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Volume VII MAY, 1954 Number 1

GROUP PSYCHOTHERAPY

Volume VII MAY, 1954 Number 1

CONTENTS

THE PREDICTION OF INTERPERSONAL BEHAVIOR IN GROUP PSYCHOTHERAPY[1]

TIMOTHY LEARY, *Kaiser Foundation*
and
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The study of psychotherapy is increasingly concerned with the phenomena of interpersonal behavior. Current approaches to therapeutic technique commonly stress what is going on in the interaction of patient and therapist in the therapeutic setting. The central core of this interest concerns what the patient brings in the form of conscious and overt attitudes toward the therapist; whether he is dependent, competitive, or hostile. These interpersonal maneuvers between patient and therapist are often described by different terms such as transference, role behavior, resistance, relationship processes. Each of these terms may assume a differential theoretical importance in a given school of thought. Though terminology may vary and therapists and theorists may assign different weights to the terms, there is an increasing tendency for such concepts to be viewed in terms of interpersonal relationships.

The present studies which have been a part of the Kaiser Foundation Research Project have had as their aim the prediction of interpersonal behavior in psychotherapy. Paradoxically the purpose of measuring social interaction according to a systematic approach which yields predictive data about a given person is to understand the conditions for inducing therapeutic change in that individual. The first step in understanding the process of change was the construction of a system which would yield firm predictions about behavior. This involved studying the person from several different sources or levels of data which then could be coordinated and made intelligible within the same system of concepts. This multi-level interpersonal system has been described elsewhere (4, 10, 11).

[1] The studies on which this paper is based have been sponsored by the Kaiser Foundation, Oakland, California, under the direction of Harvey Powelson, M.D., and were supported in part by Research Grant MH-331 from the National Institute of Mental Health, Public Health Service, under the direction of Hubert S. Coffey, Ph.D., and Saxton T. Pope, Jr., M.D. The authors are particularly grateful for the extensive contributions to this paper made by Rolfe La Forge. Dr. La Forge provided statistical and theoretical consultations at all stages of the research. He supervised the IBM calculations of most of the correlations. We are further indebted to him for his editorial contributions to the manuscript.

In applying our measurements to clinical diagnosis, and more specifically to the prediction of the interpersonal behavior of a patient in therapy, our research thus far has indicated that, while we are able to make predictions as to what the patient will do to his therapist and fellow therapy group members, it is also essential that we take into consideration another aspect of his personality, namely, the amount of variability which he shows. When the variability prediction is made we indicate how consistent or how changeable the patient's behavior will be, and what sequence of behavioral changes can be expected. The variability sequence itself is lawful and predictable and is related to certain definable personality characteristics. Although our primary emphasis at first was the prediction of behavior from our coordinate system and the validation of some of the intervening steps through comparison with other diagnostic measures or clinical evaluations, it has become increasingly clear that to obtain a meaningful prognosis for treatment one must take into consideration the fact that interpersonal behavior in therapy might vary considerably as a function of emerging latent motivations. Fortunately such shifts in attitude concerning self and others are themselves discernible in the diagnostic patterns which we obtain initially from the patient.

The present article is, therefore, concerned with methods for predicting what patients do in group psychotherapy, and an essential aspect is the consistency or variability aspect. We shall describe the methods of measurements we use, the methods of prediction, and some of the techniques for assessing the kind and amount of variability to be expected. Such predictions, insofar as they throw light on interpersonal tactics and defenses with their unfolding temporal sequences and variabilities, can be advantageous to the therapist. Further they provide implications for theory and diagnostic practice. These will be discussed after the method itself and its application is described.

I

The Measurement of Interpersonal Behavior

In studying personality the Kaiser Foundation Research Project, at the present time, deals with five discrete levels of behavior. These are: I, the Level of Public Communication; II, the Level of Conscious Description; III, the Level of Private Symbolism; IV, the Level of the Unexpressed Unconscious, and V, the Level of the Ego Ideal. These levels have been described in detail in other publications (10, 11). They are operationally defined; personality data is assigned to a level automatically according to its source, i.e., the way in which it is produced by the patient. Level I com-

prises his overt behavior as rated by others; Level II his conscious reports about self and "others"; Level III includes preconscious material from fantasies, projective tests, etc.; Level IV concerns the themes which are consistently and significantly omitted or avoided by the patient; Level V comprises his idealized superego images of what he should be and would like to be.

In this paper we shall be centrally concerned with Level I, i.e., the public communication of the individual. We are interested here in measuring the interpersonal expressions of the subject towards others, his "social stimulus value" to others, the roles that he typically establishes with others. The units of Level I behavior have been called "interpersonal mechanisms" or "interpersonal reflexes". These include the automatic, and often involuntary social expression through which human beings communicate their interpersonal purposes to others. We are not interested, at this level, in what the subject says nor in the "deeper" aspects of his personality. His public communications define the nature of the data; *in particular we shall* be concerned with predicting interpersonal behavior in the psychotherapeutic situation.

A method has been developed by the Kaiser Foundation research group for measuring the interpersonal purpose of any action. This method employs 16 generic interpersonal mechanisms which appear to reflect almost any motive which can be expressed by one human being to another. These basic variables are systematically related to each other along a circular continuum. Figure 1 presents this rating matrix. Each interpersonal mechanism or "reflex" has been given an alphabetical code, e.g., dominance is "A", narcissism is "B", etc. For each generic variable a list of illustrative verbs are included to give the flavor of the rating system. Actually there is an almost inexhaustible list of specific interpersonal descriptive terms for each generic variable. Each mechanism is rated along an intensity scale which reflects the difference between intense and inappropriate manifestations of the motive, and the most appropriate and adaptive expressions.

It is possible to rate any interpersonal action in terms of this continuum with adequate reliability (4). The most direct method for measuring interpersonal behavior is to have two or more observers rate the purpose of each interaction. The raters can accomplish this while acting as observers in the actual social situation (e.g., a therapy group), from wire recordings or typed transcriptions. Simply adding up all of the interpersonal reflexes employed during any temporal sequence provides the most direct definition of interpersonal role. The total interpersonal behavior of a patient during

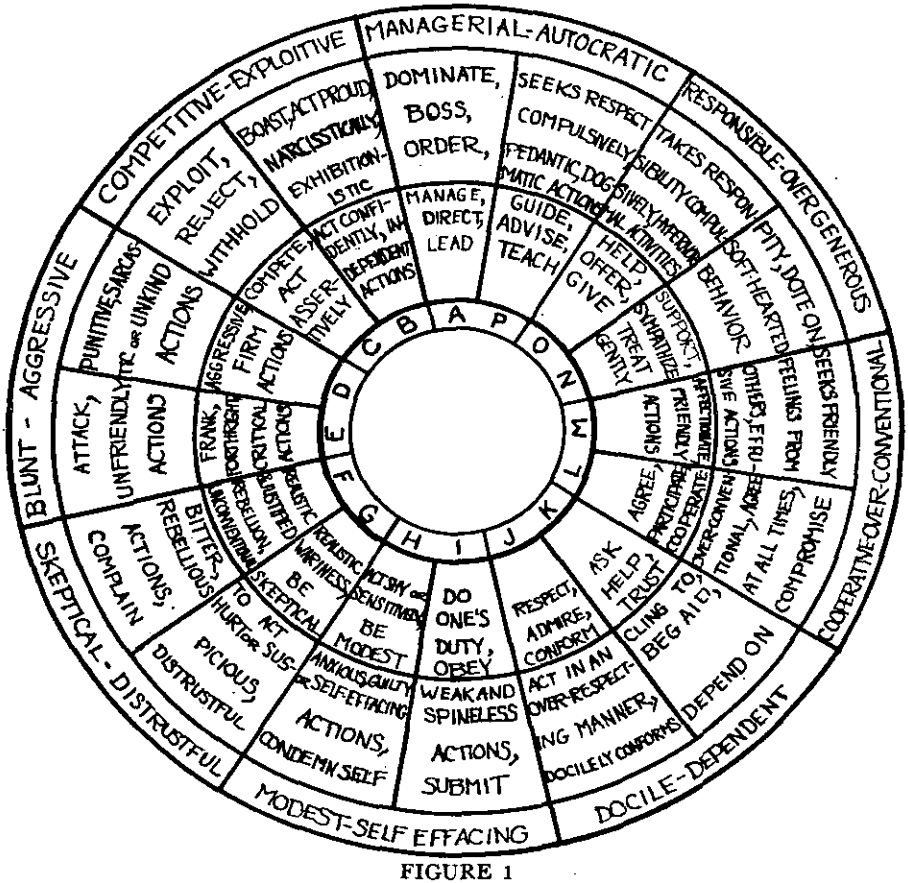

FIGURE 1

INTERPERSONAL DIAGNOSTIC CIRCLE FOR LEVEL I BEHAVIOR WITH ILLUSTRATIVE VERBS

the first six sessions of psychotherapy could then be summarized, for example, as being 50% passively-hostile complaining, 10% active hostility, 30% passive submission and 10% dependence. Figure 2 presents a diagrammatic illustration of this particular interpersonal pattern.

In this manner the useful concept of role becomes quantitative and objective.

While ratings of observed or recorded interactions provides the most direct measurements, another interesting method for determining interpersonal role is to get summary descriptions of him by others who have been in extended contact with him. By use of this technique we obtain,

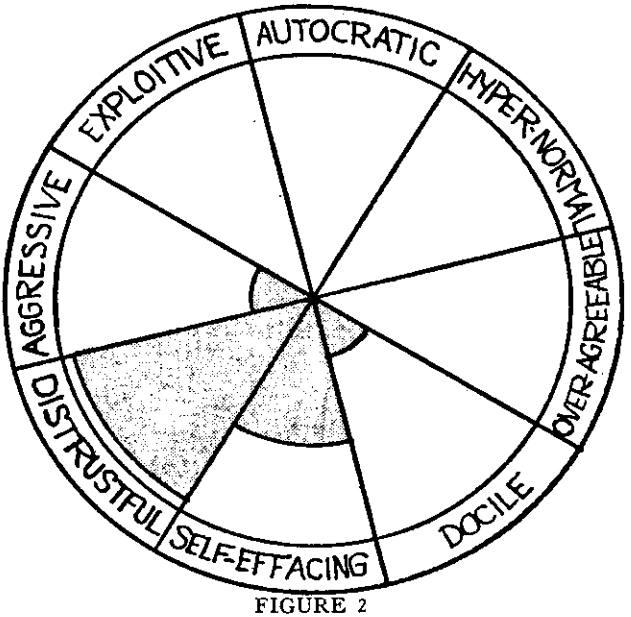

FIGURE 2

ILLUSTRATION OF INTERPERSONAL PROFILE OF A PASSIVELY HOSTILE PERSON BASED ON DIRECT RATINGS BY PSYCHOLOGISTS OF HIS INTERACTIONS DURING SIX SESSIONS OF GROUP THERAPY

Key: Radius of Circle = 50%.

not a running, minute-by-minute picture of the subject's interactions, but an overall estimate of the impact he has had on others. When six members of a therapy group agree in saying that they "respect" a seventh member they are assigning the interpersonal role of "respected" (coded "P" on the interpersonal circle) to him. When six members of another group say they "fear" a seventh member they are assigning the interpersonal role of "D" to him.

The Kaiser Foundation research group has spent several years studying the interpersonal reactions that individuals "pull" from others. Most of these investigations have focused on the behavior of patients during group therapy. After twelve hours of group therapy each patient is routinely given a check-list of 155 items on which he rates himself and each member of the group. The check-list[2] is based on the circular continuum of interpersonal

[2] The interpersonal checklist employed in these studies was developed by Robert Suczek, Ph.D., and Rolfe La Forge, Ph.D., et al., and will be described in a forthcoming publication.

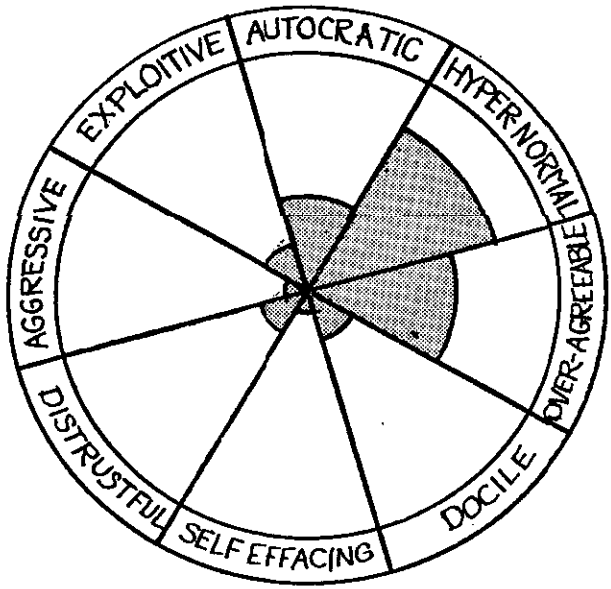

FIGURE 3

ILLUSTRATION OF INTERPERSONAL PROFILE OF A NURTURANT PATIENT BASED ON SOCIOMETRIC RATINGS BY FELLOW GROUP MEMBERS AFTER SIX SESSIONS OF GROUP THERAPY

Key: Circle radius = 50 words attributed by pooled ratings of group members. Raw number of words in each octant: AP = 10, BC = 5, DE = 2, FG = 5, HI = 2, JK = 5, LM = 15, NO = 20.

variables such that there are words of specified intensities for each of the 16 variables. Each patient is thus described by all the other members of his group. When these descriptive ratings are pooled a summary of his social stimulus value, his interpersonal role, is obtained. Figure 3 presents an illustrative diagram of the pooled ratings by six therapy group members of a fellow patient. Thus, group members rated this patient as being a responsible, helpful agreeable person.

The axes of this diagrammatic circle are calculated in terms of the raw number of words attributed to the patient by the total group. They employed 18 words in the NO octant, thus emphasizing his responsible helpfulness. They used only two words along the passive-withdrawal (HI) octant. Profiles of this sort are quite convenient for clinical purposes, since they present a graphic illustration of how the group has reacted to each member. For research purposes, however, it is often preferable to convert

the graphic description into a single numerical quantity which summarizes interpersonal role. One method for obtaining this summary point has been described as follows:

"The Interpersonal System as described so far leaves us wide latitude with respect to the formal (algebraic) properties which are to be attributed to the 16 variables. We may in fact vary the formal relationships to suit the particular context so long as we do not violate the rough intuitive specification of a circular arrangement. For example, we might think of the system as a purely ordinal array about which one specified only that categories adjacent to a given one resemble it more than do non-adjacent categories. Or we might consider the circle to be a two-dimensional array in ordinary Euclidian space, in which case conventional trigonometric and analytic formulas relate the 16 variables. After some experimentation, this latter approach was tentatively selected. Each circle was conceived to be a set of eight vectors or points in a two-dimensional space. We selected the center of gravity or vector mean of these points as a measure of central tendency.

"A vector in two-dimensional space may be represented numerically by the magnitude of its components in two arbitrarily selected directions. We chose AP and LM as reference directions, giving the designations Dom and Lov respectively to the components of the vector sum in these two directions. Representation of the eight or sixteen scores comprising a patient's circle by a single point in two-dimensional space is a considerable simplification. What is preserved in this simplification is the general tendency of the circle. What is lost are the individual fluctuations around the circle."[3]

"The formulas for the two components of the vector sum are relatively evident. They are:

$$1.\quad \text{Dom} = \sum_{i=1}^{16} R_i \sin \theta_i \quad \text{and}$$

$$2.\quad \text{Lov} = \sum_{i=1}^{16} R_i \cos \theta,$$

where R_i = the score in the *i-th category*,
θ_i = the angle made by moving in counterclockwise direction from L to the i-th category (from LM if octant scores are used).

---

[3] The two components of the vector sum must each be divided by $N = \sum_{i=1}^{16} R_i$ (the total around the circle all eight or sixteen scores) to get the two components of the vector mean. These latter may also be thought of as the first two Fourier coefficients of a curve fitted to the observed data. More complicated curves can be fitted by the computation of additional coefficients.

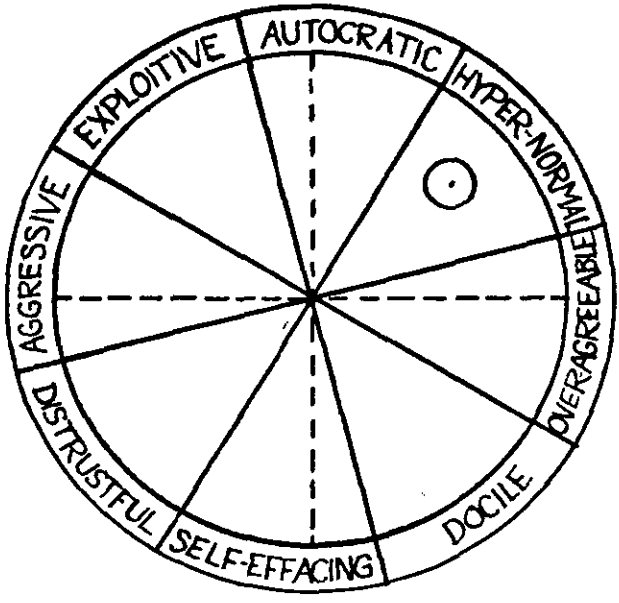

FIGURE 4

ILLUSTRATION OF INTERPERSONAL PROFILE OF A NURTURANT PATIENT BASED ON HORIZONTAL AND VERTICAL COORDINATES

Key: Radius of circle = 40; location of summary score is determined by intersection of horizontal and vertical coordinates. They are obtained by placing the octant scores into the two formulae: Vertical = AP — HI + .7 (NO + BC — FG — JK); Horizontal = LM — DE + .7 (JK + NO — FG — BC). These formulae applied to the data of Figure 3 yielded the following results: Vertical index = 10 — 2 + .7 (20 + 5 — 5 — 5) = + 19; horizontal index = 15 — 2 + .7 (5 + 20 — 5 — 5) = + 24. The intersection of the two coordinates (vertical + 19 and horizontal + 24) locates the summary point.

"In the present calculations, octant scores were used and .7 was taken as the value of sin 45°; the following simplified formulas resulted:

3. Dom = AP — HI + .7 (NO + BC — FG — JK),
4. Lov = LM — DE + .7 (NO — BC — FG + JK),

where AP = score in octant AP, etc." (5)

It is thus possible to convert the pattern of scores on the 16 variables into two numerical indices which locate a subject's interpersonal behavior on a diagnostic grid. Figure 4 presents the descriptive summary point for the group therapy patient whose behavior has been previously diagrammed in Figure 3. We note that the two summary indices place him in the "NO"

octant; they thus become a simplified and numerical summary of the circular diagram.

By means of these methods the Kaiser Foundation research group has been able to measure the interactions and role relationships of group therapy patients. This level of personality (Public Communications) is one of five levels defined in the Interpersonal System. To determine interpersonal diagnosis of personality we have found it necessary to obtain data from several levels of behavior. As we have noted the most functionally important aspects of personality include not only what the patient does at these levels, but also the variability, consistency, and conflict which we measure by comparing the data from different levels. Before considering the problems of variability, we shall consider methods for predicting interpersonal behavior.

II

Prediction of Interpersonal Behavior

The preceding section has presented a method for measuring the interpersonal purposes expressed by individuals and for summarizing these role relationships. In order to obtain Level I data it is obviously necessary to place the subject in an interpersonal situation. His behavior is then either rated directly by observers or summarized by means of sociometric checklists which we have described above.

In many clinical situations it is most advantageous to have some indication beforehand of what behavior can be expected from the patient. In making therapeutic plans, in assigning patients to groups, it is clearly helpful to have a means of anticipating the interpersonal tactics and reactions of the patient.

Prediction of social role is also useful in many non-clinical situations. In vocational or educational training programs it is often helpful to know which social roles the individual can be expected to assume and which he will tend to avoid.

For these reasons we have attempted to develop methods for predicting interpersonal behavior. We have administered batteries of personality tests to more than 100 psychiatric patients before entering group therapy, and to more than 100 "normal" or non-clinic subjects before they entered discussion groups. Six to eight weeks after these subjects had entered their respective groups we obtained Level I sociometric ratings from their fellow group members. With these data available we have attempted to develop, from the pre-group tests, predictive indices which are related to the actual, rated interpersonal behavior.

In this section we shall describe a method for making interpersonal predictions from the Minnesota Multiphasic Personality Inventory.[4] These procedures are part of a larger study in interpersonal diagnosis in which we are attempting to develop MMPI indices which predict to different levels of interpersonal behavior. Other MMPI indices are being developed which predict to conscious, pre-conscious and value levels of personality.

We have seen in the preceding section that the interpersonal diagnostic circles can be viewed as a two-dimensional surface in which points are located in reference to the vertical (i.e., dominance-submission) and horizontal (hostility-affiliation) axes. The interactions of any subject can be converted into the horizontal and vertical tendencies, thus providing a single summary point.

In attempting to convert the MMPI into an instrument for predicting interpersonal behavior, the same procedure was followed. Two years experience in comparing MMPI profiles with interpersonal profiles provided many clinical cues as to the relationship between the two. These cues were tested in a series of pilot studies sortings on several hundred cases (11). These exploratory procedures suggested that nine of the MMPI scales were related to the role behavior of patients in group psychotherapy. Four of the MMPI scales Ma, D, Hs, and Pt seem to be correlated with dominant-submissive behavior in both men and women. Four other scales seemed to be related to friendly-hostile behavior in men. These are Hy, Sc, K and F. Two of these (K and F) and two other scales (Pa and Ma) appeared to yield predictions along the love-hate axis for women. The absolute height of these scales when taken by themselves has a varying prognostic value, some have low correlations with interpersonal behavior, others are surprisingly high. When the general pattern of their interrelationship was studied, significant predictions resulted.

The first set of indices for predicting dominant or submissive interpersonal behavior for both sexes are:

Ma — D: If Ma>D a + score results. This indicates that interpersonal strength, assertion and confidence is emphasized.

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[4] The Minnesota Multiphasic Personality Inventory comprises 9 clinical, psychiatric scales and four validating scales. These are entitled as follows: Hs = hypochondriasis, D = depression, Hy = hysteria, Pd = psychopathic deviate, Mf refers to masculinity-femininity tendencies, Pa = paranoia, Pt = psychasthenia or obsessive tendencies, Sc = schizoid tendencies, Ma = mania. F = a tendency to answer items in a statistically deviant manner, and K = a tendency towards a defensive denial of Psychopathology.

If Ma<D the opposite is indicated. Weakness, immobilization, and lack of confidence is suggested.

Hs — Pt: If Hs>Pt a + score results. The subject seems to be indicating that his physical health concerns him more than emotional worries. This is the "wounded warrior" theme often expressed by psychosomatic patients. The subject admits to some bodily weakness but emotional strength is by comparison stronger. If Hs<Pt the opposite is true. The subject is more concerned with his emotional problems and is emphasizing fears, worries or immobilization.

For predicting affiliative or hostile behavior for male subjects four MMPI scales are combined as follows:

K — F: If K>F the subject tends to present himself as a helpful, friendly, outgoing person. If K<F the patient tends to be judged as alienated, disaffiliative, rebellious, unfriendly. A positive score on this index thus pulls toward the right or friendly side of the circle; a negative score in the hostile direction.

Hy — Sc: In this index the same trends appear. High Hy scores correlated with bland, naive, superficially agreeable behavior; high Sc scores with isolated hostile roles. Thus a positive score on this index pulls to the right and a negative score to the left of the circle.

For predicting affiliative or hostile behavior for female patients four MMPI scales are combined as follows:

K — F: Same as for men.

Pa — Ma: If Pa>Ma a + score results. This indicates that the patient will be seen as naive, righteous, poignant. If Ma>Pa the subject tends to be rated as aggressive, assertive and hostilely self-centered.

In this manner ten MMPI scores[5] can be converted into vertical and horizontal indices and translated into the language of the interpersonal system. Four scales, Ma, Hs, D and Pt when pooled, yield a vertical (dominance-submission factor) and four other scales K, Hy, F and Sc for men, and K, Pa, F, and Ma, for women, yield a horizontal (love-hate) factor. When plotted on the two-dimensional surface of the interpersonal circle a summary point is obtained which becomes the prediction of future role interactions. Later correlational studies (which are presented in the following

[5] In all of the MMPI indices the K corrected standard scores are employed.

section) have suggested that other combinations of MMPI scores may yield more effective predictions. Cross validation studies on the new formulae have not been accomplished at present. We shall see that the current findings (clinical and correlational) have demonstrated that the eight scales described above with certain qualifications perform adequately for most clinical predictive purposes. The formulae which have just been presented yield scores which are designated MMPI Predictive Indices Number One (Male) and MMPI Predictive Indices Number One (Female).

After these MMPI predictive indices were obtained the next step was to standardize them. The standardization sample chosen was the entire intake population of a psychiatric clinic over a two year period. The 787 cases which comprise this sample may be divided into three clinical groups roughly equal in size—those referred by physicians for neurotic symptoms, those referred by physicians for psychosomatic symptoms, and self-referrals. The MMPI was routinely administered to all the patients who were evaluated by intake procedures.

The two MMPI indices (horizontal and vertical) were standardized so that the MMPI indices for each patient can be expressed in terms of their distance from the mean of the total sample.

It is thus possible to plot each patient's MMPI scores on the interpersonal diagnostic grid and thus to indicate the intensity and type of the predicted behavior. The center of the circle was determined by the means of the horizontal and vertical distributions. The distance and direction from the center of the circle automatically "types" the expected Level I behavior in terms of the 16 variables.

By way of illustration let us consider two MMPI profiles of male patients. The solid line in Figure 5 indicates the MMPI pattern of a patient who came to the clinic complaining of neurotic symptoms—immobilization, depression and marital discord. The dotted line indicates the record of an ulcer patient referred by his physician for psychological evaluation. The interpersonal conversions of the MMPI profiles were accomplished as follows:

The horizontal and vertical scores for these two patients were then plotted onto the standardized diagnostic grid.[6] (See Figure 6) The resulting summary points indicate that entirely different interpersonal behavior

[6] The standard score conversions of MMPI Predictive Indices Number One (Male) which are employed in the diagnostic grid of Figure 5 are based on a sample of 787 psychiatric clinic patients. The mean of the vertical distribution (i.e., Ma — D + Hs — Pt) is —24.4 and the sigma is 24.1. The mean of the horizontal distribution (i.e., K — F + Hy — Sc) is —6.13 and the sigma is 27.1.

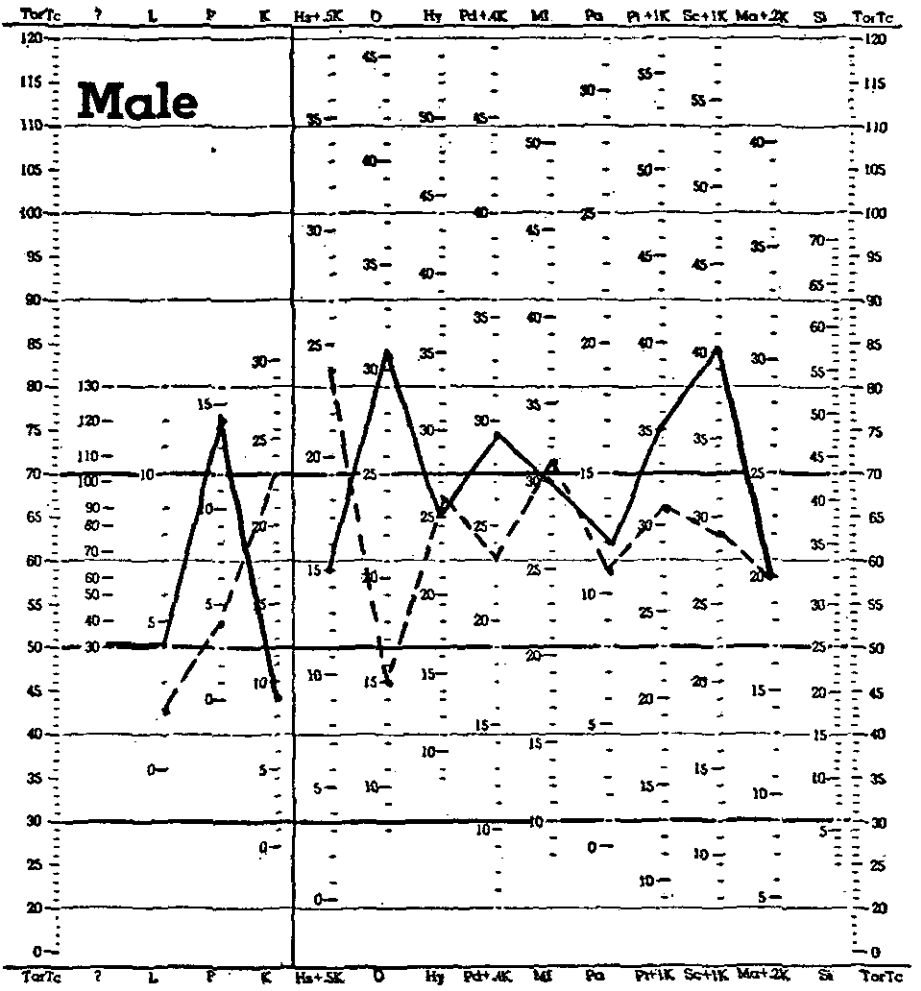

FIGURE 5

MMPI Profiles of a "Classic Neurotic" Patient (Dotted Line) and an "Ulcer" Patient (Solid Line)

can be expected from these two patients. The neurotic's MMPI predictive indices for Level I place him in the octant "FG". To the extent that the MMPI conversions hold good we should anticipate sullen, rebellious, and passively hostile behavior. The "ulcer" patient falls into the octant "NO"—thus we can expect that responsible, strong, and helpful behavior will develop. The

TABLE 1
ILLUSTRATIVE CALCULATION OF MMPI INDICES FOR PREDICTING INTERPERSONAL BEHAVIOR

MMPI Index	"Neurotic" Patient (Male)	"Ulcer" Patient (Male)
Ma. — D	58 — 84 = —26	58 — 46 = +12
Hs — Pt	59 — 75 = —16	82 — 66 = +16
Vertical Total	—42	+28
Vertical Total converted to Standard Score	+43	+72
K — F	44 — 70 = —32	70 — 53 = +17
Hy — Sc	65 — 84 = —19	67 — 63 = + 4
Horizontal Total	—51	+21
Horizontal Total converted to Standard Score	+33	+60

"neurotic" patient will complain of symptoms in a passively-coercive manner. The "ulcer" patient will generally help the other patients but will probably manifest no overt hostile, dependent or "weak" behavior.

The MMPI has thus been converted into an instrument for predicting social roles in group therapy. The next step is obvious—to correlate the MMPI indices with actual ratings of interpersonal behavior in order to determine whether the predictions are accurate.

III

VALIDATION OF THE MMPI PREDICTIVE TECHNIQUES

Four validation studies of the MMPI indices for predicting interpersonal behavior will now be presented. The first three are straight forward correlation studies which will test the relationship between the vertical and horizontal MMPI Predictive Indices Number One, and the corresponding indices obtained from sociometric judgments of social roles in group therapy. The fourth validation procedure involves a more extended correlational study between interpersonal behavior and 30 MMPI scales. These latter include the 12 original MMPI clinical scales and 18 additional MMPI scales.

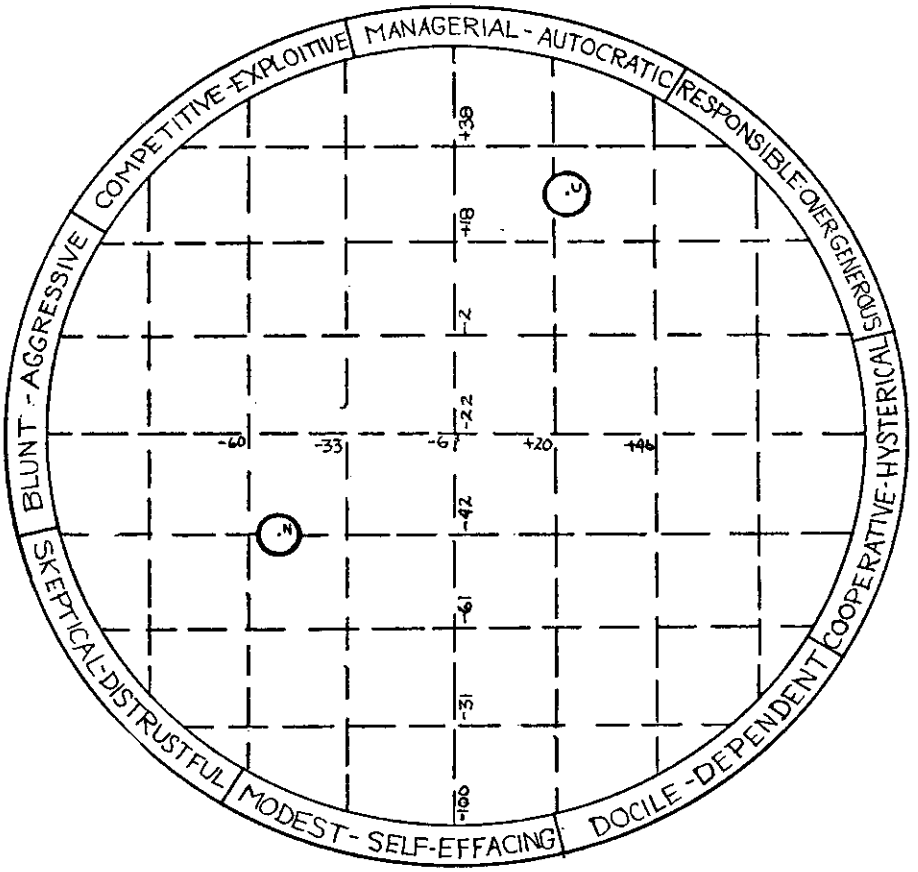

FIGURE 6

DIAGNOSTIC GRID FOR LOCATING EXPECTED INTERPERSONAL ROLE FROM MMPI PREDICTIVE INDEX #1

Key: The center of the circle represents the mean score of the horizontal and vertical distribution (standard score of 50). Each calibrated line on the grid equals one standard duration. To locate the predicted interpersonal role on the circular grid: 1. Determine the horizontal and vertical indices from the MMPI formulas; 2. Locate the horizontal coordinate and the vertical coordinate on the major axes of the diagnostic circle. The major axes are calibrated so as to convert the raw MMPI indices into standard scores. 3. The position where these intersect determines the predicted interpersonal behavior. The two illustrative cases whose indices were calculated in Table 1 are plotted on this grid. Ulcer patient = U and the patient with classic neurotic symptoms = N.

First Validation Study

The first validating study cannot be considered as an independent predictive procedure since some of the patients were involved in the exploratory studies which developed the MMPI conversion techniques. The sample consists of 79 patients (32 males and 47 females) who were seen in psychotherapy groups in the Kaiser Foundation Psychiatric Clinic. After six to eight sessions each patient filled out a sociometric questionnaire in which he rated the interpersonal behavior of each other patient in the group. The Interpersonal Checklist was used by each patient to make the sociometric ratings. Each word in this checklist, it will be recalled, is precoded in terms of the 16 variable circular continuum.

Each patient was thus rated by all the members of his group. The total number of words for each octant attributed to each patient was then tabulated. These pooled octant totals were then divided by the total number of words attributed to each patient by the group. The resulting percentage figures for each octant were free from artificial factors caused by the fact that some groups had differing numbers of patients and that each patient tended to receive a different number of descriptive words. Table 2 presents an illustrative calculation for the Level I behavior of the "neurotic" patient whom we considered above. The vertical and horizontal indices for each patient were then determined by the trigonometric formulae.

The horizontal and vertical indices for Level I were then converted into the standard scores.

The standard scores for the verticle (dominance-submission) factor on Level I were correlated with the scores on the MMPI Predictor Scale (vertical) for the total sample of 77 cases (32 men and 47 women). The correlation was +.47. When the Level I horizontal (hostility-affiliation) indices were correlated with the corresponding MMPI predictor scores (male), a relationship of +.25 was obtained. The Level I horizontal indices for the 47 females correlated +.35 with the MMPI predictor score (female) for love-hate.

The Second Validation Study

Before discussing these results we shall proceed to a second study which serves as a cross-validation. This sample consisted of 44 clinic group therapy patients directly comparable to the sample of the first study. After six to eight sessions each subject was rated by all of the other members of his or her group on the interpersonal checklist. The sociometrics for this sample were handled exactly like those of the first validity study except that stand-

TABLE 2

ILLUSTRATON OF THE CALCULATIONS FOR DETERMINING THE LEVEL I PROFILE FOR A "NEUROTIC" PATIENT, "X"

Octant	Fellow Group Member Making Ratings on Pt. "X"						Raw Total of words assigned by group to "X"	
	Pt. "A"'s ratings of Pt. X	B's	C's	D's	E's	F's		
AP	4	4	3	2	2	1	16	When the raw octant totals are placed in the trigonometric formulae:
BC	3	2	1	1	4	1	12	
DE	10	4	2	4	10	1	31	
FG	13	10	4	8	15	4	54	
HI	14	8	13	11	14	4	65	
JK	10	4	10	4	7	3	38	
LM	4	1	6	2	3	2	18	Dom = —92.4
NO	3	0	11	4	0	0	18	Lov = —20.0
Total No. of words	61	33	50	36	55	17	252	When these indices are divided by the total number of words (252): Dom = —.367 Lov = —.079

ard scores for Level I were not employed. The dominance and love indices were divided by the total number of words used as illustrated in Table 2. The horizontal and vertical scores were then correlated with the appropriate MMPI predictor indices.

The vertical (dominance-submission) index for Level I behavior of the combined sample of 44 men and women showed a relationship of +.42 with the MMPI dominance predictor. The corresponding correlation for the horizontal factor (hostility-affiliation) for the sub-sample of 14 men was +.67 and for the 30 women was +.40.

The Third Validation Study

A third correlational study seems to throw additional light on the relationship between MMPI Predictive Indices Number One, and Level I ratings. While the methodology employed is exactly the same as that of the second validation study, certain differences in sample are worth noting. The patients were 93 obese women who participated in group discussions

on the topic of weight reduction.[7] After six to eight sessions each subject was rated by all of the other members of her group on the Interpersonal Checklist. The horizontal and vertical indices were then calculated. While the methodology is the same, the fact that the subjects are "normal" (i.e., non-clinical) allows us to evaluate the usefulness of the predictive system outside the psychiatric setting.

The vertical index for Level I showed a relationship of +.12 with the MMPI dominance predictor. The horizontal index correlated +.23 with the non-hostility predictor.

Discussion of Results of First, Second and Third Validation Studies

It may be helpful at this point to summarize the correlations obtained on these two samples of group therapy patients and the obesity sample. Ex-

TABLE 3

CORRELATIONS BETWEEN LEVEL I BEHAVIOR AND MMPI PREDICTIVE INDICES FOR TWO SAMPLES OF GROUP THERAPY PATIENTS

Predictive Formula	1st sample; group therapy patients; 32 males & 47 females	2nd sample; group therapy patients; 14 males & 30 females	3rd sample; obese women in discussion groups: N = 93
Vertical Index: (dominance-submission) (Ma — D)+(Hs — Pt)	+.47**	+.42**	+.12
Horizontal Index: (love-hate) for males (K — F)+(Hy — Sc)	+.25	+.67**	——
Horizontal Index: (love-hate) for females (K — F)+(Pa — Ma)	+.35**	+.40**	+.23*

* = significant at 5% level.
** = significant at 1% level.

[7] The MMPI and interaction data for the obesity sample were taken from the Herrick Hospital Research Project on obesity. This research, supported by Public Health funds, has studied several factors—dietary, physiological and psychological—which may be related to obesity. The psychological factors in the Herrick study have been investigated by Robert Suczek, Ph.D., whose theoretical and practical contributions to this paper have been most valuable.

amination of Table 3 reveals that the MMPI Predictive Scales, Number One perform rather erratically.

First let us consider the clinic group therapy patients (first and second samples). The vertical index which predicts dominance-submission works fairly well for the total clinic sample. The correlations for both samples are significant beyond the .01 level. The horizontal (love-hate) index for women is significant at the .05 level for both samples. The horizontal index for males is highly significant in the second sample, but washes out on the first sample. The results of these correlations suggest that it is possible to predict the dominance-submission factors of interpersonal behavior for the MMPI indices Number One with a fair probability of success, but prediction of affiliative-hostile behavior is less certain.

When we turn to the third sample of obesity subjects a different picture results. The vertical index does not work for this sample of non-psychiatric clinic patients. The insignificant correlation suggests that the indices Number One cannot be successfully employed to predict dominant-submissive behavior in the case of "normal" subjects interacting in non-clinical groups. When the obesity sample ($N = 93$) was pooled with the second group therapy sample ($N = 44$) and the vertical Level I indices of the total sample ($N = 137$) correlated with the MMPI Number One dominance predictor, a relationship of $+.43$ resulted. This is highly significant. These results indicate that the predictive index Number One for dominance works fairly well for "neurotic" patients, for mixed groups of "neurotics" and "normals", but does not hold for homogeneous groups of non-clinic subjects.

The affiliation-hostility Level I scores for the sample of 93 obese women were related to the horizontal MMPI predictive index Number One to the extent of $+.23$. This suggests that this index has some predictive value when applied to normal, non-psychotherapy situations. When the obesity sample ($N = 93$) was pooled with the second group therapy sample of female patients ($N = 30$) and the horizontal Level I indices of the total sample ($N = 123$) correlated with the MMPI affiliation-hostility predictor a relationship of $+.26$ was obtained. This is significant at the .01 level and suggests that the predictive index for affiliation-hostility works fairly well for both "normal" subjects and for mixed groups of "neurotics" and normals.

Let us review the functional implications of these three studies. In practice, it will be recalled, the prediction of Level I behavior is based on the combination of two indices. This means that our predictions will probably be better than we might expect by considering the single index correla-

tions. If a patient, for example, has an extreme score on either index the pulling effect of the other index is lessened. This is to say simply that the farther away from the center of the circle, the more reliable the predictions. When the predictive indices fall close to the center of the circle the assignment of an interpersonal diagnostic term based on the octant placement is probably meaningless. If one or both scores are extreme (i.e., distant from the center of the diagnostic grid) the diagnostic labels assigned to the octants or sectors are more reliable. It follows then that the predictive indices Number One will work fairly well for maladjusted, neurotic subjects who manifest intense or extreme security operations, but cannot be depended on to predict too precisely for well balanced, adaptive (i.e., non-clinical) individuals.

The Fourth Validation Study

Even with these additional cues the MMPI predictive indices Number One cannot be considered highly satisfactory. Two lines of research were immediately suggested: 1) further cross-validation studies on additional cases (which are now in progress), 2) or expanded study of the relationship of all the individual MMPI scales to the interpersonal behavioral criteria.

To this end the horizontal and vertical indices of interpersonal behavior as rated by fellow group members were correlated with each of the 12 standard MMPI scales and with 18 special scales developed by Harrison Gough (6, 7, 8, 9), George Welsh (14), Frank Barron (2), et al. The second sample of group therapy patients (14 males and 30 females) and the obesity sample (93 females) provided the data for these studies.

The results of this correlational study are presented in Table 4.

Interpretation of the Correlation Matrix for the Clinical Samples

Examination of these results for the clinical samples reveals, first of all, that the MMPI scales selected for the original (on the basis of clinical experience) stands up fairly well, with the exception of one unhappy choice. The Hs Scale which was nominated to predict dominance actually is related (insignificantly) with submission! This clearly indicates that a more effective MMPI index for dominance can probably be developed since several single scales show correlations as high or higher than the MMPI index Number One.

This leads us to a second feature of the clinical correlational study: the single scales have surprisingly high relationships particularly with the dominance-submission criteria. There are five of the standard MMPI scales

TABLE 4

CORRELATIONS OF TWELVE STANDARD (CLINICAL) MMPI SCALES AND EIGHTEEN SPECIAL MMPI SCALES WITH VERTICAL (DOMINANCE-SUBMISSION) AND HORIZONTAL (LOVE-HOSTILITY) INTERPERSONAL INDICES FOR A "NORMAL" AND A "NEUROTIC" SAMPLE

MMPI Scale	Obesity Subjects N = 93		2nd Clinic Sample: Male N = 14		2nd Clinic Sample: Female N = 30	
	Vertical (Dominance-Submission) Index	Horizontal (Love-Hostility) Index	Vertical (Dominance-Submission) Index	Horizontal (Love-Hostility) Index	Vertical (Dominance-Submission) Index	Horizontal (Love-Hostility) Index
Lie	—.01	.00	+.16	+.27	—.23	+.10
F	—.33**	+.02	—.62*	—.50	—.03	—.21
K	+.14	—.12	+.47	+.33	—.08	+.30
Hypochondriasis	—.15	+.04	—.35	+.18	—.25	—.07
Depression	—.29**	+.11	—.47	—.03	—.45*	+.05
Hysteria	—.08	+.04	—.37	+.28	—.14	—.17
Pd	—.01	—.06	+.07	—.17	—.06	—.03
Masculinity	+.10	—.11	—.43	+.10	+.15	—.18
Paranoia	—.13	+.06	—.24	—.26	—.43*	+.07
Pt.	—.20*	+.06	—.62*	—.29	—.42*	+.12
Schizophrenia	—.37**	+.04	—.64*	—.49	—.30	—.03
Manic	—.15	—.04	+.02	—.37	+.27	—.21
Anxiety	—.27**	+.05	—.62*	—.45	—.34	+.03
Control	—.15	—.02	—.36	—.42	+.14	—.44*
Repression	—.11	+.07	—.12	+.01	—.29	+.26
Status	+.23*	—.10	+.12	+.31	+.23	.00
Prejudice	—.14	—.03	—.64*	—.49	—.17	—.15
Dominance	+.27**	—.08	+.63*	+.42	+.33	+.11
Responsibility	+.14	—.13	—.03	+.10	—.10	+.24
Dissimulation	+.08	+.08	—.69*	—.52	—.10	—.25
Social Participation	+.23*	—.14	+.40	+.27	+.34	—.09
Shock Rx Progn.	—.26*	+.09	—.64*	—	—.05	—.18
Neuroticism	—.18	+.14	—.71**	—.11	—.18	—.05
Social Introversion	—.23*	+.11	—.45	—.41	—.35*	+.15
Barron's Ego Strength	+.21*	—.14	+.64*	+.09	+.45*	—.04
Dependence	—.29**	+.14	—.65*	—.33	—.45*	+.09
Feminine Masochism	—.21*	+.04	—	—	—.33	+.07
Neurodermatitis	+.07	+.03	+.19	+.42	+.53**	—.11
Hypertension	—.13	+.19	—.52	+.11	—.21	—.08
Counter Hypertension	—.25*	+.11	—.50	—.33	—.17	—.18

Key: Correlations which are significant at the .05 level are indicated by one asterisk (*); at the .01 level by two asterisks (**).

and ten of the special scales which show relationships with dominance significant at the .05 level or better.

A third aspect of these results which deserves comment is the superiority of the dominance-submission correlations over the love-hate correlations. It is clearly more difficult to predict scores along the horizontal axis. None of the correlations of standard, clinical MMPI scales with the love-hate criterion reach the .05 level of significance. Although the general pattern of correlations is low, the scales selected for the horizontal predictor index (Hy, Sc, K and F for the men and Pa, Ma, K and F for the women) stand up as the best individual scales.

A fourth feature of this correlation matrix for the clinic patients is the performance of the non-clinical, special scales. These correlations tend to run higher than the clinical scales and include several promising predictive indices. The Welch first factor (anxiety) scale (14), the prejudice (8) and dissimulation (7) scales of Gough, the Drake social introversion scale (3), the Winne neuroticism scale (15), and the Navran dependency scale (13), all show significant relationships with submissiveness (i.e., negative correlation with dominance). The Gough scales for dominance (9) and social participation (6), the Barron "Ego-strength" scale (2), and the neuro-dermititis[8] scale (1), are all related to dominance. These last four relationships are particularly welcome because the clinical scales tend to show higher relationships with submissive, weak behavior than the non-clinical. The special scales provide indices for measuring assertive, aggressive, responsible behavior which most clinically-oriented tests fail to tap.

Interpretation of the Correlation Study on the Obesity Sample

We shall now consider the correlations between individual MMPI scales and the Level I dominance and love indices for the obesity subjects. The correlations are, for this sample, consistently lower than for the clinical, "neurotic" groups. This is to be expected since the obesity group was quite homogeneous in respect to their interpersonal behavior in the discussion groups. They tended to cluster in the upper right hand quadrant on both measures, i.e., their MMPI indices and their Level I behavior was drastically

[8] The fact that a scale for neuro-dermatitis correlates with interpersonal dominance may seem puzzling. Actually this is very consistent with previous studies executed by the Kaiser Foundation research group. Psychosomatic patients typically manifest interpersonal behavior which is considerably "stronger", more conventional, and more self-confident than "neurotic" patients do. The interpersonal correlates of psychosomatic disease include denial of weakness and claiming of strength (12).

imbalanced in the direction of responsible, hypernormal, conventional behavior. This homogenity tends to shrink the correlational results.

Even with this qualification in mind, an examination of the results tends to confirm two of the conclusions drawn from the clinical studies. 1) these are fairly high relationships between individual scales and dominant-submissive interpersonal behavior. Fourteen scales show correlations significant at the .05 level or better. 2) the MMPI scales are more closely related to the vertical index of Level I than the horizontal. Whereas fourteen scales relate significantly to dominance, no scale is so related to the love-hate axis. This suggests that "normal" subjects interacting in discussion groups are able to differentiate themselves in respect to power-submission but not in respect to hostility. It seems that neurotics may express varying amounts of sullen, bitter, irritable behavior but the "normals" fail to show significant differences in this area. These comments are presented as hypothetical and cannot be accepted as established facts—for two reasons: first, the results are not cross-validated, secondly although we have designated the obesity subjects as "normal" there is no reason to believe that this is an accurate presumption. Further research which is now being accomplished by Suczek et al., may well demonstrate that obesity patients have a specific "power" orientation and the blunting of the love-hate factor may be uniquely related to the overweight syndrome.

The general conclusion to be drawn from the correlations of Table 4 is that the original MMPI predictive indices Number One can be improved by substitution of certain standard clinical scales and by the addition of non-clinical scales. If it is desired to predict interpersonal behavior from the MMPI the most direct method is probably to study the MMPI profile in light of the correlations presented in Table 4. To facilitate this procedure the correlation matrix has been plotted on to the interpersonal diagnostic grid. In Figures 7 and 8 the horizontal and vertical coordinates have been calibrated in correlation units. This provides a graphic summary of the correlations of each MMPI scale with the dominance-submission and hostility-affiliation ratings from Level I.

Figure 7 presents the graphic plotting of the MMPI scale correlations with the Level I scores for the male sample of group therapy patients. The letters "DO" in the upper-right hand quadrant indicate that the Gough scale for dominance correlates positively with both the vertical and horizontal Level I ratings. This means that patients with high scores on the dominant scale will obtain the interpersonal diagnosis of "managerial personality" or "responsible person". The letters "Ego S." in the upper-center

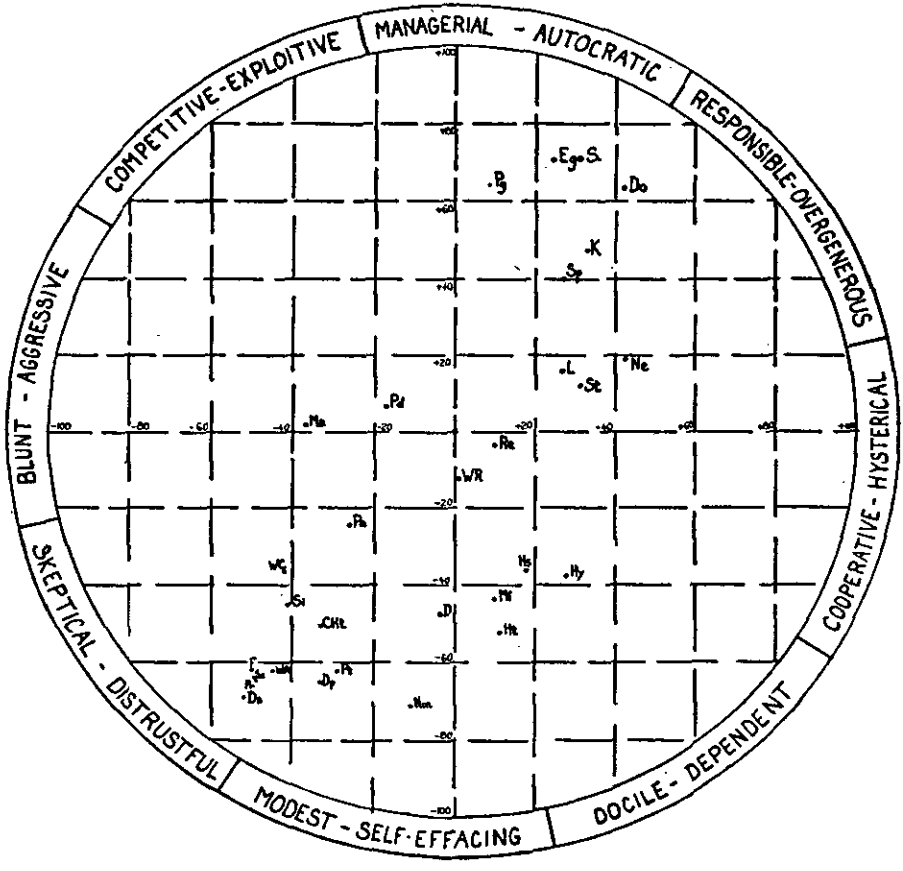

FIGURE 7

GRAPHIC REPRESENTATION OF THE CORRELATION OF 12 STANDARD MMPI SCALES AND 18 SPECIAL SCALES WITH HORIZONTAL AND VERTICAL INDICES OF INTERPERSONAL BEHAVIOR IN GROUP THERAPY FOR 14 MALE PATIENTS

Key: The vertical and horizontal axes are calibrated in terms of correlation units. The correlation of any MMPI scale with dominant-submissive interpersonal behavior is reflected by its vertical coordinate; its correlation with affiliative-hostile interpersonal behavior is reflected by its horizontal coordinate. The 30 MMPI scales are abbreviated as follows:

FIGURE 7 (*Continued*)

Legend:

L	Lie	St	Social Status
F	Non-conformity	Pr	Prejudice
K	Defensiveness	Do	Dominance
Hs	Hypochondriasis	Re	Social Responsibility
D	Depression	Ds	Dissimulation
Hy	Hysteria	Sp	Social Participation
Pd	Psychopathic Deviation	Ps	Feldman's Shock Therapy Prognosis
Mf	Masculinity-femininity	NM	Neuroticism
Pa	Paranoia	Si	Social Introversion
Pt	Psychasthenia	Pg	Barron's Ego Strength Prognosis
Sc	Schizophrenia	Dp	Dependency
WA	Welch's Factor 1 (Anxiety)	Fm	Feminine Masochism
WR	Welch's Factor 2 (Repression)	Ne	Neurodermatitis
WC	Welch's Factor 3 (Control)	Ht	Hypertension
		CHT	Counter-Hypertension

indicate that the Barron scale for Ego Strength correlates positively with the vertical (dominance) index and negligibly with the horizontal (love-hate) index. This means that patients with high scores on the Ego Strength scale will be given the interpersonal diagnosis of "managerial personality". The placement of each scale thus serves to summarize the predictive value of each MMPI scale. Figure 8 contains the same data for the women's sample.

To make predictions as to the expected security operations of a patient his highest MMPI scales should be located on the diagnostic grid. These designate the expected interpersonal behavior. Thus if a male patient has a high F, D, and Sc pattern we would expect his subsequent role to involve the themes of the lower left quadrant (passive-withdrawal and passive-hostility). If the Ma and Pd are emphasized, actively-hostile and aggressive behavior might be predicted. These diagnostic grid summaries are based on small samples and have not been cross-validated. They are presented here as illustrations of a potential technique of prediction.

A more precise method of predicting interpersonal behavior involves the use of revised predictive indices based on the performance of the single scales. It is clear, for example, that the use of the special, non-clinical scales of Gough et al., will improve the prognostic formulae. One such revision has already been attempted. A new dominance predictor index was calculated based on the following formula: Level I dominance = "Ego S." + Dominance + Status + Social Participation — Neuroticism — Anxiety — Dependence — Social Introversion. When this index (which is designated

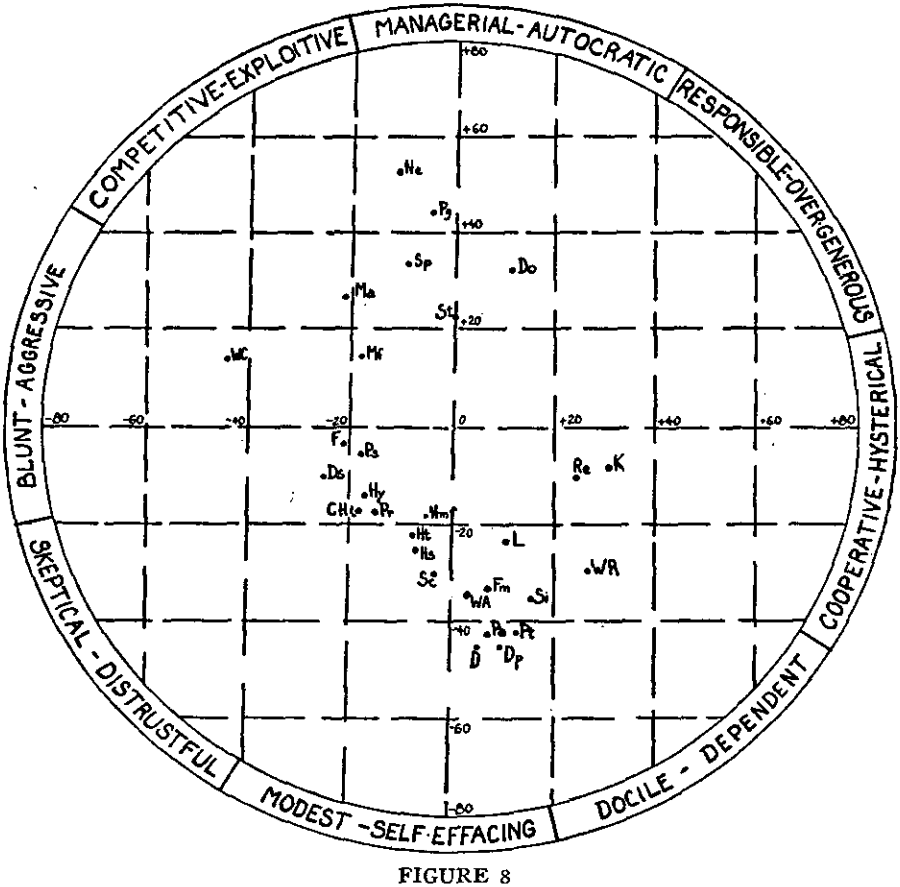

FIGURE 8

GRAPHIC REPRESENTATION OF THE CORRELATION OF 12 STANDARD MMPI SCALES AND 18 SPECIAL MMPI SCALES WITH HORIZONTAL AND VERTICAL INDICES OF INTERPERSONAL BEHAVIOR IN GROUP THERAPY FOR 30 FEMALE PATIENTS

Key: Same as Figure 7.

Special-MMPI-Index Number Two) was correlated with Level I dominance a result on the order of +.55 was obtained. This is significant beyond the .01 level. The second group therapy sample (N = 44) was employed. This index was then applied to the Level I ratings of the group of 93 "normal-obesity" female subjects. This cross-validation cannot be considered ideal because the MMPI scores for the "normal" or obesity sample tended to cluster in the extreme upper right quadrant of the diagnostic grid. Even with

this limiting qualification the correlation between the Special MMPI Index Number Two and Level I dominance was calculated to be +.29. This is significant at the .01 level. It will be recalled (see Table 3) that the MMPI Predictor Index Number One for dominance did not produce a significant relationship with the Level I dominance-submission index for the obesity sample. The fact that the new special scale index Number Two does yield a significant relationship indicates that the Gough, Welch, Barron, et al., special scales can be combined into the best predictor index for assertive-submissive, strong vs. weak behavior. These special scales produce no consistent pattern on the love-hate axis which leads to the tentative conclusion that the MMPI clinical scales are more sensitive to the expression of love-hate than are the special non-clinical scales.

While multiple regression equations using the intercorrelations among the MMPI scales would improve the predictions somewhat, in the final analysis the most successful method of utilizing the MMPI to predict interpersonal behavior would undoubtedly involve the construction of new criterion—specific scales for the horizontal and vertical factors. Research in this direction is now being planned by the Kaiser Foundation research project.

IV

Predicting the Variability of Interpersonal Behavior

In the three preceding sections we have presented methods for measuring interpersonal behavior and for predicting it by means of the MMPI. Four validation studies were then considered. In the diagnosis and prognosis of social behavior it is necessary to take into account not just the interpersonal activities of the subject but also his consistency and changeability. Some individuals routinely manifest the same interpersonal behavior at all times and in all situations. Others vary from time to time and from place to place.

In predicting interpersonal roles we have stressed, therefore, that two aspects of behavior must be studied: the interpersonal dimension and the variability dimension of personality. The measurement of the interpersonal dimension has been discussed. We shall now consider the measurement of the variability dimension.

The Kaiser Foundation research project has found it convenient to distinguish between three kinds of variability: structural, temporal and situational. These have been defined as follows:

> "*Structural variability* refers to differences among the levels of personality. It is well known that drastic discrepancies and inconsistencies

develop when we compare the conscious self description with behavioral or symbolic expressions. The subject who presents himself as a warm-hearted, tender soul may produce dreams or fantasies which are bitterly murderous. Social interactions as observed by others may be quite different from the subject's own view of them. These discrepancies are often called ambivalences, conflicts, or perceptual distortions.

"*Temporal variability* refers to inconsistencies in the same level of behavior over a time span. Time inevitably brings changes, great or small. Many subjects show marked cyclical swings of mood or action. Growth and development of the organism bring changes. The temporal changes we observe in psychiatric patients are called spontaneous remissions, therapeutic recoveries, psychotic episodes and the like. Patients sometimes come to a clinic begging for therapeutic help and on the subsequent interview indicate not the slightest interest in the treatment program.

"*Situational variability* refers to differences in environmental factors. The man who is a lion at home may be a lamb at the office. Reactions often vary according to the sex, age, and cultural status of the 'other one' with whom the subject is dealing." (10)

While each of these classes of change delimit certain specific phenomena it has been demonstrated that a general variability factor is common to all three. That is, if we can determine the amount of variability in one of these classes (e.g., in personality structure) we can make probability predictions as to the amount of variability to be expected in another class (e.g., change over time, improvement in therapy etc.).

This finding, that structural variability is related to temporal variation, seems to have some bearing on the main topic of this paper: prediction of interpersonal behavior. It follows that if we determine the amount of structural variability in the personality at the time of pre-therapy testing, we can then predict, how much consistency or change can be expected in the therapeutic interaction of the future and the sequence of unfolding interpersonal behavior. This seems to fit common-sense clinical reasoning: if a patient's personality shows a rigid, consistent loading in terms of the general role (e.g., passivity) and if he avoids, at all levels, any non-passive theme, and if no ambivalence, conflict or inconsistency in this pattern is in evidence, then we can predict (with a high probability of accuracy) that he will take a passive role in a therapy group. In the case of a patient who presents as a passive person, but whose total personality pattern reveals considerable conflict and ambivalence concerning passivity-assertion, a different order of prediction might be made. The tester might feel less secure in forecasting passivity in the future therapy situation. He might want to qualify his prediction and suggest that the patient might alternate between

passivity and assertion, or that the patient might be initially passive in respect to the therapist and quite independent in relation to the other group members, or that he may be initially passive but will eventually shift to a role of aggressive assertion. Variability in the personality structure—inter-level conflicts and discrepancies—can thus suggest the amount of consistency or variation in the future behavior.

In order to make predictions involving the variability factor it is necessary to have a way of measuring variability in the structure of personality before therapy. This is accomplished operationally by measuring the amount of discrepancy among the levels of personality. We have described, in an early section of this paper, a method for summarizing the interpersonal behavior of a subject in terms of two indices. These indices can be considered as coordinates which locate the subject's interpersonal behavior at Level I on a diagnostic grid. The same procedure can be followed for the other levels of personality. Thus his ratings of himself (the conscious aspects of Level II) can also be expressed in terms of indices which are then converted into standard scores and plotted on the same diagnostic grid. His conscious descriptions of his Father, Mother and Spouse can be similarly treated. His fantasy themes from Level III and his "Ideal-values" from Level V can be plotted in the same fashion. It is thus possible to obtain a diagnostic pattern for a patient on which his scores from all available levels of his personality are plotted on one master grid.

Figures 9 and 10 present the summary pattern of the scores of two patients before they entered group therapy at the Kaiser Foundation Psychiatric Clinic. Included on each diagnostic grid are the scores for conscious description of self, Mother, Father, Spouse, for "ego ideal", for TAT fantasy "hero", fantasy "other" and for the MMPI predictors of Level I behavior.

It will be noted that the scores plotted on Figures 9 and 10 are linked together by a network of lines. These represent the linear distance between different aspects of the personality structure. These distances can be converted into linear measurements which are the indices of variability. They reflect numerically the discrepancies between the levels of personality. The theory and methodology involved in these indices have been presented in another publication (10). Each line represents a specific inter-level discrepancy. To each of these indices of variability we have assigned a name which seems most clinically appropriate or theoretically meaningful. Thus the discrepancy between conscious description of self and Mother is called the Index of Maternal Identification or Disidentification.

At the present time the Kaiser Foundation research project is employ-

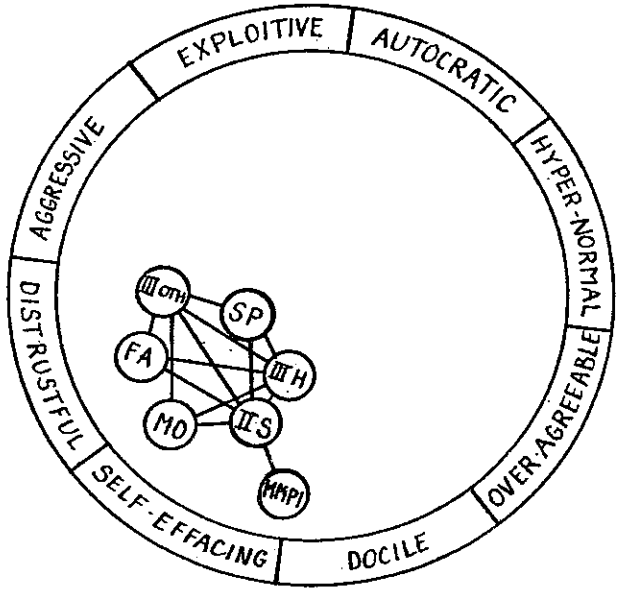

FIGURE 9

SUMMARY PATTERN OF SCORES ON SEVEN TESTS OF INTERPERSONAL BEHAVIOR FOR A RIGID "INVARIABLE" PATIENT

Key: All scores are plotted in terms of standard scores for horizontal and vertical indices. The center of the circle defines (for every distribution of test scores) the intersection of the horizontal and vertical means. The coding of the seven tests is as follows: MMPI refers to MMPI Index Number Two; IIS = Level II Self-description; IIMo = Level II description of Mother; IIFa = Level II description of Father; IISp = Level II description of Spouse; IIIH = Level III Fantasy Hero; IIIOth = Level III Fantasy Others.

ing 14 measures of structural variability. These 14 indices (some of which are like Freudian defense mechanisms) provide a diagnosis of variability which is combined with the interpersonal diagnostic profile to make functional predictions. The norms for these 14 Variability Indices are now being established and will be presented in a future publication.

The 14 variability scores to be considered in this article and their operational definitions are presented in Table 5.

It will be noted that the first 13 indices listed in Table 5 are operationally defined by the discrepancies between different aspects of the personality structure. Five additional indices have been added at the bottom of this table. Two of these refer to internal consistency measures within the

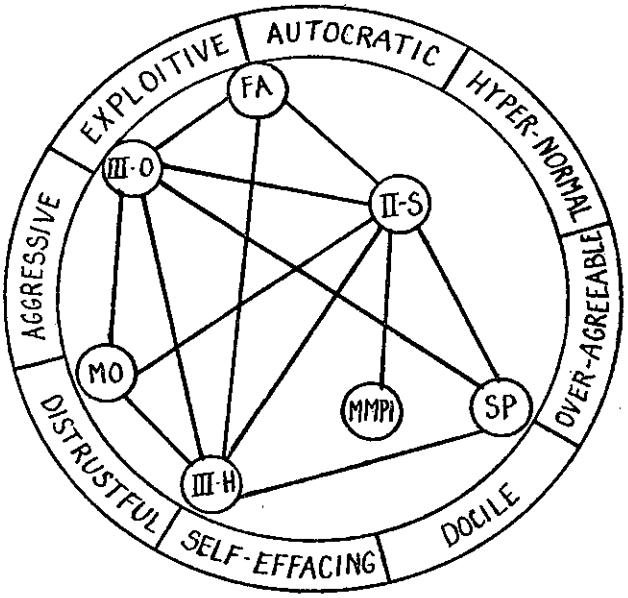

FIGURE 10

SUMMARY PATTERN OF SCORES ON SEVEN TESTS OF INTERPERSONAL BEHAVIOR FOR AN "OSCILLATING" (HIGHLY VARIABLE) PATIENT

Key: (Same as in Figure 9).

MMPI pattern and the interpersonal Adjective Checklist. They are designed to reflect the tendency of some subjects to present ambivalent, or conflicted pictures of themselves at these two levels of behavior. We have discovered that low but significant relationships exist between inconsistency at a single level and inter-level variability (10). The third of these special indices involves the "paranoia" scale of the MMPI. There is evidence that patients with high "Pa" scores on the MMPI tend to show unpredictable, inconsistent behavior and tend to show marked variability patterns (10). Some of the score discrepancies manifested by these "high Pa" patients seem to be related to the following: a tendency to see themselves as more righteous, poignant, and "sweet" along with the presence of hostile and masochistic motifs at the level of fantasy and of symptomatology. Patients with high paranoia scales on the MMPI present difficult predictive problems—particularly centering on their perception and expression of hostility.

The final two indices in Table 5 refer to discrepancies between ego-ideal and the self scores at Levels II and III. The discrepancy between conscious

TABLE 5

A DESCRIPTION AND PRELIMINARY OPERATIONAL DEFINITION OF FOURTEEN VARIABILITY INDICES

Code	Low Discrepancy =	High Discrepancy =	This Variability Index is operationally defined by the linear discrepancy between:
12 SS	Self Perception	Self Deception	Level II Self vs Level I (here we use Level II vs MMPI estimate of Level I)
23 SH	Pre-Conscious Duplication	Pre-Conscious Repression	Level II Self vs Level III Fantasy Hero
23 SO	Conscious Introjection	Conscious Disintrojection	Level II Self vs Level III Fantasy Other
22 SM	Conscious Maternal Identification	Conscious Maternal Disidentification	Level II Self vs Level II Description of Mother
22 SF	Conscious Paternal Identification	Conscious Paternal Disidentification	Level II Self vs Level II Description of Father
22 SSP	Conscious Marital Identification	Conscious Marital Disidentification	Level II Self vs Level II Description of Spouse
23 MH	Pre-Conscious Introjection (maternal)	Pre-Conscious Disintrojection (maternal)	Level III Hero vs Level II Description of Mother
23 FH	Pre-Conscious Introjection (paternal)	Pre-Conscious Disintrojection (paternal)	Level III Hero vs Level II Description of Father
23 SPH	Pre-Conscious Introjection (marital)	Pre-Conscious Disintrojection (marital)	Level III Hero vs Level II Description of Spouse
23 MO	Pre-Conscious Fusion (maternal)	Pre-Conscious Diffusion (maternal)	Level II Description of Mother vs Level III Other
23 FO	Pre-Conscious Fusion (paternal)	Pre-Conscious Diffusion (paternal)	Level II Description of Father vs Level III Other
23 SPO	Pre-Conscious Fusion (marital)	Pre-Conscious Diffusion (marital)	Level II Description of Spouse vs Level III Other

TABLE 5 (Continued)

Code	Low Discrepancy =	High Discrepancy =	This Variability Index is operationally defined by the linear discrepancy between:
33 HO	Pre-Conscious Identification	Pre-Conscious Disidentification	Level III Fantasy Hero vs Level III Fantasy Other
	Internal consistency of Level II self-perception i.e., presence of conscious ambivalence.		$\epsilon = \frac{(D - S}{N} + \frac{L - H)}{N}$ where D and S are vertical tendencies and L and H are horizontal tendencies and N is the sum of words used on Adjective Checklist. High score equals internal consistency on Adjective Checklist; low score equals internal inconsistency.
	Internal consistency of MMPI predictive indices.		$\frac{(Ma + Hs) - (D + Pt)}{Ma + Hs + D + Pt} + \frac{(K + Hy) - (F + Sc)}{K + Hy + F + Sc}$ the resulting figure (disregarding sign) is the consistency index. High score equals inconsistency; low score equals consistency.
	Variability Index cue based on "Paranoia" scale of MMPI.		Standard Score of Paranoia scale of MMPI High "Pa" score = oscillation; low = rigidity.
Self Acceptance	Self Rejection		Level II Self vs Level V Ego Ideal
Pre-Conscious Self Acceptance	Pre-Conscious Self Rejection		Level III Fantasy Hero vs Level V "Ego Ideal"

view of self and the ego ideal is a measure of self-acceptance or self-rejection since it reflects the extent to which the persons "ideal" coincides with his actual view of self. This is a most useful index because it is highly related to motivation for psychotherapy. If the person is very self satisfied (i.e., low discrepancy) it indicates low desire for change in personality. These patients may seek symptomatic relief but clearly do not wish character exploration and change.

The discrepancy between Level III hero and ego ideal is a measure of pre-conscious self-acceptance or rejection since it reflects the extent to which

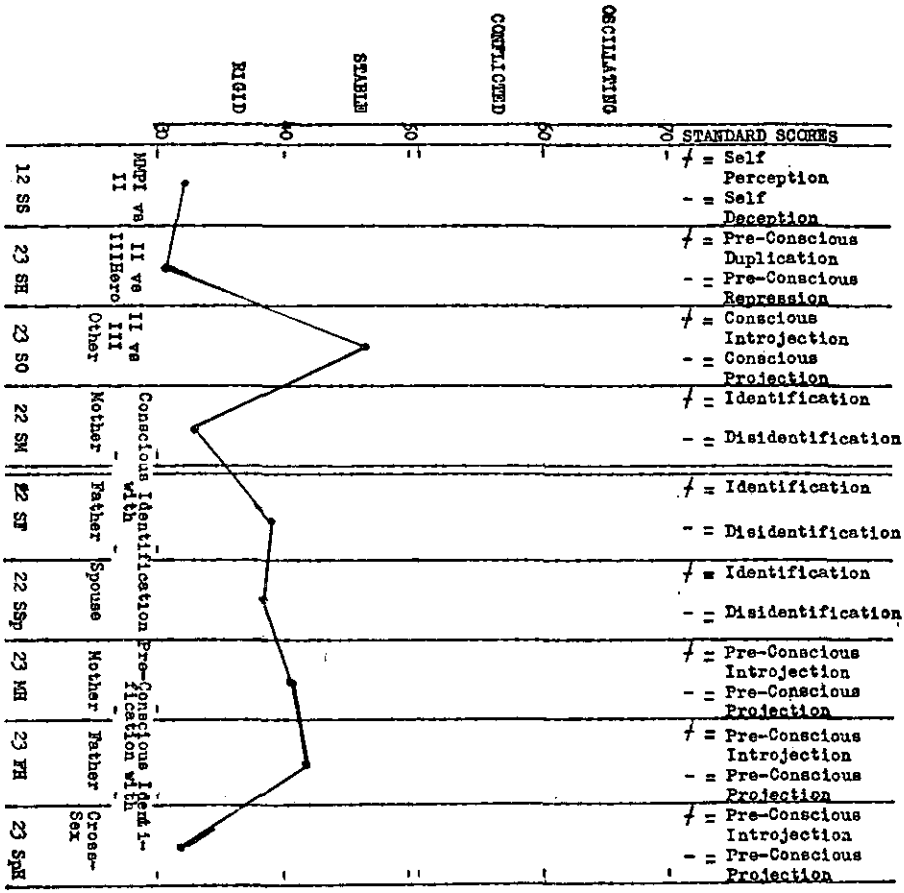

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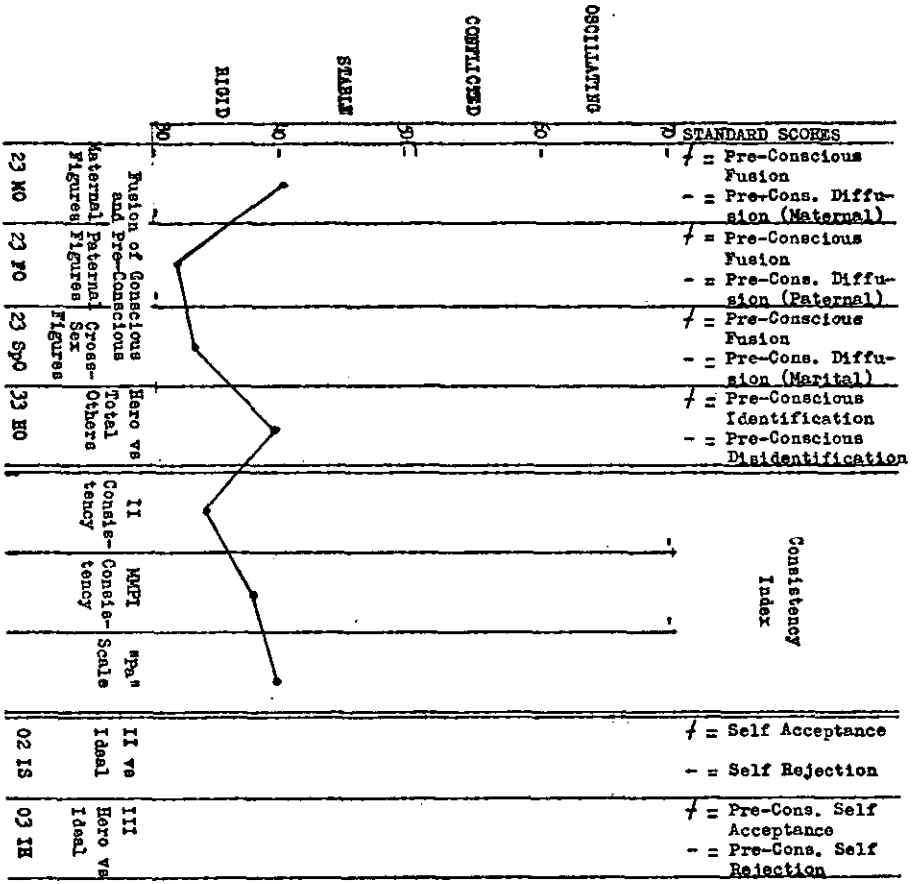
FIGURE 11*

ILLUSTRATIVE PROFILE OF VARIABILITY INDICES FOR RIGID PATIENT

* Note.—The patient whose variability profile is presented in this figure was first tested in 1952 and has been followed in group and individual therapy for about two years. The initial pre-therapy tests are diagrammatically summarized in Figure 9. When this patient was originally evaluated only the interpersonal profile was available. The basic technique of predicting variability was only partially and informally developed at that time. The variability profile presented here is based on the original 1952 test results.



*The indices which compare ego ideal with conscious view of self and pre-conscious hero (02 IS) and (03 IH) are clinical predictors which are not considered in this paper.

FIGURE 11 (*continued*)

the underlying feelings are close or distant from the "ideal". This is a most useful index to the clinician because it is related to prognosis for psychotherapy. If the underlying themes duplicate the ideal then the potentiality for rapid shifts is self-perception in the direction of self-acceptance is suggested. If the underlying themes are discrepant from the ideal it means that as the treatment process gets "deeper" the more depressive and "unwanted" motives become engaged and the slower the prognosis for recovery.

These two measures are probably the best two predictive indices for

psychotherapy. They provide a four-fold table of potential treatment results which assess the various combinations of positive and negative motivation for therapy with slow and fast prognosis. They are not used to establish the variability diagnosis because the ego ideal tends to be, in our culture, a relatively fixed measure. They are used for clinical prediction, but do not add to the variability assessment.

To summarize the variability pattern for any individual his scores are first plotted on a master diagnostic grid. The linear distances between these scores are measured. These measures are converted into standard scores and then diagrammed on a "Profile of Variability Indices". This provides a numerical and graphic representation of the specific kinds of structural variability. Figure 11 illustrates the Profile of Variability Indices for the first of the two patients—(the passive woman) whose interpersonal profiles were considered above.

This patient has a pattern of low discrepancy scores. Her personality tends to be unconflicted, tightly organized, even rigid. Her inconsistency scores are low; her conscious view of self is close to the MMPI. She is highly identified with her Mother, her Spouse and with her Father. Her Level III fantasy heroes duplicate her self descriptions—and they are not very discrepant from her fantasy "others".

The tightly organized and rigidly consistent picture which is reflected in the Variability Profile of Figure 11 did, in this case, accurately forecast a slow moving and fairly unchangeable clinical course. When we combine the interpersonal pattern of Figure 9 with her Variability Profile the following diagnostic formulation results:

> "This patient presents as a depressed, passive, guilty person. She is highly identified with a distrustful, deprived, and unhappy maternal image. She describes herself as being rather closely tied to a rejecting, cold, punitive father—and she reports the same kind of sado-masochistic involvement with her husband. The MMPI predictive indices for Level I suggest that she will be a passive, self-effacing person in her interaction during therapy.
>
> "The preconscious hero themes duplicate the immobilization and defeat of her conscious descriptions. This finding, when combined with the tight, rigidly drawn pattern of sado-masochistic family identifications suggests that the patient will manifest and maintain a helpless, modest, retiring role in treatment. She will 'train' others to see her as weak. While she will provoke activity and leadership from others, the consistent, deepseated (i.e., multi-level) nature of her adjustment suggests that she will react to these overtures with increased self-abasement. She will tend to pull sympathy, advice and help from the therapist and the other group members and the main therapeutic danger is that her

passive resistance may eventually recreate the rejecting and punitive world which she reveals in her fantasy "others". Her passivity and self-effacement will tend to provoke baffiement and frustration on the part of those who seek to help her—the continued passivity may eventually train the therapist and the group patients to ignore her.

Interpersonal diagnosis:	Masochistic passive-resistant personality.
Variability diagnosis:	Rigid personality structure invariant except for deep-seated "ego ideal" conflicts at Levels II and III vs. V.

Clinical Summary:

This submissive lady entered a psychotherapy group at the Kaiser Foundation Psychiatric Clinic. The group lasted for six months—during these 24 sessions the patient manifested a withdrawn and rather silent role, the other members shifting from an initial sympathetic nurturance to a mildly irritated neglect. The therapist's attempts to analyze these reciprocal role relations were minimally successful. Both the patient and the group members consciously perceived that the patient provoked rejection from the others, but both the patient and her colleagues seemed unable to break the chain of reciprocal interpersonal "reflexes".

At the close of this group the patient had showed no symptomatic improvement. She was administered a second battery of interpersonal tests. Her profile showed little or no change at Levels I (MMPI), II and V. There was, however, some shift at Level III—her fantasy heroes were considerably less masochistic and manifested some assertive and independent activities.

The patient subsequently entered a second therapy group. The passive resistance again appeared but was less consistent and this role was occasionally interrupted by confiding of problems to the group and "sharing behavior" towards two other members with the same symptoms, a complaining and mildly hostile exchange with a third member, and even a couple of attempts to give advice.

It may be helpful to compare the rigidly organized personality structure just discussed with a more variable pattern. Figure 12 presents the Variability Profile of the conflicted and oscillating male patient whose interpersonal profile we have previously presented in Figure 10.

The variability Profile is clearly different from the rigid, passive lady we have just considered. In the first place we notice that marked internal inconsistency exists for the MMPI and Adjective Checklist. On the MMPI he presents as extremely depressed; his Ma — D index is therefore, highly negative. This patient emphasized physical symptoms and minimized worries and fears—his second MMPI index (Hs — Pt) is, therefore, highly positive. We are presented with the paradox of a highly depressed and anxious person—unhappy, however about his diffuse physical symptoms and less about his psychological problems.

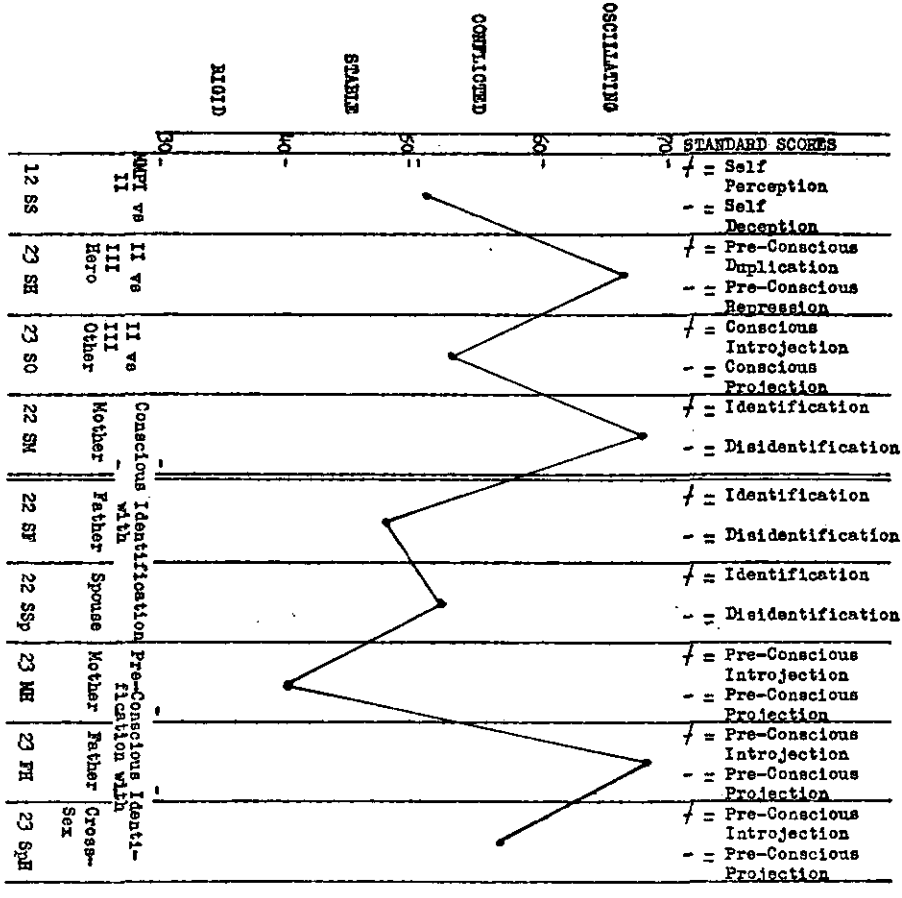


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FIGURE 12

ILLUSTRATIVE PROFILE OF VARIABILITY INDICES FOR OSCILLATING PATIENT

The same ambivalence is reflected on the affiliation (horizontal) MMPI indices. Sc is much higher than Hy—but K is much higher than F. This suggests the puzzling picture of schizoid trends accompanied by defensive denial of psychopathology.

On the Interpersonal Adjective Checklist this patient described himself as a strong, hyper-normal individual—but also admitted to certain intense themes of despair and suicidal depression. Again a marked ambivalence between contradictory claims—bland, outgoing confidence and hints at severe maladjustment.

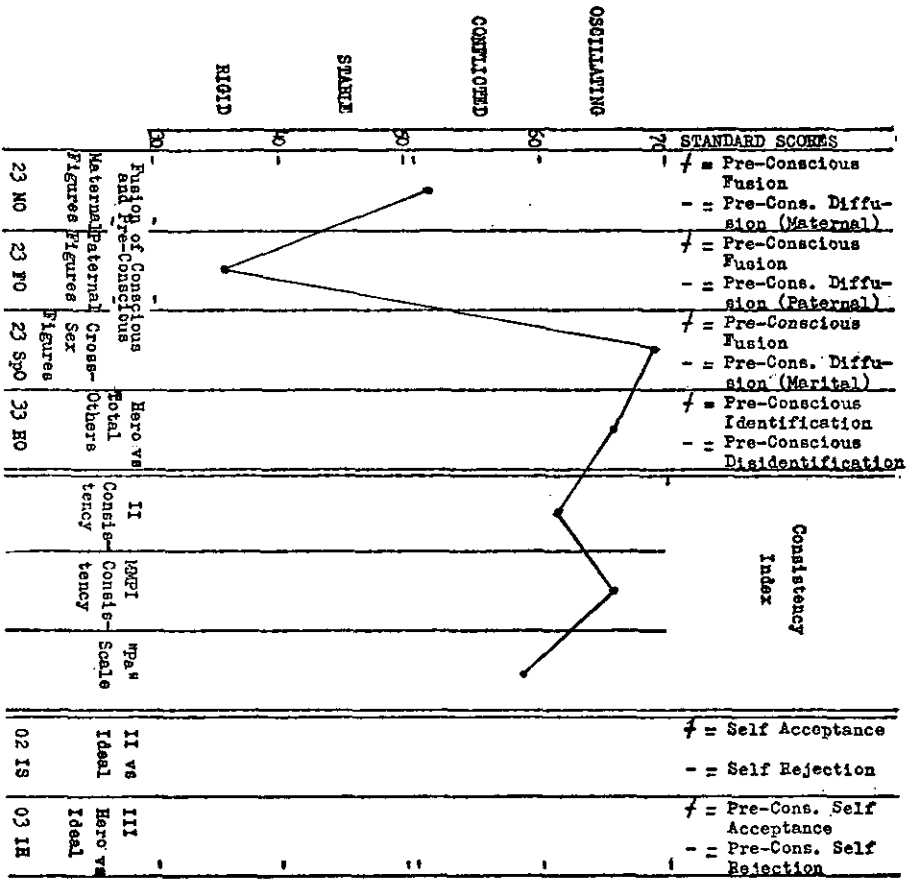

FIGURE 12 (continued)

The interlevel discrepancies confirm this suggestion of inconsistency and oscillation. He is moderately self-deceived. His pre-conscious imagery is in violent conflict with his conscious self descriptions. (The latter, we recall from Figure 10, stake his claim to success and normality, his fantasy heroes are, however, beaten, deprived figures who face a punitive, cold, rejecting world.)

The identification matrix adds to the impression of conflict. He is markedly disidentified with both parents and with his wife. (Glancing back at the interpersonal profile, we recall that he seemed to be compulsively clinging to a conscious image of normality in the teeth of a most traumatic family history.)

The preconscious identification pattern suggests that this patient

is at a deeper level, much closer to the anxieties and deprivations of his traumatic family history than he consciously tends to recognize.

The high "paranoia" scale suggests that this person is much more disturbed and hostile than his conscious self description would indicate.

In summary, we note that ten of his thirteen variability indices are above the average—indicating intense conflict or oscillation. The preconscious introjection of parental pathology suggests that this patient is a severely disturbed and deeply depressed person who is attempting to handle his schizoid feelings of deprivation by means of compulsive attempts to conform to a normal "ideal", as well as by repression, and by hypochondriacal substitutive preoccupations.

Interpersonal diagnosis:	Dependent-repressive personality with underlying masochistic-sadistic conflict. There is a bland, hypernormal facade covering deep feelings of isolation, depression, and deprivation. At the deepest level there is marked identification with the aggressor.
Variability diagnosis:	Oscillation; intense conflict between denial and recognition of feelings; in his approach to psychotherapy he will oscillate between an obtuse rejection of help and a dependent, anxious need for help. He will be difficult to keep in treatment.

Clinical Summary:

Before taking the interpersonal test battery (as part of his psychiatric evaluation) this patient had been seen by several medical clinics for diffuse hypochondriacal symptoms. These included an obsession with his cardiac function, respiratory phobias, pseudo-fainting spells, etc. He had been referred to the Psychiatric Clinic by all the physicians who examined him. He readily recognized the "anxiety" aspects of his symptoms but kept postponing the psychiatric consultation in the hope that further medical workups would relieve his symptoms. He had one psychiatric intake interview in 1952 but failed to keep later appointments. A year later (under considerable pressure from his physician) he returned for evaluation, was tested and referred to group therapy.

During the intake evaluation the same ambivalent sequences occurred. The patient readily (and with some dependent eagerness) admitted his need for treatment, the psychological origin of his symptoms, etc., but he also alternated by producing a most obtuse set of suggestions for physical therapy ("Perhaps I need new glasses.", etc.).

The psychiatric diagnostic conference was mainly concerned with the questions about the nature and intensity of the underlying schizoid material and the possibility that the hypochondriacal obsessions were a resolution that had best be left untouched by treatment.

Because of the resiliance and flexibility of the patient's oscillating defenses he was assigned on a trial basis to a group. The further recommendation was made that the therapist be particularly sensitive to the appearance of depressive material and the day-to-day efficacy of the repressive defenses.

During the first three sessions of the group this patient played a most energetic, helpful, expansive role. He took over as sub-leader of the group—interpreted, encouraged, lectured, and presented a boastful, self confident front. As the process of role interpretations developed this patient was able to face (obliquely and momentarily) the question posed by the group: "Why do you have to be active and why cannot you be a 'patient' in the group?"

Subsequently he was able to discuss his "panics", his fainting spells, his feelings of depression. He poignantly outlined his fears of suicide and insanity. He confided that before several meetings he was so immobilized that he could hardly park his car and walk up to the clinic —and that after the meetings he is often equally anxious. Up to the present time (the group is still on-going) he has maintained an expansive, self confident facade with occasional oscillations to the area of fearful passivity.

The Prediction of Interpersonal Behavior in the Case of Inconsistent Oscillating Patients

With these clinical and therapeutic findings in mind, let us return to the initial and central problem of this section: the prediction of the interpersonal and variability factors. In attempting to forecast this oscillating patient's interpersonal role in the group a series of paradoxical issues arise. When we study the scattered summary points on his interpersonal diagnostic grid and the marked inconsistencies reflected in his Variability Profile the predictive task becomes most complicated.

The passive lady whose profile was first considered posed, by comparison, a relatively simple predictive challenge. All of her "self" scores (at Levels I, II and III) fell in the "passivity" or masochistic sector. Most of her "other" scores fell in the "punitive, hostile" sector. The relationships which this lady could be expected to set up seem clear cut.

The case of the conflicted, hypochondriacal man seems cut from a different cloth. Will he act like he says he is (Level II), like his pre-conscious themes (Level III), or will the MMPI predictor index hold true?

The answer to these questions, like the nature of the profile, is variable. Where marked structural variability exists, then predictions as to future behavior are less secure. We can predict that the patient will be "unpredictable" i.e., changeable—and we can usually specify the specific roles between which he will oscillate. That is, we can forecast which sectors of the diag-

nostic grid he will tend to shuttle between. In this case the MMPI predictor index picks up the probic, passive elements of his personality. If we were to employ the MMPI index alone—our prediction would be off more than fifty percent of the time because the patient showed only occasional manifestations of passivity. If, however, the total interpersonal variability pattern is employed the accuracy of the predictions could be increased. It might be possible to forecast the amount and kind of initial security operations as well as the sequence of "deeper", latent behavior.

The specific methods for predicting the sequential unfolding of interpersonal events in psychotherapy is beyond the scope of this paper and will be discussed in a forthcoming publication. The Kaiser Foundation research project has been able to employ serial predictions as to future therapeutic reactions. Five general stages of interpersonal activity have been observed. These are related to the increasing depth (or distance from consciousness). The presenting operations can be predicted by the location of the initial Level II self description and the MMPI indices. The fantasy hero themes often define a later stage of reaction. The themes which are assigned to Level III fantasy others generally become fused to the image of the therapist and even some of the group members. Later these themes can be introjected and acted out by the patient himself. A later and perhaps the final stage of treatment sometimes involves the gradual expression of the unconscious material from Level IV which has hitherto been completely warded off at all other levels. These sequential developments are hypothetical and generalized. The full sequence of five stages would not be expected in all cases. Actually only the oscillators and extremely conflicted patients would show such a variable pattern of interaction.

The Effect of Situational Variability

In the last few pages we have considered the phenomenon of structural variability and its effect on predicting interpersonal behavior. Structural variability relates to, and therefore can predict, temporal variability.

In introducing this section it was pointed out that three types of variability can be distinguished. The third type, situational variability has not been dealt with so far in this paper. It is, however, a potent source of changeability and must be taken into account in predicting future security operations of patients.

Although the issues connected to situational changeability are beyond the scope of this article, it may be helpful to illustrate their operation, their effect on prediction, and some methods for measuring them.

It will be recalled that situational variability refers to changes in the subject's behavior in response to different environmental pressures. An individual may act differently with children than with adults; or take one role with younger women and another with older women. The clinician deals with his patients within a limited environmental range—i.e., the psychiatric clinic. He does not see the patient reacting to bosses or to parents. In the Kaiser Foundation clinic we attempt to accomplish what might be called "functional diagnosis". That is, we try to predict how the patient will react at the beginning of treatment and what sequence of interpersonal maneuvers might be expected to follow.

In making predictions of this sort situational differences due to variation in the clinic staff must be taken into account. Thus, we might predict that a certain patient will be initially "seductive" if seen by a young female therapist, "conciliatory" if seen by a young male therapist, and "dependent" if seen by an older male therapist. The further prediction might be made that bitter, distrustful, passive resistance will inevitably follow these initial security operations—but the latter would vary according to the interpersonal situation.

Predicting interpersonal behavior in group therapy introduces additional problems, because the initial role of the patient may vary in relation to the response of the other patients. Research into the relationship of the group structure to variations in patient behavior has been undertaken by the Kaiser Foundation project and will be presented in a forthcoming publication. It will be sufficient to remark at this point that the interpersonal behavior of fellow group patients does effect the individual's role in the group. A patient who might be expected to act in a mildly hostile manner will manifest increased hostility far beyond the expectation if he is placed in a group comprising several other hostile members. Other patients will exercise strong, leading behavior in a group where the other members are passive and put submissive pressure on him.

The main point of this article should, by this time, be clear. Prediction of interpersonal behavior is a most difficult task. A complex network of variables must be taken into account in order to forecast exactly what any individual will do in a future therapeutic situation.

Conclusions

This paper has been concerned with the prediction of interpersonal behavior—particularly as expressed in group therapy interactions. Such prediction involves two factors 1) the initial type of behavior to be expected,

2) the consistency or variability of this behavior and the sequence of changing security operations to be expected as the treatment process develops.

A methodology for measuring interpersonal operations was described and the specific steps for its application were outlined. This method involves 16 variables of interaction which are arranged on a circular continuum and which can be summarized by means of trigonometric procedures.

A methodology for predicting interpersonal operations was presented. This employs the Minnesota Multiphasic Personality Inventory which is given before patients enter group therapy. By means of formulae the MMPI scales can be converted into interpersonal language and used to forecast role interactions in therapy groups.

Three validations of these predictive indices were discussed. The sample studied were 123 group therapy patients and 93 normal (obese) subjects. Correlations between MMPI prediction indices for dominant behavior as measured in the group were significantly positive for the two samples of therapy patients, but insignificant for the normal groups. The indices which predict hostile vs affiliative behavior were positive but significant for only one of the two group therapy samples. These results suggest that predictive indices Number One forecast the interpersonal operations of maladjusted, "neurotic" subjects (who take extreme, inappropriate roles). They will probably differentiate the interpersonal behavior of "neurotics" from "normals" in groups comprising both kinds of subjects. They do not predict the interpersonal behavior of normals meeting in homogeneous discussion groups because the range of roles is clearly smaller.

A matrix of correlations between interpersonal behavior and 30 MMPI scales (12 standard clinical scales and 18 special non-clinical scales) was presented. These data tended to confirm the results of the first three validating studies. In addition some of the special non-clinical scales appear to have considerable promise for the development of improved predictive indices.

The problem of anticipating variability in interpersonal behavior was considered. A method for assessing the consistency or oscillation of personality was presented. This involves the systematic measurement of discrepancies between the levels of the personality structure. The resulting profile of Variability Indices which defines the amount of structural variability provides a method for anticipating the amount, the kind and the temporal sequence of variability in interpersonal behavior during psychotherapy.

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A SCALE TO MEASURE INTER-PERSONAL RELATIONSHIPS IN GROUP PSYCHOTHERAPY[1]*

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INTRODUCTION

This paper will describe the construction, validation, and use of a scale designed to measure the adequacy of an individual's inter-personal relationships in a group therapy setting. This scale is made up of 88 brief descriptions of behavior which is likely to occur in a group therapy session; the leader or observer scores each individual by indicating true or false for each of the items. The final score is the percentage of all the items which are marked in a way indicating "good" inter-personal relationships. The scale is designed to be a sensitive, discriminating measure of the changes in inter-personal behavior which group therapy aims to achieve.

This scale was developed to meet the need for a sensitive, reliable, and valid measure of treatment success in group psychotherapy. While the global, clinical evaluation of progress in group psychotherapy is often adequate for many treatment situations, the need for a standardized measuring device becomes apparent when one attempts a scientific study of the processes and results of group psychotherapy. A stable quantified score is required if one is to compare the results from several groups observed by different leaders, perhaps in quite varied settings, and with a considerable time span separating the initial from the final observations.

To meet these needs it was decided to design an objective measure of inter-personal relationships based upon observations by the leader of the behavior of the patient in the group psychotherapy setting. It might be argued that the aim of group psychotherapy is to produce changes in a patient's ordinary, everyday behavior and thus the measurement of success should be based on observations outside the group therapy situation; however, it seemed that the group psychotherapy situation offered a particularly revealing sample of inter-personal behavior and could thus provide a good

[1] From the Veterans Administration Hospital, Palo Alto, California. The author wishes to express his sincere appreciation for the assistance of his colleagues, too numerous to list individually, for their assistance in the formulation of the problem and choice of techniques as well as in the collection of the data.

* AWARD winning paper, American Society of Group Psychotherapy and Psychodrama, 1953-1954.

opportunity to evaluate the over-all changes in inter-personal relationships and emotional adjustment which are the goal of the psychotherapeutic process.

Such a scale, to be practically useful, should meet certain other requirements: (1) It should be simple enough that the observer could score it by memory after a session in which he had participated as a leader. Procedures demanding continuous recording during the session require too much observer personnel and might disturb the patients. For the same reasons, it should be brief enough that a group of six to ten patients could be scored within an hour. (2) The concepts, scoring procedures, and vocabulary should be such that it could readily be used by leaders with different backgrounds and viewpoints with a minimum of preliminary training in the use of the scale. (3) It should cover the whole range of patients, from the most regressed psychotic who is barely able to attend a group to the better adjusted patients in an out-patient clinic.

The variable of "inter-personal relationships" was chosen as the best single variable on which to measure improvement in group therapy because it seemed to be well-known concept, one which has general acceptance as being of focal importance in the genesis and cure of psychosis and neurosis, and it is the one aspect of personality which is most strikingly disorganized in psychosis and severe neurosis.

This concept of "adequacy of inter-personal relationships" was conceived as being indicated by the capacity of the individual to form intimate and personal relationships without anxiety and tension, relationships which are satisfactory and rewarding, both to the individual and to the other party.

There are several aspects to this concept and deficits in optimal interpersonal relationships can be revealed in a variety of ways. The most direct and obvious is avoidance of human contacts, epitomized by the psychotic huddled in the farthest corner of the ward, neither looking at nor talking to anyone, and apparently anxious to retreat even further from humankind. Less extreme manifestations of this tendency occur in individuals who choose jobs and living quarters with a minimum of human contacts and keep their relationships impersonal and aloof. Sometimes on a more subtle level the avoidance of intimate personal relationships is achieved despite apparent gregariousness; the person who fits the stereotype of a "salesman" is often acutely uncomfortable if a relationship is expected which is beyond the clearly defined and rather formalized behavior expected of a "good fellow".

Another index of adequate relationships is the amount of anxiety

and discomfort involved. Sometimes a person may remain comfortable in his relationships as long as he can achieve distance, but becomes acutely anxious when the positive yearning for companionship draws him close to another. This conflict between the positive and negative valences produced anxiety, sometimes conscious and correctly identified and sometimes not.

Satisfactory inter-personal relationships can exist only if the person responds appropriately to his partner as a real person and not as a projection of his own emotional expectations. To the extent that "transference" exists the relationship will suffer. Similarly no satisfactory relationship can be achieved if one party is uninterested or unable to comprehend what the other person is feeling and experiencing; some empathy and "looking from the other person's viewpoint" is essential. Since a real relationship can only exist if there is mutual communication of intents and responses, the amount and effectiveness of the efforts to find out what the other person is like, what he is saying, how he is understanding what is said to him, and how he is responding, often seems to go along with satisfactory relationships.

Finally, it would seem that a person must be able to view others as basically his friends and not his enemies; this must be a genuine attitude and not a sham to make easier the exploitation of others. There must be a willingness to accept common goals with others and to work together for their fulfillment.

While it may be an oversimplification to reduce all of these various facets to a single variable, it seemed as if there was a single common factor running throughout. By condensing it into a single variable scale it was possible to get the powerful advantage of quantification and measurement.

Construction of the Scale

It was decided that rather than to write the items according to a preformulated theory of inter-personal relationships, they would be selected from a representative sampling of the kinds of behavior that the therapists thought were related to improvement in group therapy. Therefore, therapy notes which had been compiled on about one hundred patients by approximately thirty leaders were reviewed and the descriptive statements about patient's behavior were selected as the basis of the items. As far as possible the phrasing and vocabulary used by the therapists was retained. These items were reviewed by fifteen therapists in the group therapy program on the maximum security ward in Palo Alto VA Hospital. Ambiguous, inappropriate, and infrequently occurring items were discarded and a few new items were written. It was decided that if a certain behavior occurred once

in four meetings it would be scored as true of the patient; observations on fewer meetings might not be typical of the patient, while longer periods of observation would not be sensitive to the sometimes rapid fluctuations of the adjustment status of the patients.

These items were then scored on each of 41 patients on a maximum security ward by two, three, and sometimes four observers. The final score for each patient on a given item was what the majority of the observers recorded. Each of the fifteen judges then divided the patients which he knew into those that had "good" inter-personal relationships and those that had "poor" relationships; twelve patients were classified by the majority of the raters as "good" and twenty-nine as being "poor" in their social relationships.

The following description had been provided to the raters to help them clarify what was referred to as social relationships:

"The variable of inter-personal relationships should be based on an estimate of the capacity of the individual to form relationships which are personal and intimate and which are satisfactory and rewarding for *both* the individual and the other persons. Take into consideration the kinds of behavior listed below which are examples of better inter-personal relationships.
Uses words that other people understand.
Wants the other person to understand what he is saying.
Is aware of the other person's reaction to what he is saying.
Discriminates between people and can adapt his communication to the audience.
Willing to share personal information or feelings with others.
Is interested in other people's opinions and ideas.
Wants to be part of a group.
Enjoys association with people.
Able to show friendly feelings toward people.
Able to form a common goal with other people and help in achieving it.
Uses tact and consideration in dealing with people.
Forms give-and-take relationships in which he does not exploit or let himself be exploited by other people.
Over-all effectiveness in dealing with people."

Then the data for each item was entered in a two-by-two table, the number of "good" and "poor" patients being scored either "true" or "false." The significance of the association was tested by chi-square, and 99 items were found which discriminated between the "good" and "poor" patients at the .20 level.

These 99 items were then tried out clinically on several groups to see how well they succeeded in measuring the various aspects of inter-personal relationships. After some experience with the scale, 40 new items were written to meet the deficiencies which appeared with the practical use of the scale.

The new form of the scale was scored on 128 patients by 15 leaders who conducted 18 groups in the hospital. The leaders were also instructed to rank each patient in his group on the basis of his social or inter-personal relationships. However, the problem remained of how to classify the different patients into three levels of inter-personal adjustment. One could not simply split each group into three levels, since the average members of one group might be much higher in social relationships than those of another group. A solution to this problem was attempted by using the leader's familiarity with the hospital patients in general as the anchoring standard; they were asked to classify each patient according to whether they thought his inter-personal behavior was typical of (a) the upper one-third of the patients in the hospital in group therapy, (b) the middle third, or (c) the bottom third. While it will be recognized that there would be some variance in such vaguely defined standards as interpreted by different leaders, it was believed that there would be significant average differences in the inter-personal relationships of patients so classified. Then the number of "true" and "false" responses for each item for each of the three groups of patients was entered into a two-by-three table and the significance of the chi-square calculated. The main reason for classifying the patients into three groups rather than into two as in the first item selection sample was to allow identification of the items which did not show linear increases in discrimination. Thus one item "Harangues the group," showed a frequent occurrence in the middle group of patients, but was infrequent in both the upper and lower groups. It was thus discarded because a "false" score did not discriminate between the best and poorest patients. Eighty-eight items were found which discriminated between the three groups at the .01 level, 62 of these being items which had discriminated in the first item selection procedure. These items and the "good" scoring are included in Appendix I. The distribution of the scale scores for the three groups are shown in Figure 1.

However, although each item was known to be valid, it remained to be demonstrated that the sum of these items scored on each individual would comprise a reliable and valid measure of inter-personal relationship.

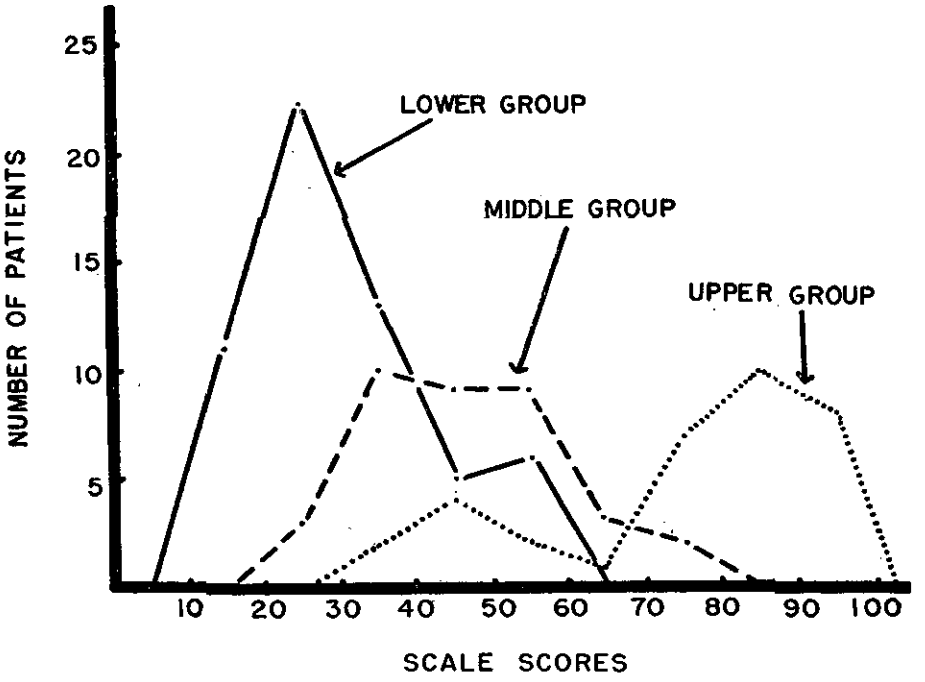

FIGURE 1

DISTRIBUTIONS OF THE UPPER, MIDDLE, AND LOWER GROUPS OF THE ITEM SELECTION SAMPLE

VALIDATION OF THE SCALE

One of the first problems was to decide upon the best method for scoring the scale. It seemed reasonable to count the number of the items answered in the "good" way, that is, the way that the patients rated best in their inter-personal relationships answered them, and then to calculate what percentage these were of the total number of items scored for the individual. The percentage of "good" responses was the final score. However, the fact that some patients remained completely silent throughout the meetings raised a problem; by not talking they would be scored *"false"* on *all* the verbal items. Some of the scores thus obtained would be "good", such as "Said something that showed he had not been following what had been said in the group." . . . but the failure to respond on most of the verbal items would give a "poor" score. Another possibility was to count the verbal items as "Do not apply" and to calculate the score of the individual only on

the non-verbal items. The answer to this problem was obtained by scoring all the patients in the second item selection sample according to both methods and then calculating the rank order correlations for each group between the leader's ranks and the scale scores translated into ranks. Since with such small N in each group and no way of demonstrating normality of the distributions, the use of the statistic *rho,* the usual rank-order correlation coefficient, might be questioned, the non-parametric statistic *tau* was also calculated. In general, the results from the two statistics were comparable, expect that *tau* was consistently lower and probably cannot be interpreted according to the usual standards for estimating the size of a correlation.

When the validity of the two methods of socring were so compared, it was found that calculating the simple average of the correlations for each of the 18 groups, the method which scored all the responses whether or not the patient talked, seemed slightly better; the average *rho* was .84 as compared to .76 by the other method, and the average *tau* was .67 as compared to .61. Thus it appeared that in general the best single score is obtained by assuming that if an individual did not talk, he was not able to perform the behavior described in the item. However, it was noticed that a few individuals, judged to have good social relationships by the leaders but who did not talk, were grossly underestimated, and probably the scale should be used with caution on non-verbal people who are fairly well-adjusted.

These correlations reported above between the group leaders' rankings and the scale scores can serve as a measure of the validity of the scale. While this was the population from which the items were derived, and for this reason one would expect the correlations to be slightly inflated, on the other hand the correlations were calculated on groups with a restricted range, since few of the groups had a representative sample of the patients included in the total population of 128 patients. Thus the true correlation was probably somewhere near the obtained correlation of .84. The mean of the scale scores on the lowest group of the item selection population was 30.6 and the S. D. was 11.7; the mean of the middle group was 45.7 and the S. D. was 9.9; the mean of the upper group was 76.4 and the S. D. was 17.5. The C. R. of the difference in means between the upper and middle groups was 8.87 which is highly significant; the C. R. of the difference in the middle and lower group was 6.71 which is also highly significant. Thus the scale scores clearly distinguished between these three groups judged by the leaders to be of different levels of inter-personal adjustment.

The next and the most definitive effort to establish the validity of the scale was made on a ward with a stable patient population, which included very sick individuals as well as many who were moderately well adjusted and a few almost ready to leave the hospital. Thirty-three patients were ranked by ten of the ward personnel—a psychiatrist, two nurses, a psychologist, and six aides—on the basis of their inter-personal relationships as exhibited throughout the hospital. All of the personnel had known most of the patients for a considerable time and had observed the patients in many different situations. These rankings had the added advantage that while the leaders who scored the scale also participated in the rankings, many of the rankers had not scored the scales or had not even seen the patients perform in group therapy.

The average of these rankings were taken as the criteria and the scale scores were translated into ranks and the rank order correlation computed. The correlation computed the *rho* was .73 and by *tau* was .53. By inspection it was found that one of the three therapy groups contributed a considerable amount of error, since the scores seemed systematically elevated for this group as compared with the personal rankings. Actually this group was not the usual type of group therapy in which the members sat around and discussed things, but instead it was an activity group, run more on the lines of a kindergarten or boys' club than of a discussion group. The participating leaders agreed that it should not be compared with the usual group, and perhaps the elevation of scores reflected the extra effort put out by the leaders to encourage interaction between the patients. When these 13 patients were deleted from the total population, the correlations for the remaining 20 patients rose to .80 *rho,* and .73 *tau.*

Several estimates of scoring reliability were obtained on this group. Several student nurses had scored the patients along with the more experienced leaders. The r between the scales as scored by the leaders and by the student nurses was .90 on a sample of 26 patients. The r between one student and another student nurse on these same patients was .90. These results would seem to demonstrate that not only can the scale be scored reliably, but it can be done so by raters who are quite inexperienced. However, the reliability is a function of the type of group and patient, for the correlations among the three skilled leaders all well acquainted with the 13 patients in the activity group were only .73, .73 and .86. However, considering the very limited amount of social inter-action among this group and the restricted range of the patients, perhaps this is as high as could be expected.

A third measure of validity of the scale was obtained by having 13 out-patient groups being treated at various mental hygiene clinics scored by their leaders. The scores on 82 patients in the 15 groups were translated into rank orders and correlated with the rankings which the leaders had made of their patients on the basis of their inter-personal relationships. The average correlation rank order (*rho*) was .50. While this is somewhat lower than those obtained on the hospitalized patients, one might expect some shrinkage because of the restriction of range in this group. These judges were also requested to class each patient as belonging to the upper and lower halves of the range of patients attending out-patient therapy, and 66 patients were so classified. Figure 2 shows the distribution of the 37 classified as above average and the 29 classified as below average in inter-personal relationships.

The mean of the group judged to be above the average out-patient group therapy member was 78.8 and S. D. was 11.0; the mean of the below average group was 57.4 and S. D. was 18.1. The C. R. of the difference in the means of these two groups was 5.62 which is highly significant. Thus the scale clearly discriminated between these two groups. The distributions

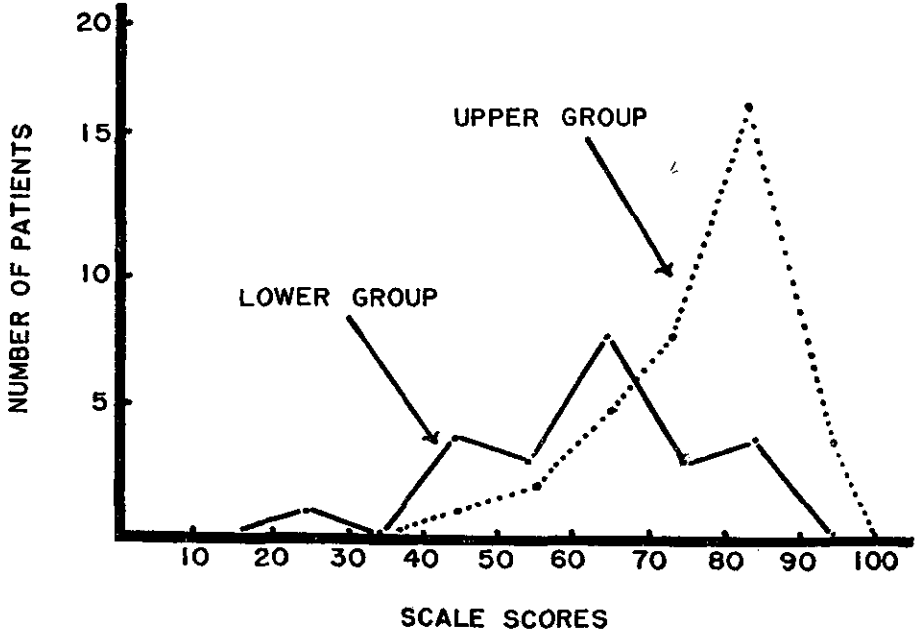

FIGURE 2

DISTRIBUTIONS OF THE SCORES OF THE UPPER AND THE LOWER OUT-PATIENT GROUPS

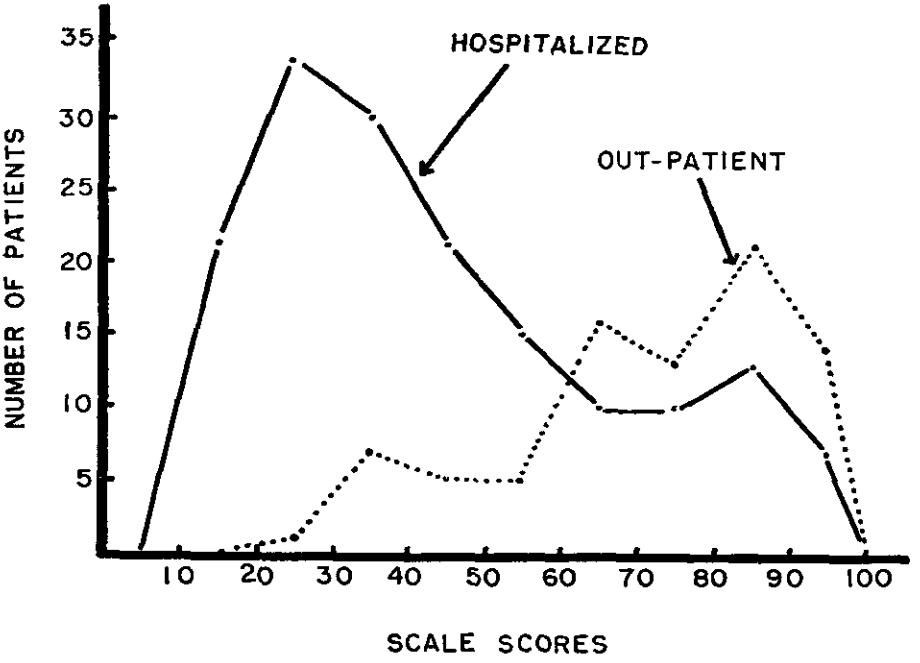

FIGURE 3

DISTRIBUTIONS OF THE SCORES OF THE HOSPITALIZED AND THE OUT-PATIENT GROUPS

of the scale scores show considerable overlap of the two groups, but one cannot say whether this represents error in the scale measurement or fluctuation in the standards used by the different judges to classify the members. It is interesting to note that according to the scale scores there is a wide range in the level of functioning of the out-patient group; thus simply being a member of an out-patient group does not necessarily mean that the individual is of upper-level functioning in his inter-personal relationships. One of the important advantages of a quantified scale is to allow more precise description of the members of different groups. Figure 3 shows the distribution of 161 hospitalized and 82 out-patient scores.

DISCUSSION

It has been demonstrated that the Palo Alto Group Therapy Scale is a reasonably valid and reliable measure of inter-personal relationships, and that it is able to discriminate among fairly well-adjusted out-patients as well as among the most regressed psychotic patients.

It appears to fulfill fairly well the basic requirements for a measuring instrument suitable for use in a research project testing the effectiveness of different treatment methods.

In addition there are several other interesting aspects to the scale. One might regard the items as descriptive of the kinds of changes which occur with the disorganization of inter-personal relationships accompanying severe neurosis and psychosis; these are the kinds of behaviors which deteriorate with mental illness.

In addition to the research use, the author believes that it can be useful in both training situations and in ordinary clinical record keeping. People who have used the scale for the first time have commented that they were impressed by the amount which they had not observed during the group, a fact which was high-lighted by having to answer specific questions in the scale. After being sensitized to observe these kinds of behavior, they found it was relatively easy to do so, but it still demanded alertness. The scale could therefore have considerable value in helping beginning therapists learn what kinds of behaviors are important to observe and also, by comparison with the ratings of an experienced observer, in helping them determine how successful they were in accurate observing.

The scale could also have value in the routine treatment of patients by providing a brief, easily scored record of the level of social adjustment of the patient so that improvements or regressions can be apparent even though the therapist might have changed or the patient might have been transferred to another ward or group. With practice the scale can be scored in five minutes and contains more information than the usual therapy notes.

The author has tried out the scale informally on other groups such as staff meetings and seminars, and it seems fairly responsive to changes in group climate. Thus it might be useful in recording the changes in the level of inter-personal interaction with different leadership techniques.

And finally, it is interesting and significant to realize that the classical psychometric methods of scale construction can be successfully applied to a clinical observation; thus, not only can the individual's performance as revealed in tests be quantified, but clinical observations can also be systematized and standardized. While the behavior measured by the scale is probably more variable and situationally determined than an ability such as intelligence, nevertheless the results from the scale do not compare unfavorably with current ability tests and higher validities were obtained than is usual with personality tests. It is possible that this type of approach can be applied to many different personality variables.

SUMMARY

A scale to measure inter-personal relationships in a group therapy setting was constructed from descriptions of patient's behavior obtained from therapy notes. A group of 15 judges divided 41 patients into a group of 12 with "good" and 29 with "poor" relationships; these patients were scored on 189 items and 99 were found which discriminated at the .20 level. Forty new items were added and the scale was scored on 128 patients classified by 15 judges into three groups according to the level of their inter-personal relationships. Eighty-eight items were found which discriminated at the .01 level; the scores from the scale significantly separated the three groups, and the rank-order correlation with the leaders' rankings of the patients in their groups was .84. The rank-order correlation between the scale scores and the average of ten ratings on a new sample of 33 patients was .74, which was raised to .80 when the scale was scored only on the 20 patients in discussion group therapy. The scale scores significantly differentiated between 37 members of mental hygiene clinic out-patient therapy who had been classed as above average in their inter-personal relationships and a group of 29 who had been classed as below average. The rank-order correlation between the scale scores and the leaders' rankings on 82 out-patients was .50. The reliability of the scale as calculated on 26 patients was .90.

APPENDIX I

Date: ———————— Patient's Name ————————

PALO ALTO GROUP PSYCHOTHERAPY SCALE
(Seventh Revision 2/9/54)

If the person showed the behavior described at least *once* in *four* meetings, or in the case of items reading "Usually" or "Frequently", did it more than half the time, score *True* by marking an X over *T*.

Score *False* by marking an X over *F*.

If an item does not apply to the patient or group, or if you *really* don't know, mark an X across the *D*.

Note: Never score a *D* simply because a patient did not talk. Thus the item "Drifted off the subject as he talked" would be scored *F* if the person never talked.

1. Question, comments, or gestures show that he had some general idea about what the other members or leader was talking about. ..... *T** F D
2. Said "Thanks" when something was done for him. ..... *T* F D
3. Usually did not seem to talk to anyone but the leader. ..... T *F* D

4.	Did not respond when something was said to him.	T	*F*	D
5.	Made faces and strange movements that did not make sense.	T	*F*	D
6.	Broke basic cleanliness taboo, such as spitting on floor, using shirt for handkerchief.	T	*F*	D
7.	Laughed or smiled when something amusing was said in the group.	*T*	F	D
8.	Did not look directly at anyone when he talked.	T	*F*	D
9.	Made some kind of a mess: cigarettes, coffee, paper, etc.	T	*F*	D
10.	Posture and expression usually showed social withdrawal.	T	*F*	D
11.	Kept bringing up a topic no one else was interested in.	T	*F*	D
12.	Was generally silent except for "yes" and "no" answers.	T	*F*	D
13.	Did not respond or rejected an attempt by another member to be friendly.	T	*F*	D
14.	Frequently started talking about something very different from what had just been said.	T	*F*	D
15.	Became psychotic and delusional when he talked about something that stirred up strong feelings.	T	*F*	D
16.	Smiled a lot to himself without any sensible reason.	T	*F*	D
17.	Never spoke without encouragement.	T	*F*	D

* The "good" responses are italicized.

18.	Said something that showed he had not been following what had just been said in the group.	T	*F*	D
19.	Questions, comments, or actions showed he clearly understood what had been said.	*T*	F	D
20.	Smiled at another member.	*T*	F	D
21.	Talk seemed mainly determined by his own peculiar ideas.	T	*F*	D
22.	Remarks had a clear and sensible relationship to what someone else had said.	*T*	F	D
23.	Talked on a subject another member introduced.	*T*	F	D
24.	Some of his remarks are not sensible.	T	*F*	D
25.	Did some strange or peculiar act while in the group.	T	*F*	D
26.	He and another member talked back and forth to each other, showing by their replies they understood what the other person said.	*T*	F	D
27.	Frequently it is hard to get the point of his remarks.	T	*F*	D
28.	Tried to be friendly to another member.	*T*	F	D
29.	*Openly* showed friendly feelings toward another member.	*T*	F	D
30.	Remarks were mostly on the subject being talked about.	*T*	F	D
31.	Usually talked to both the leader and to the other members.	*T*	F	D
32.	Asked another member a direct question.	*T*	F	D
33.	Said he agreed with what another member said.	*T*	F	D
34.	Said something which showed he *openly* agreed to having some experience or opinion in common with another member.	*T*	F	D
35.	Frequently told other members things but didn't listen to what they said.	T	*F*	D
36.	Broke in on another member to talk about something entirely different.	T	*F*	D
37.	*Openly* and *clearly* showed friendly feelings or attitudes toward the group.	*T*	F	D

38. When he talked he looked right at other members. ... *T* F D
39. Commented with humor on something. ... *T* F D
40. *Openly* and *clearly* showed that he wanted to understand what other members were saying. ... *T* F D
41. Directly asked for leader's opinion or advice. ... *T* F D
42. Usually talks about things that will be of interest to most of the group. ... *T* F D
43. *Openly* and *clearly* showed interest and awareness of how other members were reacting to what he said. ... *T* F D
44. Took an active part in making some group decision. ... *T* F D
45. Directly answered the question of another member. ... *T* F D
46. Got the other members interested in what he was talking about. ... *T* F D
47. Spoke with enthusiasm. ... *T* F D
48. Usually talked freely and sensibly. ... *T* F D
49. Addressed another member by name. ... *T* F D
50. Talked about another member by name. ... *T* F D
51. Added to the discussion of emotion by talking about his personal feelings and relationships. ... *T* F D
52. In an argument he was able to admit *openly* the other fellow had some points on his side. ... *T* F D
53. Drifted off the subject as he talked. ... T *F* D
54. Usually stopped talking when he had made his point. ... *T* F D
55. *Openly* and *clearly* showed and expressed understanding of how the other members were feeling. ... *T* F D
56. Said something that openly showed he was interested in what the other members thought about something. ... *T* F D
57. Said something like "us", "we", or "our" that showed he saw himself as part of the group. ... *T* F D
58. In a sensible, moderate way, said he did not agree with someone. ... *T* F D
59. Asked about an absent member. ... *T* F D
60. There were some members he did not seem to talk to. ... T *F* D
61. Usually only talked about neutral, impersonal, unemotional subjects. ... T *F* D
62. Introduced a subject for discussion. ... *T* F D
63. Talked about something that happened or was said at some other meeting. ... *T* F D
64. Explained to the group why he did or said something. ... *T* F D
65. Criticized other members in an indirect way. ... *T* F D
66. What he said usually depended more on his own feelings than what had been talked about by other members. ... T *F* D
67. Openly asked another member for information. ... *T* F D
68. Openly asked the other members if they understood what he was saying. ... *T* F D
69. *Clearly* and *openly* tried to smooth over the hostility between two other members. ... *T* F D
70. Talked about personal, emotional problems with sensible, genuine feeling. ... *T* F D
71. Kidded and joked in a friendly way with the leader. ... *T* F D

72.	Broke in on another member to give his opinion.	*T*	F	D
73.	Kidded and joked with another member.	*T*	F	D
74.	Talked to the leader about the meeting afterwards.	*T*	F	D
75.	Usually tried to keep the discussion going and on the general subject.	*T*	F	D
76.	Steered the group into a good discussion.	*T*	F	D
77.	*Never* said that he was wrong in *any* discussion.	T	*F*	D
78.	Said something that showed he saw the source of some of his troubles is within himself.	*T*	F	D
79.	Asked another member to explain what he meant.	*T*	F	D
80.	Gave advice in a friendly, helpful way.	*T*	F	D
81.	Remarks showed that he was trying to get a better understanding of himself and his problems.	*T*	F	D
82.	Stayed after meeting and kept on talking with the other members.	*T*	F	D
83.	Said he did not understand what another member had said.	*T*	F	D
84.	Talked in a realistic, sensible way of getting out of the hospital.	*T*	F	D
85.	Praised or admired the behavior or belongings of another member.	*T*	F	D
86.	Clearly and openly encouraged another member to talk.	*T*	F	D
87.	Openly and clearly tried to set another member at ease.	*T*	F	D
88.	Directly asked for another member's opinion or advice.	*T*	F	D

Rater's Name .....

THE WORKING SYSTEM OF PSYCHOTHERAPY GROUPS

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Group psychotherapy is known primarily as a technique and setting for treating psychiatric patients, and possibly as a method applied more widely for furthering social adjustment or providing information where other means of education would not be effective. It is also, and indeed in order to succeed must be, an experiment in social organization. It either attempts to establish a new working social unit from a collection of individuals, or to give purpose in action to an organized system which has lacked it. In the incipient structuring and later interaction of psychotherapy groups, the social scientist can study processes which can neither be experimentally produced in the laboratory, nor so directly observed in other real life social units. A psychotherapy group develops and works over a period of several months or even years, it provides for a high degree of affective involvement and intensive interaction of its members who meet to perform a task which is common to all of them. This task, admittedly, is neither so clearly defined nor so limited in its objective and reference as that of the work group. It is, perhaps, precisely in this tentative groping after an obscure goal which to each member appears, above all, as his personal aim and yet serves as a common objective, that therapy groups resemble most closely society at large. The parallel has not been drawn in order to suggest that psychotherapy groups are the most exact microscopic models of the larger and more complex social systems. This they obviously are not, for however deeply a member be involved in his group, however large a segment of his life he may wish to bring into it, a single meeting weekly with people he is discouraged from seeing on other occasions and an action program limited to discussion, considerably restrict the scope of his social behavior.

The research (16) of which this article is an abridged report, set out with no more ambitious a plan than to study psychotherapy groups as one type of informal small group. It was carried out by a research psychologist who had no clinical duties. The advantages of entrusting observations to a person not actively participating in the process of therapy, as well as the serious difficulties facing the research worker in this area, have been convincingly presented by Frank (3). He also stressed that group psychotherapy proceeds by meanings rather than by overt activity, and that observations should therefore focus on the former. In this instance most of

the observation was directed at overt behavior, but efforts were made by other experimental methods to discover its meaning, i.e. its meaning to the participants. The research proceeded on several levels simultaneously, and it should be made clear to the reader at this stage that the title of this article was chosen so as to allow for mobility from one plane to another, and not as a token of a unified conceptual model.

The object of this study was as much to experiment with techniques and to explore the factors which enter into the situation, as to test clearly formulated hypotheses; it proceeded in that "somewhat opportunistic" fashion which French (9) mentions as a general characteristic of experiments in field settings, rather than along the lines of an overall design. Psychiatric, psychological and sociological theories certainly suggested hypotheses worth testing, but the ethics of a hospital setting imposed on the research an inductive rather than a deductive empiricism. Consequently, in order to explore the widest available range of experience, the research worker reached beyond his own field of observation and sought information on how the active participants perceived their behavior in the group and each other in relation to it. Thus he followed Lippitt's (12) advice to enter "the frame of reference of the participants during group functioning", as an expedient towards the discovery of significant dimensions, and units of group process and membership behavior.

Method; setting; subjects.

While the research thus adopted the "phenomenological approach" advocated by McLeod (13), it aimed throughout at recording all observations and evaluations in some quantified form, in most instances on ordinal scales. The data thus collected were analyzed by the appropriate statistical techniques, that is principally by methods applicable to non-parametric distributions. The object of these tests was to ascertain whether certain apparently significant findings were indeed so, whether they could not have occurred by chance. A finding reported here as significant means that it is so at the one per cent level of confidence, in other words that by chance it could occur less than once in a hundred instances. It would not be expedient to discuss at this stage in detail the research tools and methods employed in this heterogeneous set of studies, the diverse procedures by which information was obtained, tabulated, analyzed and the findings tested. These will be briefly indicated under each appropriate heading. The entire research can be roughly divided into two major areas of procedure. The first, observation of groups in action, took place during the

first three months of their activity. The other, interviews by means of questionnaires, was introduced about the ninth to twelfth month after group formation, except that the groups observed in action were also interviewed towards the end of the third month.

The research was carried out in the outpatients' clinic of the Maudsley Hospital, London. Altogether 15 psychotherapy groups, with a total membership of 100 patients and 11 therapists, provided subjects for the research, though most of the studies were completed on a smaller sample, and only four groups were available for prolonged intensive observation in action. The therapists were psychiatrists who conducted the groups according to the principles of group-analytic psychotherapy propounded by Foulkes (4, 5, 6) and by Taylor (21). The groups met once a week for ninety minutes, over periods ranging from six months to two years. Their task was entirely verbal: to talk freely about any matter that occurred to a member. The therapist's role was exceedingly permissive, even though not entirely non-directive; on some occasions he contributed to the discussion nothing beyond a few words of formal opening and closure, though whenever the situation called for his intervention or directive, he readily supplied it in the shape of comments, interpretations, leading questions, reassurances or predictions. He did not, however, thus respond to every direct appeal, and would frequently throw back a question to the group.

Groups were closed, in the sense that most members joined at the time of formation and continued participating until the group was dissolved. In size group membership varied from 5 to 10; in composition some included men and women, others only members of one sex. The patients were psychoneurotic with a few milder cases of psychosis, 17 to 45 years of age, of high-average or higher intelligence, and by occupation mostly shop- or office-workers and housewives.

Group structuring.

Status hierarchies develop in psychotherapy groups at an early stage. The way to establish a position in the higher ranks is by appropriate contributions to the discussion which is the common task. The criteria by which a member's status is judged are both the amount and the quality of what he says and also the attitudes he displays towards the group and his fellow-patients. In the first two weeks quantitative shares in the discussion follow closely the ranking of members according to their general friendly disposition toward the group, Taylor's (22) "bias" measure which,

though obtained by a different method, is comparable to Moreno's (14) *emotional expansiveness*. Correlations between these and verbal activity averaging .74 for the first two meetings of all groups observed, drop to .35 at the end of the second month, and it appears that the final hierarchical structure becomes stabilized after the third meeting. This structure, as indicated by the rank order of proportionate member participation in group work, is remarkably stable and statistically significant whether measured as a correlation between active and passive participation, i.e. speaking and being spoken to, with a mean *rho* coefficient of .95 for the groups observed, each over a series of meetings, or if expressed as a W-coefficient of concordance (11) for rankings of group members from week to week, averaging .62 for active, .56 for passive participation.

The hierarchical status scale also determines the pattern of interpersonal verbal interaction. As in Bales's (3) experimentally recruited debating groups, here too individual members share in the interaction total of any other member according to their own rank (mean *rho* = .86) and address others each according to his rank (mean *rho* = .86). This means that if A is on top, F at the bottom of the group hierarchy, B, C, D, and E will all tend to address themselves most frequently to A and least often to F, and also that A will speak most, F least to any one of these others; and the same relationship applies roughly to B and C, C and D, and so forth. This pattern is very marked, and holds notwithstanding personal likings. Rank data were available for each member's preferences among his colleagues, indicating whom he liked best, second best, etc. These rankings predicted the order in which he would address the others no better than chance. Even in instances where individuals deviated in their interpersonal interaction from the group ranking, the tendency was as often away from as in the direction of personal preferences.

The hierarchical structure of these groups is apparent not only from quantified records of verbal interaction, the members perceive it themselves. If asked to rank all others in their group according to their participation in group discussion, whether this be judged in a sheer quantitative manner or by evaluating the quality of the contributions the consensus among members of a group tends to be high (mean W = .75, .53). Rankings made without regard to quality, gave significant concordance as measured by Kendall's (11) W-coefficient, in every one of the 15 groups interviewed. The additional qualitative criterion inevitably lowers the measure of concordance, though even so it fell below the rigorous criterion of significance adopted, in five groups only, and in four of these the top contributor was

recognized with significant unanimity, as measured by Whitfield's (23) tables. Status scales based on verbal interaction rate and on peer-rankings correlate, of course, very highly (mean *rho* = .78). More specific roles in the group process are also indicated by the tendency of members ranked high by their colleagues on, e.g. *friendliness* or *dominance* or *contribution,* to join in the group work at a higher than average rate with certain types of acts. Those ranked high on *friendliness,* for instance, both give and receive a larger share of their total interaction in expressions of agreement than those lower down the same scale. One notable distinction between peer-ranking for sheer dominance of group discussion and real contribution to it, is that those scoring high on the first also stand out for the frequency with which they ask for sympathy and reassurance, those high on the other for the frequency with which they offer others reassurance and sympathy. This role aspect of behavior is of considerable interest to the social scientist, and according to Ackerman (1) it is also of major clinical importance in the group analytic situation, because "the role of the individual in therapy represents a particular form of integration of his emotional tendencies in a specific situation."

Leadership.

Reports on group therapy often refer to the therapist as leader, to his role or technique or performance in conducting the group as leadership. This nomenclature is undoubtedly logical and apt in respect of certain methods of group therapy. Group-analytic psychotherapy, however, is essentially permissive, laissez-faire (22). Foulkes (7) disfavors "leader-centered configurations", but by leaving the group structure flexible he encourages the emergence of a leader from the ranks of the patients, and in most groups one does emerge. Peer rankings establish a hierarchical scale when the criterion is *leadership* displayed in discussion, as they do when it is *contribution* to discussion. On either criterion only one group showed less than significant unanimity in assigning the leader's status to one of the members.

Position on the *leadership* scale is determined by general popularity in the group as well as by contribution to its discussion. These two components of leadership are, however, not independent. After converting group summated ranks into a common metric by Taylor's (22) formula for t_p, *leadership* is found to correlate .77 with *contribution,* .82 with *dominance* and .70 with *popularity* on samples restricted by a criterion of a W-coefficient above .50 and significant at the 1 per cent level. These product-moment

coefficients are all statistically significant. While in Bales's (3) groups the chief initiator is relatively disliked, here he has the best chance of being the most popular group member. Consequently neither his colleagues, nor the outside observer face a dilemma in deciding who qualifies best for leadership. It is not difficult to account for this difference in the status structures of the two kinds of group. Those in the laboratory debate under pressure of time; by stating his interpretation of the case, an opinion or a suggestion, each participant reduces the chances of all others to have their say, and moreover the theme of the discussion is selected so as to allow for controversial solutions. This pressure and competition and sharp clash of plans is almost completely absent in the group psychotherapeutic situation.

Role behavior appropriate to leadership was studied by analyzing the process of verbal interaction, recorded both by Bales's (2) method and according to initiatory acts within another set of categories, more directly relevant to the task and situation. A tendency to give opinions and to be asked for opinions, and more particularly to offer advice, reassurance and to enquire about their fellow patients' personal problems, distinguish most markedly those who rank high on leadership from those who rank low. Leaders appear to be expected to perform certain functions as well as to be ready to discharge these. This conclusion is supported by the findings of an experiment (18) introduced into the research here reported, which set out with the observation that leaders were no more sensitive to or familiar with group opinion, prior to its public discussion, than other members. After a public discussion on the same issue of common interest, the groups' collective opinion fell, with one single exception, most closely in line with the leader's original views, and it was suggested that this outcome may have been in direct response to pressure exerted by the leader in each group.

Remarkably enough, when asked to list the qualities by which they assessed leadership in their rankings, the patients did not return a large percentage of answers drawn from the area of sociability, social responsiveness and social skills. A panel of judges, not otherwise involved in this research, were asked to sort all answers into a convenient number of logically distinct categories and to label each category. Of the seven headings thus obtained, *integrity of character* and *cognitive abilities* tied for the first place with 45 per cent of all answers between them, *stability of temperament* followed with 20 per cent, while *sociability* and the *social skills* only mustered 15 per cent of the total. It is difficult to account for these results, for neither character nor intelligence seems to be a particularly great asset for leading psychotherapy groups, least of all if we bear in mind

that a fairly high standard of intelligence is a condition of admission in the first place. Stability of temperament has been found (15) a characteristic trait of leaders in another context, and may carry additional prestige in the therapeutic situation, where it represents one of the principal goals to be attained by group work.

Interaction process.

Some of the findings of interaction process analysis have already been discussed in relation to status structuring and role behavior. Records made according to Bales's model show marked differences between the interaction process of his problem solving and these psychotherapy groups. In these a very large part of the discussion is devoted to accounts of personal experiences, which would qualify for entry into the category of *orientation*. Frequencies under this heading are much larger in psychotherapy groups than in the laboratory debate, even if entries are made for entire units of communication, and the balance becomes yet further displayed if each sentence is recorded as a unit, for it is exactly these utterances of *orientation* which often extend to as many as thirty sentences in an unbroken stretch. Fewer *suggestions* and *opinions* are voiced in therapy groups and, perhaps unexpectedly, a smaller proportion of their total interaction falls within the *social-emotional* range of acts. This last finding is less surprising if one considers that in the problem solving situation the bulk of *social-emotional* activity consists of agreement and disagreement. In psychotherapeutic discussions there are fewer opinions and suggestions to approve or reject, and furthermore, in the absence of time pressure and clear task setting, the pace of the discussion is more leisurely, more tolerant. Consequently these discussions show nothing like the consistent phase sequence of acts, typical of problem solving groups (4), nor for that matter any other trend characteristic of single meetings (19). The category profile does not suggest a tendency to re-establish a state of equilibrium here either. A propensity in that direction can be logically inferred from the interaction process analysis of problem solving groups, for which the initial introduction of a problem indeed upsets a pre-existing state of equilibrium, a state to be restored by a successful solution of the problem (3). In psychotherapy groups the equilibrium is rarely most disturbed at the beginning of a meeting, nor is the establishment of a state of equilibrium a particularly desirable goal. There is some indication that over a period of meetings the category profile changes in a systematic fashion: *opinions* and *suggestions* tend to become more frequent at the expense of *orientation* and, to a minor

extent, of *positive reactions.* Since the records indicating this trend were taken in communication units—each of which may consist of several sentences addressed by a patient to the same fellow group member and within the same category of acts—this finding is possibly due to the fact that speakers are allowed longer spells once the urgency to present oneself and one's problems to the group has abated. At the same time, familiarity and the sense of security it breeds, would allow for more ready expression of opinions and suggestions, while the need to agree, to approve of and identify with others gives way to a more critical attitude. Another long term trend in psychotherapeutic groups is the tendency of diadic communication channels to become more firmly established, and hence more exclusive.

Content: (a) therapist's evaluation.

The topics discussed in psychotherapy group meetings vary within a wide range, in which the patients' symptoms, social experiences and attempts to recall memories relevant to their complaints, form the central themes. It is therefore not so very remarkable that the discussions of entirely independent groups should have much in common, though the foci of interest do shift with the composition of membership. According to the principles of group analytic psychotherapy it matters little what topic the group chooses to discuss for, potentially at least, any topic may serve the purpose of treatment as well as any other. In fact, however, therapists do encourage talk about certain matters, and at times discourage what they regard as a prolonged evasion of getting down to a real group problem. How much evasion is permissible as a preparation for eventually coming to grips with a real problem, is largely a matter for intuitive judgment. Accumulated experience and doctrine offer some considerable help in deciding which topics are most likely to bring real problems to light, which serve for evading them. This transpired when therapists as well as their patients were asked to rank 15 topics for their usefulness in group discussion.

The list covered a varied selection of topics regularly raised in these groups, some central, others more peripheral to the patients' complaints: childhood memories; dreams; reactions to others in the group; thoughts and feelings about the group doctor; people outside the group; "is illness due to physical or psychological causes?"; marriage problems; money troubles; problems at work; quarrels and angry feelings; children, bringing up children; symptoms and anxieties; social position; sex; feelings of shame and guilt. The consensus among the therapists in ranking these items was the more striking, as several of them had declared that it made no sense to try

grading various topics of discussion for their value in group therapeutic discussion. They were almost unanimous in ranking highest the two "transference" topics, i.e. discussions of attitudes towards other group members and the therapist, and doing so followed faithfully the precepts of Foulkes's theory as well as other doctrines of group psychotherapy. By listing next *quarrels, sex, marriage problems* and *feelings of shame and guilt,* they evaluated the topics evidently within the psychoanalytic frame of reference.

Taking the therapists and their patients each as a representative sample, the two populations seem to be in fairly close agreement, for the two arrays of mean ranks correlate to the extent of $r = .71$, which is certainly a significant product moment coefficient. Divergences between the two samples on certain items are, however, worth noting. Whilst the therapists were sufficiently agreed to give their first three choices mean ranks below 3.5, the patients' top preference was above 4.0. This item, *sex,* like their third choice, *shame and guilt* was much higher in the patients' aggregate ranking than in the therapists', though in relative position rather than in terms of mean rank. Their second and fourth choices, however, were *symptoms and anxieties* and *childhood memories,* placed considerably higher in both senses; they occupied the 8th and 14th ranks in the therapists' list with mean values of 9.57 and 10.86 as against 5.18 and 5.79 in the patients', where the "transference" topics appeared in the middle range. While it is possible that therapists and patients differed systematically from each other in their interpretations of the task set to them or of the labels which defined the topic areas, it is more probable that these differences reflect genuine divergences in judgment. Patients relied entirely on their experiences in the group for evaluating the relative helpfulness of the topics, therapists interpreted these same experiences in the light of theoretical preconceptions of what would be more helpful. Group-analytically oriented psychiatrists would infer from superficial content to dynamic factors at a deeper level, and be inclined to discover at the root of any manifestly effective discussion at least a latent concern with transference problems; they are also exceptionally receptive to hidden signs of aggressive and guilt "feelings". Patients would think of other group members or of the therapist forming the topic of their discussion only when that was overtly directed at these persons, and quite probably believe that the therapeutic value of dealing with these problems is only moderate, if indeed they do admit any problem in this area. This reasoning would certainly explain why *childhood memories* was ranked high by the patients and low by the therapists, for the latter would perceive a discussion on this topic as in-

directly referring to themselves or to the group of patients. As for *symptoms,* they are of almost inexhaustible concern to the unsophisticated patient, while the therapist's interest in them is more limited.

Content: (b) patients' evaluation.

The significant measure of concordance among patients of single groups or across group boundaries as within the sample of therapists, shows that these rankings are meaningful and have reasonable validity, so that they can properly be used to test certain hypotheses concerning the therapist's role, the emergence of group norms and the factors entering into the evaluation of group performance.

Patients and therapists were found to agree in their evaluations of the topics to some extent, but differ markedly over certain items. From this observation followed the further question: are individual patients in closer agreement with their own therapist than are the two samples, and if they are not is that due to lack of motivation to follow his guidance or to ignorance of his *preferences?* In order to throw some light on these questions, patients were also asked to rank the topics according to what they thought their own therapist liked to have them discuss most, second most, and so forth. Thus *guess* rankings were obtained from each patient as well as *preference* rankings. These two sets of rankings were correlated for each patient, as were both with his therapist's *preference* rankings. The three arrays of correlation coefficients thus obtained were taken as indices of (1) *projection* of own references on to the therapist—the term being used in a purely operational sense—(2) *agreement* between patient and therapist in their preferences and (3) *knowledge* of therapist's preferences or accuracy of guess. The means of these three samples of correlation coefficients were tested against the mean correlation between any two *preference* rankings ($r = .25$), whether patient's or therapist's, and it was found that neither *agreement* ($r = .28$) nor *knowledge* ($r = .42$) tended to be higher than would be expected by chance, but *projection* ($r = .56$) was significantly higher.*

The conclusion of this analysis was that individual patients did not share their therapist's *preferences,* and failed to do so because of their ignorance of these. This finding is entirely in agreement with the teaching of group analytic psychotherapy (5, 7) according to which the therapist "does not as a rule lead the group actively, but follows the lead of the group." It was also found that neither therapists nor patients were aware

* Some statistical data of this study are available in print in (17).

of the extent to which they diverged in their evaluations of the topics, and that the favorable attitudes of the patients towards their therapists would have allowed these to exert a far more effective direction on the course of group discussion if they had wished to. The patients did not form a united front in this respect, for while the majority showed distinctly positive dispositions towards their therapists and wanted to be led, a sizable minority appeared to be reasonably accurate in assessing the therapist's *preferences* but not prepared to accept these as their own. Neither length of experience in group psychotherapy, nor intelligence seem to influence accuracy of *knowledge* or *projection*. Though the technique of conducting group analytic psychotherapy may be standardized to a considerable degree, its implementation allows for some latitude. Material obtained from groups which in course of their treatment had been transferred from one therapist to another and from groups which were independently conducted by the same therapist, supports this view. Patients know markedly better and consequently agree more closely with the *preferences* of therapists reputed to be more active in the discharge of their role.

The emergence of group norms and of a high degree of solidarity within groups was indicated by several independent analyses of the records obtained by topic ranking. In those groups which could be interviewed at an early and again at a later stage of their joint work, the measure of consensus rose quite substantially. Though inter-ranking concordance cut across group boundaries, 8 out of the 15 topics were assigned their rank with a consensus significantly higher within groups than between groups. While men and women, married and unmarried patients would be expected to differ in their relative concern with the topics listed, yet the aggregate rankings of the two sets of sub-samples correlated to the extent of $r = .82$ and .86. Identification with the group was, perhaps, most convincingly shown by the high correlations between each patient's two rankings of the 15 topics, first for their helpfulness to the entire group and secondly for their helpfulness in his own progress (mean $r = .59 \pm .10$). A detailed report of these findings is presented elsewhere (20), as well as evidence that patients tend to rank those topics high for helpfulness, which they also regard as disturbing, and that they rarely admit that even one of the topics may be entirely useless or hindering in the group's progress.

Content: (c) observed in discussion.

Observations made of the frequency with which the fifteen topics were actually raised in course of group discussion, indicate that judgments on

helpfulness do determine verbal behavior to a considerable extent. Correlations between *preferences* and relative frequencies are significant, whether we compare them for the entire sample ($r = .79$) or separately in each group, for individual members (mean rho $= .59$). The two aggregate rankings of the entire sample, however, also show some wide discrepancies. On the one hand, there is *shame and guilt* which the patients appear to be understandably more reluctant to delve into than the supposed therapeutic value of this topic would warrant, and *dreams* which may be a neglected theme for the same reason, i.e. its frequently embarrassing content, or because dreams occur or are remembered only on rare occasions. On the other hand, *problems at work* and *reactions to others in the group* provide ready sources of discussion material, though this be barely appreciated for its therapeutic value. These are probably two topics patients resort to when, as group analytic theory teaches, they attempt to avoid more disturbing problems. These instances together with the rare references to the *group doctor* are possibly the best illustration of the group analytic process of resistance.

Apart from topics discerned on the surface of discussion, the research also attempted to study the immediate objectives for which members enter into the discussion. These were classified into the following twelve categories: discovering common problems; asking for sympathy and reassurance; giving reassurance and sympathy; asking about other members' difficulties; offering interpretations to others; helping others with advice; asking for advice; asking for interpretations; remembering forgotten incidents and relating them to present problems; finding outlet for anger and hostility; talking about embarrassing own personal problems; gaining insight through self interpretation. In endeavoring to note the frequencies with which each group member appeared to join the discussion with one or another of these objectives in view, this research came closest to Frank's (3) program of search after meaning, but also strayed farthest from the canons of reliable measurement. With some changes in the phrasing the list of twelve objectives was also submitted to the patients for ranking according to helpfulness in group discussion. Concordance of these rankings were significant, but there was no evidence that personal judgments influenced the choice of objectives in actual behavior. Testing association between certain topics and objectives, it was found that *symptoms* and *childhood memories* are almost invariably discussed as a vehicle for *self-interpretation, sex* about as often as not, *shame and guilt* only once in three instances. This last topic elicits some expression of *reassurance* almost every time it

is brought into the discussion, while talk about *symptoms* evokes the same reaction slightly more often than not.

Concluding note and summary.

A serious omission, no reader could fail to notice, is the evaluation of group psychotherapy as a technique for achieving certain ends, in this instance helping psychiatric patients. This item had to be dropped from the project under pressure of the research conditions. A psychiatric hospital furnishes, perhaps, the least suitable setting for assessing changes in attitudes by means of group discussion, and the criteria commonly applied to testing therapeutic achievements are not the most acceptable to the research worker.

Studies of psychotherapy groups have, none the less, certain advantages which may compensate for the restrictive conditions under which they must, almost of necessity, proceed. To the clinician they offer a fuller and more standardized situation than the individual interview, to the social scientist groups of a more permanent structure and of deeper personal involvement than those recruited for a couple of occasions in the laboratory, and social systems more accessible to observation than other real life groups.

In this instance, psychotherapy groups furnished material for the study of group structuring as perceived both by the participants and by outside observers. The pattern of interaction process and the members' perception of their peers alike indicate a hierarchical system of positions with appropriate role behavior; the latter is most meaningfully discerned as differentiation in leadership function. The dynamic model of interaction process is specific to these groups and dictated by the logic of their task and situation. The content of discussion, this being the manifest product of group work, is evaluated according to its presumed efficacy in promoting the common goal. Similarities and differences within these evaluations and between them and actual behavior provide measures of group solidarity, of attitudes towards the therapist and also tests of certain theoretical propositions concerning group psychotherapy.

It is hoped that this attempt at an objective study of the structure and process of psychotherapy groups, has been of some value as much for suggesting research techniques as for the results it has yielded. If at first sight much of it appears to be far removed from the clinician's interests, an observation made by Ackerman (1) should help to bring it closer: "The way in which the group forms, integrates, changes and is affected by leadership, determines the channels along which emotion is released or restrained."

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GROUP THERAPEUTIC EXPERIENCES IN A CONCENTRATION CAMP*

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The following exposition is supported by my own observations and experiences in the concentration camps at Auschwitz, Dachau, and Theresienstadt (1). However, before I take up the specific experiences with psychotherapy and group psychotherapy, it seems to me advisable first to say a few words about the psychopathology of prisoncamp life. This may at the same time be a contribution to the knowledge of those syndromes which long since have been called prison psychoses, but especially of that condition which in the first World War was described as "barbed wire disease."

Within the psychology of camp life there can be distinguished three phases: 1) the shock of entrance, 2) the typical changes in character that occur with the duration of stay, and 3) the dismissal phase.

Concerning entrance-shock, it is essentially a matter of a state of panic, which is remarkable only in that it is accompanied by imminent danger of suicide. It is indeed only too understandable that an individual in a situation in which he was threatened with "going into the gas," i.e., dying the death of the gas chamber, should have preferred, or at least contemplated "going into the wire," that is, committing suicide by touching the high-tension wires which fenced in the camp.

If one wanted to classify the entrance-shock phase psychiatrically, one would have to enter it among the abnormal affective reactions. Only, one must not forget that in a situation which is abnormal to the degree that a concentration camp represents, an "abnormal" reaction of this sort is something normal.

Very soon, however, the state of panic subsides into indifference,—and herewith we come to the character changes, in other words, to the second phase. Alongside this indifference there is now evidenced a marked irritation, so that in the end the psyche of the camp prisoner is characterized by two signs: apathy and aggression. Both ultimately correspond to and arise out of a focusing of all effort and intent upon self-preservation; while everything which on the other hand is associated with the preservation of the

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species recedes into the background. Well-known indeed in the lack of sexual interest on the part of camp inmates, in which, to be sure, not only psychic but also somatic factors play a role. In general, it can be said of the prisoner that he withdraws into a kind of cultural hibernation. Everything serves self-preservation.

Psychoanalysts among the inmates were accustomed, in referring to this, to speak of a regression, a retreat into more primitive forms of behavior. A different interpretation was attempted by Professor Emil Utitz (2), who was in one of the above mentioned camps at the same time as I. He wished to have the said character changes understood as schizoidal. Apart from the theoretic difficulties, I am of the opinion that these character changes may be more simply explained: we know that a person who gets little to eat, and who can sleep only very little (vermin!) is already inclined towards irritation as well as towards apathy. This was bound to become all the more noticeable in camp because of the lack of nicotine and caffein, that is, exactly those so-called poisons of civilization whose respective function it is to help suppress irritation and to overcome apathy.

However, Emil Utitz (3) has also in other respects attempted to interpret the inner state of the camp prisoners, particularly along the line that it was essentially a matter of a provisional existence. I myself, in opposition to that, have pointed out that the essential characteristic of this provisional existence is that this provisional state is a provisional state without end. For, indeed, the end of imprisonment could not really be envisioned. Thus the prisoner was never able to concentrate on a time in the future, a time, that is, when he would regain his freedom. In view of the essentially temporal structure which is characteristic of all human existence, it is all too understandable if camp life brought about it an existential loss of structure.

There is precedence for such a view: we know from the pertinent research of M. Lazarsfeld and H. Zeisel (4) how very much a long-lasting period of unemployment influences the sense of time in human existence. Something similar is also known about chronic tubercular patients in sanatoria, particularly from the description thereof in Thomas Mann's *Magic Mountain*.

Now then, he who can cling to no end point, no time in the future, no point of support, he allows himself to collapse inwardly. Perhaps I may be permitted, instead of going into lengthy theoretical considerations and expositions, to show by means of a concrete example how far-reaching into the vegetative functions is this physical-psychic collapse which accompanies the cessation of the normal direction of human existence towards the

future: at the beginning of March, 1945, a camp comrade told me that on February 2, 1945, he had had a remarkable dream. A voice which claimed to be prophetic said to him that he might ask it something, it could tell him everything. And he asked the voice, when would the end of the war come for him? The answer was: on March 30, 1945.

The thirtieth of March drew near, but it did not seem at all as if the voice would be right. On March 29, my comrade became feverish and delirious. On March 30, he became unconscious. On March 31, he died; typhoid fever had carried him off. The thirtieth of March, the day on which he became unconscious, was literally "for him" the end of the war.

We shall not err if we assume that through the disappointment which the actual course of events had prepared for him, the biotonus, the immunity, the power of resistance of the organism was reduced and the infection heretofore dormant within him then had all too free play.

Similar phenomena could be observed on a mass scale. In the period between Christmas, 1944, and New Year's Day, 1945, there occurred in camp a mass-dying which could be explained in no other way than by the fact that the prisoners had fixed their hopes in a stereotyped manner on the catchphrase, "At Christmas we shall be home." Christmas came, and they still were not at home, but rather had to abandon the hope of getting home in the foreseeable future. This sufficed to bring about a slump in vitality, which for many a one meant death.

In the last analysis, however, it was so, that the physical-psychic collapse was dependent upon the spiritual-moral attitude; and this attitude was a free one! And though on entrance into camp one might take everything away from the prisoner, even his glasses and his belt, this freedom remained to him, and it remained to him literally to the last moment, to the last breath. It was the freedom to bear oneself "this way, or that way" and there *was* a "this, or that". And again and again there were some who were able to suppress their irritation and to overcome their apathy. They were those men who walked through the camp barracks and across the mustering grounds with a good word here and the last piece of bread to spare there. They were the living witnesses to this: that it is in no way predetermined what the camp would make of one, whether one would become a typical "KZLer" (camper), or whether one would, even in this state of duress, even in this extremest borderline situation of man, remain a human being. In each case this was open to decision. There can, therefore, be no question of a man's necessarily and automatically having to succumb to the impressing stamp of the camp atmosphere upon his character. By virtue

of that which I have in another context (5) called the "defiant power of the human spirit," he had fundamentally the possibility of holding himself above the influence of his environment. If I still had any need of proof that this defiant power of the spirit is a reality, then the concentration camp was the crucial experiment. And if Freud (6) asserts, "Let one attempt to expose a number of the most diverse people uniformly to hunger. With the increase of the imperative urge of hunger all individual differences will blur, and in their stead will appear the uniform expressions of the one unstilled urge"—it simply was not so.

Of course, they were rare, those persons who had committed themselves to the fundamental possibility of preserving their humanity; "sed omnia praeclara tam difficilia quam rara sunt." "But everything great is just as difficult to realize as it is rare to find," so reads the last sentence of the *Ethics* of Spinoza.

Though they were only a few who were able to do it, they gave the others an example, and this example produced that chain-reaction which was appropriate to such a model. As a complement to a famous saying of a poet, it is true that the good example productively gives birth to good.

Of these men, in any case, one cannot claim that they had undergone a regression; on the contrary they experienced a moral progression, moral —and religious. For there broke out in many a prisoner in confinement, and because of confinement, what I have designated in one of my books (7) as a subconscious or a repressed relationship to God.

Let no one judge this religiosity disparagingly, or dispose of it as "fox hole religion," as in Anglo-Saxon countries one is apt to call that religiosity which does not show until one is in the trenches, or in danger. I would like to say: the religion which one does not have until things go badly is to me still preferable to that which one has only so long as things go well—I call that a "bargainer's religion."

At all events, many prisoners came forth from prison with the feeling of having learned to fear nothing except God. For them prison was a gain. As it was, in general many a psychopathic and neurotic person precisely through the camp life experienced a kind of consolidation, which is understandable only by analogy to a fact that is well known to master builders: a decrepit vaulting can be strengthened if one simply—weights it down.

With this we are ready for the discussion of the third phase, that of dismissal. The limitations of time do not allow me to go into the pertinent details, for instance about the singular experience of depersonalization at the time of release. Please just bear in mind the following: dismissal means

an abrupt release of pressure (8). Like deep-sea fish that have been unexpectedly brought to the surface of the water, so all too easily the character of the released prisoner is "deformed," namely, morally deformed. Whoever prefers to, may in this connection speak, as I have done, of a psychic counterpart to caisson sickness, "the bends."

Let us turn now to our central theme, to psychotherapy or group psychotherapy in the concentration camp. Don't expect me to go into such questions as that of the open or closed group (the group with which I had to do was in any case neither open nor closed, but rather closed-in). Also do not expect me to speak of that "little" or littlest psychotherapy which evolved in the form of improvisation during mustering, during marching, in the ditches, and in the barracks. Let the little that I can tell you, however, be said in memory of Dr. Karl Fleischmann, who died a martyr's death in the gas chamber at Auschwitz. When I first learned to know this man, his mind was already occupied with his cherished idea, with the thought of administering mental succour to the newly-arriving prisoners. To organize this was a role he had impressed upon me, upon me as a physician of souls. With the unfortunately all too generously measured time at my disposal I expanded this organization into a system of mental hygiene, which of course had to be concealed from the SS and had to be carried out clandestinely. Don't forget that cutting down a comrade who had hanged himself was, for instance, strictly forbidden.

The most urgent task was to ward off entrance-shock. This was successful to a certain degree by means of a staff of neurologists and helpers who were placed at my disposal and consisted of trained personnel from all of central Europe. A young Rabbi was also assigned to me, Miss Jonas; to my knowledge the only, or at least the first, feminine Rabbi in the world (a pupil of Dr. Leo Baeck). She also met her end in Auschwitz. She was a gifted speaker, and as soon as a newly arrived transport was reported we betook ourselves—we called ourselves a shock troop—to the cold lofts or into the dark stalls of the barracks at Theresienstadt, where old and infirm figures of woe cowered on the floor, and we improvised talks which were intended to bring these people to themselves again. I still remember how they squatted there and listened devoutly to the Rabbi, among them an old woman, a hearing tube in her hand and a light on her countenance.

In particular we had to concentrate on the especially endangered ones; for them it was a matter of taking special measures and making special arrangements—for instance, for epileptics, psychopaths, the "asocial," and above all for the aged and infirm. The mental vacuum of these people had

to be forefended, a vacuum which is illustrated, for instance, in the words of an old woman who, when asked what she did the whole time, answered, "At night I sleep, and in the daytime, I ail." To give only a single example: one of the helpers attached to me was a philologist, an Anglicist, and she was assigned to divert the intellectuals among the old people from their miserable outer and inner situation by holding conversations in a foreign language with them.

A psychotherapeutic service for the ambulant could also be organized. Particularly outstanding in this was a Berlin neurologist by the name of Dr. Wolf, who used especially the "autogenic training" of I. H. Schultz in the treatment of his patients. He also died in camp, of pulmonary tuberculosis. Self-observations which he made in the terminal stages of his suffering he had recorded stenographically. Unfortunately the custodian of this record also perished. I myself also repeatedly tried similar means to put myself at a distance from all the suffering that surrounded us, specifically by trying to objectify it. Thus I remember, one morning I marched out of camp, scarcely able to endure any longer the hunger, the cold, and the pain of my feet, swollen from edema and therefore stuffed into open shoes, frozen and festering. My situation seemed to me to be beyond comfort or hope. Then, I imagined to myself that I was standing at a lectern in a large, beautiful, warm and bright lecture hall, before an interested audience, and I was about to give a lecture entitled "Group Psychotherapeutic Experiences in the Concentration Camp," and I spoke precisely of all those things which I—was just then going through.

Believe me, at that moment I could not hope that it would ever be granted to me one day really to deliver such a lecture.

Last but not least we had to be concerned with the prevention of suicides. I organized a reporting service, and every expression of suicidal thoughts or actual intentions was brought to me instantly. What was to be done? We had to appeal to the will to live, to go on living, to out-live the prison. But the life-courage, or the life-weariness, turned out in every case to depend solely upon whether the person possessed faith in a *meaning* of life, of his life. A saying from Nietzsche could have stood as a motto for the whole psychotherapeutic work in the concentration camp: "He who knows a WHY for living, will surmount almost every HOW."

Under the name of "Logotherapy" I have tried to introduce into psychotherapy a point of view that sees in human existence (in contrast to psychoanalysis or to individual psychology) not only a will to Pleasure (in the sense of the Freudian "pleasure principle"), and a will to Power (in the

sense of the Adlerian "striving for dominance"), but also recognizes what I have called the will to Meaning. Now, in the camp, with all the psychotherapy, the important thing was to appeal to precisely this will to Meaning. But in the extreme marginal state in which the human being found himself in the camp, the Meaning to whose demand for fulfillment he had to commit himself had to be an unconditional Meaning, to the extent that it included not merely living, but also suffering and dying. And perhaps the deepest experience which I personally had in the concentration camp (and forgive me if I now become personal) was that, while the concern of most people comprised the question, "Will we survive the camp? For if not, then this whole suffering has no sense," the question which in contrast beset me was: Has this whole suffering, this dying round about us a meaning? For if not, then ultimately there is no sense to surviving. For a life whose meaning stands or falls upon the fact of whether one escapes with it or not, a life, that is, whose meaning depends upon such a happenstance, such a life would not really be worth being lived at all.

So then, it was a matter of an unconditional meaning of life. To be sure, we have to distinguish between the unconditional on the one hand and the generally valid on the other, analogous to what Jaspers has said about truth. The unconditional meaning which we had to show to people doubting it or despairing of it was in every case far from a vague and general one, but rather the exact opposite, the concrete, very concrete sense of his personal existence.

I should like to clarify this with one example. One day in camp two people sat before me, both resolved to commit suicide. Both used a phrase which was a stereotype in camp life, "I have nothing more to expect of Life." Now, the vital requirement was to have the two undertake a Copernican kind of exchange in this way: that they no longer asked whether or what they could expect from life, but were made aware of the fact that life was awaiting something from them; that for each of them, indeed for all, somebody or something was waiting, whether it was a piece of work to be done, or another human being.

But what if this waiting should prove to be without prospect of fulfillment? Even then, it turned out, in the consciousness of every single being somebody was present, was invisibly there, perhaps not even any longer living, but *yet* present and at hand, somehow "there" as the *you* of most intimate dialogue. For many it was the first, last, and eternal *you:* God. But whoever occupied this position, in the last analysis the important thing was to ask: What does he expect of me, that is, what kind of an attitude?

So the ultimate matter was that of the attitude in which a person understood how to suffer, knew how to die. Savoir mourir—comprendre mourir. This, as we have been told, is the quintessence of all philosophizing.

You will say that deliberations such as these are futile. But I can tell you, in the camp as we experienced it, the precept "primum vivere, deinde philosophari," that is, "first survive, then philosophize about it"—this precept was invalidated. What was valid in the camp was rather the exact opposite of this precept, primum philosophari, deinde mori, first philosophize, then die. This was the one valid thing: to give an accounting to oneself on the question of ultimate meaning, and then to be able to walk forth upright and die the called-for martyr's death.

If you will, the concentration camp was nothing more than a microcosmic mirroring of the human world as a whole. And so it may appear justified if we now ask ourselves the question whether anything, and if so, what, is to be learned from the experiences of the concentration camp for the world of today as a whole. In other words, what psychotherapeutic doctrines can we derive from the experiences of the concentration camp with regard to what I would like to call "the pathology of the spirit of the times"? (9)

The first "symptom" we encounter in the framework of such a pathology is a provisional way of existence. We have already learned to know it in connection with the camp psychology, but we are not rid of it yet, even today. Now as then, it rules the daily existence of all of us. The average man of today is overcome by a mid-century mood whose most prominent characteristic is an atomic bomb phobia, a kind of collective fear of catastrophe. As the anticipatory fear which it is, it endangers humanity in so far as every anticipatory fear threatens to realize, or at least to accelerate, that of which it is afraid. In any case, it is easy to observe that the man of today frequently lives by the more or less conscious motto, "Après moi la bombe atomique." So, then, he lives on provisionally, lives into the day, from one day to the other, and is not aware of all that he is missing thereby. And he is not aware of the truth of a saying of Bismarck: "In life we experience much the same thing as at the dentist; we always believe the real thing is yet to come and meanwhile it has already happened." Let us only take as our models many a person in the concentration camp. For a Rabbi Jonas, for a Dr. Fleischmann, and a Dr. Wolf even the camp life was not provisional. They never regarded it as a mere episode. For them it was rather the confirmatory test and became the high point of their existence.

The second symptom within a pathology of the spirit of the times would be the fatalistic attitude toward life. Where the man with a provisional attitude tells himself that it is not necessary to act or to take his fate in his own hands, the man with the fatalistic attitude tells himself that this is not even possible. Thus, just as the man in the concentration camp inclines too much towards letting himself be driven and letting himself collapse, so the average man of today is possessed by a superstition about the most diverse powers of fate, and contemporary nihilism only serves to nourish this fatalism. In the form of the three great homonculisms, biologism, psychologism, and sociologism, man is persuaded that he is respectively a mere reflex-automaton, a mere drive-apparatus, a mere product of blood and soil, inheritance and environment, or something of the kind—in every case, unfree and unresponsible.

If man in the framework of these two attitudes of existence, the provisional and the fatalistic, fails to grasp the situation, then with two further symptoms of a pathology of the spirit of the times it appears that he is scarcely able to comprehend the Person, that is, himself and the other as a person. In the camp one wanted by no means to be conspicuous and by every means to disappear in the crowd; but even today there is a generally widespread tendency to disappear in the mass. In reality a human being submerging in the mass only gives up his personality. This is the third symptom: collective thinking.

The fourth and last symptom, however, is fanaticism. The fanatic denies not only his own person but also the person of the other one, of the one who thinks otherwise. The fanatic does not allow the opinion of another to count. He knows only his own meaning. Usually, however, he has no own meaning, but public opinion "has" him (think only of the remark of Hitler in one of his "Tischgespräche", "How lucky for the rulers that people do not think"). And public opinion is crystallized in the form of stereotypes. Once cast forth into the mass, they start a chain-reaction analogous to that which is fundamental to the atomic bomb. This is more dangerous than the physical chain-reaction basic to the atomic bomb, for the latter could never ensue if the psychological chain-reaction had not preceded it. And in so far as we may, in the sense of the above sketched pathology of the spirit of the times, speak of the provisional and the fatalistic, the collective and the fanatical attitude of existence as of a psychic epidemic, one thing must not be forgotten: somatic epidemics are typical results of war; psychic epidemics are at the same time possible causes of war, possible causes of wars and always again of new concentration camps.

Thus, then, the circle of our reflections is closed. We have gone forth from the inquiry about the conditions underlying the possibility of group psychotherapy and mental hygiene in the concentration camp. However, it must extend out to the need for a group psychotherapy which is able to prevent there ever being any further spread, or repetition, of anything like a concentration camp.

References

1. Cf. my book, *Ein Psycholog erlebt das Konzentrationslager.* Verlag für Jugend und Volk, 2nd ed., Vienna, 1947.
2. Cf. Utitz, *Psychologie des Lebens im Konzentrationslager Theresienstadt,* Vienna, 1948.
3. Cf. Utitz, Zur Psychologie provisorischen Daseins. *Psychological Essays for D. Katz,* Upsala, 1951.
4. Die Arbeitslosen von Marienthal. *Psych Mon., 5,* 1933.
5. Cf. Frankl, *Der unbedingte Mensch, Metaklinische Vorlesungen,* Vienna, 1949.
6. *Gesammelte Werke,* V, 209.
7. *Der unbewuBte Gott,* Amandus Verlag, 2nd ed., Vienna, 1949.
8. Cf. Frankl, *Ärztliche Seelsorge,* Vienna, 1946, as well as W. Schulte (*Der Nervenarzt, 22,* 140, 1951), M. Pflanz and T. v. Uexküll, Entlastung als pathogenetischer Faktor. *Klinische Wochenschrift, 30,* 414, 1952.
9. Cf. Frankl, *Homo patiens, Versuch einer Pathodizee,* Vienna, 1950.

INTERNATIONAL COMMITTEE ON GROUP PSYCHOTHERAPY AND THE FIRST INTERNATIONAL CONGRESS ON GROUP PSYCHOTHERAPY

ZERKA TOEMAN MORENO

Moreno Institute, N. Y. City

The International Committee on Group Psychotherapy was organized in April, 1951, by J. L. Moreno, in the course of his trip to Paris and London. The members of the European Committee were: Drs. Joshua Bierer, Juliette Boutonier, Jean Delay, S. H. Foulkes, Georges Heuyer, Marcel Montassut, Yves Porc'her, Leon Chertok, Victor Gachkel, Serge Lebovici, F. Pasche, P. Senft, E. N. Snowden. In addition, there were an equal number of US representatives. Plans were laid then for an International Congress on Group Psychotherapy to take place in Paris, London or on the American continent by 1953 or '54. The objective was a World Federation of societies interested in group psychotherapy and allied subjects. Thanks to combined efforts of Drs. Wilfred C. Hulse, Wellman J. Warner, J. L. Moreno and S. R. Slavson the International Committee on Group Psychotherapy took its present form, representing twenty-four countries.

It is an interesting coincidence that the First Congress takes place in Toronto, Canada, the same city in which, in May of 1931, under the initiative of J. L. Moreno, the first organizing step in behalf of group psychotherapy was made during the meeting of the American Psychiatric Association. It was followed up by the now historical Round Table Conference on the Application of the Group Method to Classification in Philadelphia, May 1932, with Dr. William Alanson White as Moderator. It was during these meetings that the terms and concepts group therapy and group psychotherapy were first circulated and defined by Moreno and presented in a monograph. Just as the terms group therapy and group psychotherapy themselves, also the research directions then formulated have attained universal acceptance in the field: the emphasis upon group dynamics and group structure, interpersonal measurement, the combination of actional, observational and analytic techniques.

During his recent European journey in May and June of 1954, Moreno was able to stimulate and assist in the formation of national societies on Group Psychotherapy, Sociometry and Psychodrama.

In *Germany* a Gesellschaft fur Gruppenpsychotherapie und Psychodrama is contemplated by a Committee consisting of: Drs. H. J. Urban

(University of Innsbruck), Victor Frankl (Polyclinic, Vienna), M. Lindner (University of Erlangen), Merguet (Lengerich), H. Kleinsorge (Jena), H. Schwab (Bad Nauheim), F. Zander (University of Bonn), H. H. Flöter (University of Bremen), H. R. Teirich (Freiburg), H. Teirich-Leube (University of Freiburg). In *Austria:* Drs. V. Frankl, Raoul Schindler (University Clinic, Vienna), Erwin Stransky (University Clinic, Vienna). In *Switzerland:* Dr. A. Friedemann (Biel-Bienne). In *Italy:* Drs. Flavia deRossi (Psychological Institute, Torino), Alberto Giordano (Mental Hospital), Luigi Meschieri (University of Rome, Psychological Institute).

In *England* three independent developments have taken place in the last few years, the Institute of Social Psychiatry founded by Dr. Joshua Bierer, the Tavistock Clinic founded by a group of British psychiatrists, under the present chairmanship of Dr. J. D. Sutherland, and the Group-Analytic Society, presided by Dr. S. H. Foulkes. In *France* the new French Society on Psychotherapy founded by Drs. Heuyer and Serge Lebovici has a special section on group psychotherapy.

In the *USA* the development of group psychotherapy and psychodrama has found articulate expression within the American Psychiatric Association. Since 1951 a trial Section on Group Psychotherapy with Drs. Winfred Overholser as Chairman, J. L. Moreno as Secretary, had been inaugurated. After three years of successful trial J. L. Moreno organized, upon request of the Program Chairman, a new Section on Psychotherapy, with Dr. Frieda Fromm-Reichmann as Chairman, Dr. Jules H. Masserman as Vice-Chairman, J. L. Moreno as Secretary. This final achievement signalizes the growing consciousness that all forms of psychotherapy, group or individual, require a new evaluation of indications, standards and policies. It is towards such a goal that the First International Congress on Group Psychotherapy should be able to make a lasting contribution.

ACT IT OUT

If things go wrong at home,
    Act it out!
If your children try to roam,
    Act it out!
If your husband is a brute,
Whom you feel you'd like to shoot,
Act it out! Act it out! Act it out!

If your office help gets flip,
    Act it out!
If your boss gives you some lip,
    Act it out!
If your wife acts like a shrew,
If you hit her with a shoe,
Act it out! Act it out! Act it out!

If you think you're not so hot,
    Act it out!
If you think your brains are not,
    Act it out!
If you try to make the top,
If instead, each time, you flop,
Act it out! Act it out! Act it out!

If you feel your life's a mess,
    Act it out!
If you hate the way you dress,
    Act it out!
If you know you need some help,
If your pride won't let you yelp,
Act it out! Act it out! Act it out!

If your baby wears you down,
Act it out!
If you go out on the town,
Act it out!
If you wish you weren't wed,
If you wish your mate were dead,
Act it out! Act it out! Act it out!

If you're hankering for love,
Act it out!
If, instead you need a shave,
Act it out!
If you've done a bit of cheating,
If you now must take your beating,
Act it out? Act it out? Act it out?

B.C.

REPORT OF ACTION OF THE COUNCIL AT ANNUAL CONFERENCE OF THE AMERICAN SOCIETY OF GROUP PSYCHOTHERAPY AND PSYCHODRAMA, ST. LOUIS, APRIL 1954.

(Reported and passed at the membership meeting.) Present were: Robert Boguslaw (proxy sent), E. F. Borgatta, R. J. Corsini, R. Dreikurs, J. L. Moreno, Z. Moreno (proxy sent), and W. E. Moore.

1. The certified report of the balloting of the society was: James M. Enneis, *president-elect;* Edgar F. Borgatta, *secretary-treasurer.* The new members of the council are: Doris Twitchell-Allen, Rudolf Dreikurs, Rosemary Lippitt and Lewis Yablonsky. Helen Hall Jennings becomes *president* of the society. The remaining members of the council, previously elected, are: Raymond J. Corsini, J. L. Moreno, Abraham Schwartz and Leonard K. Supple, two years. Robert Boguslaw, Zerka T. Moreno, Wilfred Hulse and Gerhardt Schauer, one year. Anna Brind, J. W. Klapman, Rudolf Lassner, and William E. Moore were the retiring council members.

2. The council passed a resolution that chairman of the committees and sections and branches of the society should be invited (without vote) to council meetings and those meetings of the executive committee where the agenda is pertinent to the committee.

3. The council approved the minutes of the executive committee as published.

4. The council suggested that for future meetings, the request for a reply of attendance be solicited to determine if a quorum will be met.

5. The council accepted the report of the secretary-treasurer on public relations and membership. Approximately 4,000 pieces of mail were sent out to universities, hospitals and other organizations, and to private persons selected through a careful assessment of the directories of the sociological, psychological and psychiatric organizations. Much interest was found in terms of the mail response and new applications for membership received.

6. The council went on record recommending that in cases where the applicant for membership in the society is to be rejected, the sponsor be consulted for final assessment before the applicant is notified.

7. The council accepted the report of the membership committee.

8. The council recommended that the report of the Workshop Committee be accepted, printed in the Journal and reprinted for distribution.

9. The council accepted the report of the treasurer.

10. The council passed a resolution to underwrite the expenses of its two delegates to the executive committee of the First International Congress (up to a maximum of $250.00). Dr. Moreno declined to accept the funds since he will be at the meetings in any event on vacation.

11. The council passed a motion to accept the responsibility up to $300.00 toward the operation of the First International Congress in Toronto, and one half of the expenses of the New York office of the First International Congress.

12. Dr. Moreno was asked to act as a delegate of the society in his contact with European professional groups and societies.

13. There were nine papers submitted for the Award of the Society. The three judges ranked the paper by Ben C. Finney, A SCALE TO MEASURE INTERPERSONAL RELATIONSHIPS IN GROUP THERAPY, as the first in order of quality. The council asked that a formal letter of thanks be sent to the judges.

14. The council appointed a committee of three: J. M. Enneis, R. J. Corsini, and W. J. Warner (with W. E. Moore as alternate) to explore the publication needs of the society. To facilitate this, funds up to $25 were voted for immediate clerical needs.

15. The society passed a resolution that the other society in the area of Group Psychotherapy be approached for a joint publication of a bibliography to insure that all points of view be well represented. An official letter was requested. Should the proposal be rejected, R. J. Corsini was asked to head a committee to examine the possibility of publishing an exhaustive and representative bibliography.

16. The council is cognizant of the coexistence of the two national societies and, for this reason, invites the other society to appoint a committee of two delegates to study with two delegates from this society the possibilities of cooperation and possible future unification. R. Dreikurs and W. J. Warner were named as the delegates for this society.

FINANCIAL REPORT

Assets at the beginning of the year	$ 947.96
Income (excluding funds transferred for subscriptions)	657.10
Total Assets	$ 1,605.06
Expenditures	
Secretarial assistance, mailing, clerical, etc.	$ 264.77
Stamps and mailing	265.86
Telephone and communications	53.69
Refunds	17.70
Printing	356.05
Incidentals (bank services, etc.)	5.58
Function and services	229.05
Total Expenditures	$ 1,192.70
Total Balance	$ 412.36

EDGAR F. BORGATTA, *Secretary*

THE AMERICAN SOCIETY OF GROUP PSYCHOTHERAPY AND PSYCHODRAMA

AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

(1) Change Article III, 5. from: "Section (6) Each application for membership shall be endorsed by three members of the Society, of whom at least one shall be a Fellow."

To read: "Section (6) Each application for membership shall be endorsed by at least one Fellow or member of the Society."

(2) Change Article VI, 5. from: "Any Fellow nominated for office ....."

To read: "Any member or Fellow nominated for office ....."

(3) Move Article VII, 7. from the Constitution to the By-Laws, to become Article VIII of the By-Laws.

"The official organ of the Society is GROUP PSYCHOTHERAPY, a Journal of Sociopsychopathology and Sociatry, published by Beacon House, Inc., and the Council shall make arrangements with Beacon House, Inc., to have the members of the Society receive a copy of the Journal four times per annum, against a payment by the Society of $5. per annum per member. The Journal shall present annually the proceedings of the meetings and shall print all news pertaining to the Society."

(4) Add to the end of the text of (3) above: ". . . as well as abstracts of all papers presented at local and national meetings."

(5) Add to the By-Laws, Article VI, 4.: "A majority of returned ballots on a constitutional amendment or By-Law shall be considered necessary to pass the amendment or By-Law. A By-Law may also be changed or passed by a simple majority at an annual business meeting as well as by mail ballot."

(6) Add to the By-Laws as Article IX.: "Each year, at the time of the Annual Meeting, the in-coming president may direct, at his discretion, that the Society offer a prize for the best report of research, theory, or experience in or pertinent to Group Psychotherapy and Psychodrama. The president shall appoint a committee of three judges outside the membership, representing psychiatry, psychology, and sociology. The committee of judges shall make the award only if they feel that a worthy report has been prepared. The prize will be widely announced, and papers received by submission. Dates shall be arranged at the direction of the president. The award in no event shall exceed twenty-five percent of the assets of the Society. Prize winning papers shall be published in the official journal of the Society."

RECOMMENDATIONS FOR WORKSHOPS TO BE HELD BY LOCAL COMMITTEES UNDER THE SPONSORSHIP OF THE AMERICAN SOCIETY OF GROUP PSYCHOTHERAPY AND PSYCHODRAMA

(Passed by Council May 2, 1954)

I. The primary purpose of workshops in group psychotherapy sponsored by this society is to spread information on the variety and value of group psychotherapy approaches. A second purpose is to make known the facilities of the society as a central agency for the exchange of ideas in this area. It is hoped that persons participating in the workshops will become interested in and recognize the advantages of establishing local branches affiliated with the national society. A function implicit in the organization of workshops is bringing together persons from a wide variety of disciplines and theoretical persuasions sharing the common interest in group psychotherapy.

II. The society should establish a permanent committee; its members

should represent the major geographical areas in this country as well as the executive branch of this organization. This committee would serve to initiate interest in communities where, in its judgment, a workshop on group psychotherapy could be effectively held. It should stimulate individuals in strategic positions in the local community to initiate the organization of a workshop. Workers in academic institutions and in hospitals, and in other services interested in group psychotherapy should be contacted initially. The support of the institutions themselves should be elicited formally by the society, although in most cases the support is volunteered by institutions in the host community when the possibility of a workshop is brought to their attention.

III. It should be a cardinal principle that a workshop become the responsibility of the organizing committee in the local community, and that the society function as a sponsoring organization. The society should sponsor or co-sponsor the workshops and lend necessary assistance, particularly in the initial stages, in the financing of secretarial help, mailing and publication of the programs for the workshops. The financial arrangements, however, should be so ordered that the society will in the long run not take a significant loss, and possibly would make some profit, as is the practice when workshops are successful. Preferentially, the workshop should be held on the premises of one of the major institutions in the host community, although this is not vital.

IV. It is recommended that the workshops include three types of materials.

A. Practical demonstrations of techniques widely used;

B. Information on the particular types of group psychotherapy prevalent in the local region; such presentation should make use of the workers actually employing these skills. Special attention should be given to the problems which are commonly encountered in the field as well as on the local scene.

C. Techniques and approaches to group psychotherapy not commonly available in the region; for this purpose it may be advisable that one or two nationally recognized figures be invited to the workshop to present materials in these approaches.

D. Each workshop should conclude with an appraisal of the materials which have been presented at the workshop. This appraisal should be made by a panel of workers well grounded in theory and practice. A small number of participants at such a panel is preferable to a large number. It is a function of such a panel to point out the good and the bad points and to

indicate possible extensions. A large number of participants would permit only a few minutes to each and thereby might not give the opportunity to present detailed criticism which is much needed.

V. The committee should keep an inventory and historical records of the workshops. The inventory would be used to note success and failure of the variety of possible organizations of workshops and types of presentation. Similarly, the inventory would provide the basic information of the kinds of new techniques which have been presented in any community over a period of years. Such records would, in addition, be helpful in maintaining communication with persons who are experienced both in the organization of workshops and in participation.

PSYCHODRAMA MONOGRAPHS

No. 2. Psychodramatic Treatment of Performance Neurosis—J. L. Moreno (List Price—$2.00)

No. 3. The Theatre of Spontaneity—J. L. Moreno (List Price—$5.00)

No. 4. Spontaneity Test and Spontaneity Training—J. L. Moreno (List Price—$2.00)

No. 5. Psychodramatic Shock Therapy—J. L. Moreno (List Price—$2.00)

No. 6. Mental Catharsis and the Psychodrama—J. L. Moreno (List Price—$2.00)

No. 7. Psychodramatic Treatment of Marriage Problems—J. L. Moreno (List Price—$2.00)

No. 8. Spontaneity Theory of Child Development—J. L. Moreno and Florence B. Moreno (List Price—$2.50)

No. 9. Reality Practice in Education—Alvin Zander, Ronald Lippitt and Charles E. Hendry (List Price $2.00)

No. 11. Psychodrama and Therapeutic Motion Pictures—J. L. Moreno (List Price—$2.00)

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