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# THE BRIEF PSYCHIATRIC RATING SCALE[1]

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The Brief Psychiatric Rating Scale was developed to provide a rapid assessment technique particularly suited to the evaluation of patient change. Sixteen symptom constructs which have resulted from factor analyses of several larger sets of items, principally Lorr's Multidimensional Scale for Rating Psychiatric Patients (MSRPP) (1953) and Inpatient Multidimensional Psychiatric Scale (IMPS) (1960), have been included for rating on 7-point ordered category rating scales. The attempt has been to include a single scale to record degree of symptomatology in each of the relatively independent symptom areas which have been identified. Some of the preliminary work which has led to the identification of primary symptom constructs has been published (Gorham & Overall, 1960, 1961, Overall, Gorham, & Shawver, 1961). While other reports are in preparation, applications of the Brief Scale in both pure and applied research suggest the importance of presenting the basic instrument to the wider scientific audience at this time, together with recommendations for its standard use.

The primary purpose in developing the Brief Scale has been the development of a highly efficient, rapid evaluation procedure for use in assessing treatment change in psychiatric patients while at the same time yielding a rather comprehensive description of major symptom characteristics. It is recommended for use where efficiency, speed, and economy are important considerations, while more detailed evaluation procedures, such as those developed by Lorr (1953, 1961) should perhaps be used in other cases.

In order to achieve the maximum effectiveness in use of the Brief Scale, a standard interview procedure and more detailed description of rating concepts are included in this report. In addition, each symptom concept is defined briefly in the rating scale statements themselves. Raters using the scale should become thoroughly familiar with the scale definitions presented herein, after which the rating scale statements should be sufficient to provide recall of the nature and delineation of each symptom area.

To increase the reliability of ratings, it is recommended that patients be interviewed jointly by a team of two clinicians, with the two raters making independent ratings at the completion of the interview. An alternative procedure which has been recommended by some is to have raters discuss and arrive at a

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joint rating of each symptom construct. Where this procedure is followed, there is, of course, no available check on the reliability of ratings, but it may be that a reasoned consensus contains something more than an averaging of individual opinions since the discussion may serve to refresh memory or call attention to behavior which might be overlooked by one of the raters. Research needs to be done to compare these two methods. However, in the meantime, it is important to stress that in any given research project a uniform procedure should be adopted. The practice of independent ratings is recommended unless the alternative procedure is specifically decided upon by the investigators.

Experience with the use of the scale indicates that inter-rater consistency increases with experience in joint ratings. It is recommended that any rating team which is to function as such in a research project should first standardize their procedures and achieve a consensual understanding of rating constructs through training interviews and ratings of several patients. A procedure which has been found useful for this purpose is as follows. Each patient is interviewed jointly by the two members of the clinical evaluation team. One team member is the principal interviewer but there is opportunity for the other to ask questions and clarify points which remain in doubt for him. Following the interview, the team members make independent ratings in the 16 symptom areas. Each symptom area is then taken up with reasons for specific ratings being discussed. At this point, certain differences in the interpretation of rating scale statements will become apparent. Insofar as possible, these differences in interpretation should be eliminated during the training interviews. Remaining lack of agreement will be due to differences in opinion concerning the degree of symptomatology evidenced by the patients. These differences are considered to be true errors of measurement which can be minimized through the combining of ratings by independent raters.

## THE INTERVIEW

Considerable attention has been given by researchers to the problem of inter-rater differences in psychiatric ratings, but little or no attention has been given the effect of differences in interview procedures. In an effort to reduce this potential source of variance to a minimum, a somewhat standard interview procedure is suggested for use with the Brief Scale. In recommending this procedure, the objective of speed and economy is kept in the fore. A more exhaustive interview should perhaps be expected to yield somewhat more valid results. However, the procedure to be outlined has been found quite satisfactory and can be expected to provide adequate information for completing Brief Scale ratings. The advantage which can be claimed for the Brief Scale as an efficient instrument is that, with minimum experience, the interviewer can keep in mind the 16 symptom constructs to be rated and can center the interview about these critical areas.

A problem with standardizing interview procedures is that patients are not standard and flexibility is the distinguishing feature of patient-interviewer interaction. What is suggested here is a standard general structure which permits individuality while insuring basic uniformity of approach. An 18-min. interview is proposed with time apportioned approximately as follows: 3 min: establishing rapport; 10 min: non-directive interaction; 5 min: direct questioning.

The patient's perception of the place of the interview in the total treatment program is considered to be one of the most important sources of variance in the interview situation. The standard explanation that the interview is "to gather information for the planning of the treatment program" is suggested for the initial patient evaluation. If the research design calls for repeated evaluation, the explanation that the repeat interview is "for the purpose of seeing how you have been getting along since we last talked" should be offered. The suggestion that these approaches be employed is not based so much upon the conviction that they represent the best of all possible approaches as upon the conviction that a standard approach is essential for the comparability of interview results. In a particular research setting, other explanations for the interviews may seem more desirable. It is recommended that a reasonable explanation of the purpose of the interview be given the patient and that this explanation be the same for all patients in any given research project.

During the non-directive portion of the interview, the interviewer attempts to secure the spontaneous production of content and behavior which will provide the basis for observing physical, intellectual, and social behavior necessary for completing a majority of ratings. Such general questions as the following may be used to encourage and lead the patient into useful areas:

> How can we be of help to you?
> What bothers you most about your illness?
> Tell me a little more about your illness?
> What happened just prior to your coming to the hospital?

The interviewer will formulate his own questions and follow them up with supportive remarks and further questions inviting elaboration and clarification. The purpose of this portion of the interview is to provide a basis for observing the functioning and behavior of the patient, which may be quite independent of specific verbal content, and also to elicit spontaneous content which may provide a basis for evaluating other types of symptomatology. In fact, if this portion of the interview is highly successful, specific probing during the later questioning period may be unnecessary since in talking freely the patient will frequently provide information necessary for completing all ratings.

The final 5 min. should be spent in direct probing to fill in the gaps in information necessary for completing ratings on the 16 scales. Here is where the clinical skill of the interviewer must be relied upon to elicit maximum

information without arousing defensiveness in the patient. The advantage of the Brief Scale is that the interviewer can keep in mind the areas to be evaluated and can recognize those areas where probing is necessary with the specific case at hand. Although direct questioning will differ from clinician to clinician and patient to patient, two approaches for producing hard-to-get content are suggested. The patient is generally less threatened by admitting symptomatology occurring in the less recent past. An expedient approach is to begin with the general "has there ever been a time?" and then to proceed to the specific "has this occurred recently?" Another way to elicit the hard-to-get information is by tying it to the content produced in the earlier portion of the interview. "You have told me about ————, now could you tell me a little about ————."

## THE BRIEF SCALE

The present version of the Brief Psychiatric Rating Scale contains 16 7-point ordered category rating scales. Although this instrument has gone through a series of modifications and revisions during the course of development (Gorham & Overall, 1960, 1961), the idea that each of the scales should represent a relatively discrete symptom area identified in previous research has been for the most part retained.[2] The format of the Brief Scale is presented on the opposite page of this report. It has been found that raters familiar with the instrument can make the required judgments and complete the ratings in 2 to 3 min. following the interview.

In making ratings of the degree of symptomatology, the rater should use as a reference group all patients who have the particular symptom in question. "As compared with the population of patients who do have the symptom in question, what is the degree of severity of the symptom in this particular patient?"

Although each of the symptom areas is identified with a construct which has high consensual validity among professionally trained persons in psychiatry and psychology, it is important that the users of the Brief Scale become thoroughly familiar with the definitions and delineations of symptom areas as set forth in this article and in the rating scale items. To this end, an attempt has been made to provide a succinct definition of the relevant symptom area in the rating scale itself and in this article each concept is discussed in more detail in an effort to increase the degree of communality in item interpretation. Following a format which is compatible with the recommended interview procedure,

[2]In actuality, 14 of the present scales evolved from multivariate analyses of extensive collections of psychiatric rating data. The remaining two scales were added on the basis of consensus among 12 psychiatrists and psychologists who met at Spring Grove State Hospital in the spring of 1961. That two important symptom areas were not included in the earlier version became apparent during group rating sessions, and an attempt to correct the omissions resulted in the addition of Scales 15 and 16.

PATIENT ______ NO. ______ RATER ______ DATE ______

BRIEF PSYCHIATRIC RATING SCALE

OVERALL AND GORHAM

DIRECTIONS: DRAW A CIRCLE AROUND THE TERM UNDER EACH SYMPTOM WHICH BEST DESCRIBES THE PATIENT'S PRESENT CONDITION.

1. SOMATIC CONCERN – DEGREE OF CONCERN OVER PRESENT BODILY HEALTH. RATE THE DEGREE TO WHICH PHYSICAL HEALTH IS PERCEIVED AS A PROBLEM BY THE PATIENT, WHETHER COMPLAINTS HAVE REALISTIC BASIS OR NOT.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

2. ANXIETY – WORRY, FEAR, OR OVER-CONCERN FOR PRESENT OR FUTURE. RATE SOLELY ON THE BASIS OF VERBAL REPORT OF PATIENT'S OWN SUBJECTIVE EXPERIENCES. DO NOT INFER ANXIETY FROM PHYSICAL SIGNS OR FROM NEUROTIC DEFENSE MECHANISMS.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

3. EMOTIONAL WITHDRAWAL – DEFICIENCY IN RELATING TO THE INTERVIEWER AND THE INTERVIEW SITUATION. RATE ONLY DEGREE TO WHICH THE PATIENT GIVES THE IMPRESSION OF FAILING TO BE IN EMOTIONAL CONTACT WITH OTHER PEOPLE IN THE INTERVIEW SITUATION.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

4. CONCEPTUAL DISORGANIZATION – DEGREE TO WHICH THE THOUGHT PROCESSES ARE CONFUSED, DISCONNECTED OR DISORGANIZED. RATE ON THE BASIS OF INTEGRATION OF THE VERBAL PRODUCTS OF THE PATIENT; DO NOT RATE ON THE BASIS OF THE PATIENT'S SUBJECTIVE IMPRESSION OF HIS OWN LEVEL OF FUNCTIONING.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

5. GUILT FEELINGS – OVER-CONCERN OR REMORSE FOR PAST BEHAVIOR. RATE ON THE BASIS OF THE PATIENT'S SUBJECTIVE EXPERIENCES OF GUILT AS EVIDENCED BY VERBAL REPORT WITH APPROPRIATE AFFECT; DO NOT INFER GUILT FEELINGS FROM DEPRESSION, ANXIETY, OR NEUROTIC DEFENSES.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

6. TENSION – PHYSICAL AND MOTOR MANIFESTATIONS OF TENSION, "NERVOUSNESS", AND HEIGHTENED ACTIVATION LEVEL. TENSION SHOULD BE RATED SOLELY ON THE BASIS OF PHYSICAL SIGNS AND MOTOR BEHAVIOR AND NOT ON THE BASIS OF SUBJECTIVE EXPERIENCES OF TENSION REPORTED BY THE PATIENT.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

7. MANNERISMS AND POSTURING – UNUSUAL AND UNNATURAL MOTOR BEHAVIOR, THE TYPE OF MOTOR BEHAVIOR WHICH CAUSES CERTAIN MENTAL PATIENTS TO STAND OUT IN A CROWD OF NORMAL PEOPLE. RATE ONLY ABNORMALITY OF MOVEMENTS; DO NOT RATE SIMPLE HEIGHTENED MOTOR ACTIVITY HERE.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

8. GRANDIOSITY – EXAGGERATED SELF-OPINION CONVICTION OF UNUSUAL ABILITY OR POWERS. RATE ONLY ON THE BASIS OF PATIENTS STATEMENTS ABOUT HIMSELF OR SELF-IN-RELATION-TO-OTHERS, NOT ON THE BASIS OF HIS DEMEANOR IN THE INTERVIEW SITUATION.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

9. DEPRESSIVE MOOD – DESPONDENCY IN MOOD, SADNESS. RATE ONLY DEGREE OF DESPONDENCY; DO NOT RATE ON THE BASIS OF INFERENCES CONCERNING DEPRESSION BASED UPON GENERAL RETARDATION AND SOMATIC COMPLAINTS.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

10. HOSTILITY – ANIMOSITY, CONTEMPT, BELLIGERENCE, DISDAIN FOR OTHER PEOPLE OUTSIDE THE INTERVIEW SITUATION. RATE SOLELY ON THE BASIS OF THE VERBAL REPORT OF FEELINGS AND ACTIONS OF THE PATIENT TOWARD OTHERS; DO NOT INFER HOSTILITY FROM NEUROTIC DEFENSES, ANXIETY NOR SOMATIC COMPLAINTS. (RATE ATTITUDE TOWARD INTERVIEWER UNDER "UNCOOPERATIVENESS".)

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

11. SUSPICIOUSNESS – BELIEF (DELUSIONAL OR OTHERWISE) THAT OTHERS HAVE NOW, OR HAVE HAD IN THE PAST, MALICIOUS OR DISCRIMINATORY INTENT TOWARD THE PATIENT. ON THE BASIS OF VERBAL REPORT, RATE ONLY THOSE SUSPICIONS WHICH ARE CURRENTLY HELD WHETHER THEY CONCERN PAST OR PRESENT CIRCUMSTANCES.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

12. HALLUCINATORY BEHAVIOR – PERCEPTIONS WITHOUT NORMAL EXTERNAL STIMULUS CORRESPONDENCE. RATE ONLY THOSE EXPERIENCES WHICH ARE REPORTED TO HAVE OCCURRED WITHIN THE LAST WEEK AND WHICH ARE DESCRIBED AS DISTINCTLY DIFFERENT FROM THE THOUGHT AND IMAGERY PROCESSES OF NORMAL PEOPLE.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

13. MOTOR RETARDATION – REDUCTION IN ENERGY LEVEL EVIDENCED IN SLOWED MOVEMENTS AND SPEECH, REDUCED BODY TONE, DECREASED NUMBER OF MOVEMENTS. RATE ON THE BASIS OF OBSERVED BEHAVIOR OF THE PATIENT ONLY; DO NOT RATE ON BASIS OF PATIENT'S SUBJECTIVE IMPRESSION OF OWN ENERGY LEVEL.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

14. UNCOOPERATIVENESS – EVIDENCES OF RESISTANCE, UNFRIENDLINESS, RESENTMENT, AND LACK OF READINESS TO COOPERATE WITH THE INTERVIEWER. RATE ONLY ON THE BASIS OF THE PATIENT'S ATTITUDE AND RESPONSES TO THE INTERVIEWER AND THE INTERVIEW SITUATION; DO NOT RATE ON BASIS OF REPORTED RESENTMENT OR UNCOOPERATIVENESS OUTSIDE THE INTERVIEW SITUATION.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

15. UNUSUAL THOUGHT CONTENT – UNUSUAL, ODD, STRANGE, OR BIZARRE THOUGHT CONTENT. RATE HERE THE DEGREE OF UNUSUALNESS, NOT THE DEGREE OF DISORGANIZATION OF THOUGHT PROCESSES.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

16. BLUNTED AFFECT – REDUCED EMOTIONAL TONE, APPARENT LACK OF NORMAL FEELING OR INVOLVEMENT.

NOT PRESENT VERY MILD MILD MODERATE MOD. SEVERE SEVERE EXTREMELY SEVERE

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FIG. 1. Facsimile of the Brief Psychiatric Rating Scale

separate rating scales are grouped into two sets according to the kind of information considered in completing the ratings. Ratings in several symptom areas can be completed on the basis of observation of the general physical, intellectual, and social behavior of the patient. Such ratings do not depend upon the specific topics discussed and are made most easily on the basis of observation of the patient during long, uninterrupted verbal productions such as might occur in a non-directive interview situation. The remaining items depend upon the verbal report of the patient, but ratings must include the intensity of the reported experiences which can be judged in part from observation of the patient while he relates the relevant material.

## Ratings Based Upon Observation of Patient

*Tension.*—It should be noted that the construct "tension" is restricted in the Brief Scale to physical and motor signs commonly associated with anxiety. Tension does not involve the subjective experience or mental state of the patient. Although research psychologists, in an effort to attain a high degree of objectivity, frequently define anxiety in terms of physical signs, in the Brief Scale observable physical signs of tension and subjective experiences of anxiety are rated separately. Although anxiety and tension tend to vary together, developmental research with an earlier form of the Brief Scale indicated that the degree of pathology in the two areas may be quite different in specific patients. A patient, especially when under the influence of a drug, may report extreme apprehension but give no external evidence of tension whatsoever, or vice versa. In rating the degree of tension, the rater should attend to the number and nature of signs of abnormally heightened activation level such as nervousness, fidgeting, tremors, twitches, sweating, frequent changing of posture, hypertonicity of movements, and heightened muscle tone.

*Emotional withdrawal.*—This construct is defined solely in terms of the ability of the patient to relate in the interpersonal interview situation. Thus, an attempt is made to distinguish between motor aspects of general retardation, which are rated as "motor retardation," and the more mental-emotional aspects of withdrawal, even though ratings in the two areas may be expected to covary to some extent. In the factor analyses of change in psychiatric ratings, a "general retardation" factor has emerged in several different analyses, and this general retardation factor has included both emotional and motor retardation items. It is difficult to identify the basis for rating of "ability to relate"; however, initial work has indicated that raters achieve reasonably high agreement in rating this quality. Emotional withdrawal is represented by the feeling on the part of the rater than an invisible barrier exists between the patient and other persons in the interview situation. It is suspected that eyes, facial expression, voice quality and variability, and expressive movements all enter into the evaluation of this important, but nebulous, quality of the patients.

*Mannerisms and posturing.*—This symptom area includes the unusual and bizarre motor behavior by which a mentally ill person can often be identified in a crowd of normal persons. The severity of manneristic behavior depends both upon the nature and number of unusual motor responses. However, it is the "unusualness," and not simply the amount of movement, which is to be rated. Odd, indirect, repetitive movements, or movements lacking normal co-ordination and integration, are rated on this scale. Strained, distorted, abnormal postures which are maintained for extended periods are rated. Grimaces and unusual movements of lips, tongue, or eyes are considered here also. Tics and twitches which are rated as signs of tension are not rated as manneristic behavior.

*Motor retardation.*—Motor retardation involves the general slowing down and weakening of voluntary motor responses. Symptomatology in this area is represented by behavior which might be attributed to the loss of energy and vigor necessary to perform voluntary acts in a normal manner. Voluntary acts which are especially affected by reduced energy level include those related to speech as well as gross muscular behavior. With increased "motor retardation" speech is slowed, weakened in volume, and reduced in amount. Voluntary movements are slowed, weakened, and less frequent.

*Uncooperativeness.*—This is the term adopted to represent signs of hostility and resistance to the interviewer and interview situation. It should be noted that "uncooperativeness" is judged on the basis of response of the patient to the interview situation while "hostility" is rated on the basis of verbal reports of hostile feelings or behavior toward others outside the interview situation. It was found necessary to separate the two areas because of an occasional patient who refrained from any reference to hostile feelings and who even denies them, while evidencing strong hostility toward the interviewer.

## RATINGS BASED PRIMARILY UPON VERBAL REPORT

*Conceptual disorganization.*—Conceptual disorganization involves the disruption of normal thought processes and is evidenced in confusion, irrelevance, inconsistency, disconnectedness, disjointedness, blocking, confabulation, autism, and unusual chain of associating. Ratings should be based upon the patient's spontaneous verbal products, especially those longer, spontaneous response sequences which are likely to be elicited during the initial, non-directive portion of the interview. Attention to the facial expression of the patient during the verbal response may be helpful in evaluating the degree of confusion or blocking.

*Unusual thought content.*—This symptom area is concerned solely with the *content* of the patient's verbalization; the extent to which it is unusual, odd, strange, or bizarre. Notice that a delusional or paranoid patient may present bizarre or unbelievable ideas in a perfectly straightforward, clear, and organized fashion. Rate only unusualness of content for this item, not degree of organization or disorganization.

*Anxiety.*—Anxiety is a term restricted to the subjective experience of worry, overconcern, apprehension or fear. Rating of degree of anxiety should be based upon verbal responses reporting such subjective experiences on the part of the patient. Care should be taken to exclude from consideration in rating anxiety the physical signs which are included in the concept of tension, as defined in the scale. The sincerity of the report and the strength of the experience as indicated by the involvement of the patient may be important in evaluating degree of anxiety.

*Guilt feelings.*—The strength of guilt feelings should be judged from the frequency and intensity of reported experiences of remorse for past behavior. The strength of the guilt feelings must be judged in part from the involvement evidenced by the patient in reporting such experiences. Care should be exercised not to infer guilt feelings from signs of depression or generalized anxiety. Guilt feelings relate to specific past behavior which the patient now believes to have been wrong and the memory of which is a source of conscious concern.

*Grandiosity.*—Grandiosity involves the reported feeling of unusual ability, power, wealth, importance, or superiority. The degree of pathology should be rated relative to the discrepancy between self-appraisal and reality. The verbal report of the patient and not his demeanor in the interview situation should provide the basis for evaluation of grandiosity. Care should be taken not to infer grandiosity from suspicions of persecution or other unfounded beliefs where no explicit reference to personal superiority as the basis for persecution has been elicited. Ratings should be based upon opinions currently held by the patient, even though the unfounded superiority may be claimed to have existed in the past.

*Depressive mood.*—Depressive mood includes only the affective component of depression. It should be rated on the basis of expressions of discouragement, pessimism, sadness, hopelessness, helplessness, and gloomy thema. Facial expression, weeping, moaning and other modes of communicating mood should be considered, but motor retardation, guilt, and somatic complaints, which are commonly associated with the psychiatric syndrome of depression, should *not* be considered in rating depressive mood.

*Hostility.*—Hostility is a term reserved for reported feelings of animosity, belligerence, contempt, or hatred toward other people outside the interview situation. The rater may attend to the sincerity and affect present in reporting of such experiences when he attempts to evaluate the severity of pathology in the symptom area. It should be noted that evidences of hostility toward the interviewer in the interview situation should be rated on the "uncooperativeness" scale and should not be considered in rating hostility as defined here.

*Somatic concern.*—The severity of physical complaints should be rated solely on the number and nature of complaints of bodily illness or malfunction, or suspiciousness of same, alleged during the interview period. The evaluation

is of the degree to which the patient perceives or suspects physical ailments to play an important part in his total lack of well-being. No consideration of the probability of true organic basis for the complaints is required. Only the frequency and severity of complaints are rated.

*Hallucinatory behavior.*—The evaluation of hallucinatory experiences frequently requires judgment on the part of the rater as to whether the reported experience represents hallucination or merely vivid mental imagery. In general, unless the rater is quite convinced that the experiences reported represent true deviations from normal thought and imagery processes, hallucinatory behavior should be rated as "not present."

*Suspiciousness.*—Suspiciousness is a term which is used to designate a wide range of mental experience in which the patient believes himself to have been wronged by another person or believes that another person has, or has had, intent to wrong. Since no information is usually available as a basis for evaluating the objectivity of the more plausible suspicions, the term "accusations" might be a more appropriate characterization of this area. The rating should reflect the degree to which the patient tends to project blame and to accuse other people or forces of malicious or discriminatory intent. The pathology in this symptom area may range from mild suspiciousness through delusions of persecution or ideas of reference.

*Blunted affect.*—This symptom area is recognized by reduced emotional tone and apparent lack of normal feeling or involvement. Emotional expressions are apt to be absent or of marked indifference and apathy. Attempted expressions of feeling may appear to be mimetic and without sincerity.

## Scoring

At the present time, scoring of ratings on the Brief Scale is accomplished by assigning equal interval values of 1, 2, 3, 4, 5, 6, and 7 to the rating categories. This practice has yielded good results with these and other ordered category scales (category scale values have been shown to be monotonically related to equal-interval values obtained from psychometric scaling methods) and will be employed until such time as more refined scaling units can be derived. A separate score for the degree of pathology in each of the 16 symptom areas is obtained in this way.

For evaluating patient change during treatment, the use of a "total pathology" score which is the simple sum of ratings on the 16 scales is recommended. In spite of the appeal of the search for specific treatment differences, research has indicated that treatments which are more effective in one symptom area are generally effective (Gorham & Overall, 1960). Although psychiatric symptomatology is multidimensional, the difference between pre-treatment pathology and post-treatment pathology (or lack of it) can be represented by a single dimension spanning the multivariate space. The discriminant function

approach to multivariate differences effects an optimal combination of the several measures into the one measure which maximizes the distance between groups. Under certain assumptions which seem reasonably tenable in view of the relative independence of the several scales and in view of evidence concerning the general action of psychotropic drugs, at least the total pathology score can be viewed as an approximation to the optimal discriminant function score and can be used as a univariate measure in evaluating treatment differences.

Frequently research is concerned with treatment responses in a particular kind of patient. The question which is asked, in considering the target symptoms associated with a particular type of patient, is to what degree does the given treatment move this particular type of patient toward normal. A combination of scores on the 16 scales which weights more heavily those symptoms which are most associated with the syndrome in question is a better representation of the continuum between the particular type of pathology and normal. Under certain assumptions regarding variances and covariances of the scales, weighting according to the particular mean pathology profiles seems to give an adequate approximation to these discriminant continua.

Twenty highly qualified psychiatrists were asked to rate "typical" hypothetical patients in each of several diagnostic categories to provide scores for target symptom profiles in terms of the Brief Scale measures. Weights for the 16 scale items which were derived from these data are presented in Table 1. Since interest in research is seldom in the very specific diagnostic concepts, scoring keys to represent "paranoia, paranoid-state, and related reactions," "paranoid schizophrenia," "general schizophrenia," "schizo-affective reaction, depressed," "depression" and "manic-depressive, manic" have been derived and are presented in Table 2. To use these keys, simply multiply the score on each scale by the appropriate weight and add the results. While other research is in progress to develop procedures for the quantitative classification of psychiatric patients, it is stressed that the scoring keys presented here should not be expected to prove useful for this purpose because of differences in variance of the several linear combinations.

## Reliability

The concept of "reliability" is concerned with the proportion of the total variance of a set of scores which is due to real differences between the individuals being measured and not due to errors of measurement. Thus, reliability depends upon the magnitude of true differences between individuals and upon the error in measuring these true differences.

Because of the difficulty in assessing true reliability in psychiatric ratings, the concept of "inter-rater" reliability has developed. Inter-rater reliability is simply the product-moment correlation between ratings by different individuals.

TABLE 1

SCORING WEIGHTS FOR EVALUATING IMPROVEMENT IN 13 DIAGNOSTIC TYPES

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paranoia | 2 | 2 | 2 | 2 | 1 | 3 | 1 | 3 | 1 | 4 | 4 | 1 | 0 | 3 | 4 | 2 |
| Paranoid State | 2 | 2 | 2 | 3 | 1 | 3 | 1 | 3 | 1 | 4 | 4 | 1 | 1 | 3 | 4 | 1 |
| Schizo Reaction, Paranoid Type | 2 | 2 | 3 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | 3 | 3 | 1 | 3 | 3 | 2 |
| Schizo Reaction, Acute Undifferentiated | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 1 | 3 | 3 | 2 |
| Schizo Reaction, Catatonic Type | 1 | 2 | 3 | 3 | 2 | 3 | 3 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| Schizo Reaction, Hebephrenic Type | 2 | 1 | 3 | 4 | 1 | 2 | 3 | 2 | 1 | 2 | 2 | 3 | 1 | 3 | 4 | 3 |
| Schizo Reaction, Simple Type | 3 | 2 | 4 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 3 | 4 |
| Schizo Reaction, Residual Type | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 1 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 3 |
| Schizo Reaction, Chronic Undifferentiated | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 3 | 3 |
| Schizo Reaction, Schizo-Affective Type | 3 | 3 | 2 | 3 | 3 | 3 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 |
| Psychotic Depressive Reaction | 3 | 3 | 2 | 3 | 3 | 2 | 1 | 0 | 3 | 2 | 2 | 1 | 3 | 2 | 3 | 1 |
| Manic Depressive, Depressive Type | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 0 | 3 | 2 | 2 | 1 | 3 | 2 | 2 | 1 |
| Manic Depressive, Manic Type | 1 | 1 | 2 | 4 | 1 | 4 | 2 | 4 | 1 | 4 | 2 | 1 | 0 | 4 | 3 | 1 |

TABLE 2

SCORING WEIGHTS FOR EVALUATING IMPROVEMENT IN THREE MAJOR PATIENT POPULATIONS

| Conditions | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paranoid | 2 | 2 | 2 | 2 | 1 | 3 | 1 | 3 | 1 | 4 | 4 | 1 | 0 | 3 | 4 | 1 |
| Schizophrenic | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 1 | 2 | 3 | 3 | 2 | 3 | 3 | 3 |
| Depressive | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 0 | 3 | 2 | 2 | 1 | 3 | 2 | 2 | 1 |

Obviously, inter-rater reliability depends not only upon the magnitude of real differences between the patients being rated and the random error of measurement involved in making the ratings, but also upon the extent to which the different raters are actually rating the same characteristics of the patient. It would be quite possible for two raters to be rating *without error* (with perfect reliability) and yet for their ratings not to correlate highly. The inter-rater reliability can thus be employed to yield an estimate of the lower limit of true reliability and should, perhaps, be conceived more appropriately as a measure of the consensual validity of the rating construct.

As mentioned earlier, the Brief Scale has undergone several revisions in efforts to improve its reliability and validity. An estimate of the reliability of combined ratings by two independent raters on 14 scales which are similar to the first 14 in the present version of the scale was obtained in connection with a drug research project. The estimated reliabilities based upon a sample of 112 somewhat homogeneous, newly admitted schizophrenics are presented in

TABLE 3

ESTIMATES OF RELIABILITY OF COMBINED RATING BY TWO INDEPENDENT RATERS

| Item | $r$ |
|---|---|
| 1. Physical Complaints | .88 |
| 2. Anxiety | .74 |
| 3. Emotional Withdrawal | .70 |
| 4. Conceptual Disorganization | .77 |
| 5. Guilt Feelings | .90 |
| 6. Tension | .52 |
| 7. Mannerisms and Posturing | .67 |
| 8. Grandiosity | .82 |
| 9. Depressive Mood | .82 |
| 10. Hostility | .76 |
| 11. Suspiciousness | .70 |
| 12. Hallucinatory Behavior | .90 |
| 13. Motor Retardation | .80 |
| 14. Uncooperativeness | .82 |

Table 3. While several of these scales were later revised slightly in an effort to improve reliability, these values provide an indication of the extent to which the various scales discriminate between patients within a single general diagnostic category.

Following the study described above, the present version of the Brief Psychiatric Rating Scale was produced by minor revisions in the original 14 scales and the addition of Scales 15 and 16. Paired independent ratings on 83 "newly admitted schizophrenic patients" from a drug screening project yielded the estimates of reliability (for combination of ratings by two independent raters) which are presented in Table 4. These coefficients provide indexes of the degree to which the scales of the present version of the rating instrument are capable of discriminating between patients within a somewhat homogeneous diagnostic class.

TABLE 4
RELIABILITY OF COMBINED RATING BY TWO INDEPENDENT RATERS

| Item | $r$ |
|---|---|
| 1. Somatic Concern | .81 |
| 2. Anxiety | .86 |
| 3. Emotional Withdrawal | .62 |
| 4. Conceptual Disorganization | .80 |
| 5. Guilt Feelings | .87 |
| 6. Tension | .56 |
| 7. Mannerisms and Posturing | .84 |
| 8. Grandiosity | .84 |
| 9. Depessive Mood | .76 |
| 10. Hostility | .86 |
| 11. Suspiciousness | .84 |
| 12. Hallucinatory Behavior | .87 |
| 13. Motor Retardation | .72 |
| 14. Uncooperativeness | .68 |
| 15. Unusual Thought Content | .83 |
| 16. Blunted Affect | .67 |

## CONTINUING RESEARCH

The need to present the Brief Psychiatric Rating Scale at this time has been felt because of research which is currently underway in which the scale is being employed. In addition to applications in problems involving the assessment of treatment change, further research concerned with the development and extension of usefulness of the instrument is underway. This research is currently progressing along two lines.

Considerable refinement in sensitivity should result from the development of optimal scale values for the rating categories. Although reasonably adequate

results are obtained from assuming equal category intervals, it is apparent that the distances between category mid-points are not really equal. For example, the distance between hallucinations "not present" and "very mild" is considerably greater than the distance between "very mild" and "mild." Data are being collected for the application of scaling procedures to the specification of optimal scale values which should maximize inter-rater reliability.

A second research program is concerned with the general problem of developing a quantitative approach to psychiatric classification. The first problem approached was that of evaluating the consensual validity of diagnostic concepts from the standard psychiatric nomenclature. A computer program was written and the classification of psychiatrists' ratings of "typical" cases into proper diagnostic categories was found to be highly accurate. This research indicated that diagnostic concepts have high consensual validity among experienced psychiatrists, that the several diagnostic types differ in terms of objectively ratable psychiatric symptoms, and that the Brief Scale is an adequate instrument for characterizing differences between diagnostic types. The computer procedure is now available and further work in the classification of real diagnosed cases is being undertaken.

## SUMMARY

Description of a brief psychiatric rating scale is presented, along with recommendations for its use. The scale was developed in an effort to meet the need for an efficient, rapid and economical method of assessing treatment change in psychiatric research, although usefulness of the instrument for patient classification and other research is suggested. The instrument contains 16 ordered category rating scales to be completed following a 20-min. clinical interview. Each of the 16 scales was developed to assess patient symptomatology in a relatively discrete symptom area identified in previous investigations.

## REFERENCES

GORHAM, D. R., & OVERALL, J. E. Drug action profiles based upon an abbreviated psychiatric rating scale. *J. nerv. ment. Dis.*, 1960, 132, 528-535.

GORHAM, D. R., & OVERALL, J. E. Dimensions of change in psychiatric symptomatology. *Dis. nerv. System*, 1961, 22, 576-580.

LORR, M., JENKINS, R. L., & HOLSOPPLE, J. Q. Multidimensional Scale for Rating Psychiatric Patients. *V. A. Tech. Bull.*, 1953, No. 10-507.

LORR, M., MCNAIR, D. M., KLETT, C. J., & LASKY, J. J. A confirmation of nine postulated psychotic syndromes. *Amer. Psychologist*, 1960, 15, 495. (Abstract)

OVERALL, J. E., GORHAM, D. R., & SHAWVER, J. R. Basic dimensions of change in symptomatology of chronic schizophrenics. *J. abnorm. soc. Psychol.*, 1961, 62, 597-602.

OVERALL, J. E., HOLLISTER, L. E., POKORNY, A. D., CASEY, J. F., & KATZ, G. Chemotherapy of depression: a controlled comparison of imipramine, isocarboxazid, dextroamphetamine and placebo. *Clin. Pharmacol. Therapeutics*, 1962, in press.

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