

Relatedness, Group Work, and Outcome in Long-Term Inpatient Psychotherapy Groups

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Process and outcome measures were compared in two long-term groups. The measure "Relatedness" reflected an individual's attachment to and comfort with the group, and "Group Work" indicated perception of the group as having a positive working climate. High Relatedness scores predicted better outcome at 18-month follow-up. Group Work scores were not related to outcome. Relatedness and Group Work scores were not correlated. Results replicate in a group psychotherapy population the importance, reported in individual therapy literature, of an early and sustained positive therapeutic alliance (Relatedness). However, a measure that is closely related to the concept of "working alliance" (Group Work) did not predict outcome.

Many terms have been used to describe the nature of the relationship between the individual member and the group. Most of these terms have been poorly defined and the concepts difficult to operationalize. This study used two specific measures with demonstrated reliability and validity: "Relatedness" as a measure of the member's comfort in the group and "Group Work" as a measure of a positive working group atmosphere. Both measures are obtained by member self-report, but they target quite different perspectives of the group experience. MacKenzie¹ has argued that the member's perspective is the crucial mediating variable regarding the effect of the group on the individual. Such measures are bound to be idiosyncratic and will differ between members of the same group.

Relatedness: The term *Relatedness* as used in this study is closely associated with the concept of *group cohesion*. Group cohesion is considered a fundamental property of psychotherapy groups that is directly related to positive outcome. However, the exact nature of the concept of cohesion continues to be a

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subject of controversy. Kaul and Bednar² (p. 707) suggest that group cohesion is a "multi-dimensional process that varies as a function of an indefinite number of factors," many of which are neither made explicit nor adequately measured. Self-report questionnaire measures of cohesion are typically administered on only one occasion, thus blurring possible changes in cohesion over time.³ The links between cohesion and outcome have been poorly documented.^{4,5} Bloch and Crouch⁴ describe three components of cohesion: acceptance, support, and esprit de corps (identification with the group). This list of components typifies the blurring of conceptual boundaries that we are trying to clarify in this study. A sense of acceptance and support clearly refers to the quality of the experience of the individual, whereas esprit de corps is a reflection of how the group as a whole is operating. The Relatedness scale focuses on the experience of the individual.

A minimum level of attraction to the group appears to be important for maintaining attendance, particularly in the early group.¹ The majority of premature terminations occur during the first six sessions of a new group.⁶ However, it is unclear whether cohesion should be considered as a therapeutic factor in its own right or as a background condition that enables other therapeutic factors to operate. Questions have been raised concerning the possible antitherapeutic effects of very high cohesion that dampens interactional confrontation.⁷

Cohesion has also been seen to vary over stages of group development.⁸⁻¹⁰ Yalom¹¹ suggests that cohesion must be considered "not a static, once-achieved forever held property of a group" but rather a phenomenon that "fluctuates during the life of the group" (p. 50). When, therefore, is cohesion most helpful or most critical? For whom is it most helpful? Does the nature of cohesion differ from early stages to later ones? Should cohesion be seen as analogous to the concept of "therapeutic alliance" in individual psychotherapy, where early measures of the alliance correlate

with eventual outcome? Is cohesion a necessary but not sufficient precondition for effective therapy?

Group Work: The term *Group Work* is related to the idea of an engaged group. The term *engagement* is used in a broad and poorly focused manner in the group literature. Indeed, many of the comments made above regarding cohesion could be equally applied to engagement. One way of conceptualizing engagement is as an index of how the group as a whole is functioning. The measure used in this study is based on the idea of a positive working psychotherapy environment. This is close to the concept of "working alliance," described in the individual psychotherapy literature as one facet of the therapeutic alliance. A series of studies of individual psychotherapy suggests that the working alliance is the strongest predictor of clinical outcome among the several subsets that have been described.¹²⁻¹⁴

This article describes an investigation into the relationship between Relatedness, Group Work, and outcome in two long-term, psychoanalytically oriented inpatient psychotherapy groups. The following specific hypotheses are investigated:

1. Patients reporting higher levels of attraction to and personal comfort in the group (Relatedness) will have greater clinical improvement than patients reporting lower levels of Relatedness.
2. Relatedness ratings in the early group will predict 18-month follow-up outcome status.
3. Patients reporting higher overall levels of Group Work (a positive working group atmosphere) will have greater clinical improvement than patients reporting lower levels of Group Work.
4. Group Work ratings in the early group will predict 18-month follow-up outcome status.
5. Ratings of Relatedness and Group Work will be strongly correlated.

 METHODS

 Clinical Sample

The study took place in the Psychotherapy Clinic, Stuttgart, Germany. This clinic is an inpatient treatment hospital with an affiliated psychotherapy research institute. The clinic accepts severely disturbed, treatment resistant, neurotic, and personality disordered patients as inpatients for 5 to 9 months, with an average length of stay of approximately 6 months. A comprehensive milieu program is offered, with four small group sessions per week. In addition to this psychoanalytically oriented treatment, the program has a weekly psychodrama group session as well as athletic activities.

This investigation studied two inpatient groups, each conducted by the same pair of analytically qualified cotherapists. Each therapist had more than 15 years of experience in group psychotherapy using a therapeutic approach based on the concepts described by Foulkes and Anthony.¹⁵ Participants completed an informed consent form.

Group 1: This group began with 10 patients and had 2 premature terminations within the first 21 sessions, approximately 5 weeks into the program. One of these was the only patient with a history of schizophrenia (in remission) and the other a man with a severe narcissistic personality disorder. Using DSM-III-R criteria, the remaining 8 patients had the following diagnoses: narcissistic personality disorder (3 men), generalized anxiety syndrome (2 women), schizotypal personality disorder (1 woman), dysthymia (1 woman), major depression (1 woman). The patients ranged in age from 24 to 39 years. The group completed 83 sessions of 100 minutes each over a period of approximately 6 months.

Group 2: This group also began with 10 patients and lost 1 anorexic patient because of continued weight loss at the fourth month.

One man with anorexia nervosa refused to participate in termination and follow-up measurement and is therefore not included in this study. The remaining 8 patients had the following diagnoses: borderline personality disorder (2 women), anxiety disorder with agoraphobia and histrionic personality disorder (1 woman), dysthymia and histrionic personality disorder (1 woman), obsessive-compulsive personality disorder (1 man), alcohol dependence in full remission (1 man), generalized anxiety disorder (1 man), psychological factors affecting physical condition (1 man). The patients ranged in age from 23 to 35 years. The group completed 93 sessions over a period of approximately 6½ months.

 Outcome Measures

Symptom Checklist (SCL-90-R): This 90-item checklist is widely used as a general measure of psychological distress.¹⁶ It is completed by the patient.

Target Goals—Patient: This form asks the patient to identify three target goals and rate their severity at different points in time.¹⁷

Global Assessment Scale: This is the forerunner of the current Axis V of DSM-III-R to assess overall psychological, social, and occupational functioning.¹⁸ It is completed by the clinician.

Goal Attainment Scales: Therapeutic goals were formulated by the therapists approximately 1 month after the beginning of therapy. The ratings of change on these goals were made by an independent clinician based on a 1-hour psychodynamically oriented interview.¹⁹

These measures were administered prior to beginning therapy, at termination, and at 12- and 18-month follow-ups. Outcome results were calculated for each of the four outcome measures using "residual gain scores" calculated according to the method

of Luborsky et al.²⁰ This procedure is a conservative measure of change because the outcome score is adjusted for the original pretherapy level of distress, the relative change from that level, and the average group change score. A global outcome score was calculated for each patient based on the equally weighted results on the four outcome measures. Process measures are compared with outcome as measured at the 18-month follow-up point. This avoids the temporary surge of either positive or negative reactions that is common at termination.

Process Measures

Stuttgarter Bogen (SB): This 15-item semantic differential questionnaire²¹ was administered to each group member after each group session; the instructions for each item were to complete the statement "In today's group I felt . . ." Eight of the items form a subscale entitled "Emotional Relatedness to the Group." This scale was used as the measure of the individual's sense of relatedness with the group. The eight items offer the following choices: resigned/full of hope, protected/unprotected, understood/not understood, feeling well/feeling miserable, confused/understanding, comfortable/un-

comfortable, familiar/unfamiliar, insecure/self-confident. The scores from every second session were used in the analysis.

Group Climate Questionnaire, Short Form (GCQ-S): This 12-item questionnaire²² was also administered to each group member after each session. The German version of the GCQ-S has the same three subscales—Engaged, Conflict, and Avoiding—as the original English instrument.²³ This questionnaire asks the group member to rate the overall group climate, in contrast to the SB, which focuses on personal reactions to the session. The five-item Engaged subscale is used in this article as a measure of Group Work. The items describe a positive working group climate. Using the instruction "Try to think of the group as a whole," the five items tap these areas: liking and caring, understanding and reasoning, importance and participation, challenging and confronting, and self-disclosure. As with the SB, scores from every second session were analyzed.

RESULTS

There was general concordance among the four outcome measures even though they represented three different viewpoints on

TABLE 1. Mean outcome scores for most and least successful group members

Patient Subgroup/Measure	Pretreatment	Termination	12-Month Follow-up	18-Month Follow-up
Most successful patients (n = 4)				
Goal Attainment Scaling	NA	1.87 ± 0.25	1.60 ± 0.69	2.36 ± 0.44
Target Goals	4.34 ± 0.34	2.13 ± 0.89	1.58 ± 0.83	1.42 ± 0.64
SCL-90-R	2.11 ± 0.47	1.12 ± 0.18	1.32 ± 0.19	1.32 ± 0.21
Global Assessment Scale	43.3 ± 5.1	61.3 ± 10.1	NA	67.5 ± 7.5
Least successful patients (n = 8)				
Goal Attainment Scaling	NA	1.03 ± 0.49	0.72 ± 0.59	0.68 ± 0.30
Target Goals	3.90 ± 0.46	2.88 ± 0.55	3.09 ± 0.46	2.83 ± 0.56
SCL-90-R	1.60 ± 0.34	1.43 ± 0.27	1.78 ± 0.28	1.91 ± 0.34
Global Assessment Scale	38.9 ± 3.7	55.8 ± 14.5	NA	55.7 ± 4.3

◆ *Note:* Values are means ± SD. Goal Attainment Scaling: 1 = deterioration; 3 = excellent outcome. Target Goals: 6 = worst; 0 = best. SCL-90-R: 0 = no symptoms; 4 = maximal symptoms. Global Assessment Scale: 40 = major impairment; 70 = mild impairment. NA = not applicable.

clinical progress: those of the patient, the therapist, and an independent interviewer. Improvement noted at termination tended to be maintained through the full 18-month follow-up period. Patient outcomes were classified, with “most successful” ($n = 4$) and “least successful” ($n = 8$) categories based on the 18-month follow-up results (Table 1). Two of the 4 patients in the middle outcome range, not shown in Table 1, had scores in the most successful range at 18-month follow-up but were not included because they received additional treatment during the follow-up period.

Figure 1 shows the mean Relatedness scores from the Stuttgarter Bogen questionnaire for the most successful patients ($n = 4$, two from each group) and the least successful patients ($n = 8$, four from each group) over the entire course of therapy. It can be seen that the most successful patients had scores consistently above 30, a level reflecting high Relatedness. Figure 2 shows the mean Group Work ratings from the GCQS in the same manner. No systematic difference was found between the most and least successful patients.

The mean Relatedness level over all sessions as well as for the last half of treatment was significantly related to outcome (Table 2). Significant results were also found between outcome and Relatedness for the first 12 sessions of Group 1 but not for Group 2.

Group Work scores were not significantly correlated with outcome for the first 12 sessions, the second half of treatment, or the entire time period (see Table 2). The data are

presented for each group separately because Group Work is a rating of the group as a whole.

There was good agreement between most and least successful patients regarding overall Group Work scores. However, there was not agreement between most and least successful group members regarding Relatedness scores. The correlation between Relatedness and Group Work scores for the entire sample (all 16 patients of both groups) is not significant. The details of the relationship between Relatedness and Group Work scores for the most and least successful patients are shown in Figure 3. The most successful group members reported higher levels of both Relatedness and Group Work. The least successful tended to see the group as hard-working but did not themselves feel relatedness with the group.

DISCUSSION

This study uses a standard, comprehensive set of measures of clinical change. There is a strong common directionality to the results from the different outcome measures, even though they originate from different sources: the patient, the therapist, and an independent clinician. In general, gains reported at the termination of therapy were maintained through an 18-month follow-up period. Patients with lower scores at termination did not, as a group, improve these scores over the follow-up time period.

The process measures are less well known. The Stuttgarter Bogen has been

TABLE 2: Relationship between Relatedness, Group Work, and outcome

Measure	Group 1 Outcome			Group 2 Outcome		
	First 12 Sessions	Last Half	All Sessions	First 12 Sessions	Last Half	All Sessions
Relatedness	0.72*	0.74**	0.77**	0.50	0.94***	0.77**
Group Work	- 0.27	0.25	0.03	0.15	0.12	0.27

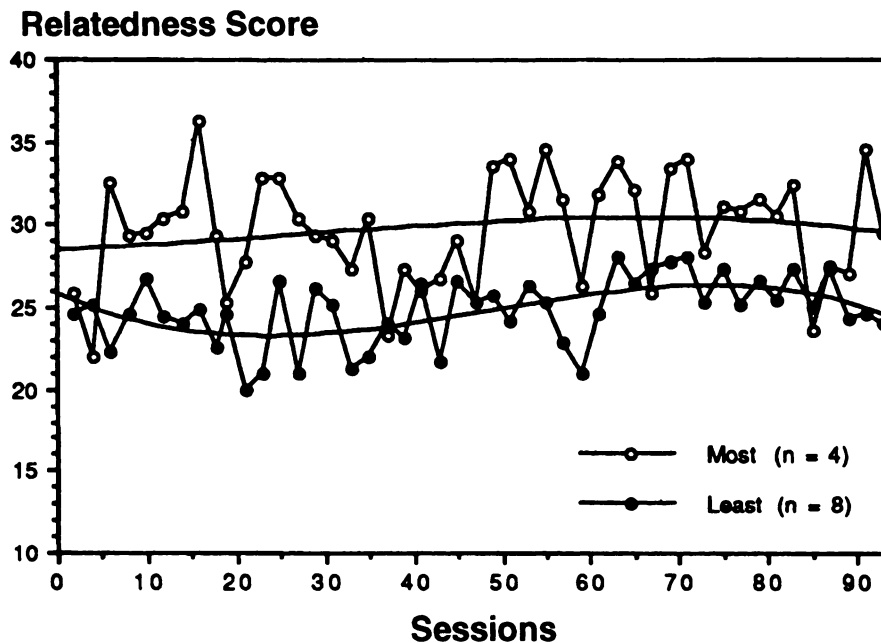
◆ Note: Pearson correlation coefficients, $df = 6$.
 * $P < 0.05$ (one-tailed); ** $P < 0.05$ (two-tailed); *** $P < 0.001$ (two-tailed).

widely used in European group psychotherapy studies. It taps the internal experience of the patient during the session. The Relatedness subscale reported in this article bears some resemblance to measures of the global therapeutic alliance in the individual psychotherapy literature. It reflects a sense of the individual's positive connectedness with the group during the session. The Group Climate Questionnaire, on the other hand, asks the group member to describe the whole group. The Engaged subscale of the GCQ-S, used here as a measure of Group Work, deals with a sense that positive work is being done in the group. This subscale represents the strongest factor in the GCQ. It undoubtedly captures an element of general relatedness to the group, but it has a focus more in keeping with the "working alliance" component of the global therapeutic alliance. These two measures—SB and GCQ-S—have not before been

used in the same study. The definitions given to each of them, although admittedly arbitrary, are carefully operationalized.

Hypothesis #1 is supported. Overall Relatedness scores were correlated with better outcome. The mean Relatedness level was significantly higher in the most successful patients compared with the least successful. This distinction emerged early in the group's life and persisted throughout. Statistically there is partial support for hypothesis #2: one of the two groups had elevated Relatedness scores in the first 12 sessions. The least successful members never reached a high level of Relatedness at any time. Thus, within the same group, members with a more positive sense of group involvement made greater gains during the therapeutic experience. The fact that these patterns emerged within the first 12 sessions suggests that some members either came more prepared to utilize the

FIGURE 1. Relatedness in relation to outcome, most vs. least successful group members (polynomial curves, 3rd order), from Stuttgarter Bogen questionnaire.



group for therapeutic goals or found it easier to make use of a group setting.

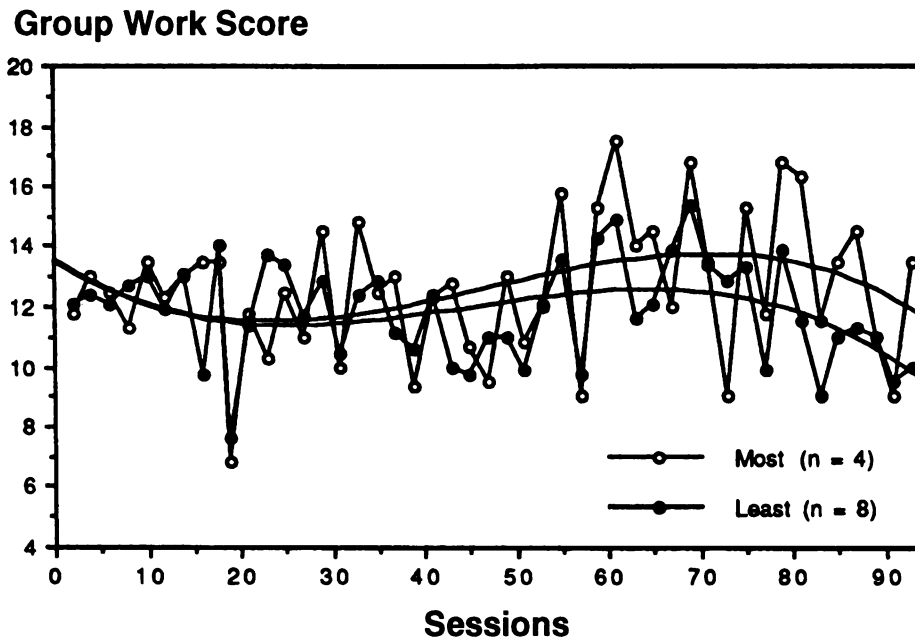
One might wonder if initial motivation or interactional capacity contributed to the difference. If this were so it would suggest that Relatedness, at least as measured by the Stuttgarter Bogen, reflects a motivational/attitudinal set prior to beginning therapy rather than a property of the group per se. This would be somewhat contrary to the therapeutic factor literature regarding the importance of group conditions, but it is compatible with the historical problems in operationalizing the concept of group cohesion.^{2,4} Piper et al.²⁴ report that "quality of object relations" is significantly correlated with outcome in brief outpatient group psychotherapy. This measure is based on a developmental model of object relations. Piper's results would be compatible with those found in the present study; namely, that patients with a greater capacity to relate to others do

better in group psychotherapy. This applies equally in individual therapy.

Various authors have conceptualized the individual member's relationship to the whole group as similar in nature to the bond between infant and mother, a regressive but powerful and poorly discriminated sense of attachment.^{25,26} Kibel²⁶ describes the effects of this bond to the "mother-group" as follows:

The practical consequences of identification with the group entity are twofold. First, attachment to such a powerful object provides a sense of belonging, enhances each individual's self-esteem, and, because of this ego support, maximizes latent potential. These include such functions as adaptation to reality, the sense of reality, reality testing, the sense of self, relatedness to others, the capacity for concern, and flexibility or receptivity to new experience. In other words, group participation, with the re-

FIGURE 2. Group Work in relation to outcome, most vs. least successful group members (polynomial curves, 3rd order).



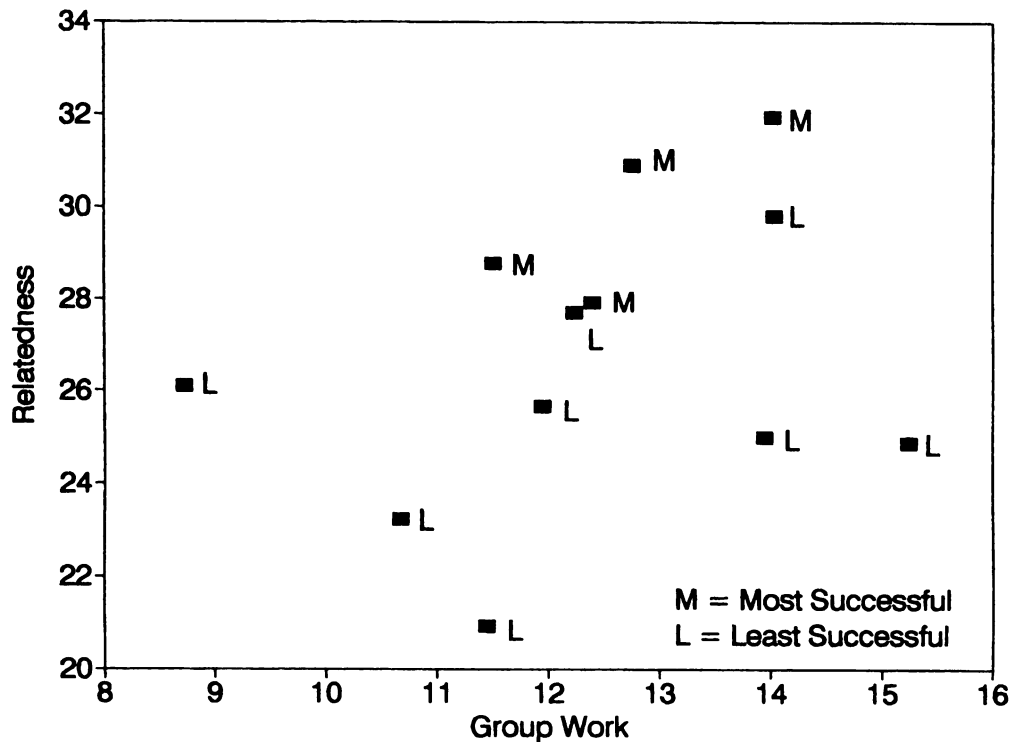
sultant sense of being valued, promotes optimal functioning and prepares one to change. (p. 118)

Hypotheses #3 and #4 are not supported. Group Work scores, either overall or in the early sessions, did not differentiate between most and least successful patients. Hypothesis #5 is also not supported. There is no significant correlation between Relatedness and Group Work scores. The most successful patients not only experienced the group in a cohesive manner, but also saw the group itself as a positive working environment. In both groups, the least successful patients tended to separate these two issues. They generally saw the group itself as working, but they rated their reactions to it at the lower end of the Relatedness scale (Figure 3). This suggests that they perceived the group accurately, at

least in the same manner as the rest of the members, but were not themselves able to align with that working atmosphere.

These results are not in keeping with the general psychotherapy literature. The Group Work scale used in this study contains items similar to the "working alliance" scales used in individual therapy studies quoted earlier. The working alliance as perceived by the patient is one of the more robust predictors of better outcome in this literature. It might be speculated that in therapy groups, the individual member's reaction is more differentiated from the perception of the overall group climate. This could be seen as the reverse of a therapeutic factor effect: "The group is really working, but I am not part of it." This effect might set up a cognitive dissonance between self and the social system that could have negative consequences.

FIGURE 3. Relationships between Relatedness and Group Work scores for most successful and least successful patients, from Group Climate Questionnaire.



These findings are based on only two groups, and they were operating in the complex milieu of an inpatient setting, where many other therapeutic processes may be at work. Although it is likely that extragroup events might be reflected in the small groups, no specific data are available regarding this possibility. Generalizable conclusions are therefore not warranted. This study has used a single-case design to look in depth at process and outcome issues in longer term group psychotherapy. By repeating the protocol with a second group, a replication of findings was achieved, thus providing an aggregation of results.

The trends shown in this study, if replicated, would reinforce the importance of several issues of relevance to the clinician. A careful assessment of motivation for therapy,

and in particular group therapy, would seem important. In these two groups, members who began with an early positive attitude toward the group did much better in the long run. Attention to pretherapy preparation might also address this point. Once the group begins, it would seem prudent to tap continuously the nature of the experience of each member in the group, particularly in early sessions. Evidence of negative reactions to the group or sagging participation should not be left unaddressed. Patients in the second half of their therapy who still rated the group low in Relatedness did not have successful outcomes. This study, and others in the individual psychotherapy literature, strongly suggest that any threatened breach of the therapeutic alliance needs to be addressed immediately and vigorously.

R E F E R E N C E S

- MacKenzie KR: *Introduction to Time-Limited Group Psychotherapy*. Washington, DC, American Psychiatric Press, 1990
- Kaul TJ, Bednar RL: Experiential group research: results, questions, and suggestions, in *Handbook of Psychotherapy and Behavior Change*, 3rd edition, edited by Garfield SL, Bergin AE. New York, Wiley, 1986, pp 671-714
- Drescher S, Burlingame G, Fuhrman A: Cohesion: an odyssey in empirical understanding. *Small Group Behavior* 1985; 16:3-30
- Bloch S, Crouch E: *Therapeutic Factors in Group Psychotherapy*. Oxford, Oxford University Press, 1985
- Budman S, Soldz S, Demby A, et al: Cohesion, alliance, and outcome in group psychotherapy: an empirical examination. *Psychiatry* 1989; 52:339-350
- Dies RR, Teleska PA: Negative outcome in group psychotherapy, in *Negative Outcome in Psychotherapy and What to Do About It*, edited by Mays DT, Franks CM. New York, Springer, 1985, pp 118-141
- Wolf A, Schwartz EK: *Psychoanalysis in Groups*. New York, Grune & Stratton, 1962
- Kaplan SR, Roman M: Phases of development in adult therapy groups. *Int J Group Psychother* 1963; 13:10-26
- MacKenzie KR, Livesley WJ: A developmental model for brief group therapy, in *Advances in Group Psychotherapy: Integrating Research and Practice*, edited by Dies RR, MacKenzie KR. New York, International Universities Press, 1983, pp 101-116
- Tschuschke V, MacKenzie KR: Empirical analysis of group development: a methodological report. *Small Group Behavior* 1989; 20:419-427
- Yalom ID: *The Theory and Practice of Group Psychotherapy*, 3rd edition. New York, Basic Books, 1985
- Docherty JP: The therapeutic alliance and treatment outcome: introduction, in *Psychiatry Update: American Psychiatric Association Annual Review*, vol 4, edited by Hales RE, Frances AJ. Washington, DC, American Psychiatric Press, 1985, pp 525-531
- Horvath AO, Greenberg LS: Development and validation of the working alliance inventory. *Journal of Counseling Psychology* 1989; 36:223-233
- Gaston L: The concept of the alliance and its role in psychotherapy: theoretical and empirical considerations. *Psychotherapy* 1990; 27:143-153
- Foulkes SH, Anthony EJ: *Group Psychotherapy: The Psychoanalytic Approach*. Harmondsworth, Middlesex, England, Penguin, 1957
- Derogatis LR: *The SCL-90-R: Administration, Scoring, and Procedures Manual I*. Baltimore, Clinical Psychometric Research, 1977
- Coche E: Change measures and clinical practice in group psychotherapy, in *Advances in Group Psychotherapy: Integrating Research and Practice*, edited by Dies RR, MacKenzie KR. New York, International Universities Press, 1983, pp 79-99
- Luborsky L: Clinician's judgments of mental health: specimen case descriptions and forms for the Health-Sickness Rating Scale. *Bull Menninger Clin* 1975; 39:448-480

19. Kiresuk TJ, Sherman RE: Goal attainment scaling: a general method for evaluating comprehensive community mental health programs. *Community Ment Health J* 1968; 4:443-453
20. Luborsky L, Crits-Christoph P, Mintz J et al: *Who Will Benefit from Psychotherapy?* New York, Basic Books, 1988
21. Lermer SP, Ermann G: Der Stuttgarter Bogen (SB) zur Erfassung des Erlebens in der Gruppe. *Gruppenpsychotherapie und Gruppendynamik* 1976; 2:133-140
22. MacKenzie KR: The clinical application of a group climate measure, in *Advances in Group Psychotherapy: Integrating Research and Practice*, edited by Dies RR, MacKenzie KR. New York, International Universities Press, 1983, pp 159-170
23. Tschuschke V, Hess H, MacKenzie KR: Der Gruppenklima-Fragebogen (GCQ-S): Methodik und Anwendung eines Messinstruments zum Gruppenerleben. *Gruppenpsychotherapie und Gruppendynamik* 1991; 26:340-359
24. Piper WE, McCallum M, Azim HFA: *Adaptation to Loss through Short-Term Group Psychotherapy*. New York, Guilford, 1992
25. Scheidlinger S: On the concept of the "mother-group." *Int J Group Psychother* 1974; 24:417-428
26. Kibel HD: The therapeutic use of splitting: the role of the mother-group in therapeutic differentiation and practicing, in *Psychoanalytic Group Theory and Therapy: Essays in Honor of Saul Scheidlinger*, edited by Tutman S. Madison, CT: International Universities Press, 1991