A REPERTORY GRID COMPARISON OF ENDOGENOUS AND NEUROTIC DEPRESSIONS

P. S. SACHDEV[1] M.D.

H. M. CHAWLA[2] M.D.

G. SUBBA RAO[3] Ph.D.

M. MEHTA[4] Ph.D.

D. MOHAN[5] M.D.

SUMMARY

The Repertory Grid Technique was used to study the construct systems of patients diagnosed as Endogenous and Neurotic Depressions. Twenty-five patients of each category were administered a Rank Order Repertory Grid comprising ten elements and fifteen constructs. The completed matrices were subjected to principal component analysis. Inter-element distance was used as the psychological measure to compare the two groups on characteristics like self-ideal congruence, self-esteem, self-criticalness, degree of identification with parents, and the degree of temperamental and/or personality differences between parents as perceived by them. No significant differences between the two categories emerged on any of the dimensions referred to above. One striking observation in many grids was a tendency to isolate the element 'self'. Another observation was the difficulties some subjects had with a few elements and constructs probably due to cultural factors.

Since the cognitive aspects interact with the affective component to produce the full depressive syndrome, the study of the cognitive structure in depression is important for understanding its classification, its etiology and possibly its treatment (Kovacs and Beck, 1978). Various aspects of the cognitive structure of depression have previously been investigated (Cohen et al., 1954; Laxer, 1964; Beck, 1967; Harrow and Amdur, 1971; Sethi et al., 1980; Space and Cromwell, 1980). These studies, however, are beset with problems. Often, different categories of depression are grouped together without realizing that the cognitive structure and social perception in different subgroups may be quite different. For example, the frequent presence of disrupted interpersonal relationships in neurotic depressives (Beck, 1967) together with the evidence of environmental loss

or deprivation, their conflicts over aggressive impulses, and the frequently pre-existing personality structure characterized by narcissism, dependency and ambivalence (Nemiah, 1975) would suggest that the neurotic depressives would have a significantly different social perception and cognitive structure than the endogenously depressed. This possibility is not paid sufficient attention. In addition, there are methodological difficulties in studying many aspects of cognition. There are no fully objective methods for studying guilt or self-criticalness (Sethi et al., 1980) and features like motivation and identification with the parents are evaluated only on the basis of subjective impressions. The repertory grid technique can provide semi-objective, quantifiable measures of psychological dimensions and has, thus, been chosen to study the cognitive struc-

1. Senior Resident
2. Assistant Professor
3. Clinical Psychologist
4. Associate Professor
5. Lecturer Department of Biophysics

Department of Psychiatry, All-India Institute of Medical Science New Delhi 110029

ture of depressed patients by some workers (Rowe, 1971; Space and Cromwell, 1980;). Its easy adaptability (Bannister and Mair, 1968), reliability, validity and well studied modes of application (Fransella and Bannister, 1977) prompted its use in the present study to compare Neurotic and Endogenous Depressions on certain aspects of cognition. The two categories were compared on self-ideal congruence, degree of identification with parents/parent-substitutes, self-criticalness or self-blame ('self'—a person dislike most' self-esteem 'self'—'a person who I think is a failure in life' distance) and the degree of temperamental and/or personality differences between their parents as perceived by them.

METHOD

Sample :

The sample was drawn from the patients attending the outpatient services of the Department of Psychiatry, All India Institute of Medical Sciences, New Delhi. Twenty-five patients each of Depressive Neurosis (ICD-9 category 300.4) and Endogenous Depression (ICD-9 categories 296.1 and 296.3) were included. It was necessary that the diagnosis be agreed upon by the first two authors (PSS and HMC) after independent examination in all cases.* For inclusion, it was also necessary that the patient be currently depressed (depressives who had recovered were excluded), not be on electroconvulsive therapy, have a sufficient knowledge of English, and be in a position to comprehend the instructions and cooperate in the task of grid completion.

The patients belonged to an age range of 18-63 years, with mean ages of 37.0 and 29.8 years in the Endogenous

and Neurotic groups respectively (difference not significant). The sex distribution was also not significantly different in the two groups.

THE GRID CONSTRUCTION

The first part of the project consisted of the construction of a grid which was then administered uniformly to all the subjects. For this purpose, 5 patients each of Endogenous and Neurotic Depressions (not included in the study) were interviewed and elements and constructs elicited from them.

(a) *Elicitation of elements :*

Each of these patients was asked to name the people who he/she thought had an important role to play in his/her life. It was observed that six elements recurred frequently in these ten interviews and these were selected for the final grid. These were :
1. Father/father—substitute.
2. Mother/mother—substitute.
3. Spouse.
4. Sibling—I—like-best.
5. Sibling—I-like least.
6. My best friend....

In addition, four elements were supplied by the investigators, keeping in view the purpose of the investigation. These were :

Element	*purposes*
7. Self	Basis of interrelation comparison
8. The kind of person I would like to be	To test motivational manifestations and self-ideal congruence
9. A person I dislike most	To judge self-criticalness and self-hate
10. A person I think is a failure in life	To judge self-esteem

The final grid, thus, contained ten elements.

*Certain criteria of diagnosis were agreed upon. These criteria are available from the authors on request.

(b) *Elicitation of constructs :*

The elicitation of constructs was done by the 'Triadic Method' described by Kelly (1955), using 'Minimum Context Card Form'. Of the constructs elicited, the ones which were common, easy to comprehend and satisfied the six assumptions of Kelly as originally stated in his Role Construct Repertory Test (Kelly, 1955) were selected (fifteen in all). These were :

1. Sees things the same as me/Sees things differently.
2. Poor/Well-off.
3. Generous/Mean.
4. Hard-hearted/Soft-hearted.
5. Jovial/Sober.
6. Helpful/Not helpful.
7. Does not mix with people (asocial)/ Social.
8. Self-respecting/Ashamed of self.
9. Pride of his companions/A disgrace.
10. Uncertain of himself/Thinks he is always right.
11. Corruptible/Not corruptible.
12. Well/Ill.
13. Indifferent to what others say/ Anxious for approval.
14. Religious/Not religious.
15. Repents if he does anything wrong/ Does not repent.

PROCEDURE

Each patient was interviewed independently by the first two authors (PSS & HMG), and, when considered suitable for inclusion, was made to perform the Rank Order Grid. He was first asked to think of people who fitted the 10 role titles (elements) supplied to him. He then ranked them in order on each construct. The detailed procedure as suggested in literature was followed (Fransella and Bannister, 1977). Each patient thus completed a 15×10 matrix. The 50 matrices were then analysed.

ANALYSIS

Each grid was subjected to Principal Component Analysis (PCA)*. A critical analysis of PCA finds it efficient (Slater, 1977). Its main advantage over the other methods of analysis is that the reference-axes supplied are strictly orthogonal and thus easy to handle. They are also mathematically precise and stable, and do not have to be interpreted in obscure, equivocal language, unlike Factor Analysis (Slater, 1977). The output of this analysis gave the factor loadings of the elements on the first two principal components. These loadings were plotted on the X-and Y-axes to yield one plot for each grid. This plot gave the distribution of the elements in component-space in each single case. The plots were then scrutinized for information.

Inter-element distances were calculated between certain pairs of elements for each grid. If X_1, Y_1 and X_2, Y_2 are the factor loadings for two elements 1 and 2, then distance between 1 and 2 is given by

$$d12 = \sqrt{(X_1 - X_2)^2 + (Y_1 - Y_2)^2}$$

The pairs of elements selected are given in Table I. The mean inter-element distances for both groups were then calculated and two-tailed test of significance applied.

RESULTS

1. Table I gives the means and the standard deviations for the various inter-element distances in both the groups. As shown, there was no significant difference between the two groups on any of the parameters studied.

2. Many inferences can be made from observation of any individual grid

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*A computer programme for PCA was prepared by one of the authors (GSR) on the lines of Slater (1977) and run on a Hewlett-Packard Computer of the MX-21 series.

TABLE I. *A Comparison selected Inter-element distances*

No.	Variable	Element I	Element II	Interelement Distance				Proba-bility
				Endogenous		Neurotic		
				Group Mean	SD	Group Mean	SD	
1.	Identification with 'the kind of person I would like to be (self-ideal congruence).	Self	The kind of person I would like to be.	14.68	11.73	15.70	6.73	NS
2.	Identification with father substitute.	Self	Father/father substitute	13.50	4.79	12.83	7.14	NS
3.	Identification with mother/substitute.	Self	Mother/Mother substitute.	10.94	6.09	10.84	8.67	NS
4.	Identification with same sex parent/substitute.	Self	Same-sex parent/ substitute.	13.08	4.57	11.98	7.67	NS
5.	Identification with opposite sex parent/substitute	Self	Opposite-sex parent/substitute	11.36	6.40	11.97	8.54	NS
6.	Self-criticalness/self-blame	Self	A person I dislike most.	20.07	5.79	20.15	7.78	NS
7.	Self-esteem	Self	A person who I think is a failure in life.	16.80	8.29	16.13	7.95	NS
8.	Psychological distance between parents.		Father substitute/ Mother substitute.	8.03	5.78	8.90	4.29	NS

NS—Not significant.

plot. However, one striking feature of many grids was a tendency by the subject to isolate 'self', i. e., in many grids, the loadings of the element 'self' were considerably different from those of the other elements. Going by rough estimate, this trend towards 'Isolation of self' was observed in about 1/5th of patients to a marked degree, in 1/5th to a moderate degree and in 1/3rd to a mild degree. The remaining did not isolate 'self' in their grids. Fig. 1 shows one grid with marked isolation of 'self'.

DISCUSSION

Using the inter-element distance as a psychological measure, no significant
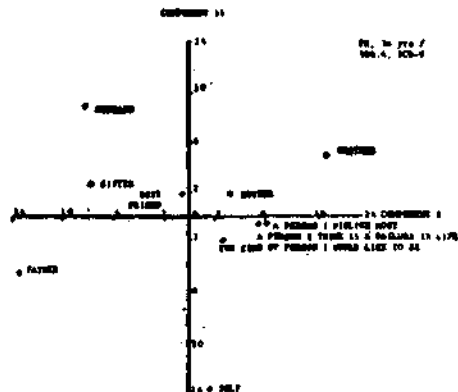

Fig. 1. Principal Component Analysis of an Individual Grid. Elements Plotted in Component space in terms of Factors Loadings on Components I and II. note the isolation of Element 'Self'.

differences were found between endogenous and neurotic depressives on the dimensions studied. If one takes a look at the published literature, however, the results do not seem to be surprising. Although a great deal of investigation has gone into the study of cognitive aspects of depression, a comparison between the two groups as done here has interested only a few authors. Results of various investigations have been different and often conflicting. There is, therefore, little consensus on most of the issues under study.

Harrow and Amdur (1971) reported that, in their investigation, although the psychotic depressives had slightly more negative self-concept than neurotic depressives, the difference was not statistically significant. Beck (1967) has not earmarked on any differences between the two categories on this aspect, but tends to relate negative self-concept with severity of depression. The opinion in literature on guilt in depressives is quite conflicting. Harrow *et al.*, (1966) found neurotic depressives to be guiltier than non-depressives, but their psychotic depressives were less consistent and showed a wide scatter on guilt measures. The Indian studies on guilt in depression have reported rates varying from 5.3% (Bagadia *et al.*, 1973) to 67.5% (Ansari, 1969). In the light of this, the result of this study, which had depressives of mild to moderate severity of illness are not very surprising. Moreover, there are various aspects to guilt (Sethi *et al.*, 1980) and our study concentrated on just one aspect, more akin to self-criticalness or self-blame.

The literature on motivational aspects of depression is scanty and impressionistic (Beck, 1967). Identification with the father or mother reflects a psychoanalytical view-point and evidence concerning it in literature is conflicting (Beck, 1967). Space and Cromwell (1980), in a reper-

tory grid investigation of depressives, report that depressed subjects tend to view themselves as less similar to their parents as compared to normals. In the present investigation, only a few subjects identified with either parent, and between the two categories no significant differences existed. The subjects in the two categories also did not differ in their perception of differences between parental temperaments and/or personalities. parental disharmony has been studied in depressives (Bagadia *et al.*, 1973; Arieti, 1974), the investigators did not come across any comparison of this kind in the literature.

The observation of a trend towards 'isolation of self' in many grids has important implications. Psychologically, it probably implies a lack of identification with others. The term 'identification', as Kelly (1955) used it, does not refer necessarily to an identification process but to the closeness of a subject's self-descriptions to the descriptions of other people by the subject. This aspect has been systematically studied in depressives by Space and Cromwell (1980). The low identification values they found in their depressives were independent of negative self-construing. This evidence of low identification appears to be an aspect of depression not readily apparent from clinical interview. The practical implications are that group techniques and cognitive control procedures may be important treatment approaches to allow the depressed patients to realise this particular deficit and to learn to organise the data of new experiences so as to see themselves as similar to others in both feelings and overt behaviour.

In the course of the study, the investigators were struck by a few additional observations. One interesting feature was the apparent hesitation with which some subjects used the element 'self'. They, sometimes, even sought clarifications on

the way it was to be used. This has not been commented upon in reports from the West. Perhaps it is a cultural phenomenon.

Marsella (1978) has noted that there is a close relationship among the self-structure, language and mode of experiencing reality. "In some cultures, an unindividuated self-structure, a metaphorical language structure, and an *imagistic* mode of experiencing reality are present in an intimate reciprocal relationship. Cultures at this end of the continuum tend to develop subjective *epistemic* orientations that make it difficult to capture or portray internal states in objective lexical terms and experiences" (Marsella, 1980, p. 273). This perhaps explains the difficulty with the element 'self', especially that this element had not been elicited from any subject but had been supplied by the investigators. In addition, our subjects had hesitation in using elements and constructs with negative connotations, i. e., 'A person I dislike most', etc. It is interesting to note that, in using the construct corruptible/not corruptible, one subject behaved initially as if his family members were outside its range of convenience. These aspects of the repertory grid need further investigation in different cultures.

In conclusion, this investigation highlights the great adaptability of the repertory grid techniques in investigating cognitive aspects of depression. It also suggests some interesting areas for further detailed investigation.

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