Brit. J. Psychiat. (1971), 119, 199–206

An Investigation of Conceptual Process and Pattern Change in a Psychotherapy Group

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Introduction

In a review of the 1967 group psychotherapy literature, MacLennan and Levy (1968) record that nearly 300 papers were published in that one year. Unfortunately, this proliferation does not reflect any great increase in the knowledge of group psychotherapy processes. There are plenty of original ideas, but these are almost totally unsupported by systematic theory and research. Where theoretical ideas have been used, they have been lifted from the sphere of individual psychotherapy and applied unmodified to group psychotherapy. The research has largely been concerned with determining such things as the most efficient group structure; who talks to whom about what; and what grammatical forms are used.

The aim of the present study was (a) to look at the group from within, (b) to attempt to identify group *processes* as well as changes in patterning of ideas in both patients and therapists and (c) to apply a theory that has the group situation well within its range of convenience together with its measuring technique.

Patients and Treatment Procedure

The group consisted of eight patients with a mean age of 30 years, 1 month (range 22 to 33 years) and a mean intelligence on the Mill Hill Vocabulary Scale of 104 (range 93 to 114). All four males were single, and of the females two were single, one was married and one was separated.

All patients had personality difficulties, and two showed no evidence of formal mental illness, two suffered from an anxiety state, two from depression, one from a phobic state (agoraphobia) and one from an obsessional neurosis. The group was closed and held once weekly at the London Hospital. The conductor (M.P.J–B) used psychoanalytically-oriented therapy. A second psychiatrist attended the group meetings as a non-participating observer. The group was aware of the fixed duration of treatment, i.e. one year.

Methods of Measurement

A. *The repertory grid as a measure of conceptual change*

To measure the basic units of his Personal Construct Theory, Kelly (1955) described the Rep Test. This has been developed and modified considerably since its inception, and further details of both grid and theory are given in Bannister and Mair (1968).

One modification of the technique is the rank order form (Bannister, 1963; Fransella and Adams, 1965). All grids are forms of sorting task, and in the rank order version the person is required to sort the *elements* according to their relative importance in terms of a *construct*. For example, a grid concerned with measuring construct sub-systems pertaining to cats might have elements consisting of different species of cat. These elements might then be ranked in terms of cat-related constructs: 'wildness', 'slinkiness', 'length of fur' and so forth. In this study rank order grids were completed by each patient and the two psychiatrists at 0, 3, 6, 9 and 12 months.

Elements

Since the focus of interest was the group, the eight patients served as elements. In practice, each had 8 cards placed in front of him with one group member's name on each, but with ME on the card that would have borne his own name. The eight patients served also as elements for the psychiatrists.

Patients' constructs

The same 20 constructs were used for all 8 patients, and the main reasons for selection were:

(i) It was expected that the LEADER would be perceived as CONTRIBUTING MOST TO GROUP DISCUSSIONS and as being the most TALKATIVE, based on studies of small group dynamics (e.g. Bion, 1961). (ii) To test the notion that the group takes over the functions of the therapist in the eyes of the group members (Foulkes and Anthony, 1965) it was expected that AS I WOULD LIKE TO BE and TYPICAL OF THE GROUP AS I WOULD LIKE IT TO BE would, in the first instance, be related to THE THERAPIST but not to THE GROUP AS IT IS NOW; during the course of therapy, THE GROUP AS IT IS NOW would become similar to AS I WOULD LIKE TO BE *and* THE THERAPIST and finally, AS I WOULD LIKE TO BE and THE GROUP AS IT IS NOW would remain related to each other but not to THE THERAPIST. (iii) To test the idea that 'no wonder the modern individual is afraid of the group—is afraid of losing his very existence, of his identity being submerged and submitted to the group' (Foulkes and Anthony, 1965), LIKE ME IN CHARACTER and MAKES ME ANXIOUS OR UNEASY were included. (iv) Constructs expressing negative attitudes: ANNOYS ME; IS A DISRUPTING INFLUENCE ON THE GROUP; IS DIFFERENT FROM THE REST OF THE GROUP; I LIKE THE LEAST. (v) Additional constructs: PEOPLE WHO HAVE PROBLEMS LIKE MINE; THE ONLOOKER; DOMINATING; DEPEND ON OTHER PEOPLE.

Psychiatrists' constructs

The same 16 constructs were used for both psychiatrists, and the following additions and deletions were made from the patients' constructs:

Additions: SCAPEGOATS; DIFFERENT FROM THE REST OF THE GROUP; UNWELL; LIKELY TO IMPROVE; LIKELY TO RESIST CHANGE.

Deletions: ONLOOKER; DEPEND ON OTHER PEOPLE; LIKE THE THERAPIST; HAVE PROBLEMS LIKE MINE; DOMINATING; LIKE I'D LIKE TO BE IN CHARACTER.

B. *Measures of outcome*

(i) *Social adjustmeat.* Existing measures of the effect of psychotherapy are notoriously inadequate. It has yet to be decided along what dimensions therapeutic outcome should be construed. For present purposes social adjustment was taken as the main criterion of change and scales devised at the Maudsley Hospital were used. The assessment categories concern the patient's adjustment at work and leisure with family and non-family members, and sexual adjustment. To the overall inadequacies inherent in such scales must be added the fact that these were originally designed to measure changes in phobic symptoms (Marks, Gelder and Edwards, 1968). It is against the background of these obvious deficiencies that significant changes must be assessed.

The ratings were based on notes taken by a senior clinical psychologist at interviews with each patient and an informant at the beginning and end of treatment (32 interviews in all). A consultant psychiatrist rated the patients on the basis of these notes alone. The reliability coefficient for these two sets of ratings was 0·83. Both raters played no part whatever in the therapeutic programme and were in complete ignorance of the patient's progress.

(ii) *Depression Scale.* The Self Rating Depression Scale (Zung, 1965) was completed by all patients at the beginning and end of treatment.

(iii) *Clinical Assessment.* This was a subjective measure of improvement for each 3-month period made by the participating psychiatrist, based on his notes for the whole year.

Scoring Procedures

The 50 grids were analysed into their principal components by the INGRID computer programme and analysis of change made by the DELTA programme (Slater, 1965, 1968; Ryle and Lunghi, 1969).*

Two of the many ways in which an individual's thought processes can be described is the extent to which his ideas interrelate (Intensity) and the degree to which the construct pattern-

* All analyses were carried out as part of the service offered by the Medical Research Council and run by P. Slater.

ing remains stable over time (Consistency). Intensity and Consistency (Bannister, 1960) are not characteristics of a person's *total* construct system. They are not 'traits'. Rather they are aspects of thought processes, and for any one individual can be limited to certain events or ideas or construct sub-systems within his total construct system.

(i) *Intensity*. This is operationally defined as the degree to which the constructs in a grid are inter-correlated (high correlations indicate high intensity, low correlations low intensity), and is related to Kelly's notion of 'tight' versus 'loose' construing. He considered that 'loosening' had to occur before a new idea could be formed, and this was encouraged during free association. Intensity scores are derived by squaring each correlation and multiplying it by 100; these can then be summed for each individual, construct or test occasion.

(ii) *Consistency*. Construct Pattern Consistency is operationally defined as the extent to which the ranking of interconstruct correlations remains similar on re-test. Element Consistency is the degree to which element placements remain stable throughout the whole grid, and also the degree to which the element rankings are similar on re-test; both these measures are provided by the DELTA programme.

This ability to discriminate between construct and element change enables one to determine whether any alteration is the result of change in *meaning* of constructs or whether the person has changed his mind about the people construed; people construed as having leadership qualities at first testing may be seen as being dependent on second testing, but the qualities defining leadership and dependency could have remained the same.

(iii) *The Grid Test of Thought Disorder* (Bannister and Fransella, 1966). This test was administered at the start and again 9 months later (not suggesting that patients or psychiatrists might be suffering from thought disorder, but to show the extent to which the group had a degree of structure and stability in their thinking that was comparable with a not-thought-disordered sample). Also, if there had been no substantial change in Intensity on the test and yet there had been on the 'group' grids, then this 'loosening' or 'tightening' could be regarded as specific to 'group' construing.

(iv) *Concordance of Person Perception*. As well as applying statistical procedures to grid matrices, the actual placement of elements by any person for any construct can be examined. To find out how an individual perceives himself in relation to other members and what they think of him, the person's placement of himself as, say, leader, is subtracted from the group's mean placement of that person as leader. This procedure gives a numerical value to the discrepancy between group and individual placement, and was calculated for each construct and test occasion.

Results

A. *Repertory grid*

(i) *Intensity Scores*. Scores on the Grid Test of Thought Disorder (see Table I) show no significant change in either Intensity or Consistency during the 9-month interval ($t = 1{\cdot}12$, $p > {\cdot}05$), nor do they differ significantly from those of neurotic or 'normal' subjects. The direction of change for both scores is one of increase.

TABLE I

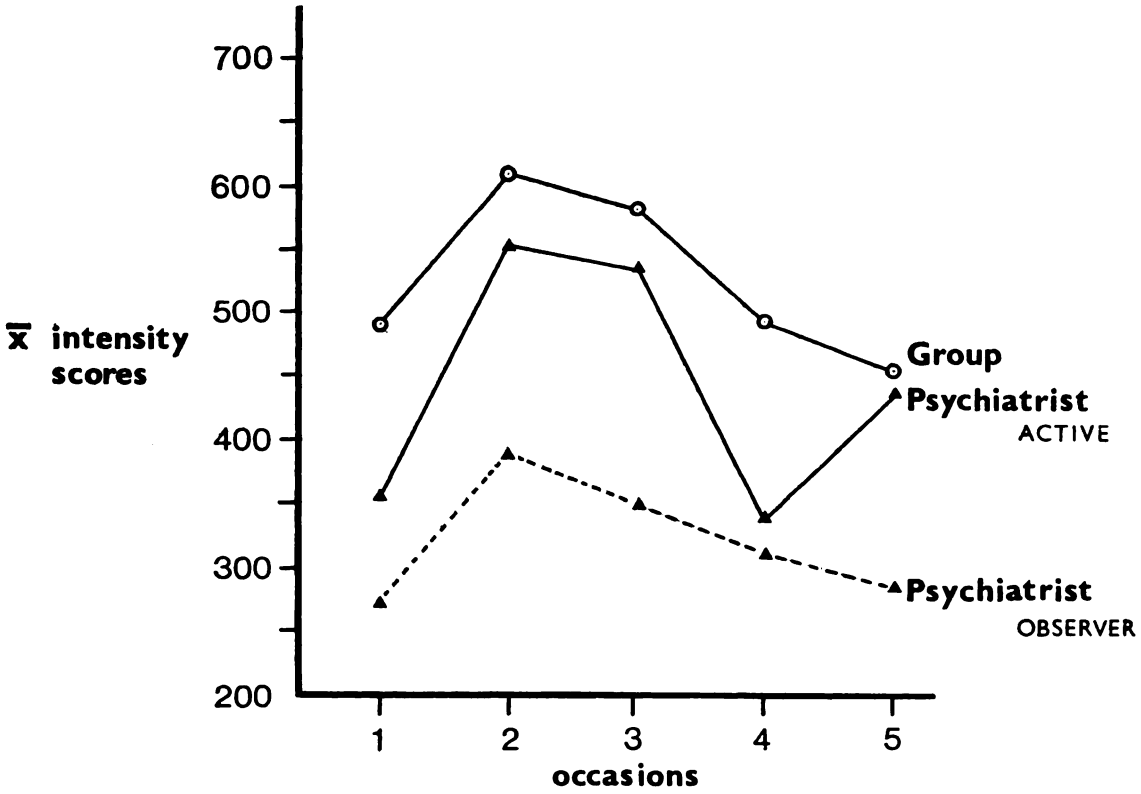
Means and standard deviations of intensity and consistency scores for 10 group members on the grid test of thought-disorder, test-retest interval of 9 months, compared with standardization samples ($N = 20$ in each group)

	Psychotherapy group				Standardization groups			
	0 months		9 months		Neurotics		Normals	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Intensity ..	1222	255	1552	427	1383	517	1253	339
Consistency ..	0·86	0·33	0·87	0·25	0·74	0·45	0·80	0·34

Figure 1 shows that the group as a whole had fluctuations in Intensity during the 12 months of treatment and that similar fluctuations occurred for both psychiatrists. Of particular interest is the fact that the observer (psychiatrist 2) was carried along with the ebb and flow of this change in thought process. This observation is in line with the often mentioned fact that the observer gets unwillingly involved with the group rather than remaining aloof and objective (e.g. Bernardez, 1969; Levin and Kanter, 1964).

An analysis of variance of the scores for each person showed that for 8 of the 10 people there were significant differences between Constructs and between Occasions; all but one had a significant change between Occasions 2 and 4. This 'loosening' that took place between Occasions 2 and 4 did not occur throughout the whole construct system, since Intensity scores on the Thought Disorder Test tended to *increase* during this time.

(ii) *Consistency Scores*. An analysis of variance showed a highly significant difference between Occasions ($p < \cdot 001$) but not between Subjects. All 10 people became more and more consistent in the way they applied the constructs to other group members (Element Consistency) up to *and including* the 4th Occasion, but changed radically before the 5th Occasion. A mean correlation of 0·08 between Occasions 1 and 5 suggests that they did not simply revert to viewing each other as they had done at the start. There was no significant change



Mean intensity scores for all constructs of the group and the two psychiatrists (scores prorated) on 5 test occasions

FIG. 1.

https://doi.org/10.1192/bjp.119.549.199 Published online by Cambridge University Press

in Construct Pattern Consistency between Occasions or between Subjects.

It would seem as if loss of Intensity between Occasions 2 and 4 happened *before* the change in structure, since both Element and Construct Pattern Consistency correlations ranged from 0·36 to 0·76 for the same period; constructs remained related in similar patterns, and individuals were construed in similar ways. But between Occasions 4 and 5 Element Consistency correlations ranged from − 0·14 to 0·44 while those for Construct Pattern Consistency ranged from 0·31 to 0·80. After 'loosening' had taken place changes occurred in the way the individuals construed *each other*, but not in the way the constructs were inter-related.

Table II demonstrates the extent to which these two measures of consistency can vary for an individual. It is apparent that the way in which the psychiatrist patterned the constructs remained very similar on Occasions 4 and 5, but the way he viewed the members of the group varied widely, two correlations being significantly negative. For instance, he tended to reverse his opinion as to *who* was LIKELY TO IMPROVE (construct 12, $r_s = -0{\cdot}71$), but the *qualities* indicating improvement remained the same ($r_s = 0{\cdot}91$).

(iii) *Concordance of Person Perception.* An analysis of variance showed that the degree of concordance differed between People, Occasions, and Constructs ($p < {\cdot}001$ in all cases). There were no significant interactions. Persons C and H were most accurate in seeing themselves as others saw them, the same 2 patients who showed no significant fluctuation in Intensity. Without doubt this measure is very much influenced by the extent to which the person is prepared to attribute 'good' or 'bad' qualities to himself. However, it does identify the person who is extreme in what he is prepared to say about himself and what the other group members are prepared to say about him.

(iv) *Relationship between 'group' and therapist grids.* A DELTA analysis was carried out to compare the grid of each patient with the grid of the participating psychiatrist for Occasions 1, 2, 4 and 5 using constructs common to both grids. Once again there is evidence that radical change occurred between Occasions 4 and 5, the patients and psychiatrist 'lost touch' with each other (correlations ranged from 0·13 to − 0·24). It is interesting that even after only one meeting the correlation between patients' and psychiatrists' use of the constructs ranged from 0·21 (person A) to 0·59 (person H); the mean correlations of similarity were 0·43, 0·43, 0·40 and − 0·06 for Occasions 1, 2, 4 and 5 respectively.

There was a constant negative trend in the relationship between the degree of 'tightness' in a patient's construct system and the extent to which the psychiatrist saw him as LIKELY TO IMPROVE, ranging from − 0·57 on Occasion 1 to − 0·19 on Occasion 4, but on no single occasion did this reach statistical significance. Many theoretical systems regard the loosening of ties between concepts as a prerequisite of change. Here there is the suggestion, in quantitative terms, of a therapist regarding tight construing as being negatively related to improvement.

There was also a significant tendency ($p < {\cdot}05$, two-tail) for him to see people who *lacked* the ability to see themselves as the 'group' saw them as being likely to improve (r_s range from − 0·93 to − 0·57). This was contrary to expectation. Concordance of Person Perception and Intensity Scores were not significantly related on any occasion.

TABLE II

Comparison between element ($N = 8$) and construct pattern ($N = 15$) consistency on 16 constructs for the participating psychiatrist between occasions 4 and 5 ($x = p < {\cdot}05$; $xx = p < {\cdot}01$)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Element consistency	−·52	−·43	·29	−·31	−·24	−·69x	−·36	·81x	·55	·02	·29	−·71	−·57	−·52	−·24	−·07
Construct pattern consistency	·96xx	·83xx	·63x	·79xx	·86xx	·94xx	·39	·48	·61x	·82xx	·78xx	·91xx	·60x	·70x	·80xx	·91xx

https://doi.org/10.1192/bjp.119.549.199 Published online by Cambridge University Press

(v) *Group phenomena;* (a) Talkative people were seen as both leaders and contributing useful things to discussions. (b) The hypothesis concerning change in the ideal self from being identified with the therapist to being identified with the group was not supported. Perhaps this was because the predicted changes were susceptible to week to week variation in the group mood and the testings did not coincide with their presence; this however, is not a very sound argument, since the relationship between 'group' and 'therapist' images is supposed to be a relatively constant one. A more likely reason is that the measures were not a fair test of the hypothesis; a better test would have been to include constructs concerning parent figures for each member and to predict that these would be transferred from THE THERAPIST to THE GROUP. (c) Patients identified themselves with THE GROUP on Occasions 1, 2 and 4 only (mean correlations 0·40; 0·48; 0·50 respectively). (d) Anxiety was felt towards THE GROUP on Occasion 3 (0·57). (e) The psychiatrists were inclined to relate the constructs SCAPEGOAT and DIFFERENT FROM THE REST to a significant degree, but there were some unexpected discrepancies in the direction of the correlations (see Table III). They did not use the two verbal labels in a similar way. This might possibly be due to the observer not having English as his first language. Whatever the reason, it demonstrates the need for care when presuming to equate a construct with its verbal label; they do not necessarily mean the same thing for all people*.

TABLE III

Correlations for the two psychiatrists between the constructs 'scapegoat' *and* 'different from the rest'

	Occasions				
	1	2	3	4	5
Participating psychiatrist	−0·50	0·50	0·83	0·71	0·69
Observer psychiatrist	0·60	−0·45	−0·79	−0·64	−0·36

* More detailed results can be obtained from the author (F.F.).

B. *Outcome*

(i) *Social Adjustment.* In the tests of significance of change one-tail tests were used, as those involved in psychiatric research tend not to make open-ended bets about the future mental health of their patients. Many have expressed dissatisfaction with this view, pointing out that if something is effective it can produce effects in the *undesired* as well as the desired direction. For example, Parloff (1967) says 'while therapists are willing to express varying degrees of modesty, or even subscribe to the more fashionable existentialist concepts of futility, few would take seriously the possibility that what they do may, in fact, be psychonoxious', and Truax and Wargo (1966) say 'If the technique of change is powerful, it must have the potential to be powerfully therapeutic or, if misused, powerfully antitherapeutic'.

According to the psychologist's ratings, no one adjustment category showed the patients to have improved. However, the independent psychiatrist rated the patients as improved, in the informants' view, in non-family social adjustment, and, in the patients' view, in sexual adjustment ($p < \cdot05$, t-test for correlated means).

The psychologist rated the group to have become *worse* in leisure and social adjustment with the family, according to the informants, and in work and social adjustment with the family, according to the patients (work adjustment $p < \cdot001$, all others $p < \cdot05$). The psychiatrist rated the group to have worsened significantly in social adjustment with the family, according to the patients ($p < \cdot05$).

The results lend support for the view that a therapeutic encounter may have undesired results when assessed by people other than those undertaking the therapy. Also, it suggests that overall measures of improvement so often used may well hide changes occurring in certain areas of functioning and not in others.

The only individual patients to change more than one scale point were C and H.

(ii) *Depression Scale.* The group as a whole improved significantly ($p < \cdot05$, t-test for correlated means).

(iii) *Clinical Assessment.* Four were judged

as showing some improvement, one minimal improvement, one symptom improvement and two no change.

Discussion

Although something resembling a group process phenomenon has been demonstrated and ways of measuring other phenomena described, it is not possible to make any generalizations about the nature of these processes from a single study. Perhaps the most striking result was the deviant behaviour of patients C and H; they did not conform on the Intensity measure of change, they were best able to see themselves as the rest of the group saw them, they were the only two to improve more than one scale point on the social adjustment measures and person H also used the constructs in a way that was most similar to the psychiatrist. It was as if they were able to use the group processes to help in their own reconstruing. If this were the case, only a minority of patients could ever be expected to improve.

Clinical assessment ratings were at variance with the social adjustment measures. Perhaps the use of general rating procedures is not applicable to the measurement of psychotherapeutic outcome. It might be more pertinent to state the desired changes for each patient at the beginning of therapy and attempt to measure the degree to which these aims are achieved, as demonstrated by Ryle and Lunghi (1969).

Further research might be designed to determine the variables relating to changes in intensity of construing for both patient groups and therapist. One possible explanation of the variability in the Intensity scores is that 'loosening' was regarded as a desirable therapeutic event. If the group members saw that this form of behaviour was regarded favourably by the psychiatrist, this would encourage its occurrence and persistence. However, if the patients perceived that the psychiatrist was also indulging in 'loosened' construing, this might have led to their experiencing some anxiety or confusion, resulting in a tendency to 'tighten' again.

The degree to which certain patients and groups produce measurable change by altering the relationships between constructs or by merely shuffling the people along the construct dimensions might prove to have some prognostic significance. It could be argued that the latter indicates only *apparent change*, whereas the former indicates that the person is viewing life through an altered construct system and so may be better able to deal with events.

Acknowledgements

The authors take this opportunity of expressing their gratitude to Miss Sue Reiman, Senior Psychologist, and to Dr. M. Pritchard, Consultant Psychiatrist, both of the London Hospital, for the time and effort they put into interviewing and rating patients and informants.

Summary

The 8 psychoneurotic members of an analytically-oriented group and the participating and observing psychiatrist were administered a rank order form of repertory grid at 0, 3, 6, 9 and 12 months. Supplied constructs were used and the 8 patients served as elements. Various measures were derived to show ways in which group construing processes as well as construing content may be investigated, and relationships of changes in construing process and content between patients and therapists were examined. Grid and outcome measures were compared.

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A synopsis of this paper was published in the April, 1971, *Journal.*

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(*Received 14 August 1970*)