likely the reassurance and support provided by psychotherapy are especially useful for the patients with psychosomatic symptoms. The results may also derive from the greater ease of evaluating the benefits of psychotherapy for patients with a clear-cut target psychosomatic symptom.

Psychotherapy vs "Control" Groups

A final special comparison is between psychotherapy and its absence. "Absence of psychotherapy" is typically measured in these studies by arranging for a more or less matched group of patients to be assessed before and after an interval without formal psychotherapy. These "controls" include "no psychotherapy," "wait for psychotherapy," "minimal psychotherapy," or hospital care alone. Such groups, by virtue of their contacts and relationship with the researchers, or because they were sometimes maintained by general hospital care, were provided with some of the nonspecific ingredients of treatment. Such studies tend to be shaky in meeting design criteria, particularly the inequality in how the patients and staff value what is provided for each group of patients. Of course, there is also an inequality in the patient's motivation and level of expectation of benefiting-if the "control" patients achieve any benefits, they might well be surprised and pleased; if the treated patients do not achieve benefits commensurate with their investment, they might well be surprised and disappointed. Both conditions might well affect the outcome judgments so as to increase their incomparability.

Many of the 33 comparisons in the box score that follows were among the much larger number surveyed in Meltzoff and Kornreich.⁵ Many of those listed by them, however, were not used by us because of research design inadequacies or because they were not usual patient popu-

		Combined Therapy vs Psychotherapy Alone				Combined Therapy vs Drug Therapy Alone				Drug Therapy Alone vs Psychotherapy Alone			
	Better		Better Same		<u></u>	Better		Same		Better		Same	
	N	Refer- ences	N	Refer- ences	N	Refer- ences	N	Refer- ences	N	Refer- ences	N	Refer- ence	
Schizophrenic inpatients	5	42, 44, 52, 53, 55	2	53, 58	4	42, 51, 52, 54	2	36, 44	3	42, 44, 51	0		
Mixed inpatients	2	26, 45	0		0		2	26, 45	2	26, 45	0		
Subtotal	7		2		4		4		5		0		
Mixed outpatients	1	7	1	46	1	7	0		1	7	0		
Depressed outpatients	1	48	0		1	48	1	48	1	48	0		
Neurotic (anxious) outpatients	4	27, 61, 62, 88	0		0		0		O		1	37	
Subtotal	6	•	1		2		1		2		1		
Total	13	•	3		6		5		7		1		

^{*} Subdivided according to diagnosis and inpatient vs outpatient status.

lations (eg, prisoners).

Twenty (or about 60%) of the comparisons significantly favored psychotherapy, but 13 showed a tie, meaning that the psychotherapy was not significantly better than the nonpsychotherapy in almost a third of the comparisons. None of the comparisons favored the control group.

We considered, in searching for explanations, whether or not the 13 comparisons showing a tie might have included more chronic inpatients. Hardly any trend in this direction was found-of 19 comparisons for schizophrenic patients, eight were a "tie"; of 14 comparisons for nonschizophrenic patients, five were a "tie." Two more applicable explanations might be that the nonspecific ingredients are often powerful for both the psychotherapy and the "control groups" (cf. Frank, 97 and Sloane et al), and the treatment effects often are not powerful enough to produce significant advantage over the beneficial forces activated by nonspecific factors.

Box Score		Schizophrenic Patients	Nonschizophrenic Patients				
Psychotherapy							
was better	20	11	9				
Tie	13	8	5				
Control group							
was better	0	0	0				

Conclusions and Implications

1. Most comparative studies of different forms of psychotherapy found insignificant differences in proportions of patients who improved by the end of psychotherapy. It is both because of this and because all psychotherapies produce a high percentage of benefit (see conclusion 2) that we can reach a "dodo bird verdict"-it is usually true that "everybody has won and all must have prizes." This predominance of tie scores appears when different forms of psychotherapy are compared with each other; that is, it applies to the first four comparisons: group vs individual psychotherapy, time-limited vs time-unlimited psychotherapy, client centered vs other traditional psychotherapies, and behavior therapy vs other psychotherapies. Only the last two comparisons involved "schools" of psychotherapy. It is noteworthy that in the 25 or 30 years of comparative treatment studies, only two schools of treatment have a sufficient number of comparative studies to permit a conclusion about the comparison with other psychotherapies: client-centered psychotherapy and behavior therapies. The preponderance of nonsignificant differences between treatments should gain in impressiveness when one considers that researchers as well as editors of journals may tend to hesitate about publishing results of studies with nonsignificant differences. Also, many of these comparisons are studied by partisans of one treatment or the other.

It is natural to question whether or not, despite care in the design, the therapeutic allegience of the experimenters might in some way influence the results, since the comparisons are often not double-blind and not impeccable in other ways. We, therefore, examined the list of authors and asked some of their peers about their therapeutic allegiences.

It appears to be a meaningful question only for those forms of treatment where a strong allegience is present. Only two of these clearly qualify: that is, behavior therapy vs other psychotherapies and client centered therapy vs other psychotherapies. For the rest, affiliations tend to be less strong.

For the behavior therapy vs psychotherapy comparison, one obvious conclusion is that it is partisans of a form of treatment who do the studies of it. We could identify the affiliation of all but two authorships and all of these were partisans of behavior therapy. The same kind of observation occurs for the client centered vs other psychotherapies comparison-almost all of these are affiliated with client centered psychotherapy. This probably should have been expected. Who else but a partisan would take the time and energy to do a comparative treatment study? Since almost all are partisans in various degrees, it is difficult to draw any conclusion about the role of partisanship in the results.

2. The controlled comparative studies indicate that a high percentage of patients who go through any of these psychotherapies gain from them. Meltzoff and Kornreich, 5(p178) for example, basing their conclusions on the controlled comparative studies, estimate that for both individual and group therapy about 80% of the studies show mainly positive results. The same can be said for the other kinds of treatment that were compared. Even a fair percentage of patients who go through minimal treatment seem to make some gains (as pointed out by Sloane et al and others). This may have contributed to our surprising finding that approximately a third of the comparisons of psychotherapy with control groups do not show significant differences. This general benefit effect may contribute to the high frequency of tie scores-if a very high percentage of all patients receive benefits, it is, therefore, more difficult to achieve a significant difference between different forms of treatment.

- 3. The "dodo bird verdict" does not apply when one ventures beyond comparisons of psychotherapies with each other; ie, to comparisons of psychotherapy with other forms of treatment. (1) A preponderance of tie scores does not apply when psychotherapy vs other types of treatment such as pharmacotherapy are compared singly-in the available studies, pharmacotherapy produces significantly higher numbers of patients judged as benefiting. (2) It does not apply to combined treatments vs single treatments. The advantage for combined treatment is striking in that it appears for all three of the box scores dealing with combinations: for psychotherapy plus pharmacotherapy vs psychotherapy alone; for psychotherapy plus pharmacotherapy vs pharmacotherapy alone; and for psychotherapy plus a medical regimen vs a medical regimen alone (for psychosomatic illnesses). A combination of treatments may represent more than an additive effect of two treatments-a "getting more for one's money"-there may also be some mutually facilitative interactive benefits for the combined treatments. (3) It does not apply to comparisons of psychotherapy vs "control groups" (eg, absence of or minimal psychotherapy)-more than half of these comparisons favor psychotherapy.
- 4. There are only a few especially beneficial matches of type of treatment and type of patient—which is to be expected since conclusion 1 is the dominant trend: (1) The most impressive match for the alleviation of a variety of psychosomatic symptoms is psychotherapy (and related psychological treatments) added to appropriate medical treatment in comparison with a medical regimen alone. (2) Behavior therapy may be especially suited for treatment of circumscribed phobias.

But it is, nevertheless, amazing in view of the large clinical literature on matching patient and treatment that in our review we have come upon only two especially beneficial matches between type of treatment and type of patient. There are some other good candidates but these are supported by only single studies rather than by the massing of studies that we require for our present review.

A symposium at the 1973 Society for Psychotherapy Research meeting was focused on these, evaluating two matches and attempting to locate others. This symposium, titled "Therapeutic technology: Effects of specific techniques on specific disorders," discussing the advantage for psychosomatic symptoms of psychotherapy plus a medical regimen vs a medical regimen alone (senior author); Arnold Goldstein, PhD, presenting research on modifications of psychotherapy for lower class socioeconomic patients with special focus on prescriptive and modeling techniques; Peter E. Nathan, PhD, reviewing behavior therapy in the treatment of phobias both circumscribed and generalized; and Albert Stunkard, MD, discussing his research with Sydnor Penick, MD, on group behavior therapy for obesity. Some other candidates for special patient-treatment matches were considered briefly; one of them was a special form of conditioning for enuresis provided in the context of complete environmental control (particularly the work of John Atthowe, PhD), and another was a special kind of conditioning for delinquency developed by Gerald Patterson, PhD.

Could the conclusions be artifacts of poor research? Deficiencies in the research designs and other artifactual problems (Fiske et al² and Rosenthal and Rosnow⁹⁸) probably do not account for our main conclusion concerning similar improvement rates for the different forms of psychotherapy, because of the following:

- (a) The criterion in the majority of these studies is the usual criterion—that is, therapist's judgment of improvement. (Some rely on independent clinical judges and some—especially those using inpatients—utilize discharge rates and readmission rates.) Although this criterion (like any criterion) has its own vantage point (the therapist's opinion), nevertheless those studies using other criteria show a similar trend (in terms of comparative percentages of patients benefiting) to those using only the therapist's judgment as a criterion. One could argue that if we improved the quality of our outcome measures, we might find a higher percentage of significant differences among psychotherapies. While this possibility must be admitted, we have no evidence so far to support it.
- (b) Compared to many studies of psychotherapeutic results, especially those of three or four decades ago, these in our review are relatively well controlled—although only a few of them come up to all of the recommendations for comparison of treatments listed by Fiske et al. Furthermore, despite deficiencies in the quality of the research in the studies selected for the box scores the best designed do not show a very different trend from those that are less well designed.

One direct way to illustrate this is to dichotomize the studies into two groups; those receiving a quality rating of A or B vs those receiving C or D. In general, the subgroups show the same main trends. One possible exception, however, is that five out of six of the comparisons in which behavior therapy is shown to be better than psychotherapy are in the poor quality category.

It may also be of interest to note the overall research quality for each type of comparative study. Here the largest number of poor studies are to be found in the comparison of psychotherapy plus psychopharmacological agents vs psychopharmacological agents alone. Also for psychological treatment plus a medical regimen vs a medical regimen alone, five out of the nine studies have D or D-ratings.

What are the main ways of improving these comparative treatment studies? Through the experience of evaluating the quality of these studies, we have evolved a system for judging them according to a list of 12 criteria partly based on Fiske et al.² We will highlight here only those four criteria on which most of the research is in need of improvement.

With regard to criterion 1, the patients should be described, especially on certain crucial dimensions. This will permit something better than random assignment of the patients to the treatments. Composing groups by matching pairs of patients on crucial dimensions, such as severity of illness, is highly desirable but very few of the studies did this. Adequate description of the sample will also permit additional exploration of specific interactions of

type of treatment with type of patient. This last recommendation for improving experimental designs could lead to the confirmation of special patient-treatment matches and the discovery of new ones. Also, the lead provided in the O'Brien et al14 study that group therapy may be especially suitable for schizophrenics should be explored in new studies; similarly more replications of Penick et al99 and Stunkard100 should be done.

With regard to criterion 5, in many studies insufficient effort was made to present the treatments to the patients as equally valued. Then, in addition, the patients in some studies may have known which therapies were most valued by the therapists or by the experimenters.

With regard to criterion 7, this criterion emphasizes the importance of evaluating the treatment outcome by independent measures. Since treatments have a variety of impacts, it is also important to include the main types in the outcome criteria. The two main types of outcome that must be evaluated are those related to specific symptoms and those related to general adjustment. Different therapies may produce different proportions of these. For example, the behavior therapies and the pharmacotherapies may have more influence on the symptom-outcome measures while the long-term, intensive psychoanalytically oriented psychotherapies may have more influence on the general adjustment measures.

With regard to criterion 9, usually there was no evidence offered that the treatment given actually fits the intended form of treatment. The simplest and most direct way of doing this is rarely done: taking samples of the administered treatment and having them judged independently. Judging samples in this way will also do much to permit comparisons across treatments in different studies, since there are so many varieties of treatment designated "psychotherapy"-eg, the "psychotherapy" provided for schizophrenia may be quite different from the "psychotherapy" provided for neurotic patients.

Another aspect of criterion 9 is equally important. The length of the treatment and the length of the follow-up must be such as to be considered reasonable examples of the designated form of treatment. Some forms of treatment exert their effects early (probably behavior therapy, pharmacotherapy, time-limited therapy, and directive therapies); some may have a slower course and more longlasting effects (probably the insight-oriented psychotherapies and particularly psychoanalysis). The insightoriented psychotherapies are poorly represented in most of these comparative studies-treatment lengths were rarely more than one year and usually much, much less, and follow-ups were either absent or too brief to catch the assumed long-term benefits of the insight-oriented psychotherapies.

Is there a practical application of our conclusions in terms of the assignment of patients to different forms of treatment? Taken at face value, our conclusions seem to dictate that from now on we should stop paying attention to the form of the treatment in referring patients for psychotherapy. Yet there are several reasons why we should hesitate to recommend such a drastic departure from all the clinical wisdom:

1. Similarities in numbers of patients benefiting from

various forms of psychotherapy probably should not be taken to imply that the quality of the improvement is necessarily similar. The patient who has improved via group therapy or individual therapy may have gained something different in his conception of himself or in his capacity for reflecting from one who has improved via behavior therapy or chlordiazepoxide hydrochloride (Librium). There is only a little evidence for this supposition; eg, Heine,29 Klerman et al,50 and Dudek101; much more research needs to be done on this.

Malan¹⁰² makes this the centerpiece in the conclusions to his review of outcome research problems, ie, "The failure to design outcome criteria and do justice to the complexity of the human personality." Malan has in mind developing better measures that rely on clinical judgment to estimate the quality of the outcome. Comparative studies of educational treatments (Messick103) are also becoming more concerned with learning the possible outcomes, not just the intended outcomes, and with the interaction of the treatment conditions and individual differences in the students.

- 2. As noted earlier, the studies we reviewed are almost entirely limited to relatively short-term treatment; that is, about 2 to 12 months. This is a glaring omission in the research literature. We do not know enough about what conclusions would be reached for long-term intensive treatment.
- 3. Our conclusions apply to the results of comparative studies of several forms of treatment. As indicated above, usually no step is taken to show how well the designation fits. Even beyond this problem, it is very likely that certain ingredients of the treatment that apply across treatment labels are the main influencers of outcome. The therapist, for example, can be supportive, warm, and empathic in a variety of differently designated forms of treatment, and this may be a powerful influence on the outcome of treatment.
- 4. As we have noted in conclusion 4, there are a couple of especially promising matches of a type of patient and a type of treatment, and others may be soon established.

In sum, for these reasons (and for other more general ones noted in Luborsky104 we should not yet consider ourselves ready to make assignments on a random basis.

How do we interpret the main finding in conclusion 1? Essentially, three factors are involved in accounting for the main finding that the studies do not produce any clearcut winners when psychotherapies are compared with each other. To start with the least of the three first: (1) Since all forms of psychotherapy tend to achieve a high percentage of improved patients (our conclusion 2), it is difficult (statistically) for any single form of psychotherapy to show a significant advantage over any other form-the higher these percentages, the less room at the top for significant differences between treatments. A survey of the distribution of improvement ratings reported by different studies supports our assertion (J. Mintz, PhD, Lester Luborsky, unpublished data). (2) Although each form of psychotherapy differs in some elements of its philosophy, each offers to provide the patient with a plausible system of explanations for his difficulties and also with principles that may guide his future behavior. Such an organized explanatory and guidance system may be one of the common elements that facilitates the benefits from all forms of psychotherapy (as was suggested by Rosenzweig¹). (3) The most potent explanatory factor is that the different forms of psychotherapy have major common elements—a helping relationship with a therapist is present in all of them, along with the other related, nonspecific effects such as suggestion and abreaction. This explanation is stressed by Rosenzweig, by Frank, 97 by Strupp, 105 and many others. This is exactly where more research needs to be done-on the components of a helping relationship (eg. in Strupp's comparison of trained vs untrained helpers Strupp¹⁰⁵. When differences among treatments do appear in some studies, they might then be explicable in terms of the proportions of these components.

These common ingredients of psychotherapies may be so much more potent than the specific ones that it is wrong to lump them together in the sense of giving them equal weight. It is like making horse and canary pie by the Spanish recipe—horse and canary in equal proportions, one horse and one canary.

COMMENT

It is not entirely fair and (and it may even be untherapeutic) to present a report that arouses strong responses in many readers without giving them some chance to be heard. We, therefore, give a few of these responses based on a small prepublication pretest sampling of opinion.

Response of some psychoanalysts: "This doesn't adequately represent long-term, intensive treatment, particularly psychoanalytic treatment."

Our answer: It is completely true, unfortunately. It is time there were some of such studies to include

Response of some behavior therapists: "Behavior therapy is better. You must not have looked at the right studies or included all of them."

Our answer: For the general run of patient samples who seek psychotherapy, we have included all that could be found. We have

not, however, covered the huge literature specifically on habit disorders (eg., addiction and bed wetting)-behavior therapy might be better for them-and we have not included many studies with student volunteers rather than genuine patients.

Response of some skeptics about the efficacy of any form of psychotherapy: "See, you can't show that one kind of psychotherapy is better than another, or, at times, even better than minimal or nonpsychotherapy groups. This is consistent with the lack of evidence that psychotherapy does any good."

Our answer: As we mentioned, the nonsignificant differences between treatments do not relate to the question of their benefits-a high percentage of patients appear to benefit by any of the psychotherapies or by the control procedures.

Response of some balanced psychotherapy researchers of any orientation: "Before I ask my question, I first want to say that I am pleased to see a careful review of comparative psychotherapy studies with research quality considered. I hadn't realized, even though I know the literature very well, that there were so many controlled comparative studies, and that the trends you found emerge so clearly. I was especially surprised about group psychotherapy since I thought it was significantly less effective than individual psychotherapy, and I was surprised about behavior therapy which I thought had more comparative treatment studies with general patient populations which showed its superiority. And finally, I hadn't realized the advantages for combined treatments. Now for my question: Would we not learn more in future studies if we constructed the studies to investigate specific treatments for specific types of patients?"

Our answer: We couldn't agree with you more. But we should underline what has been found so far in the review, that the breakdowns in terms of types of patients and types of treatments have yielded little in terms of specific matches of type of patient and form of treatment, with the possible exception of limited phobias treated by behavior therapy and psychosomatic patients treated by medical regimen plus psychotherapy.

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CORRECTION

Reprints Available; Word Omitted.—Two errors occurred in the article "Narcissism and the Readiness for Psychotherapy Termination," published in the June Archives (32:695-699, 1975). On page 695, the last footnote (column 1) should read "Reprint requests to 30 N Michigan Ave, Chicago, IL 60602 (Dr Goldberg)." And on page 696, in column 1, the second sentence in the paragraph preceding the centerhead should read "They are not in analysis. . . . " As published, the word "not" was omitted.