

Process – outcome studies

The Saarbrücken Studies on Unconscious Interaction Regulation: Multi-channel psychotherapy process research projects (SSUIR)

Anstadt, Th., Merten, J., Ullrich, B. & Krause R (1997). Affective dyadic behaviour, core conflictual relationship themes, and success of treatment. *Psychotherapy Research* 7:397-419

Krause, R. (1997). *Allgemeine psychoanalytische Krankheitslehre Band 1. Grundlagen*. Stuttgart: Kohlhammer.

Dreher, M., Mengele, U., Krause, R., & Kämmerer, A. (2001) Affective Indicators of the Psychotherapeutic Process. An empirical case study. *Psychotherapy Research*, 11, 99-117.

Hufnagel, H., Krause, R., Steimer-Krause, E., & Wagner, G. (1993). Facial expression and introspection within different groups of mental disturbances. In J. W. Pennebaker & H. C. Traue (Eds.), *Emotion Inhibition and Health* (pp. 164-178). Göttingen: Huber & Hogrefe.

Merten, J. & Krause, R. (2000). What makes good therapists fail? In: Philippot, P.; Coats, E.J. & Feldman, R.S. (Eds.) *Nonverbal behavior in clinical settings*. Accepted for publication.

Merten, J. (2001). Beziehungsregulation in Psychotherapien. Maladaptive Beziehungsmuster, und der therapeutische Prozess. Stuttgart: Kohlhammer.

Introduction

The research group created by Rainer Krause first started in Switzerland and then continued its work in Saarbrücken, Germany. Early research centered on the unconscious role relationship implantation in patients with different diagnosis and structural levels in everyday interactions with uninformed healthy partners. The research group showed that there is something like an unconscious micro-momentary interaction pattern of affect, which was determined specifically by the different structural level of personality and by the specific diagnosis affecting not only the partner but also the dyad in a feed forward process. Counter-transference feelings as well as the transference representations have a counterpart in the open behavioral system which could be described using dyadic patterns of facial expression, gaze behavior and the speech act. A computer-based algorithm was developed to integrate the different streams of behavior in the dyad. By means of a statistical tool designed by Magnusson, Schwab described choreographies of affects being characteristic for dyads with different structural levels (Schwab, 2001). A more detailed methodological paper can be found in Steimer-Krause, E., Krause, R. & Wagner, G. (1990).

The basic results are published in German in Krause (1998) as well as a brief version in English in Flack & Laird (Krause, Steimer-Krause, Merten, & Ullrich, 1998). Based on these results the research group did a series of studies testing whether the common denominator for successful psychotherapeutic processes could be that experienced successful psychotherapists of different orientations would unconsciously be able to counteract the subliminal enactment of the affect choreography that patients usually implant in their interaction patterns using the above-mentioned processes. In the first study 11 brief therapeutic treatments, affective facial behaviour of therapists and patients as well as the latter's Core Conflictual Relationship Themes (CCRTs) were investigated and related to treatment outcome and emotional experience (Differentielle Affekt-Skala, DAS).

Affective facial behavior in the first therapy session was analysed with a method for detection of hidden real-time patterns. The interactive emotional patterns found were the best predictors of outcome. High amounts of patterns indicate the implementation of maladaptive relationship-patterns in the therapeutic dyad. The higher the number of these indicators the worse the outcome was. It was also found that successful therapeutic processes were indicated by a reduction of emotional patterns. In the more successful therapies the amount of dyadic, emotional patterns in the last session was low, while in less successful therapies it was still high ($r=-.74$, $p=.05$).

Furthermore it was found that compensatory rather than reciprocal affective facial behaviour of the therapeutic dyad in the first session is indicative of therapeutic outcome. A scale describing reciprocity vs. compensation in facial behaviour correlated significantly positively with self-reports of outcome and symptom change.

The more successful therapists show more negative distance regulating affects like anger, contempt and disgust ($r=.81$, $p=.005$). These negative affects counterbalance the facial affective expression of felt happiness on the part of the patients ($r=-.67$, $p=.05$). Contrary to expectation, positive reciprocal behaviour initiated by the patient is related to worse outcome ($r=-.62$, $p=.05$); that initiated by the therapist shows a curvilinear relationship to therapeutic outcome ($b_2=-.64$, $p=.05$).

Ten single cases were conducted to validate the group findings in the context of the different therapies. For example, two psychoanalytic treatments, one with the highest reciprocity and worst outcome and another with the best outcome and high compensation, were analyzed according to temporal development of affective exchange and narration across all 15 sessions. In both therapies, frequency of narratives was negatively correlated with frequency of facial affects of the patient, so that the hypothesis of a parallel processing of affective facial behaviour and narration could be ruled out. In the successful treatment, the therapist showed those affects during the narration of the patient, which could have been expected from the latter. A very distinct temporal pattern was seen within the successful treatment (including an enactment period, a period of instability and a period of consolidation), contrasting with a homogenous distribution of affect in the unsuccessful one.

In this research project, the affective facial behavior of patients with anxiety-disorders and that of their psychotherapists is to be analysed. Affective facial behaviour within the first session will be related to subjective ratings on the therapeutic relationship and to outcome data.

Sample

The sample will contain 20 treatments. All patients are female and have the Axis-I-Diagnosis Panic-Disorder, with or without agoraphobia. Each therapist is treating two patients. All therapists are male and are experienced psychoanalysts or psychodynamic therapists. They were requested to base their treatment on the “Manual of Panic-Focussed Psychodynamic Psychotherapy“ by Milrod et al. (1997). Treatments are limited to 40 sessions.

Methods

Facial affective behavior is analysed by using EmFACS (Emotional Facial Action Coding System) developed by Friesen & Ekman (1984). In this system prototypical facial patterns of primary affects are described. These patterns are seen as culturally invariable in their meaning and given by nature. The primary facial affects are anger, contempt, disgust, fear, sadness, surprise and happiness. For a fuller account of the FACS and EmFACS, see the Appendix to this report.

Patients and therapists ratings after each session: INTREX, DES, HAQ, TAB

Outcome measures: a battery of questionnaires, including GAS, subjective ratings of success and of contentment, pre-post-comparisons of SCL 90-R, FBL, BSQ, ACQ, STAI, INTREX

Research Questions

Do patients with panic-disorder offer a specific relationship to their therapists? In clinical literature, the conflict between autonomy and attachment is emphasised. These patients have problems with separation and expression of negative feelings, because they fear the loss of their objects. The researchers expected that patients with panic-disorders would show a high frequency of facial happiness expressions. The facial expression of happiness can be seen as a strong reinforcement-system, designed to establish a positive relationship. As these patients are strongly dependent on maintaining a secure relationship, high frequencies of happiness-expressions and a low level of expression of negative affects like anger were expected.

The second question is: How do the therapists react to the facial behaviour of their patients? And what kind of dyadic relationship-regulation leads to a helpful therapeutic relationship? Usually, facial expression of happiness is very contagious. If someone smiles at you, it is a strong invitation, nearly a request, to answer with the same behaviour. Usually people do smile back. If the patients show the expected high amount of happiness, and the therapists answer with the same behaviour, one can assume that the patients have been able to establish a relationship in which they can feel secure and attached. This might be described as a good relationship – but is this helpful? If there is nothing else – just positive and secure – the patients probably will not learn anything new. The other part of the conflict – the autonomy-wishes, the negative affects – would be kept out of the therapeutic relationship. Patients need to experience within the therapeutic relationship that it is possible to express negative emotions without losing the object.

The third question is related to the personal interactive style of therapists. The fact that the therapist treats two patients, can give an outlook on the personal interactive styles of individual therapists, particularly if the two patients of one therapist show different interactive behaviour. Taking into account the models of the psychotherapeutic process, one could assume that the same therapist shows different affective facial behaviour when he is treating different patients with different role-offers.

Preliminary Results

At present only preliminary results are available. Many of the treatments are as yet not finished. There are outcome-data only from a few treatments and no follow-up-data. So far, the first sessions of 18 treatments have been analysed with EmfACS.

Mean frequencies of facial expression of patients, 1st session, 50 min.

	N	Min.	Max.	Mean	Std.-Dev.
happiness	18	1,09	140,20	49,4902	36,6047
surprise	18	,00	9,38	1,4266	2,8732
fear	18	,00	10,00	,9028	2,4317
sadness	18	,00	33,33	6,8753	9,4403
anger	18	,00	42,55	8,3735	10,8656
contempt	18	1,02	89,58	24,0250	27,5875
disgust	18	,00	280,85	49,0324	85,3686

On average the most frequent affective facial expression of the patients is happiness, followed by disgust and contempt. Other affective expressions are rare. Fear is the facial expression with the lowest frequency. Although the expected predominance of happiness on the average-level is found, patients also show a high rate of negative facial expression (especially disgust and contempt) with high ranges and standard-deviations. Facial affective behaviour of female patients with panic-disorder in the first session is heterogeneous.

Mean frequencies of facial expressions of therapists, 1st session, 50 min.

	N	Min.	Max.	Mean	Std.-Dev.
happiness	18	,00	59,78	26,3853	15,5556
surprise	18	,00	2,44	,3653	,7456
fear	18	,00	2,33	,2438	,6167
sadness	18	,00	26,04	7,6881	10,6437
anger	18	,00	193,02	22,0021	54,1954
contempt	18	,00	22,92	5,9001	6,4596
disgust	18	,00	93,02	17,4792	28,5166

On average the most frequent affective facial expression of the therapists is happiness also, followed by anger, disgust, sadness and contempt. Fear and surprise are shown very rarely. Ranges and standard-deviations of the facial expressions of the therapists are also very high.

When compared with the patients, therapists show less happiness ($p = .009$, Wilcoxon-Test for paired samples) and less contempt ($p = .004$). Other differences in frequency do not reach statistical significance.

Some of the therapists show almost the same distribution of affective facial expressions in interaction with different patients. Other therapists vary their behaviour when treating different patients. Although there is outcome-data only from a few treatments so far, it seems if the two patients treated by one therapist show different patterns of facial affects, and the therapist does not vary his pattern, one of the treatments will not be very successful. Therapists who vary their facial behaviour when treating different patients are more likely to be successful in both treatments.

Preliminary Conclusions

Female patients with panic-disorder display varying patterns of facial affective behaviour. On the average, the most frequent affect is happiness, but other patients also show high rates of disgust or contempt, while their expression of anger is not very frequent. Variations could be grounded on different personality-organisations. For example, some patients with excessive disgust-patterns have been diagnosed as “Borderline Personality“, but this is not always the case. The patients with a predomination of happiness expression often got the Axis-II diagnosis “Dependent Personality” or “Avoiding-insecure Personality.” Axis-I diagnosis does not seem to provide the criteria to predict interactive behaviour, to predict the relationship-offer of the patients. If this can be confirmed, it is clear that manualized treatments, which take Axis-I diagnosis as a starting point, should fail for a certain subgroup of this sample of patients. The same must be taken into account for outcome studies, where two treatments are compared.

On average, therapists show less happiness and less contempt, but they also show a high variation in their facial behaviour. Some therapists seem to show a personal interactive style, regardless of the relationship-role-offers of their patients. If the interactive style of the therapist is rigid, treatment-success depends on how the patient fits to it. For some patients this style can create a helpful relationship, for others not. Other therapists seem to be able to adapt their interactive affective behaviour when treating different patients. Results indicate the importance of a *patient-specific behavioural answer* of the therapists to the role-offers of their patients. Helpful relationships seem to be balanced between development and maintenance of positive attachment on the one hand and on not avoiding negative emotional tension on the other.

In another investigation Benecke (2001) showed that successful therapies can be discriminated from unsuccessful ones through a specific form of re-arranging the relation between affect expression and mutual cognitive content of the speech process between therapist and the patient as well as within the patient. Within the unsuccessful therapies the affect remains interactive where as in the successful ones the affect expression becomes attached to the unconscious and conscious cognitive content.

Another stream of research is now dealing with the relationship between affect and its transference into language in “hidden ways” before it appears as purposefully verbalised meaning (Fabregat, 2001). Metaphor is proposed as a matrix that organises and structures both affects and secondary conscious processes and thoughts; and also as a bridge between the realm of signal language (in which facial expression is classified by semiotics) and semantic language. Other transference markers are proposed and empirically analysed as predictors of outcome in a sample of 4 good outcome patients and 4 bad outcome patients. Their patterns of appearance are also set on a time-series axis on the computer together with the “mimic choreography” to establish a comparison between the times of appearance of “signal language” and verbal language.

Evaluation

The use of facial affect coding during psychotherapy provides an important window on the non-conscious processes that predominate in every day therapeutic exchanges. Psychoanalysts, perhaps because of the use of the couch, have not shown much interest in the relationship of facial emotional processing and therapeutic outcome. This pioneering study suggests that therapists whose counter-transference (or counter-response) enactments are obviously collusive achieve inferior results when compared with therapists who respond with more resonance rather than implied awareness of unconscious (hidden) content of the communication.

At the present time, this research has evolved into correlating emotional experience and facial expression of patients and psychotherapists in detailed time-series analysis that describe the manifestation of counter-transference of unconscious nature, centered around contempt, as the main affect (*Leitaffekt*) of the therapist, and that leads to the failure of the treatment due to the lack of involvement in the interactive dynamics (Dreher, Mengele, Krause, & Kämmerer, 2001). Another stream of research is now being done by Benecke & Krause (2001) taking into account the small sample and the heterogeneous diagnoses of the first studies. In this ongoing research project the affective facial behavior of therapist and their patients with anxiety disorders are investigated. Each therapist treats 2 patients in order to investigate more clearly variations that could be originated on the part of the therapist.

MGH Naturalistic Study of Brief Psychodynamic Psychotherapy for Panic Disorder

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Aims

This study aims to (1) test the effectiveness of brief psychodynamic psychotherapy for the treatment of panic disorder and (2) describe the process and identify the active ingredients of the treatment.

Sample

Thirty patients who meet DSM-IV criteria for panic disorder as a primary diagnosis with a minimum clinician-rated severity level of "moderately ill" are being recruited via local advertisements in the Boston, Massachusetts area of the United States. Patients receiving anti-anxiety medicine are eligible provided they continue to meet diagnostic criteria for Panic Disorder, they have been on a stable regimen and dose for at least two months at the time of enrollment, agree not to make changes during the course of the study.

Treatment

As this is intended to be a naturalistic study, therapists conduct the treatments according to their usual therapeutic style, with no constraints imposed by the research study on the therapies, other than the definition of brief therapy as averaging 16-24 sessions. In this way, the treatments are conducted as they are in usual clinical practice. However, in order to maximize internal validity, the therapists attend weekly case conference meetings to discuss ways to understand and address the symptoms of Panic Disorder from a psychodynamic perspective. The case conference centers on a common understanding of the psychodynamic issues involved in Panic Disorder and the treatment foci and techniques derived from the manual for Panic-Focused Psychodynamic Psychotherapy.

Measures

Outcome

The Structured Clinical Interview (SCID) for DSM-IV is used to verify a diagnosis of Panic Disorder and to collect data on co-morbid disorders that can be used in subsequent data analyses with a larger sample size. The Shedler-Westen Assessment Procedure 200 (SWAP-200; Westen & Shedler, 1999a, 1999b) is completed by clinicians to describe personality subtypes and characteristics.

Outcome is conceptualized in multiple ways and measured from a variety of different perspectives. Overall symptomatology is assessed from the patient's perspective using the Symptom Questionnaire (SQ; Kellner, 1987). Specific symptoms of anxiety and panic are assessed using the Anxiety Sensitivity Index (ASI; Peterson & Heilbrunner, 1987; Reiss, Peterson & Gursky, 1986) and the Panic Disorder Severity Scale (PDSS), also known as the Multicenter Panic Anxiety Scale (MC-PAS; Shear, Brown, & Barlow 1997). Specific symptoms of panic and anxiety are assessed from the clinician's perspective using the Panic Disorder Clinical Global Impression Scale (CGI; Guy, 1976), and clinicians also provide estimates of overall functioning using the Global Assessment of Functioning Scale (GAF; American Psychiatric Association, 1994).

Patients and clinicians also complete measures that attempt to evaluate improvement beyond the narrow definition of symptomatology. The Quality of Life Enjoyment and Satisfaction Scale (Q-LES-Q; Endicott, Nee, & Harrison, 1993) is completed by the patient to assess overall physical and psychological health and degree of functional impairment in different life areas. In order to assess aspects of functioning that may respond in particular ways to psychodynamic psychotherapy,

clinicians also complete the Defensive Functioning Scale (DFS; American Psychiatric Association, 1994, p. 751-757) and an object relations scale (SCORS; Westen, 1995).

Process

This study will closely examine the process of the treatments as well the outcome. This will make it possible to determine not only *whether* the treatment is effective but also *how*. The Psychotherapy Process Q-set (PQS; Jones, 2000; Ablon & Jones, 1999), which provides a basic language for the empirical description of therapy process, will be applied by independent raters to audiotapes (which are made for every session) of three sessions from each treatment. Adherence to a prototype of psychodynamic psychotherapy will also be measured using the PQS.

Results

Preliminary outcome data from the first subset of 12 cases indicates that brief psychodynamic psychotherapy produces statistically significant changes across all symptom measures based on patient, clinician, and independent ratings. Patients begin treatment experiencing moderate levels of distress during attacks, intensity and frequency of attacks, and impairment in life functioning. At termination, patients experience only mild distress, intensity, frequency, and impairment. Patients also report being extremely satisfied with their treatment and deriving significant benefit in their interpersonal relationships outside the therapy. Effect size of symptom gain is equivalent to that of cognitive-behavioral therapy and pharmacotherapy using historical controls, even for patients who had failed previous trials of these treatments. Future analyses will include all 30 subjects and personality and process data.

Evaluation

This promising study suffers most from a lack of a control group with random assignment to treatment conditions, without which the efficacy of the treatment cannot truly be established. The importance of this study, however, also involves the focus on process correlates of outcome.

The Berkeley Psychotherapy Research Project

- Jones, E. E. (2000). *Therapeutic Action: A Guide to Psychoanalytic Research*. Northvale, N.J.: Jason Aronson.
- Jones, E. E. (2001). Interaktion und Veraenderung in Langzeittherapien. In U. Stuhr, M. Leuzinger-Bohleber, & Beutel, M. (Eds.). *Langzeit-Psychotherapie: Perspektiven fuer Therapeuten und Wissenschaftler*. Frankfurt: Kohlhammer Verlag (pp. 224-237).
- Jones, E.E. (1997). Modes of therapeutic action. *International Journal of Psychoanalysis* , 78, 1135-1150.
- Jones, E. E., & Windholz, M. H. (1990). The psychoanalytic case study: Toward a method of systematic inquiry. *Journal of the American Psychoanalytic Association*, 38, 985-1009.
- Jones, E. E., Cumming, J. D., & Pulos, S. (1993). Tracing clinical themes across phases of treatment by a Q-set. In N. Miller, L. Luborsky, J. Barber, & J. Docherty (Eds.), *Psychodynamic treatment research: A Handbook for Clinical Practice*. New York: Basic Books, pp. 14-36.
- Jones, E. E., Hall, S. A., & Parke, L. A. (1991). The process of change: The Berkeley Psychotherapy Research Group. In L. Beutler & M. Crago (Eds.), *Psychotherapy research: An international review of programmatic studies*. Washington, DC: American Psychological Association, 98-107.
- Jones, E. E. & Pulos, S.M. (1993). Comparing the process in psychodynamic and cognitive-behavioral therapies. *Journal of Consulting and Clinical Psychology*, 61, 306-316.
- Ablon, J.S. & Jones, E. E. (1998). How expert clinicians' prototypes of an ideal treatment correlate with outcome in psychodynamic and cognitive-behavioral therapy. *Psychotherapy Research*, 8, 71-83.

Introduction

A central difficulty for psychoanalytic process research lies in designing quantitative methods that both preserve the depth and complexity of clinical material while conforming to the requirements of empirical science. One method that meets these criteria is the *Psychotherapy Process Q-set* (PQS; Jones, 2000). The PQS is a 100-item rating instrument designed to provide a basic language for the description and classification of treatment processes in a form suitable for quantitative analysis. A coding manual provides definitions for Q-items along with examples of their application, and specifies the rules governing the use of inference in making Q-ratings. Almost all process rating scales rely on recordings of brief segments of therapy sessions, forcing judges to rate a dimension of presumed relevance on the basis of relatively brief impressions. In contrast, with the Q-technique an entire hour (audiotaped or videotaped) rather than a small segment is the time frame rated, allowing a greater opportunity to capture important events. Several studies have examined the reliability and validity of the Psychotherapy Process Q-set, consistently demonstrating high levels of inter-rater reliability, item reliability, and discriminant and predictive validity (Jones & Pulos, 1993). The Q-method is flexible in terms of research designs and data analytic strategies, and can be used in group comparison (or nomothetic) designs, in which Q-ratings of groups of cases (or hours) selected on some dimension of interest are compared, as well as in idiographic (or N = 1) designs. The possibility of moving between these two kinds of research strategies with the Q-Set allows the testing of hypotheses of varying specificity. The PQS is available in Spanish and German translation.

The Berkeley Project has systematically studied process factors contributing to successful outcome in diverse treatment modalities. Treatments of varying type and length have been studied, including crisis intervention, brief psychotherapies, cognitive-behavioral therapies, longer-term analytic therapies and psychoanalyses. Many of these studies have used samples of patients and therapists in group comparison designs. Jones is now pioneering new methods for quantitative single case research. His project is collecting an archive of recorded, long-term psychoanalytic psychotherapies and psychoanalyses that is unusual in terms of the completeness of records for each case and the kinds of assessments that have been obtained during and after treatment. A series of investigations (Jones, Cumming et al., 1993; Jones & Price, 1998; Pole & Jones, 1998) has evolved a new model for the

study of single cases that takes into account the interaction of multiple variables or influences in clinical treatments using time-series statistical approaches.

Conventionally, samples of patient and therapist behavior or speech are used as predictors of outcome, or to examine session differences or contrasts between therapies. The data are typically aggregated (or averaged) and removed from the context of whatever else is going on in the treatments. In addition, little attention is given to how patient-therapist interaction might change over the course of treatments. In contrast, Jones' strategy is to focus on patterns of patient-therapist interaction ('interaction structures'; see below) and to explore the association of these structures with measures of patient change. Process is considered as a sequence of events that extends over time. This strategy takes into account time, context, and the effect of previous hours on subsequent events in therapy. Patient change measures (e.g. symptom scales) are collected at regular intervals throughout the treatments, and tapes or transcripts of therapy sessions are Q-sorted. Luborsky's P-technique is applied to the Q-ratings of therapy sessions. The P-technique is a factor-analysis of measures (in this case, the Q-sort ratings) collected over time for the same patient-therapist pair to identify potential underlying structures of interaction. Time-series analysis is then used to understand temporal variations or change in the scores on patient symptom measures as a function of Q-item patterns. Through the application of these methods, these researchers have been able to identify causal links between therapy process and patient change

Results

More than a dozen studies using the PQS have been completed which identify process correlates of outcome in randomized clinical trials of brief psychodynamic and cognitive-behavioral treatments. One study comparing these two treatments (Jones & Pulos, 1993) found that psychodynamic technique was significantly correlated with successful outcome in *both* psychodynamic and CBT treatments. In a replication study (Ablon & Jones, 1998) panels of experts developed prototypes of psychodynamic and CBT using the PQS. These prototypes represent templates or standards for how a therapy ought to be conducted from a particular theoretical perspective. The prototypes were used to assess the extent to which actual treatments conformed to these ideal standards in 3 relatively large treatment samples. The degree to which treatments adhered to the prototypes was measured quantitatively and correlated with outcome. The psychodynamic prototype constructed by experts was consistently significantly correlated with positive outcome in both psychodynamic and cognitive-behavioral therapy. The CBT prototype was not consistently significantly correlated with positive outcome in either type of therapy. Another study of the oft-cited NIMH Treatment of Depression Collaborative Research Program (Ablon & Jones, in press) suggests that even when treatments are 'manualized', they may be more similar than different, raising a question about the utility of randomized clinical trials comparing types of therapy.

An intensive investigation of a single psychoanalytic case (Jones & Windholz, 1990; Spence, Dahl, & Jones, 1993) served as a model for the study of single case and longer-term treatments. Transcripts were rated in random fashion with the Process Q-set and then scored by computer with a measure of free association based on the co-occurrence of words that are highly associated in normal language usage. Time-series analysis was used to identify causal relations. Findings showed that particular categories of the analyst's interventions, i.e. the interpretation of defenses, identifying a recurrent theme in the material, and the discussion of dream or fantasy material led to an increase in the patient's associative freedom. Increase in free association was also linked to patient improvement in a study of a longer-term analytic therapy (Pole & Jones, 1998).

The conventional manner of studying process attempts to identify the ways in which therapist actions or techniques influence patient change. Causal influences are assumed to flow principally in one direction. In two studies of a long-term therapy (Jones, Ghannam, Nigg, & Dyer, 1993; Jones & Price, 1998), a form of sequential analysis was applied that can capture processes in which causality is reciprocal rather than unidirectional. This analysis of causal effects in therapy showed that therapist and patient mutually influence one another. During the beginning phase of therapy, the data showed that the therapist was more nonjudgmental, facilitative and neutral, and that the patient's severely depressive affect seems to have gradually drawn the therapist towards a more actively challenging and

emotionally reactive and involved posture. This change in the nature of the process was predictive of the patient's gradual reduction in symptom level.

Based on these findings, the presence of 'interaction structures' was hypothesized, and the focus of the research shifted to whether such patterns of interaction could be identified, and to test whether they are linked to patient change. New statistical analysis of the data for Mrs. C was undertaken to identify the presence of interaction structures. The Q-ratings of each of the analytic hours were subjected to an exploratory factor analysis, which yielded a factor that captured such an 'interaction structure'. It was clearly an interpersonal interaction that both analyst and patient identified as repetitive and recurring. In fact, the analyst had a name for this 'interaction structure': Playing Stupid. In this repetitive interaction, the patient's thoughts become muddled and confused when she talks of sexual feelings and her wish to arouse men. The analyst found himself talking more than usual in an effort to explain matters. The patient has trouble understanding what the analyst is saying, demonstrating in the *interaction* what the analyst has been interpreting. The reciprocal, mutually influencing quality of these repetitive interaction structures could be seen in how the patient's stance evoked in the analyst his own counter-transference reaction. His interpretations were lengthy, carefully explanatory, and contained some exasperation. Jones hypothesizes that it is the experience, interpretation and comprehension of the meaning of such of repetitive interactions that constitutes a major component of therapeutic action (Jones, 1997). Further studies found additional research support for this hypotheses in several cases of longer-term, twice-weekly analytic therapy (Enrico E. Jones, 2000).

These findings led Jones to a theory of therapeutic action which addresses the complementary roles of *interpretation* and *interaction*. It brings together these polarities in a new framework, which emphasizes the presence and meaning of recurrent patterns of interaction in the ongoing analytic process. It has as its central postulate *interaction structures* -- recurrent, mutually influencing interactions between analyst and patient -- as a fundamental aspect of therapeutic action. Interaction structures provide a way of formulating and operationalizing empirically those aspects of the analytic process that have come to be termed intersubjectivity, transference-countertransference enactments, and role responsiveness. In this model, insight and relationship are inseparable, since psychological knowledge of the self can develop only in the context of a relationship where the analyst endeavors to understand the mind of the patient through the medium of their interaction (see Enrico E. Jones, 2000 for a full discussion).

Evaluation

It has been difficult to study causal relationships and mechanisms of change in psychoanalytic therapies. This research demonstrates how patient-therapist interaction can be studied, and how this interaction can be causally linked to change. Using single case designs, Q-methodology, and sophisticated statistical techniques, these investigators have managed to capture and study patient-therapist interaction in a formal way. They demonstrate how patterns of interaction can be identified, quantified, and linked to treatment outcome. This represents an innovative paradigm in clinical research. Based on these data, Jones develops a new theory of therapeutic action whose key construct is 'interaction structure'. The construct bridges and integrates cognitive-affective theories emphasizing psychological insight as a mode of therapeutic change, and developmentally oriented theories that emphasize the mutative effect of the experience of a new relationship with the therapist. The implications of this new, evidence-based theory for clinical technique are clearly drawn. The rationale for specific interventions can now be grounded in actual data, e.g., why it is important for the analyst to comment on the features of his or her interaction with the patient. This research bridges the divide between research and clinical practice and provides a model for linking empirical research, theory, and clinical application.

The Cassel Personality Disorder Study

Chiesa, M., Fonagy, P., & Holmes, J. (in press). An experimental study of treatment outcome at the Cassel Hospital. In J. Lees & N. Manning & D. Menzies & M. Morant (Eds.), *Researching Therapeutic Communities*. London: Jessica Kingsley Publications.

Chiesa, M. (2001). *When more is less: An investigation of psychoanalytically oriented hospital based treatment for severe personality disorders* (Winner of the Biannual Psychoanalytic Research Exceptional Contribution Award). Paper presented at the IPA 42nd International Congress, Nice.

Chiesa, M., & Fonagy, P. (2000). Cassel personality disorder study: Methodology and treatment effects. *British Journal of Psychiatry*, 176, 485-491.

Chiesa, M., Drahorad, C., & Longo, S. (2000). Early termination of treatment in personality disorder treated in a psychotherapy hospital: quantitative and qualitative study. *British Journal of Psychiatry*, 177, 107-111.

Chiesa, M. (2000). Personality disorder and hospital adjustment in a therapeutic community setting. *British Journal of Medical Psychology*, 73, 259-267.

Background

The effectiveness of hospital based models for personality disorder (PD) is still uncertain. In particular little evidence of specificity of treatment programmes has been demonstrated.

Method

Two PD samples allocated to a purely hospital based treatment model (longer inpatient treatment with no after care) and to a mixed hospital and community based model (shorter inpatient admission followed by outreach therapy in the community) were prospectively compared on symptom severity, social adjustment and global assessment of mental health at 6 and 12 months after admission. The relative effectiveness of the two models for the treatment of borderline personality disorder (BPD) and non-borderline personality disorder (NBPD) was also evaluated.

Results

Although both samples improve significantly over time, subjects in the mixed hospital and community based model do significantly better on global assessment of mental health (GAS) at 6 and 12 month and on social adjustment (SAS) at 12 month (Table 1).

Table 1 Outcome scores at 12 months in the two samples

Variable	Hospital Based Sample n=46	Hospital & Community Based Sample n=44
GSI mean (sd)		
Intake	2.07 (.60)	1.86 (.82)
6 months	1.80 (.52)	1.49 (.83)
12 months	1.63 (.63)	1.39 (.91)
SAS mean (sd)		
Intake	2.68 (.45)	2.56 (.54)
6 months	2.55 (.34)	2.37 (.47)
12 months	2.46 (.42)	2.17 (.58)*
GAS mean (sd)		
Intake	45.78 (6.76)	46.70 (6.48)
6 months	49.16 (7.65)	53.83 (9.43)* §
12 months	51.09 (9.66)	58.71 (13.76)** §§

Post-Hoc contrasts of groups: *p<.05 **p<.01

Post-Hoc within group contrasts: § p<.05 §§ p<.001

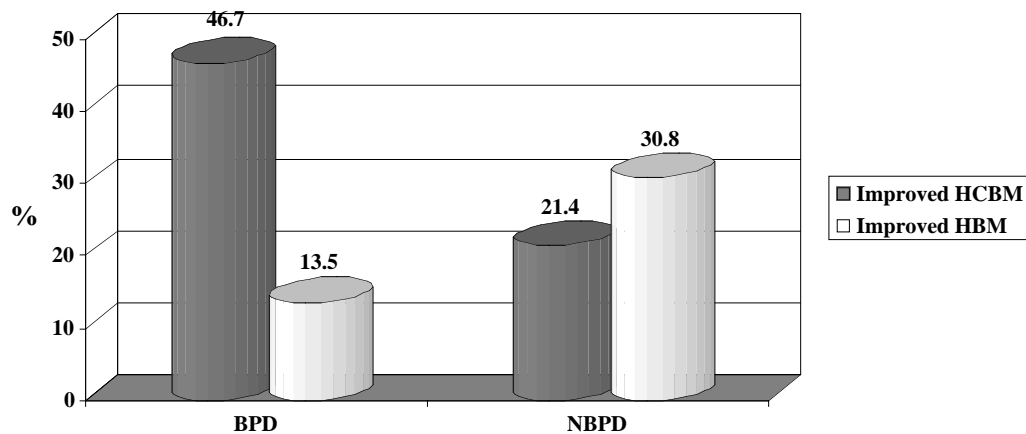
Significant differences in rates of reliable improvement in the GAS (43% v 17%) and SAS (39% v 15%) in favour of the mixed hospital and community based model were found (table 2). Subjects with BPD allocated to the mixed hospital and community based model improve significantly more than BPD in the one-stage model (figure 1).

Table 2 Reliable change at 12 months in the two samples

Variable	Hospital Based Sample n=46	Hospital & Community Based Sample n=44
GSI n (%)		
Improved	24 (52.2)	24 (54.5)
Unchanged	21 (45.7)	14 (31.8)
Deteriorated	1 (2.2)	6 (13.6)
SAS n (%) *		
Improved	7 (15.2)	17 (38.7)
Unchanged	38 (82.6)	24 (54.5)
Deteriorated	1 (2.2)	3 (6.8)
GAS n (%) **		
Improved	8 (17.4)	19 (43.2)
Unchanged	37 (80.4)	25 (56.8)
Deteriorated	5 (10.0)	0

*p<.05 **p<.001

Figure 1. Rates of Reliable Improvement in BPD and NBPD in the two treatment groups



Conclusions

A long-term phased model which combines hospital based and community based strategies has advantages over a purely in-patient model for the treatment of BPD.

This is a very important trial that highlights the limitations of long term hospitalization for severely personality disordered individuals while pointing to the value of shorter-term admission, with careful support following the end of treatment.

Adelphi University: Psychodynamic Psychotherapy Process and Outcome Research Team

Blagys, M., Ackerman, S., Bonge, D., & Hilsenroth, M. (2000, June). Measuring Psychodynamic-Interpersonal and Cognitive-Behavioral Therapist Activity: Development of the Comparative Psychotherapy Process Scale. Society for Psychotherapy Research, Chicago, IL.

Blagys, M., & Hilsenroth, M. (2000). Distinctive features of Short-Term Psychodynamic-Interpersonal Psychotherapy: An Empirical Review of the Comparative Psychotherapy Process Literature. *Clinical Psychology: Science and Practice*, 7, 167-188.

Blagys, M., & Hilsenroth, M. (2001, March). *Object Representations: Assessment, Reliability, Concurrent and Clinical Validity*. Society for Personality Assessment, Philadelphia, PA.

Hilsenroth, M., Ackerman, S., & Blagys, M. (2001). Evaluating the Phase Model of Change During Short-Term Psychodynamic Psychotherapy. *Psychotherapy Research*, 11, 29-47.

Hilsenroth, M., Ackerman, S., Blagys, M., Baity, M., & Mooney, M. (2000, June). Short-Term Psychodynamic Psychotherapy for Depression: An Evaluation of Statistical, Clinically Significant, and Dynamic Change. Society for Psychotherapy Research, Chicago, IL.

Price, J., Hilsenroth, M., Petretic-Jackson, P., & Bonge, D. (2001, March). *Psychodynamic Psychotherapy with Adult Survivors of Childhood Sexual Abuse*. Society for Personality Assessment, Philadelphia, PA.

The work of this group provides empirical data on the effectiveness and efficacy of issues pertinent to psychodynamic theory and practice. These articles focus on one part of this research team's work examining treatment outcomes across a range of measures.

Objectives

The goals of this ongoing treatment program incorporate an evaluation of interrelated issues regarding psychological assessment, psychotherapy process and treatment outcome.

Recent advances in the methodology of psychotherapy research have shown the urgent need for an integration of effectiveness and efficacy designs (1996; Seligman, 1995). Both of these perspectives, which focus on clinical utility (effectiveness) and experimental control (efficacy), compliment one another and thereby answer vital questions regarding the validity of psychotherapy. Each method assesses the outcome of psychotherapy from a complementary perspective as well as eliminates alternative hypotheses. This research program combines the rigor of the efficacy method with the high external validity of the effectiveness method to exam clinical outcomes of Psychodynamic psychotherapy.

Outcomes are evaluated from three perspectives (Strupp, 1996) including: patient self-report, therapist ratings, and external rater via videotape. Measures include well-normed questionnaires evaluating psychiatric symptoms, social functioning (work, family, leisure), interpersonal functioning, and psychiatric syndromes; well-operationalized behavioral criteria, and survey material designed to obtain patient assessment of changes in productivity at work, interpersonal relations, improvement on the presenting problem, satisfaction with treatment and global improvement. These measures are administered longitudinally: prior to beginning treatment, at different (standardized) points during the treatment, and at the termination of treatment.

Design

The design of this treatment program is primarily an effectiveness model that has integrated the assessment and technique/training aspects of an efficacy model within a naturalistic setting (1996; Seligman, 1995). The incorporation of these efficacy features in this otherwise naturalistic treatment delivery setting allows for the measurement of treatment fidelity in a less rigidly specified treatment procedure, that is closer to the real world of service delivery, and to provide important information

regarding the nature of the treatment that is not often evaluated in general psychotherapy effectiveness studies. In this program treatment manuals were utilized for intensive training in technique. However, these manuals were used to aid, inform, and guide the treatment rather than to prescribe it. In this manner therapists were encouraged to provide the interventions in an accurate (Crits-Christoph, Cooper, & Luborsky, 1988), congruent (Piper, Joyce, McCallum, & Azim, 1993), competent (Barber, Crits-Christoph, & Luborsky, 1996), and optimally responsive (Stiles, Honos-Webb, & Surko, 1998) manner, instead of a producing a high volume of certain techniques within a predetermined session framework. A potential difference between the findings from this program and those from an efficacy model would be this groups' decision to include all patients regardless of comorbidity (i.e., Axis II) as well as not setting an arbitrary time limit on the provision of treatment. As such, this program represents a naturalistic examination of patient change during Psychodynamic Psychotherapy as delivered in an, university based, outpatient community clinic.

Sample

The participants utilized in this program were patients consecutively admitted for individual psychotherapy to a Psychodynamic Psychotherapy Treatment Team (PPTT) over a twenty-six month period at a, university-based, community outpatient psychological clinic. The number of supervised treatment teams at this clinic ranged from three to five during the period of data collection. It is the standard protocol at this clinic for all sessions with patients to be videotaped (i.e. not just patients in the PPTT sample). Patients were accepted into treatment regardless of disorder or comorbidity. Cases were assigned to treatment practica and clinicians in an ecologically valid manner based on real world issues regarding aspects of clinician availability, caseload, etc. There was a range of DSM-IV (APA, 1994) Axis I & II diagnoses in the patient sample, the largest subgroup of which was Mood Disorder. Approximately one third of patients were diagnosed with an Axis II disorder. The presence of sub-clinical Personality Disorder features or traits was also recorded. Commensurate with samples drawn from, university-based, community outpatient clinics the level of psychological/emotional distress of the patients was primarily in the mild to moderate range of severity. This mild to moderate range of impairment was evidenced within the DSM-IV diagnostic categories, clinician rating scales, and self-report measures. Each patient provided written informed consent to be included in program evaluation research.

Treatment

Treatment consisted of once or twice weekly, sessions of Psychodynamic Psychotherapy. Treatment was organized, aided, and informed (but not prescribed) by the technical guidelines delineated in the following treatment manuals: Book (1998), Luborsky (1984), Strupp & Binder (1984), and Wachtel (1993). Additional technical material from Barber & Crits-Christoph (1995), Grove (1996), and Malan (1979) was also actively integrated into a number of treatments as needed. Key features of the STPP model included (Blagys & Hilsenroth, 2000): (1) Focus on affect and the expression of emotion; (2) Exploration of attempts to avoid topics or engage in activities that may hinder the progress of therapy; (3) The identification of patterns in actions, thoughts, feelings, experiences, and relationships. These patterns were explored/formulated using the Core Conflictual Relationship Theme (CCRT) format (Luborsky & Crits-Christoph, 1998); (4) Emphasis on past experiences; (5) Focus on interpersonal experiences; (6) Emphasis on the therapeutic relationship/alliance; and (7) Exploration of wishes, dreams, or fantasies. In addition to these areas of treatment focus, case presentations and symptoms are conceptualized in the context of interpersonal/intrapsychic conflict (Luborsky, 1996; Luborsky & Crits-Christoph, 1998). Also, when a termination date is set in the treatment this becomes a frequent area of intervention. Issues related to the termination are often linked to key interpersonal, affective, and thought patterns prominent in that patient's treatment.

Clinicians

Thirteen advanced graduate students (5 men and 8 women) enrolled in an American Psychological Association approved Clinical Psychology Ph.D. program were trained in the use of STPP using the 4 primary and 3 secondary texts described earlier. The study supervisor, a Ph.D. licensed psychologist

with extensive training in STPP, also treated one patient in this investigation and utilized this treatment in a continuing case conference to augment therapist training. In all cases within the PPTT, the clinician who conducted the assessment procedures also performed the formal psychotherapy sessions. Each therapist received a minimum of 3.5 hours of supervision per week (i.e., 1.5 hours individually, and 2 hours in a group treatment team meeting) on the therapeutic assessment model/process, scoring/interpretation of assessment measures, presentation/organization of collaborative feedback, therapeutic model, case conceptualization, session process, interpretation, and clinical interventions. Prior to scoring the assessment measures utilized in this program, the 13 clinicians participated in both individual and group training where scoring and interpretation guidelines were reviewed. Individual and group supervision focused heavily on the review of videotaped case material and technical interventions.

Procedure

Each patient completed a videotaped semi-structured clinical interview that lasted approximately two hours and an interpretive/feedback interview that lasted approximately one hour. The clinical interview focused on a number of salient therapeutic topics such as presenting problems; past psychiatric history; past medical history; family history; developmental, social, educational, and work history; an exploration of both historic and current relational episodes; and a mental status exam that included an assessment of all DSM-IV symptom criteria for Schizophrenia, Major Depressive/Manic/Mixed episode, Dysthymia, as well as many anxiety symptoms. Each feedback session, also videotaped, was organized according to a Therapeutic Model of Assessment (Finn & Tonsager, 1992, 1997). This approach focuses on collaboration, alliance building, exploration of factors maintaining life problems (often relational) and identification of potential solutions, and therapist-patient interaction.

Treatment was not of a fixed duration, but was determined by the clinician's judgment, patient's decision, progress toward goals, and life changes. Treatment goals were first explored during the assessment period and a formal treatment plan was reviewed with each patient in the third psychotherapy session. This treatment plan then was subsequently reviewed in the 10th, 24th, 40th, 60th and 80th session for changes, additions, or deletions. Re-assessment of patient functioning on a standard battery of outcome measures as well as process ratings were completed by patients and therapists immediately after selected sessions prior to these review points (sessions 3, 9, 15, 21, 27, 36, 57, and 78). Patients were informed both verbally by the clinician and in writing on these forms that all of their process/alliance ratings would not be made available to their clinician and were returned to clinic administrative staff. Videotaped psychotherapy sessions were viewed and coded by PPTT clinical staff (however no clinician served as an external rater for their own patients) on a number of different process dimensions. At the end of treatment all patients receiving services from the PPTT complete an exit evaluation. Thus, measures of clinical assessment and psychotherapy process can be evaluated in relation to the outcome of treatment.

Measures

- Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1993)
- Social Adjustment Scale (SAS; Weissman & Both, 1976)
- DSM-IV: Major Depressive Episode (MDE; symptoms A1 - A9; APA, 1994, p. 327)
- DSM-IV: Global Assessment of Functioning scale (GAF; APA, 1994, p.32)
- DSM-IV: Global Assessment of Relational Functioning scale (GARF; APA, 1994, p. 758)
- DSM-IV: Social and Occupational Functioning Assessment Scale (SOFAS; APA, 1994, p. 761)
- Schwartz Outcome Scale (SOS; Blais et al., 1999)
- Social Cognition and Object Relations Scale (SCORS; Westen, 1995)

Development of the Comparative Psychotherapy Process Scale (CPPS): Measuring Psychodynamic-Interpersonal and Cognitive-Behavioral Therapist Activity

The CPPS (Blagys, Ackerman, Bonge, & Hilsenroth, 2000) is a measure of psychotherapy process designed to assess therapist activity, process variables, and psychotherapy techniques used and occurring during the therapeutic hour. Developed from an extensive review of the comparative psychotherapy process literature (Ablon & Jones, 1998; Gaston & Ring, 1992; Goldfried, Castonguay, Hayes, Drozd, & Shapiro, 1997; Goldfried, Raue, & Castonguay, 1998; Goldsamt, Goldfried, Hayes, & Kerr, 1992; Jones & Pulos, 1993; Kerr, Goldfried, Hayes, Castonguay, & Goldsamt, 1992; Samoilov, Goldfried & Shapiro, 2000; Wiser & Goldfried, 1993; 1998), the scale consists of 20 items to be rated on a 7-point Likert Scale ranging from 0 ("not at all characteristic"), 2 ("somewhat characteristic"), 4 ("characteristic"), through 6 ("extremely characteristic"). The CPPS may be completed by the patient, the therapist, and/or an external rater. One unique feature of the items on the CPPS is that they were derived from empirical studies comparing and contrasting Psychodynamic-Interpersonal and Cognitive-Behavioral oriented approaches to treatment. This scale consists of two subscales: a Psychodynamic-Interpersonal subscale (PI; 10 items) and a Cognitive-Behavioral subscale (CB; 10 items). The PI subscale measures therapist and patient activity found in empirical research to be emphasized significantly more in a Psychodynamic-Interpersonal oriented treatment than in a CB treatment. Items include (1) Focus on affect and the expression of patients' emotions; (2) Exploration of patients' attempts to avoid topics or engage in activities that hinder the progress of therapy; (3) The identification of patterns in patients' actions, thoughts, feelings, experiences, and relationships; (4) Emphasis on past experiences; (5) Focus on patients' interpersonal experiences; (6) Emphasis on the therapeutic relationship; and (7) Exploration of patients' wishes, dreams, or fantasies (Blagys & Hilsenroth, 2000). Likewise, the CB subscale consists of items, which are significantly more characteristic of Cognitive-Behavioral oriented therapy. Items include (1) Emphasis on cognitive or logical/illogical thought patterns and belief systems; (2) Emphasis on teaching skills to patients; (3) Assigning homework to patients; (4) Providing information regarding treatment, disorder, or symptoms; (5) Direction of session activity; and (6) Emphasis on future functioning (Blagys & Hilsenroth, in press). Coefficient Alpha for the PI and CB subscales (N=101 rated sessions) are both reported as .93 (Blagys et al., 2000).

Judges in this study were two advanced graduate students in an APA approved Clinical Psychology Ph.D. program. Prior to rating therapy sessions for the present study, the two coders underwent 50 hours of supervised training in rating the CPPS. In training, the two judges rated videotaped therapy sessions conducted by both Psychodynamically-oriented and Cognitive-Behaviorally-oriented therapists using the CPPS. Fifteen psychotherapy sessions were rated during training and comprised a preliminary analysis of interrater agreement. After reaching an acceptable level of initial interrater agreement ($> .60$), as measured by an intraclass correlation coefficient (ICC), (1) one-way random effects model (Fleiss, 1981; Shrout & Fleiss, 1979), judges began to rate videotaped sessions of patients in this research study. Regular reliability meetings were held during the coding process to prevent rater drift. Videotapes from 101 sessions for 33 patients were arranged in random order and *entire* sessions were watched by the two judges. Immediately after viewing a videotaped session, judges independently completed the CPPS. Also, each subscale (PI & CB) was coded in random order. One judge was always unaware of the session number being watched and rated (i.e. 3rd, 9th, etc) throughout the coding process.

The interrater reliability of the CPPS-PI and CPPS-CB subscales was evaluated using one-way random effects model intraclass correlation coefficient (ICC (I); Shrout & Fleiss, 1979) for 67 psychotherapy sessions that were rated by both judges. Interrater reliability scores [ICC (I)] for these 67 sessions were in the "excellent" range ($> .75$) for both the mean and total CPPS-PI (.81 and .93, respectively) and CPPS-CB (.83 and .96, respectively) subscale scores. A comparison of 34 sessions (17 Psychodynamic and 17 Eclectic/Cognitive-Behavioral) revealed significant and large effects across individual items and total subscale scores. As predicted a robust two-factor structure was evident and these two factors were negatively correlated ($r = -.54$) with one another. This brief (20 item), two-subscale, measure represents an empirically derived attempt to measure therapist activity in nonmanualized (i.e., assessing general clinical principles rather than manual specific techniques)

Psychodynamic-Interpersonal and Cognitive-Behavioral treatments that may more readily generalize to “real-world” practice among clinicians.

Treatment Outcomes of Psychodynamic Psychotherapy

In the initial outcome study from this research program Hilsenroth, Ackerman, and Blagys (2001) examined the phase model of psychotherapy change (Howard, Lueger, Maling, & Martinovitch, 1993; 1996) and assessed the domains of subjective well-being, symptomatic distress, and social/interpersonal functioning across the early stages of Psychodynamic psychotherapy. Specifically, these authors assessed evaluation/3rd session to 9th session changes in a group of 20 treated patients. Changes in these three domains were examined for both statistical and clinically significant change (Jacobson & Truax, 1991). This was one of the first studies to examine the dose-effect/phase model of change that has empirically evaluated treatment fidelity and credibility, both of which were found to be high.

As predicted, improvements in subjective well-being showed the largest changes in statistical effect ($t=4.42$, $p=.004$, $d = 1.1$) and percent of patients exhibiting clinically significant change (59%) through 9 sessions of psychotherapy. Also, almost all (88%) of those patients who completed the SOS at the 9th session recorded scores within a functional distribution. Both measures of symptomatic distress were found to make significant improvements during the first 9 sessions of psychotherapy (GSI: $t=2.70$, $p=.02$, $d = .62$ and GAF: $t=6.90$, $p<.001$, $d = .71$). This study also reported a moderate rate of clinically significant symptom change (through 9 sessions) for patient reported symptoms (GSI=29%) and clinician rated symptoms (GAF=25%). Analyses revealed statistically non-significant, but small effects for patient reported (SASG: $d = .36$) and clinician rated (SOFAS: $d = .27$) change in social functioning. However, a statistically significant ($t=3.79$, $p=.001$) and moderate effect ($d = .53$) was observed regarding clinician ratings of interpersonal functioning (GARF). In addition, changes in both subjective well-being (Beta=.36) and symptomatic distress (Beta=.40) contributed unique and separate variance to predicting changes in social/interpersonal functioning ($R=.63$, $p=.03$).

It is important to note that this study only examined changes through the 9th session of psychotherapy. Evaluations of pre-post changes during the course of this treatment are currently being conducted. The benefits of Psychodynamic psychotherapy may be even more robust when the full course of treatment has been completed and in subsequent follow-up period. Nevertheless, these initial results demonstrate that statistical and clinically significant improvement can occur in the domains of subjective well-being and symptom distress by even the 9th session of Psychodynamic psychotherapy. In addition, statistical and reliable improvement can be observed in relational functioning during the same time period. Finally, these results are consistent with differential effects predicted by the phase model of change during the early course of treatment.

In a subsequent study of treatment outcome Hilsenroth, Ackerman, Blagys, Baity, and Mooney (2000) examined a subset of 16 depressed patients (Major Depressive Disorder, Depressive Disorder NOS, Dysthymia) from this sample. Again, treatment fidelity, credibility, and satisfaction were empirically evaluated and all found to be high. Improvements on a number of patient rated subjective well-being scales all exhibited significant ($p<.05$) and large statistical effects ($d >.80$). In addition, a number of patient reported and clinician rated measures of general symptomatic distress, interpersonal and social functioning exhibited significant improvements ($p<.005$) over the course of psychotherapy, all with large statistical effects ($d >.80$). Furthermore, clinician rated scales of dynamic personality functioning (SCORS; Westen, 1995) all exhibited significant ($p<.05$) and moderate ($d >.50$) to large statistical effects ($d >.80$). Of particular interest with regard to Psychodynamic conceptualizations of depression were the very large adaptive changes exhibited for the SCORS variables Affective Quality of Representations ($d >1.21$) and Self-Esteem ($d >1.16$).

Specific measures of depressive symptomatology were also found to make significant improvements at the end of treatment (DSM-IV-MDE: $t=5.93$, $p<.0001$, $d =1.76$ and SCL-DEP: $t=6.41$, $p<.0001$, $d =1.17$). In this study rate of clinically significant symptom change for patient reported depressive symptoms (SCL-DEP=56%) to be substantial. Changes in both patient reported (SCL-DEP) and clinician rated measures of depressive symptomatology (DSM-IV-MDE) were significantly related to one another ($r=.82$, $p<.001$), after adjusting pre-test scores for regression to the mean and controlling

for initial levels of variable severity. This finding indicates that the amount of change in depressive symptomatology reported by the patients were very similar to those changes observed and rated by clinicians. Most figural was the finding that the more Psychodynamic activity a therapist engaged in, as measured by the CPPS-PI subscale, was significantly correlated with changes in both patient reported (SCL-DEP: $r=.66.$, $p=.004$) and clinician rated measures of depressive symptomatology (DSM-IV-MDE: $r=.62.$, $p=.008$), again even after adjusting pre-test scores for regression to the mean and controlling for initial levels of variable severity. This relationship between the distinctive process elements of Psychodynamic-Interpersonal psychotherapy with positive treatment gains clearly support the efficacy of this intervention with depressed patients.

Evaluation

Limitations of these outcome studies include the absence of a placebo control group, small sample size, and variable length of treatment. The importance of these studies are enhanced by the significant process (i.e., Psychodynamic technique/interventions) with outcome (i.e., decreased depressive symptomatology) correlations.

Present Status

A number of current projects are ongoing and many of these seek to extend the previous work by this group as well as findings from other Psychodynamic research programs. In the area of treatment outcome, preliminary analyses have been conducted for two separate studies that seek to further elaborate the positive pre-post treatment changes observed in this program. This first study (Price, Hilsenroth, Petretic-Jackson, & Bonge, 2001) examines the differential impact of childhood sexual abuse on the effectiveness of Psychodynamic treatment. The second study (Blagys & Hilsenroth, 2001) examines the differential rates of change between dynamic personality variables (SCORS; Westen, 1995) with patient reported and clinician rated measures of general symptomatic distress, interpersonal and social functioning. Finally, an examination of the relationship between psychotherapy process, alliance, and therapist activity with treatment outcomes are currently being organized.

The Ulm Study of Dreams: Aggregating Single Cases (USD)

Leuzinger-Bohleber, M. (1987). *Veränderung kognitiver Prozesse. (Changes of cognitive processes in psychoanalysis, Vol. 1 A single case study)*. (Vol. Eine hypothesengenerierende Einzelfallstudie). Berlin, Heidelberg, New York: Springer.

Leuzinger-Bohleber, M. (1989). *Veränderung kognitiver Prozesse in Psychoanalysen. Bd 2: Eine gruppen-statistische Untersuchung*. Berlin, Heidelberg, New York, Tokyo: Springer.

Leuzinger-Bohleber, M. (1995). Die Einzelfallstudie als psychoanalytisches Forschungsinstrument. *Psyche*, 49, 434-480.

Leuzinger-Bohleber, M. (Ed.). (1997). *"...die Fähigkeit zu lieben, zu arbeiten und das Leben zu genießen." Zu den vielen Facetten psychoanalytischer Katamneseforschung*. Giessen: Psychosozial Verlag.

Leuzinger-Bohleber, M., & Kächele, H. (1988). From Calvin to Freud: Using an artificial intelligence model to investigate cognitive changes during psychoanalysis. In H. Dahl, H. Kächele, & H. Thomä (Eds.), *Psychoanalytic process research strategies* (pp. 291-306). Berlin,: Springer.

Brief Summary

This study described and analysed changes in the problem-solving cognitive processes of five patients during their long-term psychoanalyses. Modifications of the way the patients themselves handled their dreams during psychoanalytic sessions were focused upon. One general goal of a psychoanalysis is that unconscious conflicts should become conscious as a precondition for being able to reach other more external goals of a psychoanalytic treatment such as the ability to work, to love and to enjoy life. The patient should learn to recognise unconscious conflicts in order to avoid their interfering with the satisfaction of his wishes and duties. In this special form of psychotherapy he is expected to develop specific problem-solving strategies for dealing with unconscious conflicts. Therefore the changes in problem-solving cognitive processes served as an example of the way the patient deals with unconscious material (i.e. his dreams).

In the first phase of the study, hypotheses were derived by exploring dream associations as recorded in a patient's diary during the first and last hundred hours of his psychoanalysis (Leuzinger-Bohleber, 1987). In the second phase, the hypotheses were tested by studying the verbatim materials of four psychoanalytic cases from the Ulm Textbank (Leuzinger-Bohleber, 1989b). Using two kinds of theory-guided content analysis, the dream reports taken from the first hundred along with those from the last hundred psychoanalytic sessions were evaluated case by case. At this point, the clinical outcome assessments - provided by independent clinicians - were compared to the findings on the cognitive changes. Across the five cases the estimation of clinical change corresponded very well to the changes in the cognitive functions measured by the patients' handling of dreams supporting the study hypotheses.

Recently an extension study was performed on material from one of the patients (Kächele, Eberhardt, & Leuzinger-Bohleber, 1997). In this study, all dreams were subjected to an analysis of changes in relationship pattern, dream atmosphere and problem solving. In this case there was no systematic variation of relationship constellation over the course of the analysis. There was, however, an impressive change of the dream atmosphere from negative to more positive affects and to more variation and an impressive change in a variety of problem-solving activities.

Evaluation

This is an innovative approach to the process-outcome problem. Changes in dream quality would not be predicted by any theory other than the psychoanalytic. The methods developed here need validating by other centres but the use of replicative single case design is one with many possible applications in this field.

Applying Clinical and Empirical Approaches in Research on Psychic Change in Long-term Treatments

López Moreno, C., Dorfman Lerner, B., Schalayeff, C., Roussos, A. (1999). Investigación empírica en Psicoanálisis. *Revista de Psicoanálisis*, 56, 677-693.

López Moreno, C., Birman, L., Dorfman Lerner, B., Koziol, S., Schalayeff, C., Roussos, A. (2000). *Research Project on Psychic Change in Psychoanalytic Psychotherapy. Process Tools, Methods and Outcomes*. First Latin American Research Conference on Psychoanalysis. Asociación Psicoanalítica Argentina. p. 293-307 (English). p. 271-292 (español).

Caridad, V., Dorfman Lerner, B., López Moreno, C., Schalayeff, C., Valazza, A. M., Acosta, S., Vernengo, P. (2000) Incidencia en la tarea clínica de la pertenencia a un grupo de investigación empírica, trabajo. *Análisis terminable e interminable en el año 2000, trabajos libres*, Asociación Psicoanalítica Argentina. Vol. 1, pp. 199-206.

Roussos, A., López Moreno, C., Dorfman Lerner, B., Schalayeff, C., Acosta, S. (2000). *A strategy to the use of empirical research to add systematized information to clinical treatments*. Paper presented in the Annual Meeting of the Collaborative Analytic Multi-Site Project. Fall Meeting of the American Psychoanalytic Association 2000. New York.

Roussos, A. (in press). Un ejemplo de investigación empírica en psicoterapia psicoanalítica. In C. Wainerman (Ed.), *La trastienda de la investigación. Second Edition*. Buenos Aires: Editorial Belgrano.

Brief Summary of Approach

The aim of this research is to detect indicators of change in the therapeutic process of a psychoanalytic psychotherapy. To this end the results of a two year treatment of six patients are compared using clinical and empirical methods.

This is an ongoing report. A single case two-year treatment with all the techniques applied was presented in the second L.A.R.C. held in Gramado (Brazil) in September 2000.

This project studies the long-term treatments, that is, at least two years in length, of six patients selected from applications submitted to Centro Racker of Asociación Psicoanalítica Argentina by the general public demanding therapy. It should be underscored that this is the first investigation done in the Argentine Psychoanalytic Association (Centro Racker) with the written consent of patients who accepted to be tape-recorded all along their treatments and it is the first data base of complete long term ongoing tape-recorded treatments.

A secondary aim of the research is to create a text bank in Spanish language and to this purpose contact with other Spanish speaking centers.

One of the subprojects of this study is related to the elaboration of a protocol, the Differential Elements for a Psychodynamic Diagnostic (DEPD). This protocol aims to operationalize a patient psychodynamic diagnosis and standardize the information that comes out during the supervision. The protocol has two parts: the first is centered on the diagnosis and prognosis of the patient made by supervisor and supervisee. The second part is focused on the dynamic between patient-therapist, therapist-supervisor and an evaluation of the supervision itself.

In the future it should be possible to use this protocol as a standardized tool for the supervision of psychodynamic treatments. Simultaneously, these researchers are undertaking a validation study of the DEPDI and are designing, to this purpose, a series of empirical tests to assess the general validity and reliability of this instrument (2000; López Moreno et al., 1999).

The original project, which received a grant from the Research Advisory Board of I.P.A. was presented at the first L.A.R.C. (Latin American Research Conference) organized by the I.P.A. Research Committee. That meeting was held in Buenos Aires (Argentina) on September 1998.

Instruments

This research is an exploratory one due to the type of general and working guidelines the researchers had in mind. These are:

1. Psychoanalytic psychotherapy produces psychic change.
2. The conjoining of the results of techniques and clinical observation helps in assessing psychic change.
3. The results of this kind of complementary analysis can serve as feedback to therapists.

In this study an operational definition of psychic change is used.

First area: Symptoms, inhibitions and conflicts.

Second area: subject's relational aspects; relational patterns with others and self; relationship among manifest wishes and actions to make them possible; defensive aspects related to defense mechanisms as conceived by psychoanalysis.

Third area: linguistic patterns and narrative styles taken as expression of mental processes.

Research team

The team in charge is composed by four therapists and two supervisors all of them trained in DEPD and DSM-IV; four members specialized in CCRT; two members specialized in CRA; two in SCL-90-R and in statistical methods.

Participant therapists

The therapist group is highly homogeneous, with therapists trained in the Asociación Psicoanalítica Argentina and graduated from its Institute. All of them had had supervision with one of the team's senior members prior to their inclusion in this investigation, so that they were informed about and consented to the working style of the researchers.

Sample

The aim was to obtain as homogeneous a sample as possible. As high compliance with treatment was desirable, it was decided not to take psychotic or in-patients for treatment (diagnosis according to DSM-IV). All patients were women between twenty and forty six years of age. Notwithstanding, there has been a dropout rate of nearly 50%. New patients have been therefore been continuously added to the sample to maintain a constant the number of cases. This fact produces a slowdown of results due to the need to complete the two years treatment of the project.

Ethical Safeguards

All the participants and the institutional authorities involved in this research were informed about their participation, and patients, therapist researchers, and director of the centers signed an agreement. This agreement follows the ethical points proposed by the Buenos Aires Psychologist Association, which are compatible with the American Psychologist Association guidelines.

Procedures, Methods and Techniques

This is a naturalistic study. The assignment of treatments are not randomized nor manualized. In spite of this, instructions about how to include the investigation procedures (how to invite the patients to participate in the research, include the tape recorder, administrate the symptom checklist, etc.) are given to the therapists involved in the project.

All of the sessions have been audio-recorded. Transcriptions of the third session and of the sixth, twelfth, eighteenth and twenty-fourth month were used. The transcripts have been completed by the oral reports offered by the respective therapists at the clinical meetings.

The approach of the material is taken from two different perspectives.

The clinical point of view comprises:

a) Supervision

Fortnightly supervision has taken place. DEPD has been filled in both by supervisor and supervisee at the start of treatment and every six months.

b) Clinical meetings

The frequency of the clinical meetings is once a month and all the team members participate. This encounter allows a fruitful interchange of clinical impressions about the results obtained by the empirical methods. At these meetings, the therapist presents the patient's first interview's synopsis and gives their clinical opinion of the introduced patient. The rest of the members give their clinical opinions, including psychodynamic diagnosis, defense mechanisms and latent conflicts, therapeutic strategies and prognosis. The results of this discussion are protocolized (Clinical meeting protocol)

The meetings fulfil several objectives:

- Enrichment of the therapeutic team due to the results given by the empirical workers.
- Empirical workers' better knowledge of patients.
- Providing the whole team with a sense of identity and feeling of belonging.
- Differential Elements for a Psychodynamic Diagnostic protocol (DEPD) based on psychoanalytic therapy (2000; López Moreno et al., 1999)

The empirical point of view includes the assessing of:

- CCRT (Lester Luborsky)
- CRA (Bucci and Mergenthaler)
- SCL-90 R (Derogatis).

Brief Evaluation

Clinical and empirical techniques are used as complementary tools during the study of therapeutic processes, allowing the enrichment and interchange of information from both perspectives. From a clinical point of view the different empirical approaches show a high degree of concordance and complementarity. In relation to this, there is a need to utilize multiple empirical techniques. This multiplicity has enhanced the significance of combining the two. Following this criterion, a group of clinicians have begun to evaluate, from the clinical point of view, the impact of having empirical information in their psychotherapeutic practice (Caridad et al., 2000).

In this sense, the SCL-90 has been a sensible indicator, because the increase or decrease of symptoms can only be assessed as positive or negative in psychoanalytic psychotherapy when it is assessed against other empirical techniques and is estimated from a clinical point of view. The data obtained to date show the sensitivity of these techniques to patient's changes throughout treatment and their usefulness in tracing features of the patient's evolution.

The AHMOS (Amsterdam, Helsinki, Milan, Oslo, Stockholm) project; a multicenter collaboration of research on process and outcome of psychoanalysis

Szecsödy, I., Varvin, S., Amadei, G., Stoker, J., Beenen, F., Klockars, L. et al. (1997) *The European Multi-site Collaborative Study of Psychoanalysis* (Sweden, Finland, Norway, Holland and Italy). Paper presented at the Symposium on Outcomes Research (Chair Otto Kernberg) International Psychoanalytic Association Congress, Barcelona, August 1997.

Szecsödy, I., Varvin, S., Beenen, F., Stoker, J., Klockars, L., & Amadei, G. (1999). *Multicenter collaboration of research on process and outcome of psychoanalysis. Presentation of AHMOS*. Paper presented at the International Psychoanalytical Congress, Santiago.

Pilot study

With the ambition to establish a fruitful collaboration between clinicians and researchers, a qualitative study was conducted in the Psychoanalytic Institute of Amsterdam. Using retrospective data from interviews with 16 analysands and their analysts, the researchers wanted to study whether it was possible to detect elements and processes that produce change (curative factors). A combination of four curative factors emerged out of the material they collected, as being at the core of the psychoanalytic cure. This core combination consisted of (1) experiencing primary security (analysand), furnished by the analyst through attention, concern and acceptance. This accepting, non-judgmental attitude of the analyst encouraged (2) free expression of thoughts and feelings ('catharsis') by the analysand. In the interaction (3) the analyst actively offered structure (especially by setting boundaries) to the analysand. At the same time the latter received encouragement leading to a process of (re-) education. And (4) experiencing the direct emotional interaction in the relationship with the analyst led to new self-insight by the analysand, a process guided by the transference interpretations of the analyst. The study indicated that there were aspects of the function of the analyst as a new relational object that seemed important for outcome. These results were presented at the 38th IPA conference in Amsterdam in 1993 and at a workshop on Process and Effect Research in Psychoanalysis in Stockholm 1994, where the first plans were formed for a European collaborative study. At the first IPA Summer-school on research in London in 1995, members of the Amsterdam group, psychoanalysts from Stockholm, Oslo, Helsinki and Milan decided to form a network with the aims of collaborating in research on process and outcome of psychoanalytic treatments and evaluating the possibility of forming a multicenter-study.

Plans and Instruments

Widely accepted outcome measures were chosen for the treatments conducted at the different centres, which include the following; questionnaires such as SCL-90, SASB INTREX, IIP, WBQ and CHAP (Change After Therapy Scale). This would allow comparisons to be made with other studies and formal contact has been made with a larger psychotherapy project at the Stuttgart Center for Psychotherapy Research. It may be possible to attach the AHMOS project to this if desired.

Further, a construct that at least theoretically could be seen as related to the changes one hopes to achieve in psychoanalysis had to be selected. This was found in the capacity for "Reflective Functioning", as proposed by Fonagy and colleagues (1997). This is related to the development of the mentalising function. For the study of reflective functioning the multicenter project agreed to use the Adult Attachment Interview (AAI) (George, Kaplan, & Main, 1996). This is an hour-long, semi-structured interview focusing on the description and evaluation of early attachment relationships and attachment related experiences. The interview includes features of both highly structured or "questionnaire" interview format and the more clinical interview. It asks participants both to provide several general overall evaluations of their experiences and to illustrate those evaluations with a description of specific biographical episodes. The interview is transcribed verbatim, and scored according to the reflective functioning manual. For further information on the RF scale, see the Appendix to this report.

Reflective-function is the operationalization of the psychological function, which is frequently referred to as mentalizing (Fonagy & Higgitt, 1989b; Fonagy, 1991; Morton & Frith, 1995). It contains both a self-reflective and an interpersonal component that ideally provide the individual with a well-developed capacity to distinguish inner from outer reality, pretend from 'real' modes of functioning, intrapersonal mental and emotional processes from interpersonal communications. Mentalising capacity is about seeing and understanding oneself, and individuals around one, in terms of mental states (feelings, beliefs, intentions and desires), and further about the capacity to reason about one's own and other's behaviour in terms of such mental states, through a process normally termed as reflection. The robustness of this capacity determines not just the nature of psychic reality of the individual, but also the quality and coherence of the reflective part of the self, which is at the core of the self-structure (Fonagy & Target, 1996a).

Mentalisation is important - as it enables the individual to see people's action as meaningful through the attribution of thoughts and feelings, so that their actions become predictable, which in turn reduces dependency on others. Secondly it allows for recognition of the fact that someone is behaving as if things are a particular way does not mean that things are like that. Thirdly, without a clear representation of the mental state of the other, communication must be profoundly limited. Finally, mentalisation can help an individual to achieve deeper experiences with others, and ultimately a life experienced as more meaningful. One can assume that it is the successful connecting of internal and external that allows beliefs to be endowed with meaning which is emotionally alive and manageable. A partial failure to achieve this integration can lead to neurotic states; in more profound and pervasive failures of integration, reality may be experienced as emotionally meaningless, other people and the self are related to as things, and the relating itself occurs at a very concrete level. In the extreme, the individual may inhibit or decouple their tendency to treat themselves or others as motivated by mental states, resulting in a personality organisation sometimes denoted borderline (Fonagy & Higgitt, 1989b; Fonagy, 1991).

Psychoanalysis is supposed to influence the individual's ability to relate to and integrate emotional experiences through a development of the capacity to tolerate mental frustration and pain. Reflective functioning can indicate the degree of ability for relating to and integrating conflicting emotional experiences. The manner and the degree in which this function changes during psychoanalysis could then be a *process-related outcome measure of psychic change* during psychoanalysis.

A central question is of course the *relation between process and outcome*. Modelling research on what has been criticised as the "drug metaphor", the belief that there exists a causal relationship between certain aspects of the process and outcome, was not attractive considering the complexity of the psychoanalytic conception of process (Stiles, Shapiro, Harper, & Morrison, 1995). Time will not allow detailing the discussion that ensued. The fact remains, however, that an adequate model and design to address this question was unavailable. A tentative design was then created that has a structure which allows for considerable variation among the participating centers, such as timing (when to start to implement the different parts of the project), to focus on different aspects, to add specific instruments and to integrate research and quality assurance.

A further aim was to construct research approaches that generate a multi-window view on the process and/or the interaction between the analyst and the patient. The study aims to investigate whether it is possible to detect positive and/or negative critical moments, variables or developments in the process, and to see how fundamental changes take place and to find out to what extent are these characteristic and specific for the psychoanalytic process under study.

One way to collect process data was to use the *Psychoanalytic Process Rating Scale (PPRS)*, designed by the group in Amsterdam as an elaboration of the Session Rating Scale of the Anna Freud Centre for Children and Adolescents in London. Through the PPRS one can collect the subjective opinions of the analysts, regarding the presence and/or absence and the type of their interventions about more than 200 items. Filling out the PPRS (with the help of a detailed instruction manual) produces a picture of the ongoing process, in a form that is a compromise between a naive descriptive and a more theoretical clinical kind of reporting, that is systematised and standardised. These items are divided into three sections and concern: i) General attitude: time keeping, missed sessions, quality of sessions, physical behaviour, affective moods, defences, resistance. ii) Conscious and unconscious content concerning: the body, self-esteem, object relations, sexuality, and aggression. [Further: schoolwork,

employment; current life events; gender and age issues;] treatment parameters. iii) The form of transference themes; analyst's feelings; styles of interventions; reactions to interventions; analyst's feelings in the gross. The analyst will fill out this questionnaire monthly and the hope is that this, together with three-monthly clinical summaries, will create a profile of the analytic process as seen by the analyst, in a systematised and standardised manner. The PPRS is now used by the groups in Amsterdam, Milan and Stockholm. For further information on the PPRS, see the Appendix to this report.

Further there seemed to be a common interest in conducting regular interviews with the analysand during ongoing analysis. These are specially designed interviews: a) the *Therapist Attachment Transference Interview* (TATI, which is an application of the AAI with the focus on the way one is reflecting about the attachment on the analyst/therapist), which aims to measure the reflective function of the analysand during the process; b) the *Analysand Experience of the Process* (AEP) developed in Oslo, the aim of which is to give information about the analysand's ongoing experience of his/her analytic process. In addition the analyst is interviewed regularly at several centres. In Oslo a number of ongoing analyses are tape-recorded with the aim of detailed process analysis.

Current activities at different centres

Amsterdam

In Amsterdam the group (Folkert Beenen, Wouter Gomperts, Jan Stoker, Jolien Zevalkink) focuses mainly on a quality assurance program; in addition they have projects with different topics. About 25 staff-members of the Netherlands Psychoanalytic Institute who are engaged in the analysis of 45 analysands take part in a systematised feedback system, using the periodical rating scale (PPRS) and three monthly reports, for a description of each analysis. This system is integrated in the daily clinical practice of the Institute, in the course of which, by means of yearly staff-meetings, the progress of the treatment is discussed on the basis of the output of the filled out scales. The monthly PPRS is a picture at a given moment in time. They expect that collecting a sequence of these pictures would enable them to see a kind of movement over time, and to make the **ongoing process visible over time** regarding the development of content and form. Perhaps it can make it possible to specify at which points during treatment changes take place. As a second step they have started to join the Multicenter Project more closely, using AAI and TATI interviews to rate RF. To explore the outcome question a pilot follow-up study (n=20 ex-analysands) is now being executed, focusing on the interaction-elements in the analytic process by means of administering TATI-interviews to get a systematic picture of the attachment- and transference-relationship as experienced by the analysand. They score this interview with the Reflective Functioning Scale (which is translated into Dutch, also for training purposes) For this follow-up they also use a Curative Factors Questionnaire (CFQ), a version for the analysand and one for the analyst; which is an operationalization of the PEP-study presented at the 1993 IPA Congress in Amsterdam and at the Scandinavian workshop in Stockholm '94. After statistical analysis, the Psychoanalytic Process Rating Scale has been recently reduced to 100 items. Moreover progress has been made in making applicable another process measure, the computerised Referential Activity (Bucci, 1997) for transcripts and interviews in the Dutch language.

Helsinki

In Helsinki (Camilla Renlund) the question of the mode of participation of psychoanalysts in the AHMOS research scheme is, at the moment, undecided.

Milan

In Milan (Gherardo Amadei and Sylvia Pozzi) the main focus is on patients who are treated with psychoanalytic and cognitive psychotherapy in the public health service. During the first 3 years they had 88 patients, 33 became dropouts while 55 patients stayed with the research. At the present time they have started to include also psychoanalytic treatments within the project, which will allow for a comparative design. Before treatment starts patients are interviewed both according to the AAI

(restricted to the demand questions) and to be able to score for CCRT. SCL-90, IIP and SASB are used by patients, and therapists fill out PRS regularly. 6 patients have completed treatment and they plan to make RAP with them. In Milan they do not interview the therapists, nor ask patients anything other than AAI demand questions. The strength of this center is, that the participants work within a public health service, with the usual patients and treatments for this kind of service. The relation between the conducted psychodynamic and cognitive treatment respectively is 4/5 - 1/5.

Oslo

In Oslo (Siri Gullestad, Bjørn Killingmo, Inge Refnin, Sverre Varvin) the researchers are psychoanalysts in private practice, organised by the Norwegian Psychoanalytic Institute. 10 analyses will be included in the study. At present 8 analyses are in the project and 2 of them have already terminated. The aim is to have a certain number of analyses in the project studied on somewhat different levels of intensity (e.g. 5 are audio-taped). The core-battery is used. Patients are tested with a psychoanalytically informed qualitative Rorschach at the beginning and after termination. AAI interview will be administered at beginning and at follow-up. The analysand is interviewed every half year with Analysand-Experience Interview. They work with the assumptions, that psychoanalysis may lead to integration/maturation/flexibility/better relational ability, which may be reflected in two main areas: Reflective function and emotional differentiation, which may be measured by AAI/scoring of RF and Rorschach/scoring of emotional integration. RF could be seen as a measure of integration and be related to integrating processes in treatment. Rorschach in the same regard may be seen as a measurement of emotional integrating. Rorschach is used as an implicitly predictive instrument. That is, a Rorschach (based on B Killingmoes system) is made before treatment with a prediction of how this should/might change in a successful treatment. (In this sense it will be a project which validates Rorschach as a predictive instrument as well as its use for measuring outcome). AAI, Rorschach, the Analysand-Experience Interview plus the different instruments (SCL-90 etc.), are extra process measures used before, during and after treatment. Tape-recorded analyses and extensively reported analyses will provide data directly related to the process. Process-data from tape-recorded sessions are analysed according to CRA methods. (The group is conducting a pilot study analysing transcripts of tape-recorded sessions using CRA (computerised referential activity), "screening" narrative activity in the sessions (Bucci 1997) and the Cycles-model (Bucci, 1997; Mergenthaler & Bucci, 1999). With these methods they assume that moments of change and integration may be detected which then must be analysed qualitatively. The hypothesis is that it should be possible to detect patterns and profiles of each analytic process both concerning content and form/ style and to relate change to other process variables such as intervention, analyst style etc. The goal being the detection and description of emotional dialogic interchange process that may be related to change in extra analytic processes.)

Stockholm

In Stockholm (Anna Krantz, Roger Karlsson, Daniela Montelatici Prawitz, Imre Szecsödy) the research group consists of a few members/candidates of the Swedish Psychoanalytic Society and the Swedish Psychoanalytic Association (a recent study group of the IPA). Supported by local funding a pilot study with two analyses has started. It is difficult to increase the number of analyses to be studied, due to two parallel ongoing empirical studies that compete for the potential resources of analysts and analysands.

The initial interview of the analysand is based on AAI and completed with questions from the Drew Westen Personality Diagnostic Interview. The interviewer also asks the patient to talk freely for 5 minutes about his/her expectations from analysis. The transcribed text of the interview is scored according to RF. During treatment, analysands are interviewed each year according to TATI as well as asked to free associate for 5 minutes about their experiences of the analysis (to be studied according to Wilma Bucci's referential activity). Each year a semi-structured interview is conducted with the analyst, who also is asked to fill out the PPRS each month and to write a clinical summary every third month. To study information both from the analysand as well as the analyst is an extremely interesting and enticing task, and might deepen our reflections about the analytic process. The transcripts of the interviews with the analyst are studied qualitatively, according to the grounded theory approach.

Ongoing and future goals

1. To present and share information on assessment instruments of the psychoanalytic process and treatment.
2. To discuss topics relevant to research into the psychoanalytic domain.
3. To act as each other's reviewers for research proposals and other research plans.
4. To help each other in matters related to funding research projects.
5. To be able to act as a European platform in international meetings.
6. To develop research projects similar on main strategies, topics, and methods in order to be able to compare results.
7. To encourage a wide range of research projects on certain psychoanalytic topics and/or instruments in order to obtain diverse research experiences.
8. To make use of bilateral contacts in case of training possibilities or other organised events.
9. To encourage bilateral research projects among its members.

Evaluation

This is a relatively mature group of researchers, who have made very significant progress in developing psychoanalytic research methodology for the study of both process and outcome measurement, as well as a unique methodology for collaborative psychoanalytic research. They have set an example for other psychoanalytic organizations to follow.

The Oslo II study: A process-outcome study of psychoanalysis (OIS)

Varvin, S., Norwegian Psychoanalytic Society

Background

This study is conducted by a group of practicing analysts at the Institute of Psychoanalysis in Norway. It is part of a multicenter study with participants from Finland (Helsinki), Sweden (Stockholm), The Netherlands (Amsterdam), and Italy (Milan). The design, methods and theoretical background for the project are partly worked out in collaboration with the multicenter group but the Oslo-group has developed its own research interests.

Psychoanalysis and the relation between process and outcome

The Stockholm study (Sandell, 1996) demonstrated generally favourable results of psychoanalysis compared to psychotherapy and the importance of long-term follow-up in providing evidence for this treatment. These findings support earlier findings (Bachrach, 1993; Kantrowitz, 1993; Wallerstein, 1986) on positive outcome of psychoanalysis. Although there are studies on process factors contributing to outcome (e.g. Kantrowitz et al., 1990b), this is an underdeveloped area in psychoanalytic research. The Oslo study addresses outcome but its main focus is on the relation between outcome and process. This is a difficult task since there are no well-accepted methods for describing the process of psychoanalysis and few research findings supporting suppositions on what it is in the psychoanalytic process that might bring about change. An endeavour in this direction must therefore necessarily be exploratory and designed also to test out methods and possibly develop new ones.

Outcome, as measured by traditional symptom-based measures such as SCL-90 (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974), is not necessarily congruent with the expected impact of psychoanalysis. More specific to psychoanalytic treatment are outcome measures related to conceptions of those personality and intrapsychic changes psychoanalytic treatment is thought to bring about. This endeavour is related to the aims of psychoanalysis and there have been many, often conflicting, claims concerning the desired aim or effect of psychoanalytic treatment, as well as claims about the curative aspects of the psychoanalytic process that may bring about these changes. These have altered greatly over time and are dependent on the theoretical background, affiliation and historical circumstances of the authors (Sandler & Dreher, 1997).

The research group in Oslo has chosen two broadly defined interrelated areas: the possible development of a mentalising function (psychological mindedness) and the structuring of emotional experience seen as part of integrative processes. These choices are based on clinical experience, theoretical reason and the availability of methods for measuring outcome which tap these areas.

Mentalising

Based on research on attachment, Fonagy and colleagues (Fonagy, 1998; Fonagy et al., 1995) have sought to define individual differences in adults' metacognitive capacities or what type of working model of the mind was operating in a patient. The crucial distinction was whether the subject could conceptualise their own and others' behaviour as reflecting states of mind. This capacity, coined "reflective function" (RF), would determine whether a person could tolerate and reflect on negative feelings, problematic behaviour by self and others and in that way be less vulnerable to conflict and psychic pain. A scale was developed to measure the degree of reflective function. This concept has corollaries in concepts such as psychological mindedness, and is well established as a hoped for capacity in analysands which would be expected to develop in relation to a psychoanalytic treatment. The valuation of reflective function is based on scorings of the Adult Attachment Interview (Main & Goldwyn, 1995). In the Oslo study this interview will be administered prior to treatment and at the follow up. In addition to evaluating RF, this interview provides narratives of relations to important

others which may be studied by other qualitative methods. The researchers aim to develop an interview which will tap the analysands' conception of their analytic experience and from which it will be possible to score RF. This interview would be administered once or twice a year. Interviewing the analyst at the same intervals is also being considered.

Differentiation and organisation of affective experiences.

Reflective function is related to mental states and the subjects' models of mind (for a more detailed account of RF, see the Appendix to this volume). Pathology is associated with little differentiation and difficulties in containing feelings. The Rorschach is a method which, used as a psychoanalytic research instrument, may be a good measure for describing the subjects' degree of ability to organise and differentiate affects (Killingmo, 1980, 1992). This differentiation is thought to make up the ability to sustain and endure emotional tension and conflict. Patients in this study will be tested with Rorschach (prior to treatment and at follow-up).

RF and the capacity for emotional differentiation may be viewed as dynamic outcome measures. The question being addressed concerns the relationship of characteristics of the psychoanalytic process and the outcome on these measures.

The aim is to tape-record as many analyses as possible. Others will be recorded by extensive session notes. The analyses will be intensively studied and will constitute the 'core-cases' in the project. The hypotheses under investigation are that the character of the relational style, the development of integration and the ability to tolerate feelings and conflicts, broadly speaking, are marks of a good analytic process. Particular concerns for the study are the identification of turning points where important changes surfaces.

Interviewing analysand and psychoanalyst during the process will provide an additional point of view in exploring interactive processes over time and, to a certain degree, countertransference aspects. The last is also expected to surface in the exploration of the therapeutic dialogue.

Research questions

At the present stage of planning the study, these are defined broadly as follows:

- (a) whether the outcome of psychoanalytic treatment as assessed by psychoanalysts corresponds to assessments in terms of RF and emotional differentiation.
- (b) whether clinical outcomes are reflected in specific features of the psychoanalytic process.
- (c) the relationship of process evaluations, RF/Rorschach assessments and symptomatic /psychometric changes.

Design

This is a multiple single-case design. Cases will be incorporated into the project as they become available. A multilevel participation model has been designed to facilitate engagement of as many analysts in the society as possible. It will be possible for the clinician to participate without tape-recording, but full process notes and systematic recording of the process will be mandatory. The analysand/analyst couple can opt not to participate in the yearly independent assessment. The lowest level of participation will be only the pre- post-psychometric measures and independent interviews. It remains to be seen if this flexible model will stimulate members to participate. The participation in a multi-centre collaboration increases the number of cases and makes possible a group design within the project. The international collaboration also makes possible an extensive exchange of ideas and collaboration on developing and learning research instruments. The group may also apply for research funding for this and other purposes (e.g. conferences).

Methods

The following structured psychometric interview-based instruments are part of the core battery common for all the centres in the international collaborative study:

- (a) The Hopkins Symptom Check List (The SCL-90) (Derogatis et al., 1974), a self-report measure of the severity of somatic and psychological symptoms
- (b) Inventory of Interpersonal Problems (IIP) (Horowitz, Rosenberg, Baer, Ureno, & Villaseñor, 1988), a self-report inventory of interpersonal problems
- (c) Structural Analysis of Social Behaviour (SASB-q) (Benjamin, 1974), an inventory assessing the internal representation of social relationships
- (d) Adult Attachment Interview (AAI) (Main & Goldwyn, 1995), an assessment of attachment history. This is an hour long, semi-structured interview focusing on the description and evaluation of early attachment relationships and attachment related experiences. It asks participants both to provide several general overall evaluations of their experiences and to illustrate those evaluations with a description of specific biographical episodes. The interview is transcribed verbatim, and scored according to the reflective-self manual. It may also be scored for attachment styles. These will be administered before treatment, yearly during treatment and at follow up.
- (e) The Rorschach will be given before and after treatment and at follow-up. It will be used for constructing a personality profile, and a hypothetical personality profile given a favourable outcome (the changes that would be expected in the follow-up Rorschach based on the pre-treatment protocol). Process data will be obtained through tape-recording of some of the analyses, extensive session notes, periodic session-notes (e.g. once a month) based on the periodic rating scale.
- (f) The Periodical Rating Scale (PRS) is filled in weekly or monthly in the other centres. It is a reduced form of the Session Rating Scale of the Anna Freud Centre and was constructed by the Amsterdam members of the multi-centre group (Beenen & Stoker, 1997) with the assistance of Peter Fonagy.

Through the Periodical Ratings Scale one can collect the subjective opinions of the analysts, regarding the presence and/or absence and the category of their interventions for more than 200 items. These items are divided into three sections: (a) *manifest content*. General attitude: time keeping, missed sessions, quality of sessions, physical behaviour, schoolwork, employment; current life events; gender and age issues affective moods, defences, resistance, (b) *conscious and unconscious content*: concerning the body, self esteem, object relations, sexuality, aggression, (c) treatment parameters, the form of transference themes, analyst's feelings, styles of interventions, reactions to interventions; analyst's feelings in the gross. The filling out of the PRS questionnaire (with the help of an instruction manual) is supposed to give a picture of the ongoing process, in a form that is a compromise between a naive descriptive and a more theoretical clinical kind of reporting, that is systematised and standardised. At present the Periodic Rating scale is not used in the Oslo-project. (The AAI-interview and Rorschach may be seen as indirect process data.) At this point sampling for the purposes of statistical analysis has not yet been decided. The amount of data could be overwhelming, but at this point it has been agreed to keep tape-recording and session notes from as many sessions as possible, on all archival bases, with the aim of later making more informed sampling possible.

Methods for studying the dialogue under consideration are: SASB (Henry, in press), CCRT (Luborsky & Crits-Christoph, 1990), Frame analysis (Dahl, 1988), Dialogical sequence analysis (Leiman, 1997), Assimilation analysis (Stiles et al., 1990; Stiles et al., 1992; Stiles et al., 1991), Cyclical analysis and referential activity (Bucci, 1997; Mergenthaler, 1996) and Enunciation analysis (Rosenbaum, 1997). Data compatible with these procedures will be collected but any one or two of the methods will be selected based on evidence accumulated in the meantime. The aim is to identify key-sessions and "important periods" in the process for analysis with more time-consuming process analysis-methods. Table 1 includes an overview of the methods.

Table 1: Overview of measurement techniques and questionnaires under consideration in the Oslo Study.

Instrument	Aims
Before treatment	
Clinical interview	Dynamic & psychiatric diagnoses
Adult Attachment Interview	Reflective functioning and attachment status
Rorschach	Psychodynamic emotional profile
SCL-90	Inventory of somatic and psychological symptoms and problems
IIP	Inventory of interpersonal problems
SASB-q	Inventory of introjects
Interview of analyst (research interviewer)	Analyst's theoretical & practical attitude & expectations
During treatment	
Periodical clinical summary (analyst, 3-monthly)	Process data
Semi-structured interview of analysand (analyst) 1-2 times per year	Process data
Adult Attachment Interview	Representational change
Process/outcome data of analysand (start, end, follow-up)	Process data
Questionnaires (SCL-90, IIP, SASB-q) (patient, annually)	Symptomatic status
Tape-recording	Process data
Termination and follow-up	
AAI	Reflective-functioning
Rorschach	Emotional integration
Interview of analyst	Analyst's evaluation of treatment process
Questionnaires (patient) SCL-90, IIP, SASB-q	Symptomatic status

Two and five years after termination the patient will be interviewed according to the CHAP (Changes After Therapy) Scale (Sandell, 1993) and fill out the WBQ (Well Being Questionnaire: Sandell, Blomberg, Lazar, 1996) in order to obtain comparability with the STOPP study.

Evaluation

This project is still in an early stage, with conceptual/theoretical issues, hypotheses, and the application of instruments and methods still under consideration. Eight analyses are now in the project. There is an ongoing pilot-study with one of cases using clinical and research data for reflection and discussion in the group by studying and discussing both process data (tape-recordings), Rorschach protocol, AAI and the questionnaires, with the aim both of deeper clinical understanding and refinement of theory and hypotheses. The overall aim is to at make the research clinically relevant and to keep it close to current clinical discussion in the Norwegian Psychoanalytic Society. This will be done by broad participation of the membership in the actual research process, research seminars and regular presentations at meetings of the society.

The Mexico City Study: The psychodynamic psychotherapy of BPD (MCS)

Cuevas, P. & Lopez, N.

This study commenced in 1993 initiated with a training program for thirteen analysts, candidates and psychotherapists on a course concerning psychodynamic psychotherapy for borderline personality disorder patients, offered by Otto Kernberg and based on his manual (Kernberg & Clarkin, 1993). Further therapists were trained in Mexico. Patients were selected for the project with two questions in mind: (a) can the manual be taught to therapists with different training backgrounds? and (b) are there differences in the process and outcome of treatments when a therapeutic contract is made along the lines suggested by Kernberg and where contracts are not made or are made as usual? It was decided to limit the observation to one year of sessions with a minimum of 25 sessions to be considered a treated case.

Sample

BPD patients (between 18 and 50 years) were selected on the basis of SCID II, MMPI, CATELL, WAIS and Kernberg's Structural Interview. All patients were treated in twice a week face to face therapy following the manual and all sessions were video-recorded. All therapists were supervised by one of the trained researchers and the research team rated the adherence to the manual and the therapist's skill.

Results

Data have been collected on eight patients. Four have been treated using Kernberg's Therapeutic Contract and four with Contract as Usual. Seven attended therapy for more than a year and one dropped out after 32 sessions. Preliminary results indicate that the six therapists (two of them had two patients) adhered quite well to the manual. Those with psychoanalytic training could follow the manual better than did those with psychotherapy training.

The results on the significance of therapeutic contracts are as yet inconclusive. The process and outcome of the treatments with and without contracts were quite similar. The patient who dropped out of treatment was in the group using contracts. However, the two groups were not comparable. The patients with the Kernberg's contract were more impulsive than those treated using no routine contracts.

The results on process and outcome are impressive. All of the patients improved greatly in impulse control and the level of affective storms but were less improved in terms of their identity diffusion.

This study will be a unique experimental process-outcome study concerning the importance of therapeutic contracts in the psychoanalytic psychotherapy of borderline patients. The preliminary observations of major improvements in both groups are of course encouraging from a purely outcome perspective, although the absence of a comparison group would make the study a purely naturalistic follow-along investigation. With increased sample size the study may yield important conclusions concerning the importance of specific readily controllable process variables for therapeutic outcome with an extremely challenging patient group.

The Kortenbergh-Leuven Study on Inpatient Psychoanalytically Oriented Hospitalisation for Personality Disorders

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Background

At the University Centre St. Joseph, associated with the Catholic University Leuven, patients with personality disorders can be treated in an intensive psychoanalytically oriented multicomponent programme. This programme is applied in two settings: a day-hospital of 16 patients and an inpatient ward of 32 patients. The stay is limited to one year, with a main stay of seven months.

The aim of the treatment is to foster a psychoanalytic process. Vaughan and Roose (1995) formulated a clinical and research definition of the psychoanalytic process in terms of free association, resistance, interpretation and working through. However this definition seems to correspond more to the neurotic level of functioning. There are arguments that at the borderline level another kind of psychoanalytic process takes place as borderline patients have mentalisation problems and act out in the here and now.

The therapeutic approach at this borderline level was conceptualised in three facets: object relational, mentalisation and psychoanalytic relation (therapeutic alliance). These facets are addressed in the different components of the programme.

Research Questions:

The study aims to

- examine prospectively the relation between the analytic process and outcome in psychoanalytically oriented hospitalisation of patients with moderate and severe personality disorders.
- define the characteristics of the group for whom this form of treatment is indicated and of the group which does not respond to this type of therapy.
- assess the concepts on which this psychoanalytic treatment model is based and their relation to the psychoanalytic process.

Sample

100 patients with personality disorders who are referred to the in-patient psychoanalytically oriented hospitalisation unit. The diagnosis of a personality disorder is assessed by the SCID II (categorical DSM diagnosis) and the IPO (Inventory of Personality Organisation: structural diagnosis according to Kernberg and Clarkin).

Measures

Outcome measures

Clinical parameters: the Beck Depression Scale (BDI), the Symptom Check List (SCL-90-R), the Spielberger State Trait Anxiety (STAI), the Spielberger State Trait Anger (STAXI), a Self Harm Inventory and the Social Adjustment Scale (SAS).

Process measures

1. Therapeutic Staff: assesses the psychoanalytic process in patients by a bi-monthly evaluation on a 7-point scale.
2. External researchers assess the process in patients by a four monthly ORI (Object Relations Inventory), a semi-structured interview on which measures are scored, which are related to the psychoanalytic concepts on which the therapeutic programme is based:
 - *mentalisation*: the Reflective Functioning Scale of Fonagy and Target (RFS) and Bions GRID categories (GRID)
 - *object relations*: the Differentiation-Relatedness Scale (DRS) of Blatt apart from this ORI, the *therapeutic relationship* or therapeutic alliance is measured by the CALPAS
3. The patients rate their own evaluation using two new empirical instruments:
 - *the Louvain Psychotherapy Scale (LPS), a self-rating scale*
 - *the Event, Intervention, Affect- Inventory (EIAI)*

Evaluation

This project started in March 2001. It is, however, an extremely sophisticated design which should yield exciting findings in an important area.

Frankfurt - Hamburg Long-term Psychotherapy Study: Process and outcome of psychoanalytically oriented therapy and behavior therapy - a study from private practices

Brockmann, J., Schlüter, T., & Eckert, J. (in preparation). The effects of psychoanalytically oriented and behavior long-term therapy. A comparative study from the private practices of insurance-registered psychotherapists.

The Study attempts to combine a naturalistic design with experimental test conditions. The results reported here are restricted to 'hard data' that may be of interest in an Evidence-based Medicine context for their relevance to both treatment (in this study, long-term therapy) and disorder (in this study, depressive disorders and anxiety disorders).

Sample

31 psychoanalytically oriented long-term therapies were compared with 31 long-term behavior therapies. The treatments were carried out in private practices. All patients passed a Diagnostic Interview (SCID) by an external interviewer before participating in the study. Only patients with depression and anxiety problems (according to Axis I of DSM-III-R) were included in the study. Patients with alcohol/drug addiction or psychotic symptoms were excluded.

Treatment

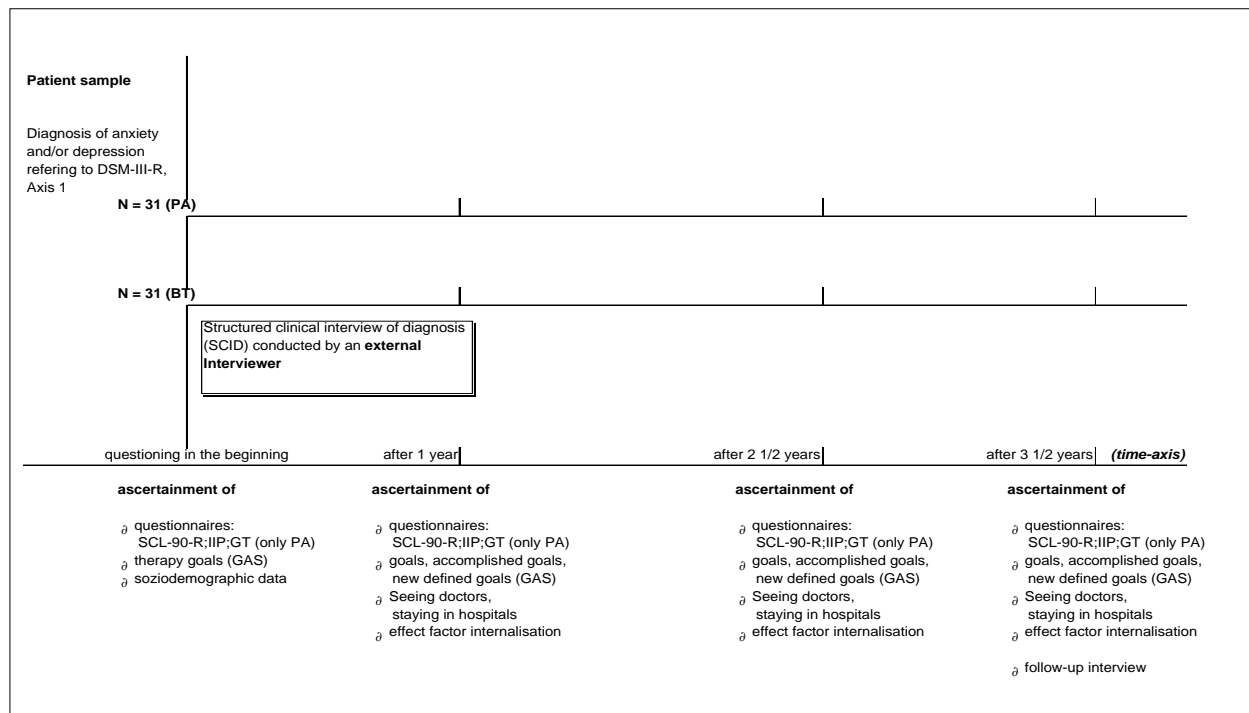
The behavior long-term therapies (BT) were treatments, that were conducted by behavior therapists who are licensed by the psychotherapeutic guidelines (German law). The average duration of the treatments was 63 sessions. After 2 _ years, 55 % of the treatments were not yet concluded; treatments still in progress after 3 _ years constituted 16 %. Psychoanalytically oriented long-term therapies were treatments, that were conducted by psychoanalysts who are licensed by the psychotherapeutic guidelines as well. Of the 31 psychoanalytically oriented long-term therapies (PA), 26 were conducted as psychoanalytic and 5 as psychodynamic treatment (all definitions according to the German health insurance system). The courses took an average of 185 sessions. After 3 _ years, 58 % of the courses had been completed. The mean frequency of sessions in the completed courses amounted to 4.8 sessions monthly ($d = 1.9$); for the ongoing courses the figure was 5.4 sessions monthly ($d = 1.5$).

Measures

Data were taken at four instances: at commencement of treatment, after one year, after 2.5 years and after 3.5 years. The experimental plan with the instruments of ascertainment is shown on the table below (Figure 1).

Figure 1. Experimental Plan

PA: long-term psychoanalytically oriented therapy and BT: long-term behavior therapy



The follow-up interviews after 3.5 years were conducted by independent interviewers. The interviews have been tape-recorded. The therapy goals were defined by the patients (BT) or the interviewer (PA) at the beginning of their respective courses of therapy. The patients were also given the option at every interview occasion to drop goals and name new ones. The follow-up interview figures: 95 % of the patients supplied answers after 3 _ years in the questionnaires (PA: 100 %, BT: 90 %) and 77 % took part in the follow-up interview (PA: 90%, BT: 64 %).

Results

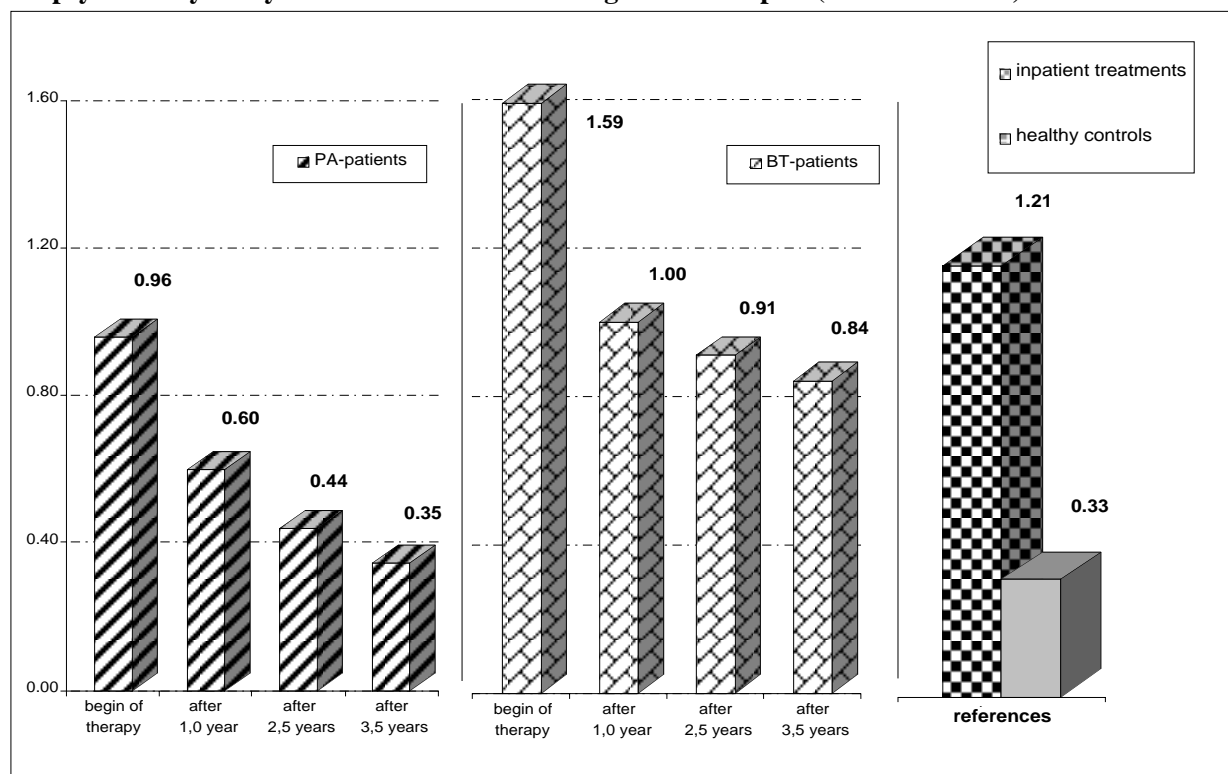
Differences between the patient groups at commencement of treatment

Notwithstanding comparable diagnoses, there were differences between the patients who were looking for or had been referred to behavior long-term therapy on the one hand and a psychoanalytically oriented long-term therapy on the other. The differences emerged in a number of characteristics – their schooling, their access to psychotherapy (referral by medical professionals vs. own initiative), the strain of their symptoms and the use of psychotropic medicines. Patients who had begun PA-oriented treatment had significantly better education, significantly fewer had come to a therapist via medical referral (but on their own initiative), they suffered significantly lower symptom strain in all scales and the total score of SCL-90-R, and there was significantly less use of psychotropic medicines (0.06 % vs. 35%). The educational differences between the two groups of patients is corroborated by Rüger & Leibing (1999), who incorporate studies by Linden et al. (1993) and Linden & Pasatu (1998) in their discussion. As long ago as 1958, Hollingshead & Redlich's (1958) classic study found that patients of different social classes received differing forms of psychotherapy. Long-term psychoanalytic treatment was accessible mainly to the middle and upper classes.

Developments in symptoms and interpersonal problems

In patients who came to this treatment under naturalistic conditions, both psychotherapeutic approaches proved highly successful. Both the patients who had begun a psychoanalytically oriented psychotherapy and those receiving behavior therapy showed significant changes in the symptom strain throughout the SCL-90-R scales and in the overall score (Analysis of Variance with repeated measurements MANOVA), as shown in Figure 2.

Figure 2 Development of the characteristic value GSI of SCL-90-R over all measurement dates for psychoanalytically oriented and behavior long-term therapies (with references)



References

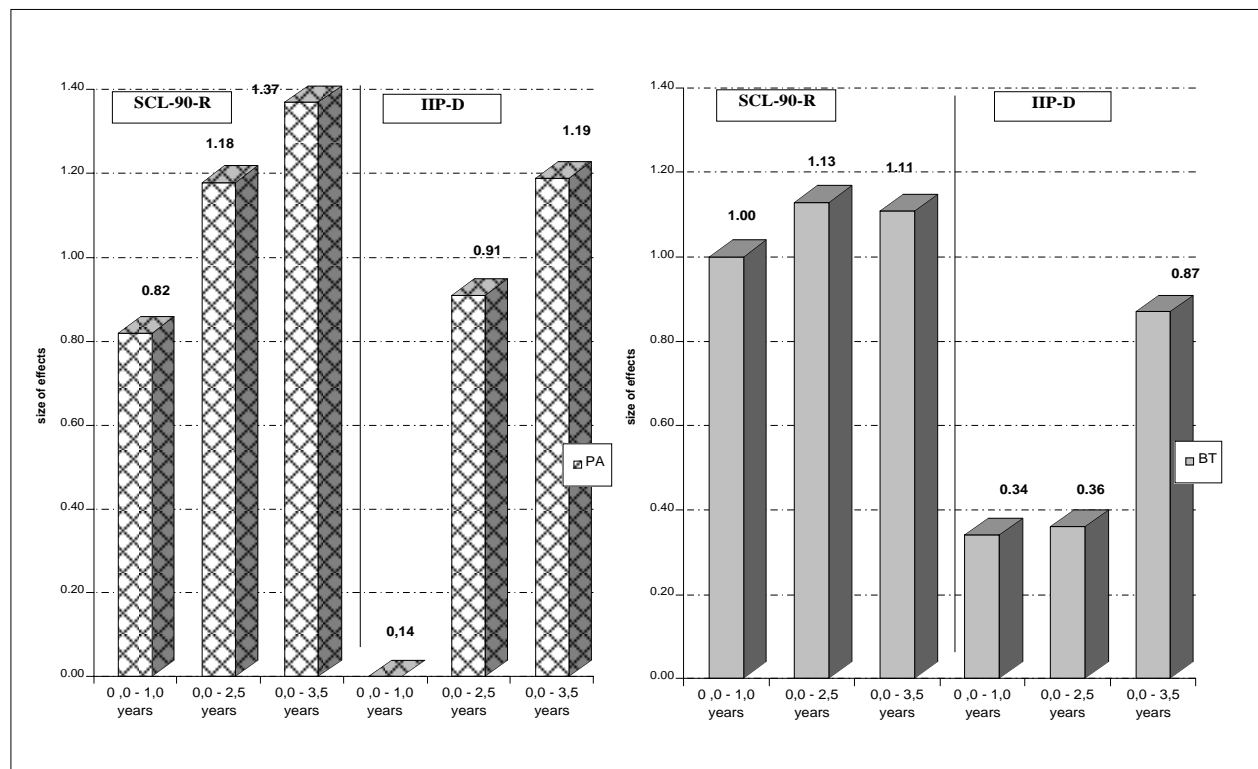
Healthy controls – average value for strain of symptoms in the general population

Inpatient treatments – average value for strain of symptoms in a sample of inpatients receiving psychotherapy (G. H. Franke, 1995)

Highly significant changes in interpersonal problems were also found, measured by the IIP, between the beginning of treatment and the repeat measurement after 3 _ years, in both treatment groups. For the patients in treatment group 'PA', substantial changes in this sphere could be ascertained in the period between the 1-year and 2 _-year points, while for the patients in treatment group 'BT' such change came even later, between the 2 _-year and 3 _-year test dates. The effect sizes for the changes in symptoms and in the interpersonal problems, as shown in Figure 3, have been obtained by a statistical method that tends to produce conservative results; so the effect sizes, especially for changes in interpersonal problems after 3 _ years, can be considered as high.

In both test groups, changes in the interpersonal sphere occurred later than changes in symptom strain. These results in this investigation confirm for long-term therapy the phase model set out by Lueger (1995) for psychotherapy outcome in short-term therapies.

Figure 3: Process of effect size of the characteristic value GSI of SCL-90-R and of the total IIP score, for the long-term psychoanalytically oriented and behavior therapies respectively.
Effect size formula $ES = (X_{\text{post}} - X_{\text{prae}}) / SD_{\text{prae}}$



Changes in experience, behavior and goal attainment

In their experience and behavior, measured by VEV (Zielke & Kopf-Mehnert, 1978a), and in goal attainment (GAS), significant changes over the test periods in both groups were again found. The patients – in both groups – redefined some 1/3 of their therapy goals after a year. The long-term therapies, under naturalistic conditions, took a rather discontinuous course in terms of time. This applies to both the beginning and the process of therapy. 1/3 of the patients had taken one or more courses of treatment prior to the therapy under investigation, and the latter was not infrequently interrupted, in both treatment groups.

Results specific to Disorders

The sample for patients with diagnosed anxiety disorders is too small in both groups for an examination of the differences between the two therapy approaches to be split into diagnosis type and still enable any generalised conclusions to be drawn.

Therefore only the effect sizes are tabulated here (see Table 1), which reveal the following differences in trend: patients with diagnosed depressive disorders appear in the long term, as inferred from the follow-up at the 3 _-years test point, to profit more from long-term treatment of the psychoanalytically oriented than the behavior therapy. The converse seems to be true of patients with anxiety disorders. The 1-year-point reading indicates that they profit sooner, and subsequently also more, from long-term behavior therapy than from long-term therapy on psychoanalytical lines.

Table 1 Effect sizes for diagnostic groups ‘Depression’ and ‘Anxiety’

$$ES = (X_{\text{post}} - X_{\text{prae}}) / SD_{\text{prae}}$$

ES ES ES	ES ES ES	ES ES ES
(0 - 1,0 J.)	(0 - 2,5 J.)	(0 - 3,5 J.)
Depression		
PA (N=22) GSI (SCL-90-R)	1.08	1.72 1.96
IIP total score	0.34	1.20 1.42
BT (N=19) GSI (SCL-90-R)	0.80	0.95 0.80
IIP total score	0.15	0.21 0.65
Anxiety		
PA (N=9) GSI (SCL-90-R)	0.55	0.53 0.85
IIP total score	0.28	0.40 0.97
BT (N=10) GSI (SCL-90-R)	2.08	1.83 2.14
IIP total score	0.69	0.55 1.52

It is not possible within the present limits to establish conclusively whether these differences derive from the different methods of treatment or from the differences between the patients in their education, use of medicines, etc.

Evaluation

The prospective study, of naturalistic design, shows that comparative therapy studies with parallelised samples do not always do justice to the reality that is their subject. A regrettable fact is that the number of patients with anxiety disorders in this sample is so low. The follow-up period (3 _ years after the beginning of the therapy) proved too short for an entire group of long-term therapies; they had not been completed at that point. Therefore a further follow-up sample (7 years after the beginning of therapy) is in preparation.

