

Follow-up studies

The Oslo I Study: Schjeldrup (1955) - An early proponent of combined questionnaire and personal follow-up interview (OIS)

Schjeldrup, H. (1955). Lasting effects of psychoanalytic treatments. *Psychiatry*, 18, 109-133.

"Evaluation of therapeutic results is a long-term task which can only be accomplished on the basis of very comprehensive and critically sifted material...Strangely enough, none of the older analysts with experience over a considerable period of time has thus far issued any systematic follow-up study of his patient material. I believe that such investigations, even though they may not satisfy the ideal standards of methodology, would make a significant contribution to the evaluation of analytical therapy" (Schjelderup, 1955, p.110)

Results

Schjelderup, the analyst, treated 28 psychoanalytic cases between 1926 and 1943 - then the Nazi occupation stopped all clinical work for a brief period. After the war a questionnaire was sent to the patients; after the questionnaire had been returned there followed a personal interview with the analyst himself "in which the answers to the questionnaire were discussed in great detail and necessary additional information ...was obtained" (p.110).

In 9 of these cases the follow-up shows a lasting symptomatic cure, and in 14 others, a substantial improvement. The commonest personality changes found are changes in interpersonal relationships (25 cases) and in capacity for work and enjoyment of work (22 cases). Changes in capacity for sexual adjustment and in perception of reality have also been very common.

Evaluation

It is perhaps to be regretted that there are not more such reviews of psychoanalytic practice as carried out by busy, real practitioners over many years. Kächele and colleagues report (Kächele, Wolfsteller, & Hössle, 1985) a replication of the study by Strupp and colleagues (Strupp, Fox, & Lessler, 1969): "Patients view their psychotherapy". Distributing a revised version of Strupp's questionnaire to 150 patients, 91 questionnaires were returned. Among them were 15 patients treated by an analyst with more than 20 years clinical experience. Factor analysis revealed a three factor solution, two of the dimensions of which were empathy and acceptance, and confidence and feeling appreciated. Fourteen of this analyst's 15 patients reported positive experiences in these two dimensions, while other patients from other analysts did not express such positive experiences. Results such as these suggest that the routine administration of standardised outcome instruments could teach us a great deal not only about the extent of benefit that patients derive from psychoanalytic treatment but also about differences between analysts which are associated with the size of these changes.

The Berlin II Study (BII)

Dührssen, A. (1962) Katamnestische Ergebnisse bei 1004 Patienten nach analytischer Psychotherapie. *Psychosom Med* 8, 94-113

In 1946, amid the ruins of post-war Berlin, Kemper and Schultz-Hencke broke new ground by founding the Central Institute for Psychogenic Illnesses, which was financially sponsored by the local insurance society, the later General Communal Health Insurance (*Allgemeine Ortskrankenkasse*). Baumeier (1971) and Dräger (1972) rightly emphasise the great social significance of this pioneering advance: "This was the first step in the recognition of neurosis as illness by a German public institution. For the first time one of the institutions in the social insurance system paid the costs of psychoanalysis and other psychotherapeutic treatment" (Dräger 1972, p.267). For the first time, insured patients were able to receive psychodynamically oriented therapy at no direct cost, and this on a far greater scale than in the outpatient clinic at the old Berlin Psychoanalytic Institute (Thomä & Kächele, 1987).

Sample and Treatment

Great credit is due to Dührssen (1962) for her pioneering analysis of the follow-up of 1004 patients who successfully had received analytic psychotherapy at the Central Institute, in which she showed the effectiveness and efficiency of the treatment. (However, the 152 patients that were judged to have been unsuccessful did not enter the follow-up). The duration of treatments was on the average about 100 sessions (10-15% up to 200 sessions, 10-15 only 50-60 sessions).

The original sample consisted of 1004 improved and 152 non-improved patients. At follow-up - five years later - only the improved patients were traced. From these patients 84% (845 patients) were seen for follow-up. Ten percent (101 patients) could not be located; 45 patients (5%) did not show up for follow-up appointments, and 13 patients had died.

Results

The evaluations by independent assessors at termination and at follow-up are listed in Table 1. According to the categories of outcome, while 55% were rated as improved at termination, 58% were similarly rated at follow-up. The percentage of patients showing no improvement at all was very small at termination and somewhat larger (15.5%) at follow-up.

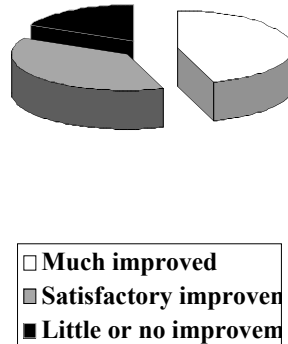
Table 1: The comparison of evaluation at termination and follow-up (N =845)

Outcome	% termination	% follow-up
Very much improved	43.0	28.5
Much improved	9.0	17.0
Satisfactorily improved	3.0	13.0
Little improved	41.0	26.0
Not really improved	2.0	4.0
Not Improved	0.0	9.0
Without statement	2.0	0.0
Unclear	0.0	2.0
Misdiagnosed	0.0	0.5

The evaluation by the therapists at the end of treatment seems to have been handled as a dichotomous judgement. A summary chart of improvements reported is shown in Figure 1.

Figure 1: Improvement by follow-up in Berlin II Study

- 1156 patients, average duration of treatment 100 sessions, 84% available for follow-up
- Independent clinical assessments



The ratings by the follow-up (independent) interviewer were more diversified. As the 152 non successful patients were omitted in the Dührssen (1972) tabulation, this cannot be considered an intent to treat analysis; assuming, as Dührssen does, that they have not improved they should be included in the final evaluation to get a realistic estimate. Table 2 contains the figures adjusted for these individuals. Improvement rate remains just below 50% but rises to 82% if those whose improvement was satisfactory are included.

Table 2: Outcome of analytic psychotherapy in the Berlin II study

Outcome	N	%
Very much and much improved	441	45.04
Satisfactorily improved	367	37.49
Very little or no improvement	171	17.47
Total	979	100

Based on very positive findings with the sick leave in the first study, Dührssen and Jorswieck (A. M. Dührssen & E. Jorswieck, 1965) re-analysed a sample of 100 patients who had terminated their treatments in 1958. A second group of patients from the waiting list was added as well as a third group of patients from the general file of the insurance company (normal controls). Table 3 illustrates that hospitalisation was similarly reduced in the treatment group relative to untreated neurotic and normal controls (see Table 3 and Figure 2).

Table 3: Mean number of days hospitalisation in the five years before and five years after psychoanalysis

	number of patients	mean (SD) number of days in hospital	
		5 years before	5 years after
Neurotic patients	125	26.09 (26.87) ^a	5.9 (14.16) ^{b,c}
Untreated neurotic patients	100	25.55 (30.40) ^a	23.91 (28.65) ^a
General population of insured patients	100	10.04 (18.20)	11.70 (19.45)

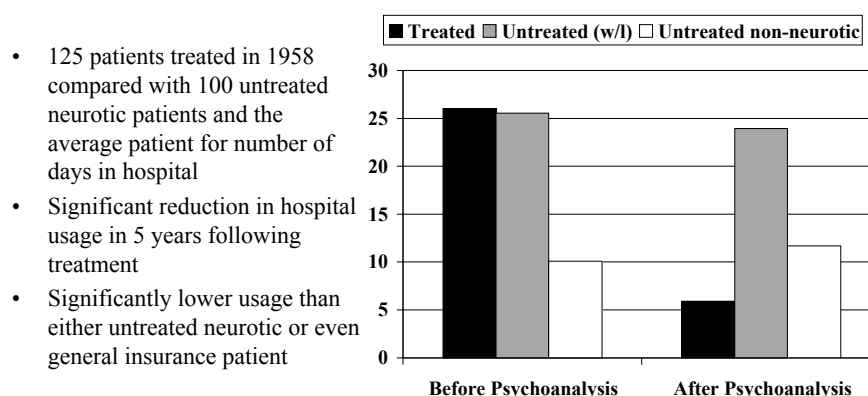
The statistical comparison for the three groups:

^a Significantly higher than general insured patients ($p < .01$)

^b Significant drop relative to pretreatment ($p < .001$)

^c Significantly lower than general insured patients ($p < .01$)

Figure 2: Days hospitalisation before and after psychoanalytic treatment in Berlin II Study compared with control groups



Evaluation

The overall success rate of psychoanalytic treatment appears to be high, although in the absence of a comparison group these figures are difficult to interpret. This investigation demonstrated with straightforward data on days in hospital available from the insurance company files, the superior work capacity of individuals who had the benefit of analytic psychotherapy in comparison to an untreated control group and to the normal population. The untreated group probably received some treatment and the assignment to groups was not random. However, the comparison with a non-neurotic control group is impressive.

The Boston Psychoanalytic Institute Study (BPIS)

Sashin, J., Eldred, S., & Van Amerowgen, S. T. (1975). A search for predictive factors in institute supervised cases: a retrospective study of 183 cases from 1959-1966 at the Boston Psychoanalytic Society and Institute. *International Journal of Psycho-Analysis*, 56, 343-359.

This was a study monitoring the outcome of a significant number of patients treated by trainee analysts under supervision. The patients were selected as good training cases and are therefore not necessarily representative of psychoanalytic cases in general.

Sample

130 patients with diagnoses of neurotic disorders were reported on retrospectively by treating analysts. The majority of the patients were either diagnosed as hysterics, obsessive-compulsives or mixed neurotics.

Measures

Outcomes were reported, after the termination of the analyses, on a global change scale, a scale assessing life situation at termination, and six clinical scales covering symptom restriction and discomfort, work productivity, sexual adjustment, interpersonal relations and insight.

Results

Over a quarter of the patients terminated treatment prematurely – at least from the analyst's point of view. Three quarters of the patients treated were judged to have improved; 6% showed a significant worsening of their condition associated with the analysis. Those who had longer treatment were more likely to show favourable outcomes. The analyst's agreement that the termination of treatment was appropriate was associated with good outcome.

A spin-off study (Kantrowitz, 1987; Kantrowitz, Paolitto, Sashin, & Solomon, 1987a, 1987b) describes a prospective investigation of 22 patients who were administered a battery of psychological tests. The study yielded a number of important findings including further evidence on the variations of psychoanalytic technique amongst psychoanalysts (Kantrowitz, 1987) and the importance of the match between patient and analyst as a predictor of long term outcome (Kantrowitz, Katz, & Paolitto, 1990b). Another important finding to emerge from this study was the observation that analysts were somewhat more optimistic about the outcome of their patients than was supported by independent psychological tests (Kantrowitz et al., 1987a). Further, these studies offered suggestive evidence – albeit on a relatively small sample – that while some patients showed improvement subsequent to termination, in other instances patients revealed that improvements at termination were not maintained over the long term (Kantrowitz, Katz, & Paolitto, 1990a; 1990b).

Evaluation

The use of trainee analysts and retrospective design places a major limitation on the generalisability of the findings concerning outcome. The spin-off studies, however, generated considerable interest, particularly in the issue of patient-analyst match.

The Stuttgart Study: The Stuttgart Psychotherapeutic Hospital Follow-Up Study (TSS)

Teufel, R., & Volk, W. (1988). Erfolg und Indikation stationärer psychotherapeutischer Langzeittherapie. In W. Ehlers, H. C. Traue, & D. Czogalik (Eds.), *Bio-psycho-soziale Medizin* (pp. 331-346). Berlin: Springer- PSZ.Drucke.

Background

Since its inception in 1967, the Stuttgart Psychotherapeutic Hospital has been an exclusively psychoanalytically oriented inpatient treatment facility. It offers 102 beds with a staff of 17 therapists and treats about 300 patients per year (for a clinical description see Beese). Average length of stay is about 6 months.

Method

Sample and Treatment

The treatment offered by this institute was 3-4 times weekly individual psychoanalysis and group therapy with minimal adjunctive treatments. Patients admitted suffered from severe personality disorder, psychosomatic or neurotic conditions. For details of the patient group and treatment program see Teufel (1988). In the years 1986-1987, a follow-up study on 248 patients was planned; 147 patients were recruited who could be interviewed at least 3.9 years following termination of treatment. The follow-up study was performed by scientists from the Forschungsstelle für Psychotherapie¹ (Center for Psychotherapy Research). This research centre is based on the same campus as the hospital but acts quite independently.

Treatment outcome

The operationalisation of treatment outcome distinguished four dimensions of outcome:

- (a) Treatment goals attainment (Therapieziele) rated by therapist at end of treatment;
- (b) Symptom reduction by comparison of patient's symptom questionnaire from start of treatment to follow-up;
- (c) general well-being according to patient's report at follow-up;
- (d) capacity for work – according to patient's report at follow-up.

Results

Table 1 contains the success rates of patients in terms of per cent of goals attained and percent of presenting symptoms remitting. About two thirds of patients achieved more than 50% of their therapeutic goals and nearly half achieved two thirds. In terms of symptom reduction, one quarter of the sample achieved 75% symptom reduction while the majority achieved 50% reduction of symptoms or better.

¹Directed until March 1988 by Helmut Enke, since then by Horst Kächele

Table 1: Patients attaining required percentage of treatment goals and percentage of symptom reduction

	Attainment of treatment goals Number of patients		Symptom reduction	
	N	%	N	%
95%	9	6.12	13	8.84
85%	11	7.48	10	6.80
75%	14	9.52	11	7.48
65%	30	20.41	13	8.84
55%	25	17.01	11	7.48
45%	16	10.88	31	21.09
35%	11	7.48	9	6.12
25%	16	10.88	14	9.52
15%	6	4.08	9	6.12
5%	9	6.12	27	17.69
Total	147	100%	147	100%

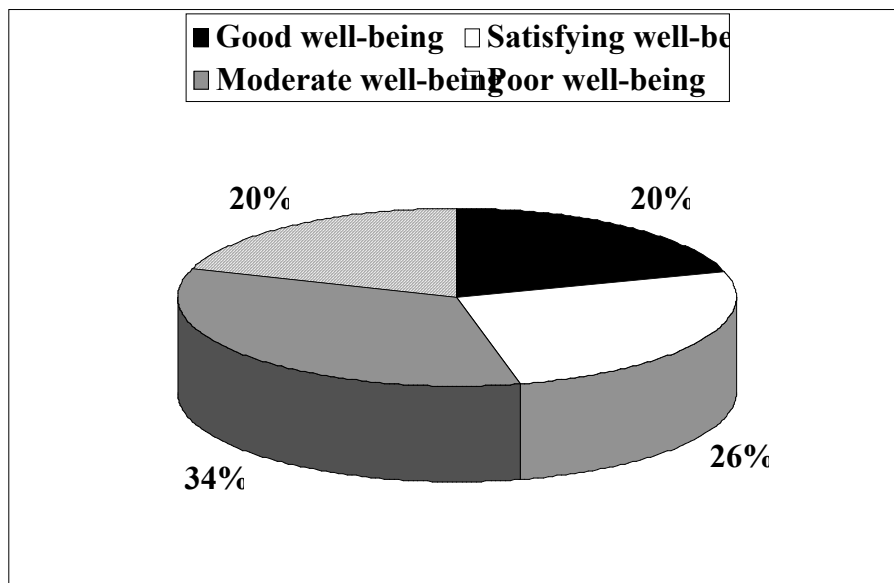
Table 2 displays the findings in a slightly simplified form. The percentages from 95.85 and 75 were considered good results, from 65-45 were considered moderate and from 35 and below are poor. Approximately one quarter achieved good results and almost three-quarters achieved moderate results or better in terms of goal attainment and half achieved the same level of outcome in terms of symptom reduction.

Table 2: Attainment of treatment goals and symptom reduction organised in three outcome groupings

	Attainment of treatment goals n = 147	Symptom reduction n = 147
95%.- 75%	34 = 23 %	34 = 23 %
65% - 45 %	71 = 48 %	55 = 37 %
35% - 5 %	42 = 29 %	59 = 40 %

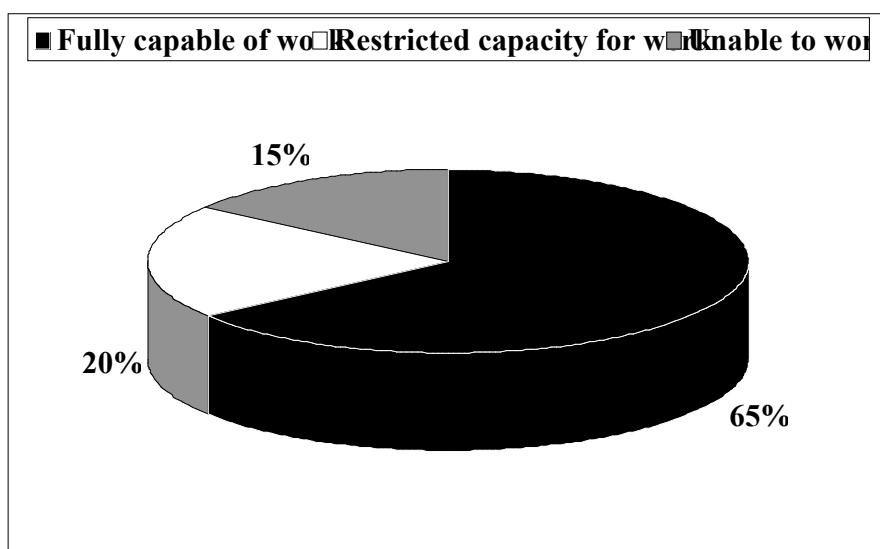
The third outcome criterion, “general well-being”, was divided into four groups: good, satisfactory, moderate and poor. Almost half (46%) of the follow-up sample had good or satisfactory quality of well-being and only 20% reported that their well-being was poor.

Figure 1: General well-being at follow-up



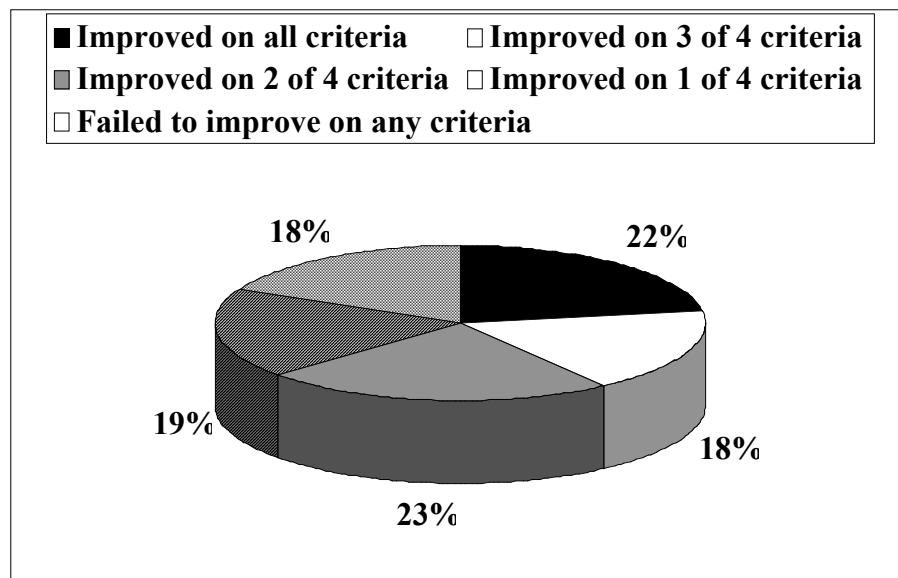
A similar breakdown of work capability is presented in Figure 2. Two thirds of the sample reported being fully capable of work and only 15% were unable to take on gainful employment.

Figure 2: Capacity for work at follow-up



A summary across the findings is shown in Figure 3 by dividing results on the four criteria, so that patients fell either into the improved or the worsened category. Almost one quarter of the sample improved on all criteria and 63% improved on at least two. Only 18% failed to improve on any criteria.

Figure 3: Overall outcome at follow-up



Evaluation

The results suggest that the capacity for work is the most likely criterion to improve in in-patient psychoanalytic treatment. The treatment also seems efficacious in terms of the attainment of treatment goals. Well-being was observed as comparable to that in the general population. Patients responded less well in terms of symptom reduction. This may or may not reflect the truly psychoanalytic focus of this hospital over the years of the investigation (1969-1975) where symptom reduction was rarely considered a priority. No psychotropic medication was given and very few paramedical interventions were used, indicating that psychoanalytic in-patient treatment can be relatively beneficial for severe conditions even without adjunctive treatments aimed more directly at symptom reduction. The study has major limitations in not using standardised measures and results from individual goal attainment scaling is hard to interpret in the absence of a comparison group. However, the good results with regard to functioning at work are robust to such criticism. Work is the most important aspect of social adaptation in terms of social costs and the fact that four years post-treatment the large majority of this severely handicapped group was able to fulfil a useful social function speaks well of the effectiveness of in-patient psychoanalytic therapy.

The Berlin Jungian Study: On the effectiveness and efficacy of outpatient (Jungian) psychoanalysis and psychotherapy - a catamnestic study (BJS)

Keller, W., Westhoff, G., Dilg, R., & Rohner, H. H. (1998). *Study and the study group on empirical psychotherapy research in analytical psychology*. Berlin: Department of Psychosomatics and Psychotherapy, University Medical Center Benjamin Franklin, Free University of Berlin.

Despite a large number of studies on the effectiveness of psychodynamic psychotherapy, there are so far no studies on the efficacy and effectiveness of long-term psychoanalysis as performed in a naturalistic setting including Jungian psychoanalysts and psychotherapists in private practice. The reasons for this paucity of research include the long duration of prospective case studies and the high costs involved, as well as methodological difficulties involved in research in the field of private treatment practice. Psychoanalysis and psychoanalytic psychotherapy increasingly come under pressure to offer convincing evidence of their effectiveness. The study presented here is an effort to close this gap for Jungian therapy. This study was financed by independent funding (Bosch Family Foundation).

Objectives

There were three objectives for this study:

1. To prove the effectiveness of long-term analyses (more than 100 sessions) in routine treatment practice and to examine the stability of treatment results by a follow-up study 6 years after the end of therapy.
2. To evaluate some aspects of cost-effectiveness.
3. To implement research strategies in the area of outpatient psychotherapeutic care for quality assurance purposes.

Recruitment methods and design

All members of the German Society for Analytical Psychology (DGAP), the umbrella organisation of Jungian psychoanalysts, were asked to participate in this retrospective study. Over three quarters (78%) responded to this request and 24.6% participated. Reasons for refusal to participate are listed below in Table 1. Over 40% refused (actively or passively) to participate and a further 15% discontinued participation.

Table 1: Therapists' reasons for declining to participate in outcome research

Total number of the members of DGAP (adult psychoanalysts) invited to take part in the study	N (%) 223 (100)
Did not respond to invitation	49 (22.0)
Responded but refused to participate	48 (21.5)
Therapists initially agreed to take part and later refused or failed to contact their terminated patients	32 (14.4)
Therapists with documented agreement of the patients to participate and complete follow-up assessment of these patients	35 (15.7)
No finished cases in 1987/88	59 (26.4)

The remaining sample (both therapists and patients) is described in Table 2. The patient sample thus recruited was less than one third of those in the sampling frame while the therapists recruited were less than 16% of those who could have participated.

Table 2: Selection of participating therapists and patients

	Therapists n(%)	Patients n(%)
Total number of contacted therapists	223 (100)	
Therapists who sent back the invitation questionnaire	174 (78)	
Therapists who assessed the pre-treatment status of their finished cases in 1987/1988 (drop-outs included)	55 (24.6)	353 (100)
Therapists who contacted their patients who terminated in 1987/1988	42 (18.8)	259 (73.4)
Therapists who provided documented agreement of participation from their patients terminated in 1987/1988	35 (15.7)	152 (43.1)
Therapists who provided complete follow-up assessment from their patients terminated in 1987/1988	35 (15.7)	111 (31.4)

Measures and Sample

On the basis of their clinical notes, participating therapists in private practice documented all their cases (including dropouts) which terminated in 1987 and 1988. They completed a basic questionnaire regarding clinical and sociodemographic data and setting characteristics at the onset of therapy and gave a retrospective global assessment of their patients' state at the end of therapy.

Based on the diagnosis given in the funding claims of the former therapists, two independent raters reached a consensus concerning a retrospective ICD-10 classification. Additionally, the severity of disease before treatment was assessed using the Schepank method of impairment severity index (BSS, 1987, 1994).

In 1994 111 former patients, who had finished either psychoanalysis or long-term-psychotherapy in 1987 or 1988 and who agreed to take part in the study, were sent a follow-up questionnaire which included measures of life satisfaction, well-being, social functioning, personality traits, interpersonal problems, self rated health care utilisation and some psychometric tests (SCL-90R, VEV, Gießen-Test). In 33 cases (in the Berlin region), a follow-up interview was carried out and actual health status was rated by two independent psychologists trained in Jungian psychoanalysis.

Additionally, objective data on the utilisation of health care services was recorded from health insurance companies (number of days off work through sickness and inpatient hospital days) 5 years before and after therapy. Data were unavailable for a significant proportion of patients. In this comparison only those cases with complete pre and post data were included. Thus, for this calculation, the sample was reduced to 47 (for analysis of sick days) and 58 (for analysis of hospital days). Neither subgroup differed from the entire sample in socio-demographic data, pre-treatment characteristics or other criteria of treatment success.

The selection of the follow-up sample was controlled by comparing the study patients with the total of 358 therapist-documented therapies that finished in 1987 and 1988 with respect to socio-demographic and clinical characteristics. The selection of therapists participating in the study was controlled by an independent survey of all DGAP members with respect to therapist's and setting characteristics. There was no difference between the groups, supporting the assumption that the study sample was representative of the clinical population.

Patient characteristics

Table 3 gives details of the sample followed up in the study. The mean age at follow-up was 44.5 years (range 27-69). More than two thirds (69.1%) were women. Compared with the reference sample, the follow-up sample contained a higher proportion of unmarried (26% vs 8%) or separated

patients, a higher education level, fewer manual workers (4% vs 15%) and a lower level of unemployed individuals (38% vs 87%).

Table 3: Characteristics of follow-up sample

Follow-up sample (n=111)	Mean (SD)
Age at follow-up, 1994 (yrs)	44.5 (4.8)
Age at start of treatment (yrs.)	35.0 (8.8)
Age at the end of treatment (yrs)	37.0 (8.0)
Time of follow-up (yrs)	5.8 (0.79)
Treatment length (0.3-8.3 yrs)	2.9 (1.7)
Number of therapy sessions (range 15-399)	161.9 (94.9)

Treatment characteristics

Table 4 includes information concerning treatment characteristics. Mean post-treatment follow-up time was almost 6 years. Taken together with the average treatment length of just under 3 years, the patients at follow-up were about 10 years older than at the beginning of therapy. Three quarters (76%) had received psychoanalysis with an average of 193 sessions and a mean duration of 3 years; 63% of the psychoanalytic patients had more than 100 sessions. Overall, 17.5% of the patients included were drop-outs, finishing treatment at various points of therapy. Thus the results reported constitute an intention to treat analysis. This figure further validates the representativeness of the selection procedure indicating that the treating therapists did not exclusively select their successful patients.

Table 4: Characteristics of the treatment

Type of therapy	Mean (SD)
Psychoanalysis (%)	76.0
Treatment length (0.3-8 yrs.)	3.0 (1.6)
Number of therapy sessions (range 17-399)	192.9 (88.9)

Psychotherapy (%)	16
Treatment length (0.8-8.3 yrs.)	2.4 (1.9)
Number of therapy sessions (range 30-200)	78.3 (40.5)
Drop-outs (%)	17.5

Status before treatment

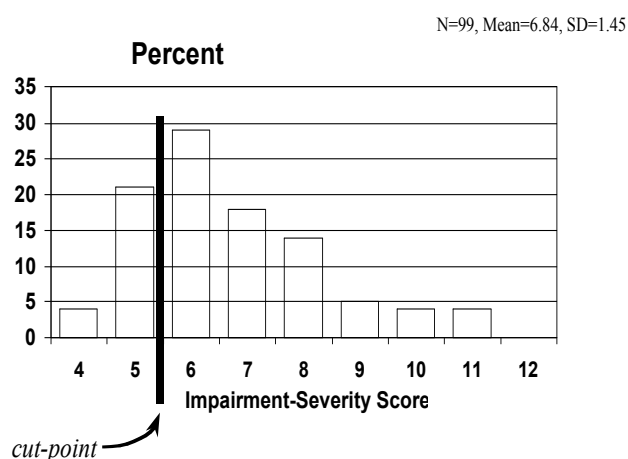
Table 5 gives information concerning the principal ICD10 diagnoses of the follow-up sample. A third (34%) of the patients had had symptoms for more than 10 years; 17% had a personality disorder and 46% were classified as affective disorders according to ICD-10.

In 96% of the patients psychotherapy was necessary because disturbance of emotional, psychosocial and physical functioning was above the clinical cut-point. The mean impairment severity score (BSS) for the total sample was 6.8. The clinical cut-off point for this measure is 5.0 or above (Schepank, 1987, 1994). Figure 1 shows the distribution of BSS Impairment severity score prior to therapy and indicates that a substantial proportion of the sample were very severely handicapped, normally warranting hospitalisation or partial hospitalisation (score of 9 or above).

Table 5: ICD-10 Classification prior to treatment (retrospective expert rating n=100 main groups only)

		n	%
F3 Affective disorders	F31 bipolar affective disorder	1	1.0
	F32 depressive episode	13	13.0
	F33 recurrent depressive episode	13	13.0
	F34 cyclothymia	19	19.0
F4 Neurotic and somatoform disorders	F40 phobic disorder	4	4.0
	F41 anxiety disorder	10	10.0
	F42 compulsion disorder	3	3.0
	F43 stress reaction	3	3.0
	F45 somatoform disorder	8	8.0
F5 Behavioural disturbance with physical symptoms	F50 eating disorder	3	3.0
	F52 sexual dysfunction	3	3.0
F6 Personality disorders	F60 specific personality disorder	17	17.0
	F61 complex or other personality disorder	1	1.0
	F63 abnormal habits	2	2.0

Figure 1: Total mean of impacts on emotional, psychosocial and physical functioning prior to psychotherapy.



Results

Self-assessment of the patients at follow-up

Compared with their state before therapy, 6 years after the termination of treatment 70-94% of the former patients reported good to very good improvements with respect to physical or psychological distress, general well-being, life satisfaction, job performance and partner and family relations as well as social functioning. The distribution of some responses are presented in Table 5.

Table 5: Global self reports of the patients at follow-up compared with presentation prior to therapy

	n	Better %	Unchanged %	Deteriorated %
How did the problems, which brought you into treatment, develop?	111	93	6	1
How do you see your emotional condition today?	111	94	5	1
How do you compare your physical health status to that before treatment?	111	66	24	10
How did the physical problems, which brought you into psychotherapy, develop?	63	83	10	7
Compared to pre-therapy, how satisfied are you with your partnership today?	80	74	19	7
Compared to pre-therapy, how satisfied are you with your job conditions?	111	75	17	8

Global health-state

The self reported global health state of the patients at follow-up was compared with a representative randomly assigned calibration sample drawn from a "normal" population (Gerdes & Jäckel, 1992) adapted to the study with regard to sex and age. Overall, 88% of the follow-up sample's ratings fell within the 75th percentile of the reference sample, indicating that 88% of this study's sample's global health state could be seen as "normal health" as rated by 75% of the calibration sample.

Clinical significance of global well-being

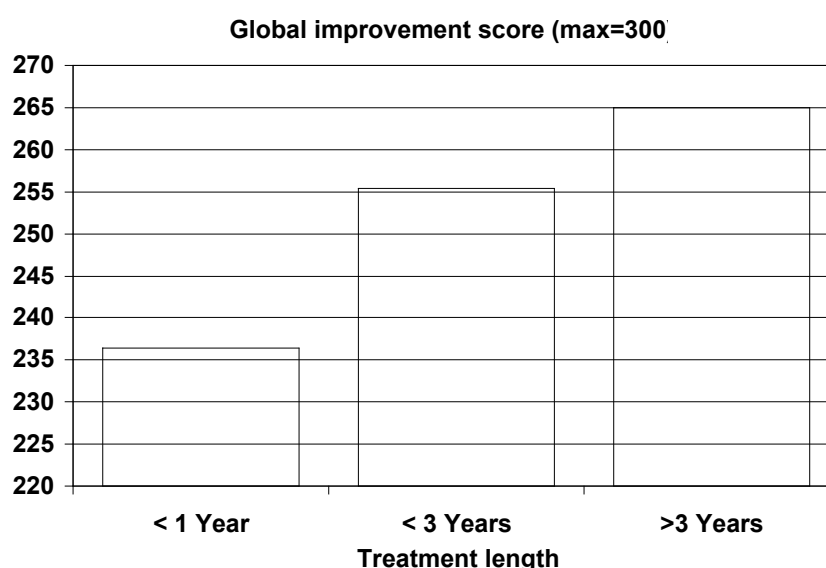
Global well-being was assessed by a 6 point Likert-scale (from very poor to very good). Of 60.4% (n=67) of patients reporting their well-being as very poor prior to therapy, 86.6% (n=56) rated their global well-being at follow-up (6 years after termination of psychotherapy) as very good, good or moderate. This indicates improvement in global well-being long after the termination of treatment. These results have been confirmed by the "Consumer's Report-Study" by Seligman (1995).

Relation between global success and treatment length

The addition of 3 total scores (ranging from 0 to 100) of different self reported global ratings (degree of improvement of the complaints leading to need for psychotherapy, how much psychotherapy helped the patient, satisfaction with actual psychological and emotional state) created a global variable of therapy success. Figure 2 shows the relationship of therapy success to treatment length ($p < 0.05$), indicating the longer the treatment, the better the treatment success 6 years after termination of psychotherapy.

With regard to this criterion, long-term psychotherapy was more successful than short-time psychotherapy. Similar results were found by Seligman (1995) and Sandell (1996).

Figure 2: Treatment length and global therapy success (improvement-score composed of the addition of 3 different global self-assessments of success)



The global assessment by former therapists

The global assessment by former therapists of the patients' state at the end of therapy shows a comparatively good agreement in terms of distribution with the patients' own assessment at the time of follow-up 6 years after the end of therapy (therapist: 64.9% good, 29.7% moderate, 5.4% unchanged or deteriorated overall state; patients: 70.3% good, 22.5% moderate, 7.2% unchanged or deteriorated).

Results of psychometric test examinations at follow-up

SCL-90R: On standardised psychometric tests of state of health at follow-up, the sample tested lies within the range of healthy standard random samples and compares favourably with other clinical groups with respect to the relevant alteration qualities of symptoms. Figures 3a & b show the means of the 9 subscales and global severity scores on the SCL-90R for the study sample compared with relevant standardisation samples.

Figure 3a: Mean SCL-90-R-Scales on follow-up compared to standardisation samples

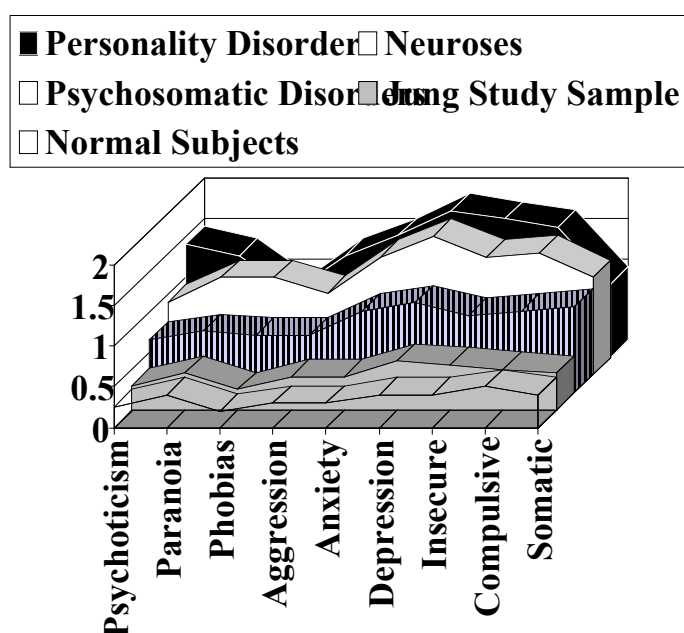
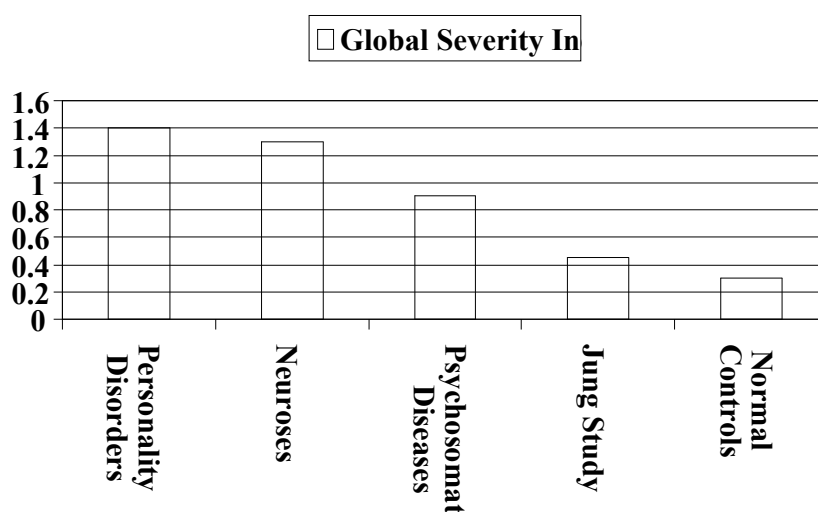


Figure 3b: Mean SCL-90-R-Global Severity Index on follow-up compared to standardisation samples



The global severity scores and the sub-scale scores of the Jung Study sample indicates that 6 years after treatment this group with a relatively severe set of diagnoses pre-therapy were quite well-adjusted on all scales of psychopathology and more like the normal comparison group than any of the clinical groups with which they shared diagnoses prior to therapy.

Gießen personality test:

Standardised for sex and age, the Gießen test scales (T-values) range within the calibration values of two SD's from 50, for normal sample. Clinically significant disturbance is indicated by deviations

greater than two SDs from the mid-point of 50. The results obtained from the Jungian Study follow-up indicate that the means of these subjects fell within the normal range on all scales.

Table 6: Mean values on the Gießen Personality Test for the Jungian Study sample

	Mean (N=11)	Std Dev
Dominance	44.23	9.68
Social resonance	46.83	9.81
Control	51.05	9.14
"Permeability"	51.27	11.40
Social potency	51.84	8.70
Basic mood	58.51	10.18

Changes in experience and behaviour (VEV)

A questionnaire measure of change (VEV), covering a range of behavioural and subjective items, was administered on follow-up. On this scale of "Change in Experience and Behavior" (VEV), the test subjects showed significant improvements in various areas of life ($p < 0.01$) compared to the calibrated random sample. Compared to a one year follow-up of another clinical sample treated with inpatient cognitive behavioural therapy, there are no marked differences (Table 7). Both treatments appear to bring about positive change in about three quarters of a clinical sample.

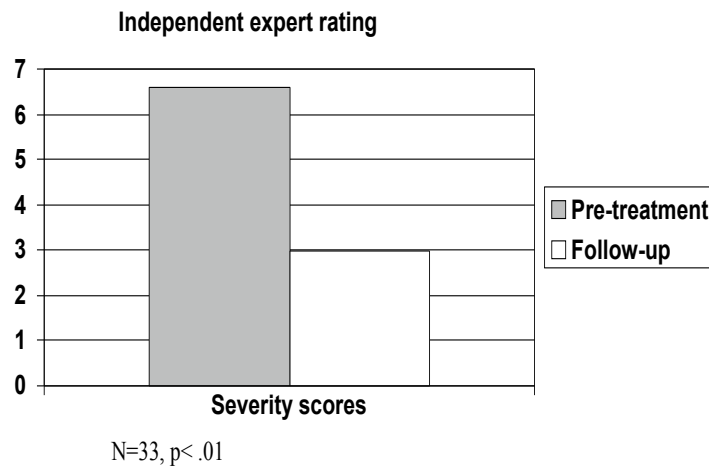
Table 7: Results for VEV questionnaire of Change in Experience and Behavior: Comparison of the Jungian follow-up sample (N=111) with a 1-year follow-up sample of inpatient cognitive behavioural treatment (N=142, Zielke, 1993).

	Jungian Sample (N=111)		CBT Sample (N=142)	
	N	%	N	%
Positive change (>187)	78	70.3	105	73.9
Moderate change (value between >150 and <187)	31	27.9	34	24.0
Negative change (value<150)	2	1.8	3	2.1

Change of the impairment severity score (BBS)

In the comparative pre- and post-treatment expert rating of the actual state of disturbance by clinical interviews during the follow-up, an examination of a sub-sample of $n=33$ patients (regional sample of Berlin) by independent raters showed a significant ($p<0.01$) decrease of the severity of the disturbance on the Schepank Impairment Severity Index. The effect size was 2.1 (see Figure 4) which is large, although in this instance the comparison was not a control group, which may explain why the ES is larger than usual.

Figure 4: Impairment severity score (BBS) prior to and post psychotherapy (follow-up)

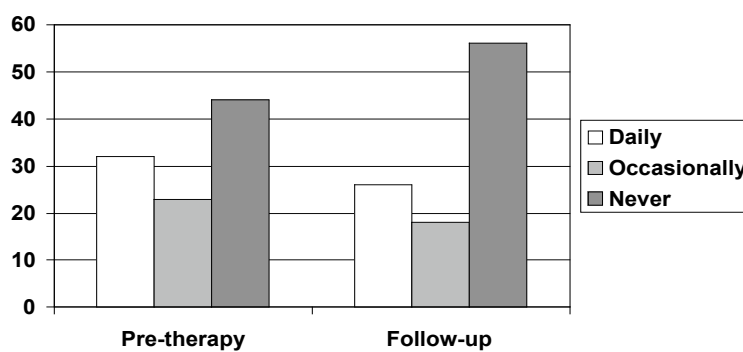


Health care utilisation

Health care utilisation was looked at in a number of ways. Psychotropic drug use significantly reduced over the course of the post-therapy period (Figure 5).

An increased percentage of the patients no longer use psychotropic drugs compared to pre-psychotherapy and the proportion of those taking medication regularly reduced most substantially.

Figure 5: Intake of psychotropic drugs prior to psychotherapy and at follow-up

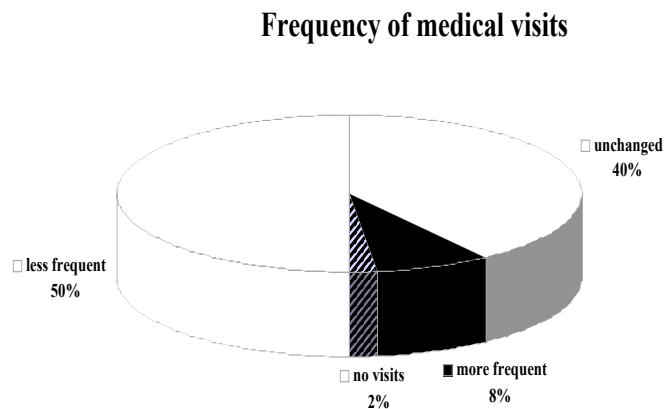


N=111

Neurotic and personality disordered patients often use resources by presenting at primary care physicians for physical symptoms or support. More than half of the patients reported a substantial reduction in the frequency of doctor visits compared with the frequency of visits prior to

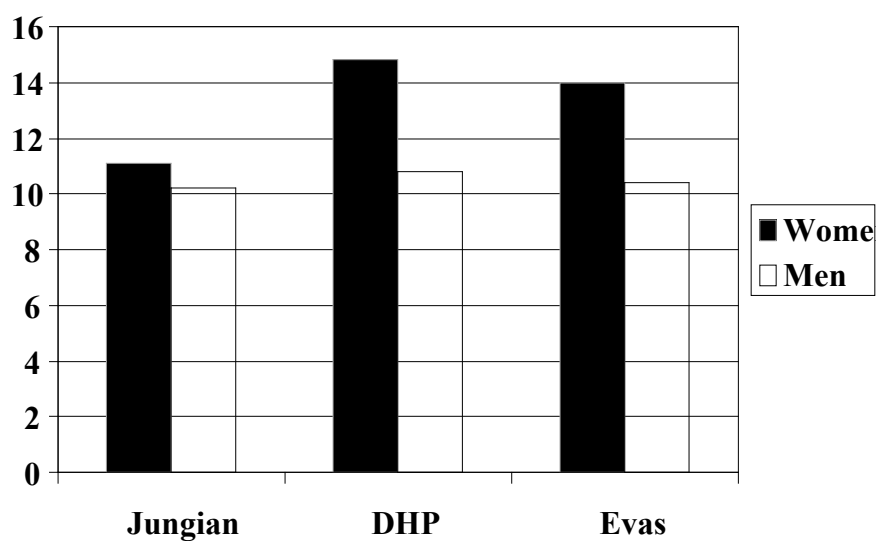
psychotherapy. Only 8.1% had a higher frequency and nearly 40% reported an unchanged frequency in the year before the follow-up.

Figure 6: Frequency of medical visits (comparison of the year prior to psychotherapy and the year prior to follow-up)



The frequency of medical visits in the year before follow-up were substantially below the frequencies that would be expected on the basis of two representative studies of private practice patients (Hoffmeister, 1988; Schacht, 1989) (Figure 7).

Figure 7: Frequency of medical visits in the past year compared with two German studies of general practice attendance (DHP and Evas-Study)



Perhaps the most meaningful index of resource use is days lost from work due to illness (sickness absence) and cost of hospitalisation. An examination of the data recorded by third party payers (national insurers) before and after treatment revealed a substantial reduction of working days lost due to sickness. Sickness absence dropped by 50% (from an average of 16 to 8 days). At the same time an even greater reduction in hospitalisation days was observed. The reduction was 87.5%, from an average of 8 days per year before therapy to an average of 1 day per year after (Figures 8 and 9).

Generally, a reduction of sickness absence and hospitalisation days after psychotherapy can be regarded as an important indirect measure of therapy success. However, in order to assess the number of days of sickness using insurance records, the study participants had to be continuously employed. Part of the sample therefore could not be included in this analysis. Thus the sample was reduced from 111 to 47 patients for analysis of sickness absence and to 58 patients for days hospitalisation. This detracts from the persuasiveness of the findings.

Figure 8: Mean number of work days lost per annum due to sickness 5 years before and five years after psychotherapy

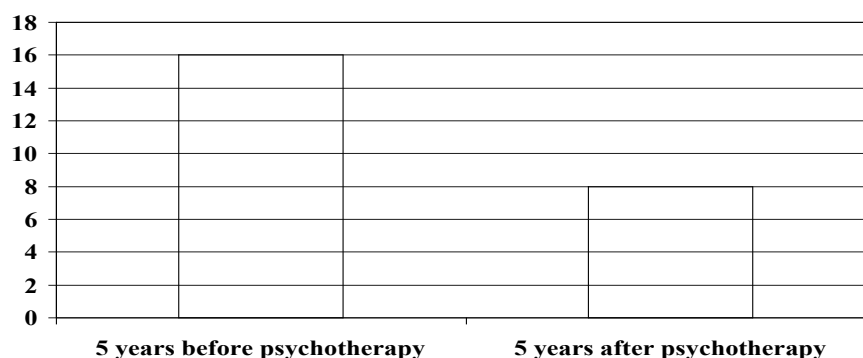
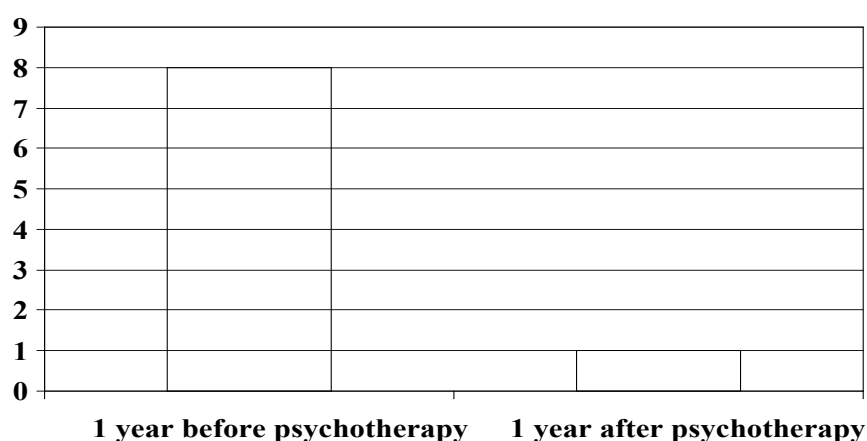


Fig. 9: Mean number of days of hospitalisation (one year before and after psychotherapy)



Conclusion and Evaluation

The effectiveness of Jungian psychoanalysis and psychotherapy was determined on the basis of a number of different perspectives and success criteria in a selected and not necessarily representative sample. Three quarters (76%) of the patients examined had Jungian psychoanalysis so that empirical proof of the effectiveness of long-term analyses could be examined after an average of 6 years. Even after 5 years, the improvement in the patients' state of health and attitude toward the disease resulted in a measurable reduction of health insurance claims (work days lost due to sickness, hospitalisation days, doctor's visits and psychotropic drug intake) in a significant number of the patients treated. This suggests that psychoanalysis is related to a reduction of health care and related costs. Cost effectiveness aspects increasingly play an important role as outcome criteria for health care purchasers and providers. This retrospective study demonstrated that psychoanalysis also has long-lasting effects on the patients' psychological wellbeing. There are numerous major methodological problems with these data including the lack of comparison sample, the non-representativeness of the sample, the unreliability of pre-treatment data, the high rate of attrition, the need for multi-variate statistics, and uncertainty about the actual treatments offered. However, limitations of design and methods aside, the data here provide some convincing arguments for the effectiveness of psychoanalysis. This is encouraging as the design could be readily replicated on other patient populations.

The Konstanz Study - A German Consumer Reports Study (TKS)

Breyer, F., Heinzl, R. & Klein, Th. (1997). Kosten und Nutzen ambulanter Psychoanalyse in Deutschland (Cost and benefit of outpatient analytical psychotherapy in Germany): *Gesundheitsökonomie und Qualitätsmanagement*, 2, 59-73

This retrospective questionnaire study included former patients of a randomly drawn 20% sample of members of two German analytical psychotherapy associations (DGPT & DGIP) with a total membership of 394 who had terminated their analytical therapy between 1990 and 1994. The return rate of the anonymous questionnaire from therapists was 66%. Overall 183 responses (46.4%) were received; 91 declared their readiness to participate (23.1%) and 92 explained why they could or would not take part (23.4%). Reasons for therapist non-participation is shown in Table 1a. One subject filled out two questionnaires for his patients, reducing the sample of participating therapists to 90. The theoretical orientation of the participants is shown in Table 1b.

Table 1a: Reasons for non-participation

	N	%
No terminated treatments during 1990-1994	48	52.2%
Disease, age	8	8.7%
Shortage of time	12	13%
Participation in other study	5	5.4%
Unable to contact patients	5	5.4%
Unwilling to contact former patients	1	1.1%
Rejection of study design	11	12%
No reasons given	2	2.2%
Total	92	100%

Table 1b: Theoretical orientation of therapists participating in the German Consumer Report Study

Freudian	61
Jungian	10
Freudian & Jungian	4
Adlerian	15

Sample

The 90 therapists were asked to send out 979 questionnaires - 789 to former patients in individual therapy and 190 to former patients in group psychotherapy. The return rate was 66%. Forty two questionnaires were excluded, as the actual termination time turned out to be more than 6 years earlier. Thus, the final analysis was based on N = 604 patients.

Due to the naturalistic design, the large sample and the relatively high return rate, the results of the study may be taken to be representative for insurance based psychoanalytic therapy as it is currently practised in Germany; it is much more representative than the similar Consumer Reports study is for the United States. A further interest of the study is the relatively long treatments included in the study as well as some three or more times weekly treatments.

Treatments

Table 2 contains the mean length of treatment and treatment duration of the sample from which treatment density (frequency of sessions per week) may be derived. Treatment density was, not surprisingly, higher for Freudians and Jungians than Adlerians and eclectics and somewhat higher for psychologists than for psychoanalysts. Group therapy rarely took place more than once per week.

The length of the treatments with the relatively small standard deviation points to a certain selectivity of the sample. Patients mostly terminated their therapy when their insurance funding was exhausted rather than for other reasons. This is in contrast to the sample from the Ulm out-patient centre when duration of treatment is widely varying (Kächele et al., in preparation). Subjects were asked retrospectively to report their self-assessed physical, mental, social and overall health status at three points of time: at the beginning and end of their therapy and at the time of follow-up questioning.

Table 2: Mean number of sessions, length of treatment and estimated treatment intensity for 604 patients in psychoanalytic therapy followed up for up to 6 years after termination

	Mean number of sessions (SD)	Duration in months (SD)	Estimated no of sessions per week
All	238.65 (7.55)	41.04 (1.02)	1.58
Psychologists	276.66 (13.70)	42.60 (1.38)	1.77
Physician	213.77 (9.66)	39.28 (1.72)	1.48
Others	191.15 (23.37)	31.10 (2.65)	1.67
Freudians	255.92 (10.05)	40.85 (1.29)	1.71
Jungians	232.79 (15.19)	39.11 (2.28)	1.64
Adlerian	171.90 (11.35)	39.80 (2.72)	1.18
Eclectic	197.03 (14.86)	44.97 (3.45)	1.19
Individual therapy	261.28 (8.41)	42.42 (1.05)	1.68
Group therapy	119.79 (9.07)	32.67 (2.98)	1.00

Results

Table 3 displays the mean well-being scores as rated retrospectively by study subjects. There seems to be a substantial shift in well-being from bad to good associated with therapy. The change is interestingly most clearly marked for physical health. It is also interesting to note that the full impact of change on the relationships variable mainly emerges at the follow-up stage whilst the other two dimensions improve only to a limited extent between termination and follow-up.

Subjects also reported on their health care utilisation (physician's visits, hospital days, drug consumption) and on their days lost from work. Table 4 displays these data.

Table 3: Retrospective reports of subjective well-being from start of treatment to follow-up

	Start of treatment	Change by termination	Change by follow-up	Change from termination to follow-up
Total well-being	4.33	- 2.06**	- 2.17**	- 0.11**
Somatic well-being	3.21	- 1.01**	- 1.08**	- 0.07*
Psychological well-being	4.44	- 2.16**	- 2.26**	- 0.10*
Quality of relationships	3.66	- 1.19**	- 1.52**	- 0.33**

scale: 1 = very good 5 = very bad

** p< 0.001 on related t-test (one tailed)

* p< 0.05 on related t-test (one tailed)

Table 4 displays mean values for medical visits at the start of therapy, changes by termination and changes during the follow-up period. There were reductions in both primary care and specialist care visits over both time periods with both types of consultation being almost halved by follow-up assessment. Consistent with these observations, sickness absence was reduced by 60% at follow-up and hospitalisation by 66%.

Table 4: Changes in health utilisation parameters (mean values and percents relative to the year previous to therapy, at therapy termination and follow-up)

Indicator	Start of therapy	At termination (% reduction)	At follow-up (% reduction)	% change from termination to follow-up
Number of visits to family doctor	6.28	3.76** (40%)	3.03* (52%)	19%**
Number of visits to medical specialist	3.97	2.65** (33%)	- 1.59**	10%*
Days of sickness absence	14.48	8.46** (42%)	- 8.62**	31%**
Days of hospitalisation	3.39	1.17** (66%)	- 2.22**	0%

** $p < 0.001$ on related t-test (one tailed)

* $p < 0.05$ on related t-test (one tailed)

Generalisation of these findings might be problematic because several selection biases may be operating. There may have been an oversampling of successful therapists in the recruitment procedure and an over-sampling of "good" former patients by these therapists. Further there may have been bias in patients' self-selection with those who feel improved being more likely to agree to participate. To check for selection bias due to selection of "good" patients by therapists, the correlation between mean success rate and number of questionnaires sent out by a therapist was computed. This provided no evidence to suggest that fewer questionnaires sent out was associated with better outcome. Nevertheless, the results should be interpreted with some caution.

Bearing in mind these concerns, the study offers substantial evidence that the self-assessed health status of patients improved significantly associated with psychoanalytic therapy, and this effect did not weaken and in some respects even increased over the follow-up period (up to six years). The self-reported utilisation of other health care services also decreased significantly, notably the number of physician visits and hospital days. Although the validity of such retrospective reports is open to doubt, events such as sickness absence are normally accurately reported, but no attempt could be made by the study to validate these figures given the anonymous nature of the survey.

An econometric analysis yielded the expected results. The size of savings was bigger, the worse the patient's self-assessed health status at the beginning of the therapy. Importantly, savings increased with greater number of sessions and was greater for younger patients. There were no significant differences of the effects between the different professions of the therapists (psychologists vs physicians) or the analytical schools (Freud vs Jung vs Adler) or even between patients of individual and group therapy. Hence, the results are in important respects similar to the ones found in the Consumer Reports study. Savings in health care utilisation were costed and the reduced work loss and its consequent contribution to GNP was allowed for, and it was shown that in the two years (on average) between the end of the individual therapy and the time of follow-up questionnaire the monetary benefits of therapy alone added up to one-quarter of its costs (see Table 5).

Table 5: Savings accrued as a result of individual and group psychotherapy in the first two years after therapy

Savings	Expected reduction in health care events (individual therapy)	Cost of events (individual therapy) (DM)	Expected reduction in number of health care events (group therapy)	Cost of events (group therapy) (DM)
Family doctor visits	7.3	130.90	7.5	134.70
Speciality doctor visits	3.0	101.30	7.1	235.40
Days sickness	19.5	6,906.10	26.0	9,198.00
Days in hospital	3.0	1,339.50	10.74	759.90
Total savings		8,477.80		14,330.00
Costs of treatment		33,235.00		4,305.00
Savings/costs ratio		0.255: 1		3.32:1

These figures suggest that analytic group psychotherapy is more cost-effective than individual analytic psychotherapy by a ratio of almost 13:1. The main source of this difference is the higher costs of individual analytic psychotherapy as opposed to group therapy: 7.5:1. This was a result of both the higher unit cost and greater number of individual sessions (2.5 times) relative to group therapy. Medical cost reduction is less dramatic in this study: group patients turned out to have 1.7 lower costs than the patients in individual therapy. The sample of group therapy patients was, however, too small (N=59) to justify generalisations about the relative cost-effectiveness of these treatments.

Evaluation

This study is an interesting replication of the well-known “consumer survey study” carried out in the USA several years ago. Seligman’s (1995) report did not include long term or intensive treatment. The current report demonstrated that long term therapy works and may be shown to pay for itself in terms of reduced health care costs given follow-up studies of sufficient length. The weaknesses of the consumer survey methodology have been extensively discussed in the literature. The absence of a comparison control group makes attribution of improvement and savings to the psychotherapeutic experience problematic. Controlled studies of psychotherapy have their own methodological problems, however, and consumer surveys undoubtedly add an important perspective to evaluations of the efficacy of psychoanalytic therapy.

Taking a psychoanalytic perspective, the problems of the consumer oriented approach may soon be seen in a different light. Long term treatments, particularly those interrupted as a consequence of funding restrictions, are likely to leave significant unresolved transferences which would bias subjective evaluation in unknown ways. Untangling the relationship of objective measures and subjective reports in the context of long term therapy may be an important field of investigation as the methodology of consumerism is adopted in the field of outcome evaluation.

The German Psychoanalytical Association Study – Long-term effects of psychoanalyses and psychoanalytic therapies: a representative follow-up study (GPAS)

Chairs: M. Leuzinger-Bohleber. U. Stuhr. M. Beutel. Consultant for Statistics: B. Rüger. Consultant of the IPA Research committee: H. Kächele

Leuzinger-Bohleber, M. (in press-b). The Psychoanalytic Follow-up Study (DPV): A Representative, Naturalistic Study of Psychoanalyses and Psychoanalytic Long-term Therapies. In M. Leuzinger-Bohleber & M. Target (Eds.), *The Outcomes of Psychoanalytic Treatment*. London: Whurr.

Leuzinger-Bohleber M, Stuhr U, Rüger B, Beutel M (2001) Langzeitwirkungen von Psychoanalysen und Psychotherapien – eine multiperspektivische, repräsentative Katamnese studie. *Psyche* 55:193-276

Stuhr U, Leuzinger-Bohleber M, Beutel M (2001) Langzeitpsychotherapie. Perspektiven für Therapeuten und Wissenschaftler. Kohlhammer, Stuttgart

Leuzinger-Bohleber, M. (Ed.). (1997). "...die Fähigkeit zu lieben, zu arbeiten und das Leben zu genießen." Zu den vielen Facetten psychoanalytischer Katamnese forschung. Giessen: Psychosozial Verlag. (Chairs: M. Leuzinger-Bohleber. U. Stuhr. M. Beutel. Consultant for Statistics: B. Rüger. Consultant of the IPA Research committee: H. Kächele)

In order to respond to the political situation in their country, the German Psychoanalytic Association (DPV) formed a research committee in 1992. This group, of 19 members of the DPV, decided to carry out a naturalistic follow-up study of long term psychoanalytic treatments. The major aim of the project is to study patients' retrospective views of their psychoanalytic experiences and their effects at least 6 years after termination of psychoanalysis or psychoanalytic long term treatment. The question to be addressed is whether the subjective views of the former patients correspond to those of their former analysts, those of independent observers and to the results of tests and questionnaires used in psychotherapy research.

Recruitment and Sample

In the first months of 1997 a questionnaire was sent out to all members of the DPV to test the feasibility of the study. The researchers endeavoured to ascertain co-operation of the members of the DPV, in order to estimate the total number of patients available for the study, and how representative this group might be. Overall, 91% of the members responded to this "baseline-assessment". A great majority (89%) was in favour of the study. A representative sample (N=401) of patients who had terminated their psychoanalytic long term treatment with DPV members between January 1990 and December 1993 agreed to participate. These included (a) former psychoanalytic patients and (b) patients who received long term psychoanalytic psychotherapy.

Method

Three follow-up questionnaires (SCL-90, Sense of Coherence Scale, Life Satisfaction) plus open-ended questions regarding goals, causes of treatment and relationship with analyst, well-being, utilization of medical services before, during and after treatment and treatment satisfaction were used to study all the former patients available as well as their analysts. Of those patients who only received questionnaires (n=207), 44 did not respond. 9 were excluded leaving a sample of 154 patients (75%) for whom only questionnaire data was available.

In the second part of the study two psychoanalytic follow-up interviews were administered to the other 194 patients. In the first unstructured psychoanalytic 90-minute interview, patients had the opportunity to discuss their views of their experiences in psychoanalysis with an experienced analyst. Topics such as the patient's motives for treatment, their subjective evaluation of the therapy, and their motivation for participating in the study, were addressed. Interviews were tape-recorded. Afterwards, the interviewing analyst tape-recorded his impressions of the interview, and determined what information still needed to be gained from the second interview. S/he then met with a member of one

of the 9 local research groups (62 analysts in total) for a supervision, enabling the interviewer to formulate the questions to be explored in the second interview more clearly. The second interview again began in an unstructured way, and the interviewer then asked a semi-structured set of questions about the patient's view of the former therapy, the therapist-patient relationship, the symptoms, the personal significance of the treatment for the patient, the life events before, during and after therapy, and their overall evaluation of the therapy.

Another member of the research group (who had no information about the patient) interviewed the patient's former analyst. Finally, the local research group met with the interviewers of patient and analyst to discuss the information gathered (the session was tape recorded). The group also rated some global outcome items and the Scales of Psychological Capacities (Wallerstein, DeWitt, Hartley, Rosenberg, & Zilberg, Unpublished manuscript, 1996).

The reports of the follow-up interviewers and the tape-recorded interviews of 129 cases are currently being analysed by a wide range of qualitative and quantitative methods, including narrative single case studies, the use of narrative case presentation to illustrate questionnaire findings, systematic evaluation of qualitative findings by the "bottom-up procedure of clinical clustering" (Klinische Typenbildung; see Leuzinger-Bohleber, Beutel, Stuhr & Rüger, 2000 for details); the specific, elaborated qualitative method of "Verstehende Typenbildung" (Stuhr, 1995) which studies the image of the analyst using the representative sub-sample of transcribed follow-up interviews; and systematic analysis of the transcribed interviews by a modified form of a theory-guided, computerised content analysis developed some years ago (Leuzinger-Bohleber, 1989a) to compare the extra-clinical, non-psychoanalytical analysis of the follow-ups with the researchers' psychoanalytic expert evaluation (expert-ratings on the psychoanalytic follow-up view of the treatments, content analyses, text analyses, qualitative analyses etc).

Additionally, the total costs of health care for the patients before and after treatment were assessed based on the records of health insurance companies, taking into consideration the diagnoses and the severity of disturbances before and after treatment.

Results

Questionnaire results

As Figure 1 shows, about 80% of the former patients reported positive changes regarding well-being, personal development and relationships to others, 70 to 80% regarding coping with life events, self-esteem, mood, life satisfaction and work ability. The proportion of patients with a stable partnership increased from beginning of treatment to follow-up from 67 to 76%. No consistent differences between psychoanalysis and psychotherapy patients regarding the retrospective assessment of their impairment before and after treatment were found.

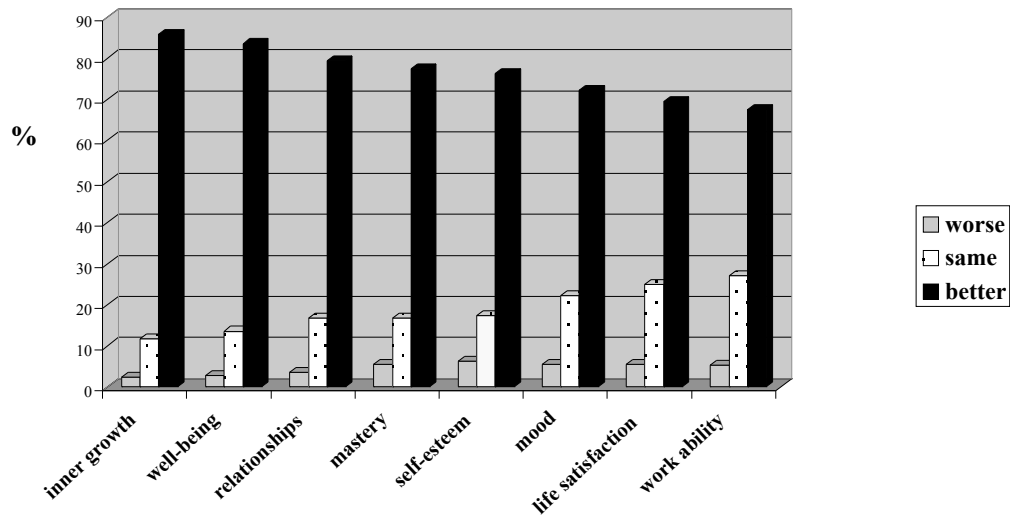


Figure 1: Changes during treatment in the patients' view (n=247)

Figure 2 shows the current distress (SCL-90R) of the patients at follow-up compared to other samples. The study participants report lower distress than comparable patient samples (outpatients at Giessen psychosomatic ambulance, patients in private practice, inpatients at Giessen psychosomatic clinic). Patients of the GPAS achieved symptom scores comparable to the community sample. The results also illustrate the maininainance of the low level of distress even at about 6 years after termination of treatment.

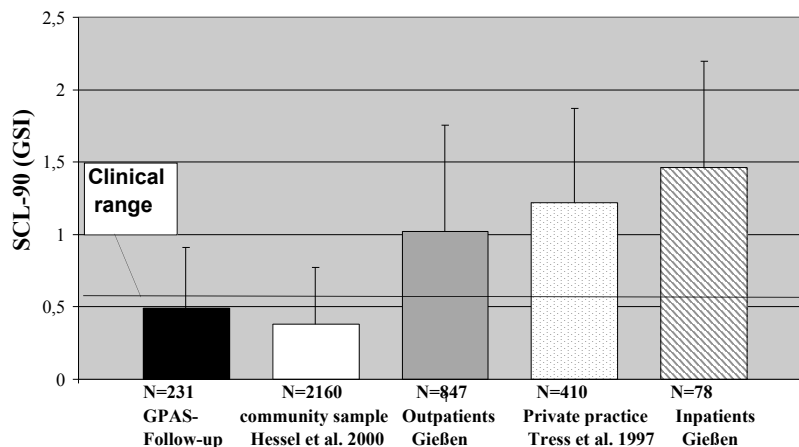


Figure 2: Current distress (SCL-90R-GSI): Participants of the GPAS compared to other samples

Results of the health care utilization subproject

With the written consent of the former patients the research team contacted the health insurance companies and asked for data of health care utilization before during and after treatment. Based on 47 complete cases figure 3 shows that there is an increase in days of sick leave in the year before treatment and a decrease in the course of treatment which is maintained after treatment. Even at follow up the level of days of sick leave was well under the mean of comparable insurants of the general population.

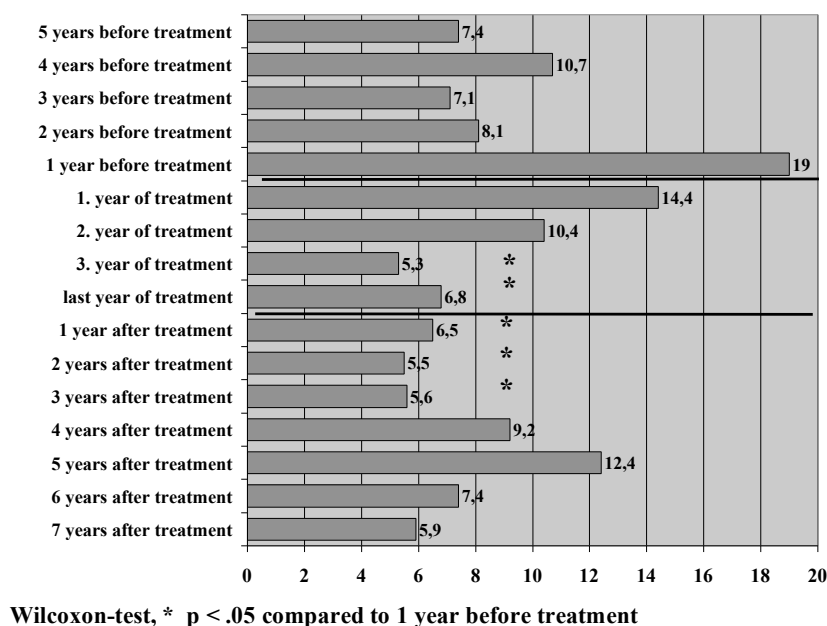


Figure 3: Days of sick leave before, during and after treatment based on health insurance data

Interview subjects

Systematic evaluation of the follow-up interviews using the 'bottom-up' procedure mentioned above uncovered the following three dimensions, which describe central aspects of the patient's change during psychoanalytic long-term psychotherapy:

- A) Self-reflection: limited or high self-reflection
- B) Object-relations: limited or high capacity to live in satisfying relationships
- C) Creativity and working ability: limited or high creativity and work ability

By combining these three dimensions systematically, eight prototypical treatment outcomes were logically defined (see Leuzinger-Bohleber et al. 2001 for the details of these prototypical outcomes).

In 89 % of cases the former patients, their analysts, the psychoanalytic expert and the independent raters agreed with respect to the general outcome of therapy (good, medium, bad). If a more differentiated evaluation was requested (very good, good, medium, bad, very bad) 46 % of the former patients were slightly more satisfied with therapy outcome than their treating analysts; 44 % agreed with them and 10 % evaluated the outcome slightly more critically than their analysts. The

psychoanalytical experts were, in 50 % of the follow-ups, slightly more critical than the former patients, and in 25 % more critical than the treating analysts. In 40 % of cases they agreed with the former patients and in 60 % with the treating analysts. In 10 % of cases they rated treatment outcome to be slightly more positive than the former patients, in 15 % more positive than the treating analysts. According to their findings the psychoanalytical experts evaluate therapy outcome most strictly, and the former patients most mildly of all the different groups of raters in this study.

The raters found that successful analyses seem to depend on a good “matching process” between analyst and analysand. The idiosyncrasy of the different psychoanalytic processes and outcomes is amazing. It appears that these processes can lead to a satisfactory outcome if the analyst is capable of a skillful adaptation of his psychoanalytic technique to the individual characteristics, needs and conflicts of his specific patient, and can avoid following in a rigid and narrow way his own “stereotyped” technique or his ideological view of how psychoanalysis should be. In particular, the treatment of severely disturbed patients seems to require much personal flexibility, creativity and sensitivity on the part of the analyst.

The fact that a statistically significant difference in the outcomes of psychoanalyses and psychoanalytic therapies was not found in the questionnaire sample cannot be interpreted as a “proof” that such a difference does not exist. Detailed analysis of the 129 follow-ups of the interview sample revealed clear differences between former psychoanalysis and former psychotherapy patients. The former psychoanalytic patients with “good enough” treatment outcome had internalised the analytic function in a more extensive and intensive way. Therefore their self-reflective functions were rated as “deeper”, “more elaborated” and “more differentiated” than those of the therapy patients. This finding may be useful for the interpretation of the findings of the Stockholm study on why former psychoanalytic patients increasingly improve more than the therapy patients over proportionately to the length of the follow-up period (cf Sandell, in this volume).

Most of the treatments had been terminated by the agreement of patient and analysts. 43 of the 118 former patients, whose data have been analysed in this respect, said that treatment had been too short for them; 11 said that treatment had been too long. Some psychoanalyses with medium or bad results were terminated after the insurance companies had stopped paying (after 240 or 300 sessions).

11 % of the former patients in the interview sample were not satisfied with therapy outcome. In some cases obviously tragic life events (as loss of a partner, unemployment etc.) had influenced this negative view of therapy outcome. In 4 % of the follow-ups either the former patient or his analyst were “very unsatisfied” with therapy outcome. In the group of the 11 % unsatisfied patients were persons with all kinds of diagnoses. However, all the five patients with the extremely negative therapy outcome had been borderline patients, although seven borderline patients in the interview sample had good and stable therapy outcomes (even 6,5 years after the end of treatment).

Another unexpected finding is the number of severely traumatised patients (externally traumatic events in the context of World War II, long separations from primary objects, psychiatric illnesses of caregivers, sexual abuse, illness during childhood etc.). 81 of the 129 former patients belonged to this subgroup. Many of the analysts seem to have treated these patients with a modified psychoanalytic technique. There seemed to be two groups of severely traumatised patients with good therapeutic outcome. In the first group (76 patients), the trauma was reactivated and worked through in psychoanalysis itself. Another small group (five patients) seem to have protected the analytic relationship from the enactment of the severest traumas and, instead, used the analytic relationship as a “holding function”, reflecting with the analyst on the reactivation of the trauma in an external relationship. All these analysts said that they regretted that while analysis had proved to be quite successful, negative transference was not worked through thoroughly.

Evaluation

This is the most significant follow-up study of psychoanalysis performed thus far. Of particular importance is the careful attention paid to issues of sampling and the collection of the retrospective data with as little contamination from bias by current status. While no differences were found between the outcome of psychoanalysis and psychoanalytic psychotherapy on long term follow-up, qualitative

analyses revealed some important differences. The way these researchers approached the opportunities presented by qualitative research are of great interest to all of us. The study results are actually presented as a highly original combination of qualitative and quantitative methods with great promise for replication in future follow-up or follow-along investigations or even in prospective studies.

Project TR-EAT: A Multicenter Study of Inpatient Psychodynamic Treatment of Eating Disorders in Germany

Kächele, H. (1999). A multicenter study of expenditure and success in psychodynamic therapy of eating disorders. Study design and initial results. *Psychother Psychosom Med Psychol*, 49(3-4), 100-108.

Kächele, H., Kordy, H., Richard, M. (in press). Therapy amount and outcome of inpatient psychodynamic treatment of eating disorders in Germany: Data from a multicenter study. *Psychotherapy Research*, 11(3).

The Center for Psychotherapy Research in Stuttgart initiated a multicenter study on the effectiveness of inpatient psychodynamic treatment of eating disorders in the early 1990s. Project TR-EAT was a naturalistic, longitudinal, and observational study of outcome. Besides this overall objective, the study aimed to estimate the amount of therapeutic resources that were applied within the various treatment programs in everyday clinical practice and the impact on the short- and medium-term course of eating disorders. After the pilot phase, the main study began in 1993. It was completed at the end of 1998 with a 2.5-year follow-up assessment. Forty-three specialty hospitals and departments for psychosomatic medicine and psychotherapy in Germany participated in the data collection. Treatment duration and intensity were not standardized to observe the naturalistic clinical course of treatment. Patients included in this study were at least 18 years old and fulfilled diagnostic criteria for anorexia nervosa (AN) or bulimia nervosa (BN), or both, at screening. The study investigates (a) factors that determine length of treatment and (b) the effect of treatment duration and other factors on outcome for patients with eating disorders.

Sample

Treatment of 1,171 patients from 43 sites in Germany was examined; 355 patients fulfilled diagnostic criteria for AN, 647 patients fulfilled criteria for BN, and 169 patients fulfilled criteria for both disorders. The majority were female. Less than 4% of the sample were male (AN = 3.3%, BN = 2.3%). The mean age of the participants was 24.8 years for AN (SD = 5.6) and 25.9 years for BN (SD = 6.3). The mean duration of illness before admission was 8.2 years (SD = 6.1) for BN and 5.7 years (SD = 5.3) for AN. Anorexic patients had a body mass index (BMI) 72.1% of expected (SD = 8.4).

At the 2.5-year follow-up, 879 patients (75.1%) could be contacted. A comprehensive interview was conducted with 781 patients (66.7%). Limited information given by family or doctors was available for 98 patients (8.4%). Of the 292 patients who could not be reached, only 64 declined participation. It was not possible to establish contact with the other 207 patients despite repeated attempts to contact them via mail and telephone. For various other reasons, no data were available for 11 patients. In the course of this study, 10 patients died: 6 through suicide, 1 as a result of medical complications related to the illness, and 3 of unknown causes. Few differences were found between patients who participated in this 2.5-year study and those who did not.

Measures

All patients were assessed over a 2.5-year period. At therapy admission and discharge, as well as 1 year and 2.5 years after index admission, patients were questioned as to physical condition, mental state, and level of psychosocial functioning using a comprehensive battery of inventories. At the same time, the condition of each patient was clinically evaluated at admission and discharge by their primary therapist. The 2.5-year assessment was conducted by clinical experts. The 1-year assessment was conducted by mail and thus was limited to self-evaluation. The questionnaires covered sociodemographic and historical variables; the battery of psychological inventories included the Symptom Checklist-90-R (SCL-90-R), the Eating Disorder Inventory (EDI), the Freiburg Personality Inventory (Freiburger Persönlichkeitsinventar [FPI-R]), the Narcissistic Personality Inventory (Narzissmus Fragebogen), and the Parental Care Index (Familien-Klima-Skalen). Treatment exposure was measured using weekly documentation of the frequency and duration of all psychotherapeutic contact. In addition, the occupation of the participant was considered (to estimate therapy cost), and

the number of participants in group or family therapy was monitored. The 2.5-year follow-up assessment was completed using a semistructured interview, the Longitudinal Interval Follow-up Evaluation (LIFE; Keller, Lavori, Friedman, et al., 1987), adapted for use in the present study. Retrospective, longitudinal information on symptomatic disturbance (the “change points”) during the postdischarge course of the illness was obtained using LIFE. This information was used to track the course of recovery and relapse between the point of discharge and the 2.5-year follow-up interview (Kordy et al., in press).

Results

The following results are based on a sample of 1,112 patients (AN: $n = 338$, BN: $n = 605$, AN and BN: $n = 169$) from 43 hospitals, of which 733 (AN: $n = 225$, BN: $n = 399$, AN and BN: $n = 109$) participated in the 2.5-year follow-up assessment.

The mean treatment duration for all three subclasses of eating disorders was roughly 11 weeks (median weeks: AN = 11.1; BN = 11.4; AN and BN = 10.6). Twenty-five percent of patients were treated for 4 to 8 weeks; a further 50% were treated for 9 to 13 weeks. Fifteen-week treatments were rare, and those that continued for more than 6 months were exceptionally rare.

To investigate which variables defined treatment duration, a stepwise linear model was used. The construction of the model required three steps. The results are presented in Tables 1 and 2. Variances within and between hospitals were estimated using a first model without predictors⁵ (Model 1 in Table 1), also known as an unconditional model (Bryk & Raudenbush, 1992). The effect of the patient-related variables on treatment duration is presented in the second column (Model 2). Finally, in the third step, data regarding the specialty status of the treatment offered were included (Model 3). As can be seen in Table 1, patient characteristics accounted for only a small percentage of variance within the hospitals. These patient variables did not explain variance between the hospitals.

Table 1 Proportion of Variance Explained of Treatment Duration Within and Between Hospitals

	Model 1^a $\sigma^2 \pm SE$	Model 2^b $\sigma^2 \pm SE$ σ^2 explained	Model 3^c $\sigma^2 \pm SE$ σ^2 explained
Between	19.19 \pm (4.69)	19.95 \pm (4.91)	14.75 \pm (3.69) 23.1%
Within	20.44 \pm (0.96)	19.78 \pm (0.94)	3.2% 19.33 \pm (0.91) 2.3%

^aWithout predictors.

^bPatient characteristics as predictors.

^cHospital characteristics.

Detailed results for Model 3 can be found in Table 2, which lists all variables with a statistically significant effect. The strongest effect was found in hospitals with a separate eating disorders ward. When compared with a specialty eating disorders hospital, their patients received 7 additional weeks of treatment on average. A few patient characteristics were moderate predictors of outcome. Patients with low treatment motivation at baseline received half a week less treatment on average than those with higher motivation.

Table 2 Selected Predictors of Treatment Duration

Predictor	B	SE
Other vs. specialty hospital	0.42	3.95
Specialized program vs. specialty hospital	-0.33	3.98
Specialized ward vs. specialty hospital	7.29	4.36*
Motivation to change: no	-0.49	0.16***
Psychological distress (GSI)	0.50	0.18***
Age	0.013	0.016
Weight (% of expected BMI)	-0.006	0.004
BN diagnosis	4.06	1.32***
Weight \times Diagnosis (BN)	-0.05	0.01***
Psychological Distress \times Diagnosis (BN)	-0.74	0.23***
Age \times Diagnosis (BN)	0.05	0.03***

Note. GSI = Global Severity Index of the Symptoms Checklist-90-R; BMI = body mass index; BN = bulimia nervosa. * $p < .1$. ** $p < .05$. *** $p < .01$.

Although the effect of 4.06 for BN diagnosis appears significant, it does not indicate that BN was treated 4 weeks longer than AN on average. Three further significant interactions are involved in interpreting diagnosis effect. For AN patients a difference of 1 point on the SCL-90-R Global Severity Index (GSI) correlates with an extended treatment length of half a week, whereas for BN patients the same difference on the GSI leads to 0.24 weeks shorter treatment because of a GSI \times BN interaction. A weight gain of 16% BMI, which equals an increase in weight from the upper diagnostic boundary of 17.5 BMI to the expected BMI of 20, results in a treatment shortened by 0.1 weeks for AN patients. This correlation is even stronger for BN patients; a weight gain of 16% BMI results in a treatment shortened by 0.75 weeks. Because BN patients have a higher weight at baseline, the effect is even more pronounced. The treatment duration of very overweight BN patients (greater than 130% BMI) is approximately 2 weeks shorter than that of BN patients with expected BMI. For AN and BN patients with 90% of expected body weight, a difference of only 0.56 weeks is found. These examples underscore once more the role of interaction effects.

Outcome rates at the end of treatment and at the 2.5-year follow-up assessment are presented in Table 3. Essentially, the present definition of treatment success implies an almost complete lack of symptoms or only symptoms for which immediate further treatment is not necessary. Positive outcome thus defined was found in a minority of AN patients and in patients who met both AN and BN criteria: 11% and 17%, respectively, at the end of treatment. Self-report evaluations and therapist's evaluation did not differ substantially. Positive outcome rates for BN were markedly higher. However, outcome success rates as assessed in therapist evaluations (45%) differed greatly from self-evaluations (31%). At the 2.5-year follow-up assessment, a significantly greater proportion of patients with AN (36% based on therapists reports and 33% based on patients reports) and with AN and BN (26% vs. 21%) were to a large extent symptom free. However, the rate of positive outcome for BN dropped slightly (36% based on therapists' reports vs. 22% based on patients' reports).

Table 3: Rate of success (in %) at discharge and at 2.5 years follow-up classified according to treatment duration

Perspective	Discharge				2.5 years follow-up			
	≤11 weeks	≥11 weeks	Total	OR	≤11 weeks	≥11 weeks	Total	OR
AN	<i>n</i> =166	<i>n</i> =170			<i>n</i> =112	<i>n</i> =113		
Patients	7.8	13.4	10.6	1.1	34.8	31.0	32.9	0.7
Therapists	9.6	15.1	12.4	1.8	36.6	34.5	35.6	0.8
BN	<i>n</i> =292	<i>n</i> =303			<i>n</i> =197	<i>n</i> =202		
Patients	33.0	29.0	31.0	0.7 ^a	20.6	24.0	22.2	1.0
Therapists	48.0	43.0	45.4	0.6	35.5	37.1	36.3	0.9
AN+BN	<i>n</i> =73	<i>n</i> =95			<i>n</i> =44	<i>n</i> =65		
Patients	13.7	15.8	14.9	1.2	27.3	16.9	21.1	0.5
Therapists	13.7	19.0	16.7	1.5	31.8	21.6	25.7	0.6

Note. Odds ratios after propensity score adjustment (with the exception of anorexia and bulimia nervosa). ^a1 within the 95% confidence interval.

A patient-reported difference in outcome for shorter and longer treatments at the end of treatment was found only in BN patients. For patients with bulimia, the patient-reported positive outcome rate for shorter treatments was 33% higher than the rate for longer treatments with other correlated variables controlled for. The therapist-reported success rate for patients with anorexia was about 80% higher for longer term versus shorter term cases. However, this difference in success rates was not statistically reliable (despite the considerable sample sizes). Overall, there was no recognizable difference in outcome between shorter and longer treatment at the 2.5-year follow-up assessment. This analysis does not preclude the possibility that unconsidered variables may interact with treatment duration and intensity in predicting outcomes.

An analysis of possible predictors of treatment success at the 2.5-year follow-up was conducted, using a stepwise multivariate logistic regression method within AN and BN groups, separately. No substantial differences between outcome at the various hospitals could be found. The analysis of the predictive variables of treatment success used a simple logistic regression approach, excluding the hospital factor from the design. The resulting models for AN and BN differ with regard to the identified predictors as well as to the goodness of fit.

Overall, the goodness of fit was moderate for both models. The model for AN explained 31% of the variance. The model for BN showed 13% variance explained. Even after controlling for other covariates, treatment intensity had no effect on the outcome for patients with AN. However, treatment length (short vs. long) in interaction with the age variable was a significant predictor. Low body weight and low desired body weight (%BMI) at treatment admission and significant deviations as measured on the FPI-R were risk factors associated with a poor outcome. Examining the interaction between treatment duration and age revealed that high patient age indicates a poorer outcome. The predictive value of this variable was intensified in the outcome of younger patients: Those in the 18- to 20-year age range had two to four times higher rates of positive treatment outcome with shorter treatments than age-matched counterparts with longer treatments. This correlation is reversed for older patient outcomes: Those patients who received a longer treatment actually had an increased rate of good outcome. However, this rate as a whole was considerably lower than that of younger patients.

The results for BN are quite complex: Multi-impulsivity, additional anorectic symptoms, and high number of previous treatments were associated with lower success rates. Treatment success was only slightly lower for patients who scored high on the first three EDI subscales (i.e., those with a more severe eating disorder syndrome). The effect of treatment duration is complicated by interaction effects with age and with the Morgan-Russell E subscale, in which relationships to family and friends are presented. Patients with difficulty in establishing relationships (low Morgan-Russell scores) had a better prognosis when treated for a longer rather than a shorter period. If patients scored at least moderately on psychosocial functioning, the reverse effect resulted in the good outcome increasing with shorter treatment. The advantage of longer treatment for outcome was stronger for younger patients with poor social adjustment than for older patients, whereas for older patients with good psychosocial functioning the advantage of shorter treatment was stronger than for younger patients.

The results of this study suggest that inpatient psychodynamic treatment should have a duration of at least 8 to 12 weeks, whereas a longer treatment for older patients older than 40 years could be beneficial. Further treatment extensions should be based on individual cases as well as on the course of improvement. The decision for further inpatient or outpatient treatment should not be independent of patient status at point of discharge. Rather, new and specified treatment methods should be developed. The results of the medium-term course of eating disorders (Kordy et al., in press) suggest an increased risk of relapse in the period immediately after hospitalization. This could be counteracted by a maintenance treatment. Booster therapies could be such an approach to reduce the rate of relapse that occurs a few months after discharge. Stepwise care provision could serve as a guiding principle for the development of a comprehensive treatment strategy (Royal College of Psychiatrists, 1992). Experiences with such strategic approaches are positive in those countries that do not separate inpatient and outpatient treatment as strictly as is the custom in Germany.

Treatment duration in interaction with psychosocial functioning seems to be an indicator of outcome: The probability of a good outcome increased for those patients with good social adjustment. This effect was intensified in older patients and suggests that long treatment (i.e., long absence) has a reduced effect for patients with good social functioning, especially when those patients are married. However, this effect reverses for young patients with difficulties establishing relationships: They do not have these problems in a longer treatment.

Evaluation

This is an ambitious, high quality study which is the best attempt so far to demonstrate the value of intensive long-term treatments using naturalistic methods. Unfortunately, the study yielded little evidence that suggests that intensive psychotherapy for AN or BN might be of special value. The participation of such a large sample of hospitals in Germany, whilst an advantage in terms of statistical power, also limits possible conclusions. For example, the differences in patient mix between the hospitals limit the interpretation of the observed effect of the specialty level of the treatment. The possible bias for this factor alone or in association with the various clinical settings could not be adjusted with the propensity score method used because that would have required that all hospitals apply longer as well as shorter treatments.

Of note for the findings regarding treatment length is the range that was used in this study: The treatments investigated run from 5 to approximately 16 weeks. Treatments shorter than 5 weeks were excluded from the analyses because it was uncertain to what extent the duration was intended and what proportion could be attributed to dropouts. Treatments longer than 16 weeks were not found frequently enough to justify inclusion. Furthermore, the possible effect of many variables not included in the model remained unobserved (e.g., parameters for the course of illness not included in this study, further characteristics of the hospitals, and parameters for the treatment program). Other possible factors within the follow-up period, such as the effect of further outpatient treatment or critically decisive life events, were not included in this study and thus limit generalization.

The Significance of Childhood Neurosis for Adult Mental Health: A Follow-Up Study

Waldron, S., Shrier, D. K., Stone, B., & al. (1975). School phobia and other neuroses: a systematic study of the children and their families. *American Journal of Psychiatry*, 132, 802-808.

This long-term follow-up study of neurotic children in general focused on children with school phobia because of the evidence that impairment continues into adolescence, while the symptom itself tends to remit during childhood with most short-term therapies. Therefore, extensive psychotherapy for this condition would ordinarily be indicated only if the long-term prognosis were unfavourable.

Sample

The mental health of 42 young adults who had suffered from a neurosis in childhood was compared with that of 20 control subjects. A child psychiatrist screened the charts of all patients under 13 who were first evaluated at the researchers' clinic between 1955 and 1962 (N=627). Using the classification of psychopathological disorders in childhood of the Group for the Advancement of Psychiatry (Group for the Advancement of Psychiatry, 1966), it was possible to differentiate between those children who suffered from neurotic disorders or other milder conditions (e.g., reactive disorders or developmental disturbances) and the sicker children. Those who had experienced a school phobia were identified from among the neurotic group. Criteria of classification were first refined in a pilot series of charts, resulting in excellent interrater reliability.

Two-thirds of the over 600 children were considered sicker than neurotic and excluded from further study. Forty-five of the 203 neurotic children were identified as having had school phobia. A panel of 35 subjects was drawn up from the group with school phobia; this was the maximum number that could be studied. One other neurotic child was then matched to each of these children with school phobia on the basis of sex, age at referral, and year of referral to the clinic from the class that each child with school phobia was attending. The researchers were able to locate 91% of the study's 105 subjects, of whom two-thirds agreed to be interviewed. 24 phobic subjects, 18 subjects with other neuroses, and 20 controls were seen. Fifty-eight percent of the follow-up group were men. Most subjects were of middle- to lower- class origin. The subjects averaged 22 years old at follow-up; fewer than 5% were younger than 18.

Measures

The Menninger Clinic's Health-Sickness Rating (HSR) Scale (Luborsky, 1962; Luborsky & Bachrach, 1974), in which ratings are anchored to case descriptions, and the Current and Past Psychopathology Scales (CAPPS), a semi-structured clinical interview with rating scales developed by Endicott and Spitzer at Columbia University (Endicott & Spitzer, 1972) were used. Each time an individual was rated for severity of illness on the CAPPS, the case descriptions provided with the HSR scale were used, a rating on the 100-point HSR scale was given, then converted to the corresponding score for the severity of illness expressed in the 6-point scale. 4 subscales of this overall health-sickness rating were developed, reflecting different aspects of mental health and based upon the 7 subscales originally developed at the Menninger Clinic.

Reliability of the two psychiatrists conducting the follow-up interviews was monitored by independent ratings of an unselected sample of the tape recordings of interviews. Reliability was excellent for the various scales; for example, the most important judgment, the HSR score, showed an interclass correlation coefficient of .87 between the two raters. Neither interviewer had any knowledge of the old records or of the classification of the subject at the time of the interview, except as the subject revealed it himself in the course of the interview.

Results

Because there were so few differences between the 2 groups of former patients, the former patient group as a whole was compared with the control group for the remainder of the analysis.

There were striking differences in distribution of diagnosis and degree of illness at follow-up between the former patients as a whole and the control group.

Table 1. Health Sickness Ratings and Diagnosis at Follow-Up of 42 Former Patients (FP) and 20 Control Subjects (C)

Health-sickness rating*	No specific diagnosis		Neurosis **		P.D.		Psychosis		Total		Percent	
	FP	C	FP	C	FP	C	FP	C	FP	C	FP	C
1: None	1	10	0	0	0	0	0	0	1	10	2	50
2: Minimal	9	7	0	0	0	0	0	0	9	7	21	35
3: Mild	11	2	1	0	1	0	0	0	13	2	31	10
4: Moderate	4	1	7	0	3	0	0	0	14	1	33	5
5: Severe	0	0	1	0	2	0	2	0	5	0	12	0
6: Extreme	0	0	0	0	0	0	0	0	0	0	0	0
Total no. %	25	20	9	0	6	0	2	0	42	20	-	-

* HSR scores on the 6-point scale correspond to the original 100-point scale as follows: 1=86-100, 2=76-85, 3=66-75, 4=51-65, 5=26-50, 6=0-25.

** The numbers for the neurosis have been corrected for computer overdiagnosis of phobic neurosis when the clinical picture did not warrant this specific diagnosis.

40% of the former patients, but none of the controls, received specific diagnoses from the computer program ($p<.01$, chi square analysis). Twenty-one percent of the former patients were diagnosed as having specific neurosis, (Four suffered from depressive neurosis; 2 from hysterical neurosis, conversion type; 1 from phobic neurosis; 1 from anxiety neurosis; and 1 from obsessive-compulsion neurosis.) 14% as having a personality disorder including drug dependence, and 5% as being psychotic, although neither of these 2 patients had ever been hospitalized. Thus a wide range of psychopathology was found in the former patients. The HSR scales showed an even more striking difference between the former patients and the controls: more than 75% of the former patients were at least mildly ill, compared to only 15% of the controls ($p=.001$).

The relationship between the nature and degree of illness of the 2 groups can be summarized as follows: 64% of the former patients were mildly to moderately ill, predominantly with a neurosis or character disorder, while another 12% were severely ill, predominantly with a personality disorder or psychosis. In contrast, only 15% of the control subjects were mildly to moderately ill, all with character disorders. None of the controls was more severely ill.

We were also interested in which of the different aspects of mental health was impaired. The data in table 2 demonstrate that the former patients were quite impaired in severity of their symptoms and in their interpersonal relationships and less impaired occupationally and in breadth of their interests. In all aspects they were substantially less healthy than the control subjects.

Table 2. Percent of former patients and control subjects with more than minimal impairment on the HSR Scale and Subscales

Item	Former patients (n=42)	Control subjects (n=20)	Significance*
Overall HSR	76	15	p<.001
Occupational role	48	5	p<.001
Interpersonal relationships	79	25	p<.001
Severity of symptoms	74	20	p<.001
Breadth & depth of interests	52	10	p<.01

* Significance was determined by analysis of variance over entire 6-point range (Student's t test).

Evaluation

No patient received adequate treatment by psychoanalytic standards. If the treatment received resulted in some improvement for some of these children, then without intervention the former patients would have been, if anything, sicker. Thus this study's findings make necessary the conclusion that these children need effective treatment. This study is consistent with other less thoroughly psychoanalytically informed investigations that reported enduring psychological problems in adulthood for children diagnosed as anxiety disorder (Champion, Goodall, & Rutter, 1995; Cohen, Cohen, & Brook, 1993; Cohen, Cohen, Kasen et al., 1993). Thus, while ordinary psychiatric treatment cannot prevent the relatively poor adult outcomes of severe phobic disorder, whether child psychoanalysis can achieve this remains an unanswered question.

Anna Freud Centre Studies 3: The Long-term Follow-up of Child Analytic Treatments (AFC3)

Fonagy, P. & Target, M. (1998). *The outcome of psychodynamic therapy: the work of the Anna Freud Centre*. Invited public lecture, London, England, September 1998.

Target, M. & Fonagy, P. (1998). The long-term follow-up of child psychoanalysis. Paper presented at the *Vulnerable Child Symposium* at the American Psychoanalytic Association, Toronto, Canada, May 1998.

This is an ongoing follow-up study asking the simple question of whether psychoanalytic treatment in childhood enhances adult functioning. The epidemiological background for this study is provided by the growing recognition that children do not grow out of either emotional or behavioural disorder. The adult outcome may not be overt pathology alone but may manifest as poor planning, inadequate sexual relationships, absence of social support, low self-esteem, the persistence of trauma, insecure attachments and adverse life events. From a psychoanalytic point of view, this may be explained as indicating continuities in the representational system. The question is whether psychoanalytic intervention in childhood functions as a protector?

A fascinating recent study from Professor Sir Michael Rutter and his colleagues reported a 20 year follow-up of over 200 individuals half of whom had childhood disturbance aged 10-11. Measures of psychosocial functioning included a life events schedule, a measure of the quality of planning, particularly during life transitions, adult personality functioning and adult psychiatric diagnoses. The key finding of the project was that childhood psychiatric disturbance was associated with an increasing frequency of severe negative life events during adulthood. These could not be seen as the consequences of adult psychiatric disorder, or continued contact with the family of origin, nor could they be simply discounted as brought on himself by the individual (e.g. divorce may be considered self-induced but loss of employment consequent upon the closing of a factory is hard to conceive of in this way). It is more likely that the psychological sequelae of childhood psychiatric disturbance (such as poor planning or a handicap in understanding minds) leads these individuals into more than usually risky life situations. This, in turn, increases the probability of encountering negative life events. The question the present study addresses was if therapy in childhood has the capacity to reduce such risks. Clearly, such protective effects would only be expected from interventions which had been relatively successful in childhood.

Sample

Four groups are being recruited for this study: (a) those who received intensive psychoanalytic treatment; (b) those who received once (or twice) weekly psychotherapy; (c) the siblings of the treated groups (in order to control for the effect of shared family environment) and (d) a matched group whose disorder was untreated in childhood. Subjects are mostly young adults between 24 and 35 and individuals whose diagnosis was too severe to permit evaluation using the instruments were excluded.

Measures

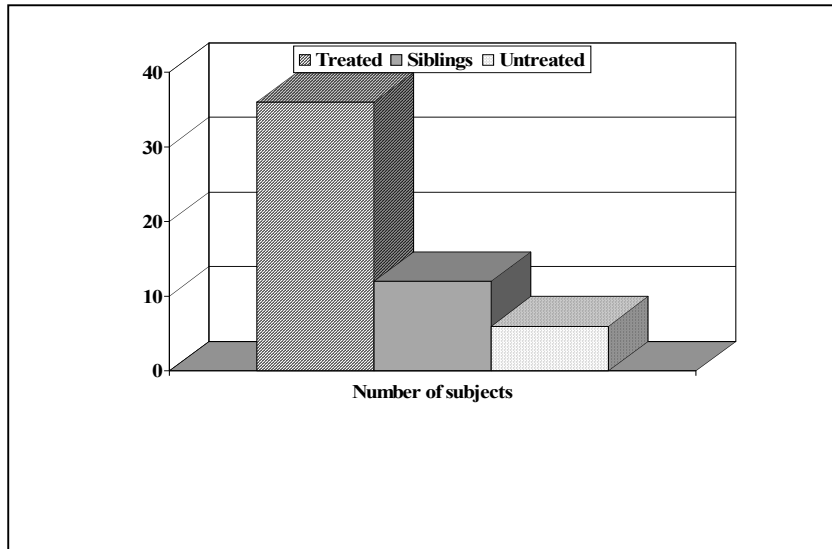
Three types of measures are used. First, and perhaps most central, in-depth interview based objective measures of life-events, transitions and plans, current personality functioning, psychiatric and personality disorder diagnosis. Second, self report measures of symptomatology (SCL-90), physical health (SF-36), IQ (NART), personality (EPQ) etc. And third, psychodynamic measures of attachment and internal representations of object relationships which provide relatively reliable data concerning the quality of object relationships, the coherence of object representations, expectations concerning other's behaviour, morality, perspective taking, hostility and mentalizing capacity.

Preliminary results

We are still in the middle of the study and results reported here are subject to modification as the sample accumulates. In particular, the difficulties in recruiting untreated subjects makes comparisons

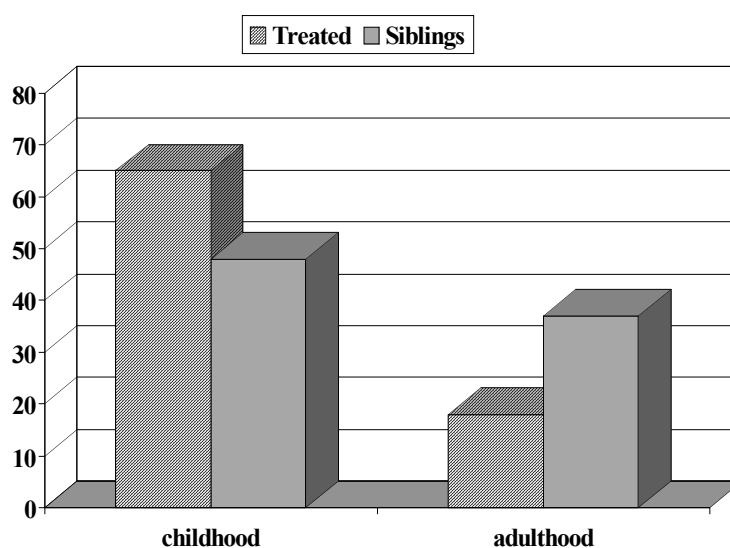
premature for this group. The researchers feel somewhat more confident of the comparisons between treated and untreated siblings and between treated subjects who achieved a clinically significant change and those whose therapeutic outcome in childhood was poor. Figure 1 displays the numbers of subjects traced thus far and on whom these preliminary results are based.

Figure 1: Subjects so far traced, interviewed and coded



There is evidence to support the researchers' hypothesis that whilst in childhood the vast majority of treated subjects suffered significantly more adversity relative to their siblings, in adulthood the siblings were more likely to experience significant life events than the treated subjects (see Figure 2).

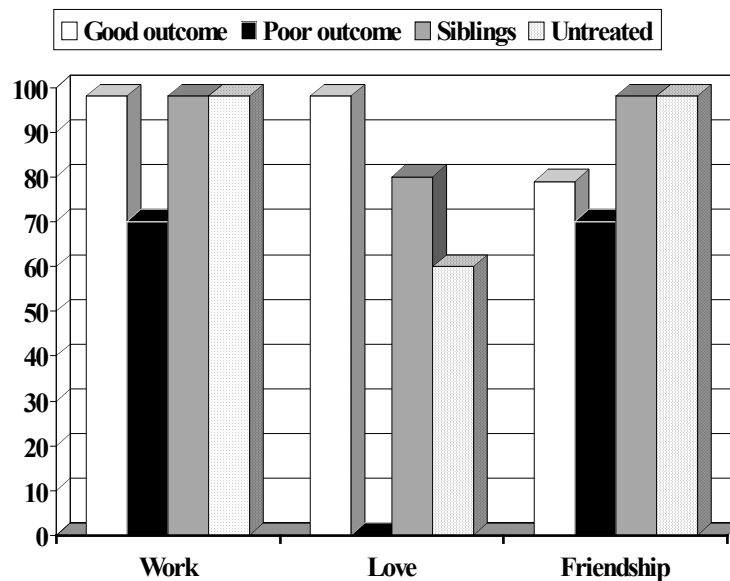
Figure 2: Severe adversity in childhood and adulthood for treated subjects and siblings



In terms of personality functioning, in the work domain all groups in the current sample with the exception of those whose childhood outcome was poor are doing well. In the love relationship

domain, individuals with successfully treated psychiatric disorders in childhood appeared to be doing somewhat better than their siblings or the untreated controls. However, none of those unsuccessfully treated in childhood appears to have an adequate love relationship. In terms of friendships, even those successfully treated appear to be somewhat disadvantaged relative to their siblings (see Figure 3).

Figure 3: Good personality functioning in three domains across treated patients with both good and poor outcome, siblings and untreated controls



In terms of attachment security, those children whose outcome was relatively good appear to do as well as their siblings in terms of the likelihood of secure attachment. Those unsuccessfully treated appear to be predominantly preoccupied and entangled, whereas those untreated appear to be predominantly dismissing (see Figures 4, 5 & 6 which display 3-way and 5-way attachment classifications and examine the 3-way classification by therapeutic result respectively).

Figure 4: 3-way attachment classification for treated group, siblings and untreated group

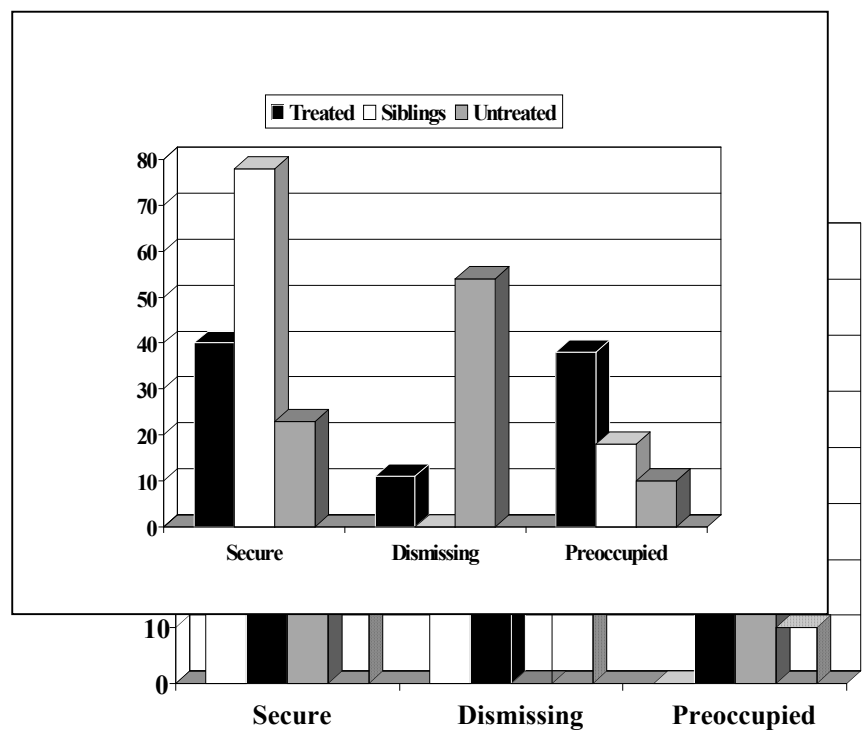
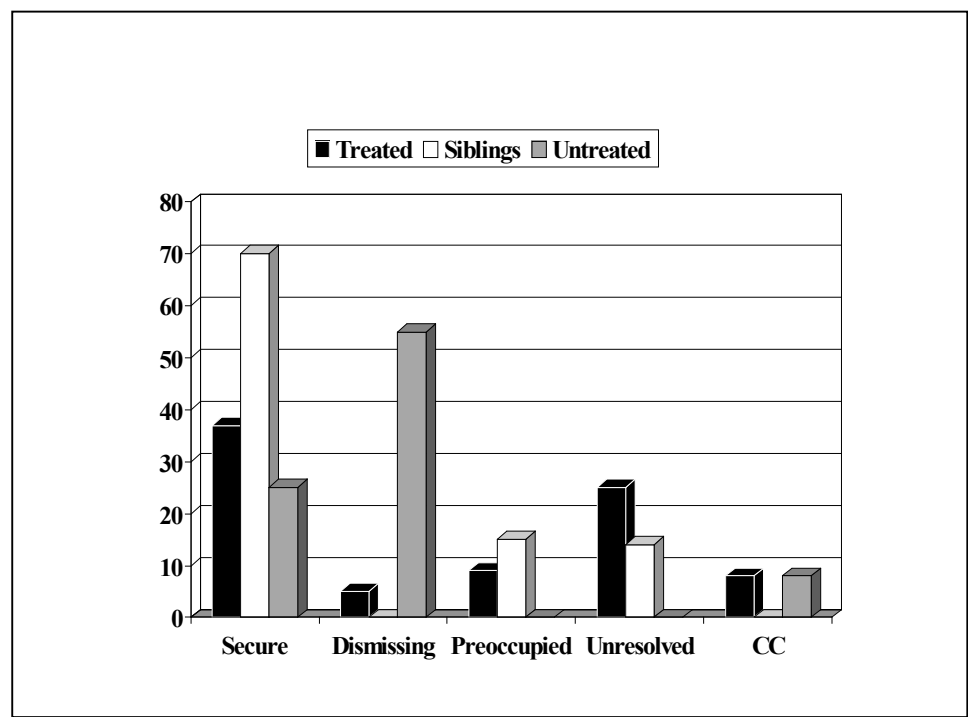


Figure 5: 5-way attachment classification for treated group, siblings and untreated group

Figure 6: 3-way attachment classification for good outcome and poor outcome: treated groups, siblings and untreated group

In terms of the capacity to mentalise, to reflect on mental states, as predicted, the successfully treated group does somewhat better than all the others, whereas those whose outcome was poor in childhood appear to remain unable to conceive of mental states accurately (see Figure 7).

Figure 7: Mean reflective function in good and poor outcome treated groups, siblings and

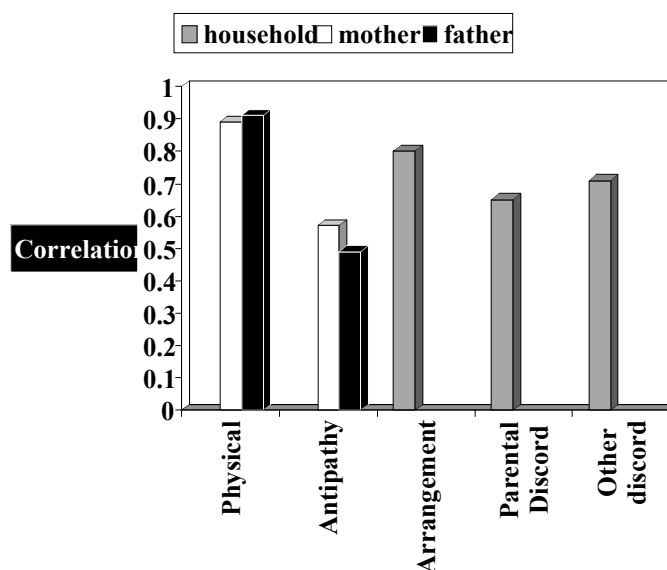


untreated controls

In brief, successful childhood treatment does appear to be somewhat of a protective factor, although perhaps less dramatically so than it might have been hoped. However, where treatment was unsuccessful, this seems to represent a risk factor, with unsuccessfully treated individuals perhaps even worse off than those whose disorders were untreated. It should be borne in mind that the samples are as yet small and further interviews may yield quite different observations.

As part of this study the researchers were able to make a number of other preliminary observations of some interest. For example, they were able to compare the information about childhood gained from these retrospective interviews with the original observations carefully recorded by clinicians under Anna Freud's supervision. It seems that the agreement in recall between case-files and adult recollection was relatively high, particularly for physical abuse and discord in the parental relationship (see Figure 8).

Figure 8: Agreement between ratings of case files and childhood experience of care and abuse interview (CECA)



Ratings also matched case-files in terms of the extent to which childhood experiences were regarded as loving, rejecting, pressuring or involving. Thus it may be concluded, with respect to the current controversy concerning the accuracy of childhood memories, that these are at least factually broadly reliable.

Is there evidence that the forgetting (repression) of adverse experience is associated with psychopathology or poor personality functioning? It seems that individuals who are better functioning remember somewhat less well: their recollections are coherent but slightly idealising. They appear to smooth over or forget reporting adverse experiences noted at the time of their assessment. It seems their memory problems arise less from simple forgetting than the reinterpretation of negative experiences as positive. The question arises, if it is sensible to approach psychological therapy by helping people to remember, when relatively good functioning seems to be associated with the capacity to forget.

A further interesting unanticipated observation was that actual trauma remembered clearly in adulthood and claimed never to have been forgotten was nonetheless often not recognised by clinicians working 10-20 years ago. Some of the poor long-term outcome may be associated with therapists interpreting these children's reports as fantasy and these individuals repeating such traumata in later development. Perhaps it is not surprising that such individuals remained preoccupied, entangled in their childhood experiences, with their traumatic experiences unresolved, their psychiatric functioning is less than optimal and they are unable to adapt to either work or social situations.

A further observation related long-term outcome to technique. Which therapeutic techniques proved to be effective in the long term? Again speaking broadly, it seems that traumatised borderline children are not substantially helped by interpretations of conflict, Oedipal or pre-Oedipal. More simple therapeutic interventions, focussing on the elaboration of the child's current mental state, either with regard to the therapeutic situation or the child's current life appeared to be far more effective for these childhood problems. Focussing on the child's emotional life, his unformulated but perhaps frightening thoughts and fantasies, appeared to bear the richest therapeutic fruit.

Evaluation

This is an interesting study with an unusually thorough assessments of adult functioning. The small current samples makes the findings reported here highly preliminary and subject to change. The findings, if they are confirmed by a fuller review of untreated patients, indicate that children who receive psychotherapy are better off in the long-term than those who are not able to have access to this intervention. As these groups could only be matched retrospectively, these results remain suggestive rather than conclusive.

Saarland Study of Psychotherapy Effectiveness and Patient Satisfaction

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Background

The study presented here is a replication study of the US survey on the satisfaction of patients with their treatment that was conducted by Martin Seligman in 1994 on instruction of *Consumer Reports*. Just like the study of Seligman, this investigation aims to prove the effectiveness of psychotherapeutic treatments *in the field*, whereby the researchers are particularly interested in its dependence on specific psychotherapeutic orientations (above all psychoanalysis, psychodynamic psychotherapy, behavior therapy, client-centered therapy) and on treatment duration. Additionally, the effectiveness of psychotherapeutic treatment is to be compared to other ways of treating mental disorders (family doctor's treatment, pharmacological treatment, self-treatment in self-help groups). Thereby, the question of effectiveness is to be answered solely from the subjective perspective of the patients. In order to determine effectiveness, the researchers took the dimensions of effectiveness of the CR-study (Seligman, 1995) as a basis: 1. specific improvement of the problem that led the patient to therapy, 2. satisfaction with treatment, 3. global improvement of the overall emotional state.

Sample and Measures

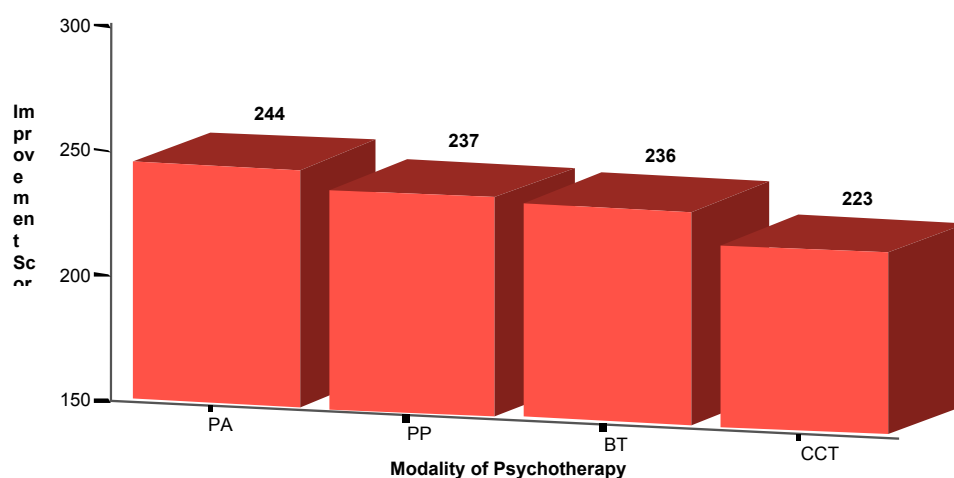
To collect the data, the original *Consumer Reports* questionnaire was used. After having received the right of user, the questionnaire was translated by a native speaker and was adapted to German standards if required. The nationwide distribution of the questionnaire was carried out by the *Stiftung Warentest*, by different psychotherapeutic associations and via the internet. From June 1st, 2000 to February 28th, 2001, a total of 1621 questionnaires were received, of which 1506 have been included in the study; 115 questionnaires had to be left out for different reasons. Since the socio-demographic characteristics of the subjects of the sample correspond to the characteristics of psychotherapeutic patients in Germany as described in literature (see also Franz, 1997; Scheidt et al., 1998; Rüger & Leibing, 1999), the researchers were able to proceed from a relatively representative selection of their sample.

Results

Taking the dimensions of effectiveness mentioned above, the researchers used the same method as in the *Consumer Reports*-study to determine a global scale for effectiveness. This scale ranges from 0 to 300; 300 meaning a maximum of therapeutic effectiveness, 150 meaning no effectiveness at all, and values below 150 indicating a negative effectiveness in the sense of an increase of psychic complaints in the course of the treatment.

The first analysis of the data refers only to psychotherapeutic treatments and does not consider treatments by family doctors and self-help groups. The results are as follows:

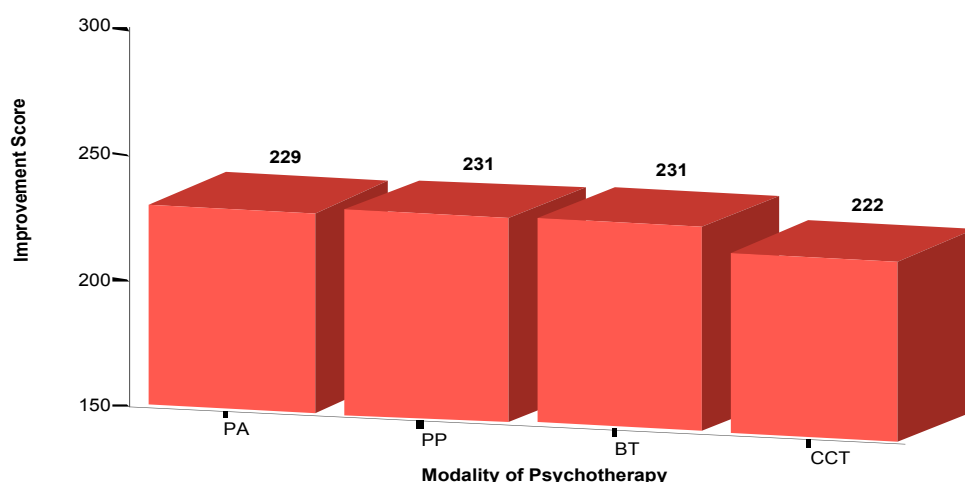
Figure 1: Effectiveness of psychotherapy



Preliminary calculations detect a statistically significant difference between psychoanalysis (PA) and the other forms of treatment. Also, there is a significant difference between psychodynamic psychotherapy (PP) respectively behavior therapy (BT) and client-centered psychotherapy (CCT). The effectiveness of behavior therapy and psychodynamic psychotherapy is on the same level.

However, there is good reason to suppose that the differences in effectiveness essentially cannot be attributed to the therapeutic orientation, but to the duration of the treatment. The majority of psychoanalytic patients have been treated for more than 2 years, whereas an equally high share of the treatments in behavior therapy lasted less than 2 years. A comparison of the patients whose treatment lasted less than 2 years, testifies to this assumption:

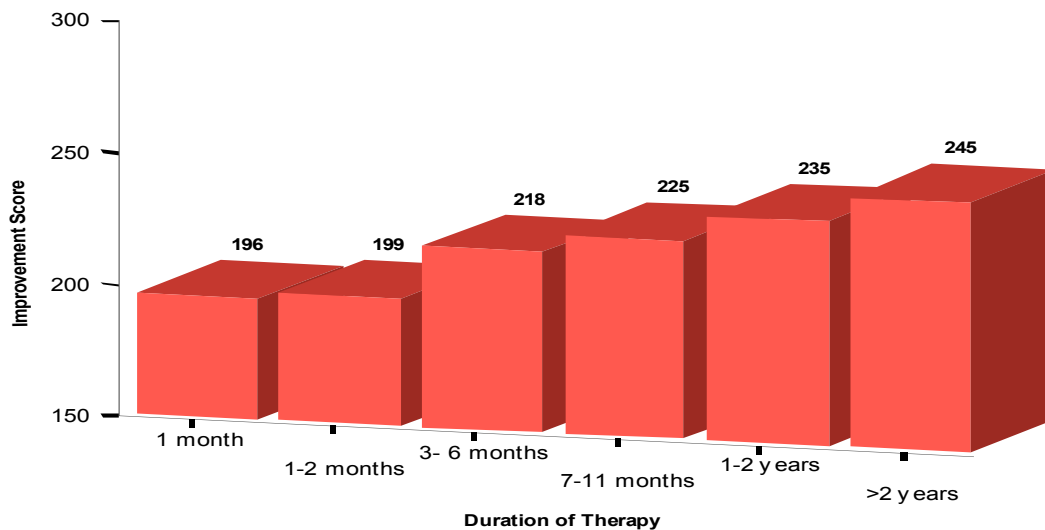
Figure 2: Effectiveness of treatments with a duration of less than 2 years



At the same time, the marginal differences in effectiveness did not reach a level of significance.

The distinct influence of treatment duration onto treatment outcome can be seen when taking a look at the effectiveness (considering all therapeutic orientations) as a function of length of treatment:

Figure 3: Effectiveness in relation to treatment duration



The first statistically significant improvement of effectiveness shows from 7 months on, a second one from 1 year on, and another highly significant improvement shows from 2 years of therapeutic treatment on.

The preliminary results seem to correspond to the ones of the *Consumer Report*-study. Considering the present state of statistical analysis, though, differentiated statements cannot yet be made.

Evaluation

This replication in Germany identified a significant number of psychoanalytic treatments. The US consumer report included no psychoanalytic treatment. Like the original Consumer Reports study, which this project faithfully replicates, the study's strengths are also its greatest weaknesses. The methodology of the Consumer Report is controversial and the sample in this study is relatively small compared to the original survey. Using a retrospective self-report patient satisfaction questionnaire the authors were able to sample a large number of patients. However, without collecting data on those who did not return the questionnaire, it is impossible to know how representative this sample is. The sampling parameters are somewhat unclear. Simply comparing the socio-demographic characteristics with those of the general psychotherapy population is not sufficient. Furthermore, the validity of the retrospective report of treatment satisfaction needs to be confirmed using measures collected before, during, and immediately after the therapy, possibly collected on a representative subset of the whole sample. The results appear to be promising and favourable to long term intensive treatment.

Steißlingen Survey of Individual and Group Psychotherapy

Heinzel, R., & Breyer, F. (1995). Stabile Besserung. *Deutsches Ärzteblatt*, 11, 752.

Heinzel, R., Breyer, F., Klein, T. (1996). Ambulante Psychoanalyse in Deutschland. Eine katamnestiche Evaluationsstudie, Diskussionsbeiträge der Univ. Konstanz, März 1996.

Heinzel, R., & Breyer, F. (1996). Katamnesenstudie belegt Wirksamkeit der analytischen Therapie. *Deutsches Ärzteblatt*, 11, 658.

Heinzel, R., Breyer, F., Klein, T. (1998). Ambulante analytische Einzel- und Gruppenpsycho- therapie in einer bundesweiten katamnestiche Evaluationsstudie. *Z. Gruppenpsychotherapie und Gruppendynamik*, 34, 135-152.

Breyer, F., Heinzel, R., Klein, T. (1997). Kosten und Nutzen ambulanter Psychoanalyse in Deutschland. (Cost and benefits of outpatient psychoanalytic therapy in Germany) *Gesundheitsökonomie und Qualitätsmanagement*, 2, 59-73.

Dossmann, R., Kutter, P., Heinzel, R., & Wurmser, L. (1996). The Long-Term Benefits of .Intensive Psychotherapy. *Psychoanalytic Inquiry, Supplement*, 74-86.

Aim

Unlike many (clinical) outcome projects, this study was designed to measure and evaluate the effects of individual and group analytical psychotherapy performed in its most prevalent setting: outpatient treatment in the therapist's office. One specific goal of the inquiry was to determine the effectiveness of analytical psychotherapy in such a manner that its costs and benefits become more transparent for the general population of insured persons. The researchers were concerned with both the direct benefits in terms of an amelioration of the patient's health situation as well as with the indirect benefits in terms of an increase in gross national product due to savings on lost working time due to sick-leave. They did not propose to investigate how or by which means the effects of psychotherapy are achieved and for which symptoms and diagnoses it achieves the best results. Dührssen and Jorswieck (1965) have pointed out that for the verification of the effects of psychotherapy a distinction according to illness symptoms is hardly useful. Consequently, distinctions were only made between three basic psychoanalytic schools (Freud -Jung -Adler)

Design

A purely catamnestic and anonymous procedure was employed. Only after completing therapy (up to 5 years later) were patient and therapist asked to participate in a measurement of therapy success. Neither patient nor therapist can be identified by means of the data collected. Moreover, neither therapist nor researcher determined what indicated success in therapy; The indicators are oriented on the subjective assessments of the patients themselves: Finally, the general background of the inquiry is not an artificial experiment but a representative sampling of all long term psychoanalytic outpatient treatments conducted during the time frame 1990-1994.

Sample

From the membership lists of the DGPT (German Society for Psychoanalysis, Psychotherapy, Psychosomatics and Depth Psychology-comprises both Freudian and Jungian psychotherapists) and the DGIP (German Society for Individual Psychology-Adlerians) a 20% random sample was taken. The questionnaire was then sent to the selected (medical, psychological and lay) psychotherapists asking them to send it on to all of their former patients who had completed their therapy between January 1990 and December 1994. In order to differentiate the respondents according to (1) the analytical method employed in their therapy, (2) individual or group setting and (3) the basic analytical schools of their therapists (Freud, Jung, Adler), the therapists were asked to supply this supplemental information on a coded sheet (to insure anonymity) correlating with a code number marked on the Individual patient's questionnaire. No actual names of patients or therapists appeared

on the material returned to us. Out of 979 questionnaires sent to former patients, 666 were returned (68%); 633 of these were suitable for evaluation.

Instruments

Subjects were asked for self-assessment of their physical, mental, social and overall health status at three points in time: at the beginning and end of their therapy and at the time of assessment (up to five years after completing therapy). In order to assess the effects of therapies that took place in a natural setting patients were asked to rate on a 5-point scale their overall health condition, their physical and mental condition and their personal relationships. The patients themselves were allowed to decide, what they understood these categories to mean. In addition they were asked for their work-loss days and their utilisation of other health care services—(Schlesinger, Mumford, & Glass, 1980). In March 95 a report was given at the Deutsche Ärzteblatt (Heinzel & Breyer, 1995). Then a social scientist joined the project and tightened up the questionnaire on one A4 page. The structure of the questionnaire was as follows:

In addition to the particular data such as therapist code, duration of therapy, total number of sessions, method of therapy (individual or group), year of birth and sex; this questionnaire comprised the following questions pertaining to all three above-mentioned points in time. The first 4 questions contained a 5-point rating scale from 1 (very good) to 5 (very 'bad'). Intermediate values were not specified, so that evaluation on an interval level was possible.

How was / how is your over-all health condition?

How was / how is your physical health status?

How was / how is your mental health status?

How were / how are your relationships?

A further question about job activity was interpreted only descriptively.

Did you / do you take ... (1 = nothing, 5 = very much)

a) medication for acute illness?

b) long term medication for chronic illness?

c) psychotropic medication? .

How often did you consult a physician (not including preventive check-ups) in the year prior to begin / end of therapy, time of assessment?

a) general practitioner?

b) a specialist?

Patients were asked to indicate the specific frequency (number of times).

How many days per year did (do) you take sick leave?

How many days per year did (do) you stay in hospital?

Did (do) you have any other therapy? (method... from... until...)

Results

On the basis of t-tests comparing responses to the questionnaire for before, during, and after therapy, it can be concluded that the patients consider their over-all condition, physical and mental health situation and their subjectively experienced relationships to be better at the completion of the therapy than at the beginning, and that this effect continued to improve in a stable manner up to the time of the completion of the questionnaire. Improvements proved to be comparable irrespective of basic professions (medical, psychological, lay psychoanalyst) or the basic analytical schools (Freud, Jung, Adler). Among the aforementioned subgroups there were no significant differences in assessment of the effects of therapy. This finding corresponds with most of the therapy research studies referred to above. Like Mackenzie (1994), no difference in the effectiveness of individual and group therapies was found, though on average in the German health care system – as was the case in this data as well – group psychotherapy is allotted only half the number of treatment sessions available to individual psychotherapy (maximum 150 : 300).

When survey data for prescription drug consumption were analysed, a noticeable reduction was found especially in the case of psychotropic medication. However, the reduction is almost as strong with medication for acute illness, which shows the strongest long term effect. A possible interpretation of these results is that through therapy patients become less prone to getting sick and learn in their therapy to manage acute illness and disturbances of their overall physical and mental health more

efficiently than in the past. A significant savings in other health care services can be seen with respect to visits to physicians as well as days in hospital. Especially interesting is a two-thirds decline in lost work days.

In general, hardly any difference between individual and group therapy is ascertainable apart from the somewhat better results of group therapy with respect to days in hospital and consultation of general practitioners. However, due to the small amount of explained variance, these differences do not seem significant. Due to the lower costs of group therapy compared to individual therapy (individual to group fee relationship 1:3, number of sessions allotted 2.4:1) and the calculated relationship of the cost savings (1:1.7) within an average time of two years after the end of the therapy, a calculation of the rentability leads to a total ratio of 1:13. This means that whereas individual therapy saves only one-quarter of its costs in this time-frame, group therapy save 3.3 times its costs.

Evaluation

This study addresses the interesting question of the satisfaction level and health care utilization of patients treated with individual and group psychotherapy. Despite its large sample size, the study is severely limited by the sampling bias inherent in a anonymous questionnaire (return rate of 65%) and a retrospective self-report measure. More work needs to be done to verify that those patients who returned the questionnaire are not significantly different from those who did not, as well to compare self-report measures of psychological health and health care utilization against more objective measures. Finally, better statistical procedures are needed for studying pre-, during, and post-measures without the confounds of regression to the mean and initial value bias.

IPTAR Study of the Effectiveness of Psychoanalytic Psychotherapy

Freedman, N., Hoffenberg, J. D., Vorus, N., & Frosch, A. (1999). The effectiveness of psychoanalytic psychotherapy: The role of treatment duration, frequency of sessions, and the therapeutic relationship. *Journal of the American Psychoanalytic Association*, 47, 741-772.

Freedman, N. (1999). Report from Mid-Manhattan: The research program of the institute for Psychoanalytic Training and Research (IPTAR). Paper presented at the Psychoanalyses and Psychoanalytic Long-term Therapies International Conference, University of Hamburg, October 21-24, 1999.

Background

This study was built in the image of the Consumer Reports study (Seligman, 1995) as a way to use self-report to measure treatment outcome in the IPTAR Clinical Center (ICC). The roles of treatment duration, frequency of session, and the therapeutic relationship were studied in determining treatment effectiveness. The questionnaire and scoring methodology of the Consumer Reports study were used for this purpose. This study aims to go beyond a mere replication by applying the measures exclusively to patients in psychoanalytic psychotherapy and by treating the data in a manner specifically responsive to issues of concern to psychoanalysts and psychoanalytic patients.

Aims

This study was guided by a series of questions:

1. What is the impact of treatment exposure (i.e., duration) on treatment outcome?
2. What is the impact of session frequency on treatment outcome?
3. What is the role of both duration and frequency on the evolving treatment relationship?
4. Is there an interaction among clinical syndrome, duration, frequency, and outcome?

Method

The study was a survey of patient satisfaction and treatment in psychoanalytic psychotherapy. All patients of the ICC, past and current, were contacted by letter and asked to participate in a study of the effectiveness of the psychotherapy they had received at the ICC. Patients who agreed were sent the Consumer Reports Effectiveness Questionnaire (EQ). Two hundred forty questionnaires were sent and 99 returned (41%). Therapists were in no way involved in this process.

Sample

The sample for the study consisted of 99 patients drawn from the total patient population of the ICC. Comparisons reveal that these patients were indistinguishable from the overall clinic patient census for 1996 (n=97). Patients were predominantly female, under 35 years old, single, college-educated, and English speaking. Initial diagnostic impressions included dysthymic reactions, anxiety reactions, adjustment and personality disorders, as well as substance abuse problems, and in small numbers, more severe pathology. Twenty-eight percent of patients in the study were on psychopharmacological medication, largely antidepressants.

Treatment

The research was conducted under the auspices of the IPTAR Clinical Center (ICC) established in 1993 to serve a population in need by unable to afford ongoing psychological services. It is a community-oriented mental health center whose goal is to maintain the treatment of every patient accepted to its natural completion without regard to financial considerations. The ICC is a low-cost

facility and most treatment is paid for out of pocket, without third-party payments. Duration of treatment in the study sample ranged from one month to over two years with 38% in treatment from one to two years, and 21% over two years. Fifty-five percent of the sample was seen once a week, 32% twice a week, and 8% three times a week.

Measures

The Effectiveness Questionnaire (EQ) consists of twenty-eight items asking patients to identify the problems that brought them into treatment, quality of the treatment setting (frequency and duration), attitudes toward their therapist, and perceptions of the outcome of their treatment. The EQ is a shortened version of the questionnaire developed by *Consumer Reports* and is used with their permission and their scoring system.

The major outcome variable of the EQ is the effectiveness score, which is subdivided into three 0-100 scales: specific improvement (how much the therapy helped the respondent with “the problems that led me to therapy”), satisfaction with one’s therapist, and global improvement (how respondents felt at the time of the survey, compared with how they felt when they began treatment). A second outcome variable, index of adaptive life gains, was calculated from the EQ to assess gains in concrete aspects of living. Data from symptoms described on the questionnaire were factor analysed to reveal five orthogonal factors: (1) eating disorders, (2) anxiety, (3) depression, (4) family disorganization, and (5) stress. Finally, items on the EQ descriptive of patients’ perception of and experience with their therapist were used to calculate a positive relationship index (PRI), negative relationship index (NRI), and together an optimal relationship index (ORI).

Results

Duration

Treatment duration was significantly correlated with self-report of effectiveness ($r=.28$, $p<.005$). When treatment length was subdivided into four groups, ANOVA revealed an incremental relationship between treatment length and effectiveness (see Figure 1).

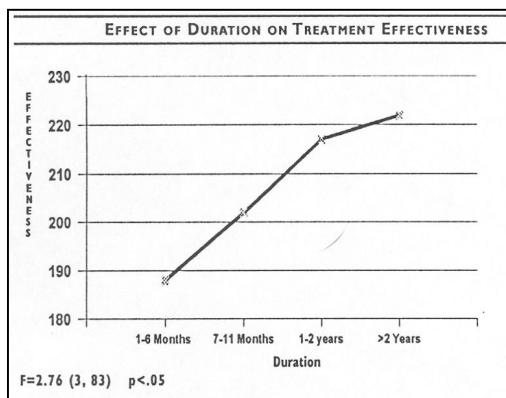


Figure 1.

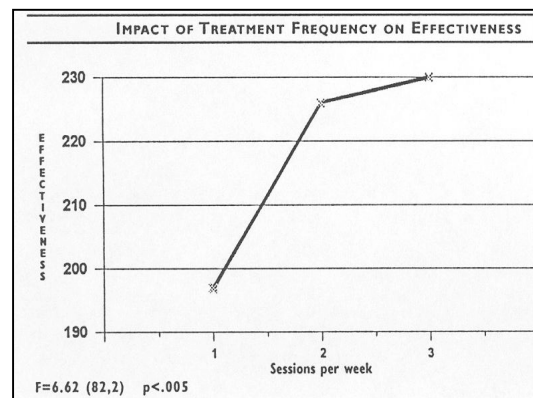


Figure 2.

Session Frequency

ANOVA also revealed a significant relationship between frequency of treatment and self-report of effectiveness. Post-hoc tests showed that this difference was significant between once a week and greater than once a week groups, but not between twice and three times a week (see Figure 2). Multiple linear regression analyses suggested that the effects of duration and frequency were independently significant.

Treatment relationship

Significant correlations were found between all three relationship measures and overall effectiveness: PRI ($r=.56$, $p<.001$), NRI ($r=.26$, $p<.01$), ORI ($r=.47$, $p<.001$). Since the PRI correlation is largest, the authors interpret these results to mean that a patient experience of a positive relationship with the therapist is related to effectiveness. A regression model designed to predict effectiveness based on duration, frequency, and quality of relationship found frequency and quality of relationship to be significant predictors accounting for over a third of the variance ($F=23.1$, $p<.0001$, $R^2=.36$).

Interplay between clinical syndrome and treatment conditions

When subjects were subdivided into five groups by clinical syndrome (eating disorders, anxiety, depression, family disorganization, and stress), differential relationships were found between frequency, duration, and effectiveness in each of these groups. Frequency was significantly related to effectiveness only in eating disordered and anxiety patients, while duration was related to effectiveness in patients most troubled by family disorganization and stress (see Table 1).

Table 1. Relationship between frequency, duration and effectiveness by clinical syndrome

Effect by Factor	Frequency	Duration
Overall	$r=.29^{***}$	$r=.28^{***}$
1. Eating disorders	$r=.51^*$	$r=.09$
2. Anxiety	$r=.57^{**}$	$r=.14$
3. Depression	$r=.25$	$r=.22$
4. Family disorganization	$r=.17$	$r=.44$
5. Stress	$r=.07$	$r=.49^{**}$

*= $p<.05$; **= $p<.01$; ***= $p<.005$

Evaluation

This study makes impressive use of a modified version of the *Consumer Reports* questionnaire, showing that treatment duration, frequency, and patient retrospective report of therapeutic relationship are related to self-report of treatment effectiveness. The study also attempts to distinguish these trends among patients with different clinical syndromes. Like all such retrospective studies, though, the findings are limited by self-selection of the sample population, and the self-report and retrospective nature of the ratings. The authors should be commended for their use of a “recall validation” procedure, comparing patient recall of a session with the actual audiotape of that session.

