A BEHAVIOURAL RATING SCALE FOR MENTAL PATIENTS

Bу

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In connection with a demonstration programme of comprehensive psychiatric care for hospitalized schizophrenic patients, it was necessary to develop a rapid and effective method for rating patients' ward adjustment and social behaviour. The scale, entitled the Albany Behavioural Rating Scale (ABRS), and its validation, are described in this report. The nature of the problem required that the scale be readable, easily completed and scored, and suitable for use by nursing and rehabilitation personnel (OT, CT, Music Therapist, etc.). Further requirements included adequate scoring reliability and validity, as well as amenability to quantification.

Various rating scales have been described in the psychiatric literature, but these did not meet our needs. Some were too cumbersome and time-consuming. Others required individual psychiatric interview. Frequently they demanded high literacy of the rater. Certain scales are indeed useful for special purposes, as for example the MSRPP (Lorr, 1953) which can be employed with confidence as an aid to psychiatric classification. Lucero and Meyer (1951) have discussed the requirements of an adequate rating scale.

Method

Development of the Scale. A scale was organized of items selected on the basis of clinical judgment. Materials from existing rating scales were reviewed (Lorr, 1953; Lucero and Meyer, 1951; Malamud and Sands, 1947; Wittman, 1941), and they contributed to the composition of the present scale. The majority of items were adapted from the listing of Ferguson, McReynolds, and Ballachey (1952). One hundred items were chosen; they included six major areas. Each item was presented as a statement in the affirmative with "yes" or "no" to be encircled by the rater. The complete scale is reproduced at the end of this paper.

The items for the six areas were scattered throughout the final scale. The statements subsumed under the six main headings were not mutually exclusive, and certain items might reasonably have been contained in two or more areas. This classification was the result of individual ratings of each item by three experienced clinical psychologists,* who then met in conference for joint discussion of the items and their proper placement within the classes of content.

* Dr. Manual Aronson, whose co-operation is gratefully acknowledged, and the authors.

Area I—Self Care: Eighteen items pertaining to the patient's adequacy in caring for himself; his appearance, personal habits, and ability to comply with ward routine. (Nos. 2, 8, 14, 15, 20, 21, 29, 36, 42, 47, 56, 64, 71, 77, 85, 91, 98, 100.)

Area II—Orientation: Eight items. Does the patient know who he is, where the is; is he oriented in time? (Nos. 1, 19, 49, 51, 52, 73, 82, 97.)

Area III—Communication and Socialization: Twenty-eight statements pertaining to interpersonal relations with fellow patients, ward personnel, and family. Items probing communication in terms of the patient's speech, letter writing, etc. (Nos. 3, 7, 9, 10, 12, 13, 16, 18, 22, 24, 25, 31, 34, 47, 48, 55, 57, 60, 64, 66, 69, 72, 75, 78, 81, 87, 93, 96.)

Area IV—*Psychotic Behaviour:* Eighteen statements concerning the presence of psychotic manifestations such as delusions and hallucinations. (Nos. 4, 5, 6, 17, 23, 32, 39, 43, 62, 68, 76, 79, 83, 84, 86, 88, 89, 92.)

Area V—*Co-operation:* Fourteen items describing possible patient reactions ranging on a continuum from co-operative to hostile and openly assaultive behaviour. (Nos. 11, 26, 27, 30, 35, 41, 45, 50, 65, 70, 74, 89, 95, 98.)

Area VI—*Reaction to Environment:* Fourteen items which probe the patient's interest in and reactions to his environment. (Nos. 3, 9, 33, 38, 40, 44, 46, 53, 54, 58, 61, 67, 94, 99.)

Scoring. Total number of items was 100, with lowest possible score at 0 and highest at 100. The healthier direction of response ("yes" or "no") for each item was designated a priori according to usual clinical standards. A higher score signified healthier ward behaviour, with one point accruing for each item rated in the healthy direction. A key was utilized to minimize scoring time which then required under two minutes per scale.

Reliability. The patients of one active treatment ward (N=31) were rated independently on the scale by each of two nurses assigned to that ward. The raters were given no training beyond the initial instructions for the scale and the definition of any words which they did not understand. The Pearson product-moment coefficient of correlation between the two sets of ratings was +.79. Since this was an active treatment ward (EST, Chlorpromozine, ICT), the individual patients were more than ordinarily variable in their behaviour and showed frequent temporary fluctuations in their adjustment. On this account the scoring of the ABRS assumed greater difficulty than would have been the case for a continued treatment ward. The correlation coefficient of \cdot 79 was therefore a conservative estimate of the scale's reliability. A second reliability study was made on a continued treatment ward for schizophrenic patients (N=25). These subjects were rated independently by each of two nurses assigned to that ward. No special training was given. The Pearson product-moment coefficient of correlation between the two sets of ratings was \cdot 84. Rating reliability is satisfactory for clinical and research purposes.

Reliability as consistency of the scale was estimated by the Richardson and Kuder method of rational equivalence (Guilford, 1950). This was calculated from the scores obtained by all patients in the two contrasted wards, 9D and 10C (N=56). The reliability coefficient thus obtained was $\cdot 97$ which is high.

The standard error of an obtained score is a measure of the error made in taking an individual's obtained score as an estimate of his true score. This was calculated from the reliability coefficient reported above: the standard error was $3 \cdot 2$, or 3 in whole numbers. The odds are therefore 2 : 1 that the obtained score made by any individual in the group does not differ from his true score by more than ± 3 points.

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Validity. The patients on each of two wards, 10C and 9D, were rated by their respective ward nurses with the Albany Behavioural Rating Scale. Age, educational-vocational levels, and chronicity were equivalent. Ward 10C contained long-term patients who made a poor adjustment; they required closed ward supervision. In contrast, ward 9D patients—although long-term made a satisfactory open ward adjustment requiring only minimal staff supervision; the majority were privileged patients. They were free to come and go; they attended general hospital functions. Clinically these two ward populations showed marked contrast in behaviour and in interpersonal communication. They constituted the validating criteria for the rating scale. The latter was tested for its ability to differentiate these two populations, one from the other.

A replicated experiment was conducted. All patients in each ward (N =28/ward) were rated by their respective ward nurse. The patients of each ward were then listed in ascending order according to their ABRS scores. The oddnumbered patients of each ward (9D vs 10C) were selected to constitute the first experiment (N=28). Means and standard deviations were calculated, and statistical tests of the significance of the differences between these were made (t-tests and F-tests). Results are reported in Table I. This procedure was repeated with the even-numbered patients (N=28). Comparative results are reported in Table I. Finally, the scores of the total populations of each ward were submitted to the same statistical treatment (N=56). The outcome is again reproduced in Table I. In every instance the better adjusted patients (ward 9D) attained a significantly higher mean adjustment score ($P < \cdot 001$) than did the more poorly adjusted patients (ward 10C). A chi square test of independence between ward adjustment and ABRS score led to rejection of the hypothesis that these two qualities were independent of each other ($\chi^2 = 12.07$, P<.001). They were definitely interrelated. The coefficient of contingency between these two qualities, corrected for broad categories (Guilford, 1950) was .60. All results point to the validity of the ABRS as an indicator of ward adjustment and social communication for long-term or psychotic patients.

TABLE I

Behavioural Rating Scale Comparative Data Ward 10C VS 9D

Patients $10C \pmod{(N=14)}$		Mean 34 · 78	t	р	Variance 199.56	F
$VS \dots N$ 9D (odd) (N=14)	 	58.71	4 · 24	< • 001	260.00	1 · 3 0*
10C (even) (N=14)		36.57	4 40	- 001	221 · 90	1 02*
9D (even) $(N=14)$	•••	61 · 50	4.40	< • 001	228 • 42	1.03+
10C Total (N=28)	•••	35.67	6.00	< 001	203 · 54	1 10*
vs	••	60·10	0.77	<∙001	228.15	1.12*

* Not significant at 5 per cent. level of confidence.

Each item of the ABRS was tested individually by chi square for its ability to differentiate between the two contrasted wards. This too was done as a replication experiment. Each of the patients on 9D and 10C were ranked according to score within their respective wards. These two lists were each divided into split halves (odd-even), and the odd-numbered 10C patients were then tested against the odd-numbered 9D patients (N=28) for each ABRS

TABLE II

Chi Square Analysis, Significant Items

Item No.			Even (N=28) Experiment	Odd (N=28) Experiment	Total (N=56)
3			·01	> 30	·02
4	••	••	·05	· 20	·01
5	••	••	·05*	> . 30	·02
6	••	••	· 00 1	· 0 1	· 001
7	••	••	·05*	> · 30	·02*
. 8	••	••	> · 30	·01	·01
10	••	••	> · 30*	·05*	·20
11	••	••	·05*	> .30	·02*
15	••	••	·10	· 30	·02
16	••	••	· 30	·01	·01
17	••	••	·20	·01	·001
18	••	••	·05*	> .30	· 30*
20	••	••	·20	·01*	·01
24	••	••	•01	$> \cdot 30$	•01
25	••	••	·20	• 30	·02
26	••	••	•20	· 10	·02
21	••	••	> .30	•02*	·02
28	••	••	· 20	> '30	•05
29	••	••	•01*	·02*	•001
31	••	••	•01	.05	•001
34 · · · · · · · · · · · · · · · · · · ·	••	••	- 30	- 30	•03
35	••	••	.10	.10	•01
30 <i>4</i> 1	••	••	· 20 .001	· 20 .001	•02
41	••	••	-001	-001	-001
42	••	••	-10	-05	-01
44	••	••	.01	- 10	-001
40	••	••	·01	-05	.02
47 54	••	••	> 30	.20	.02
56	••	••	.30	.10	.02
57	••	••	.20	•10	-02
58	••	••	.20	.30	.05
60	••	••	·10	·30	·05
62	••	••	·05	> .30	·02
63	••	••	·01*	·20	·01
64			· 30	·10	·02
65			·05*	> .30	·05
67			·01	·20	·001
72	••	••	·05*	> .30	·02*
73	••		· 0 01	·05	·001
75			·01	· 20	·01
77	••	••	· 10	·10	·01
78	••		·05*	·10	·01
80	••		·01*	·10	·001
82	••	••	· 0 01	·20	·001
84	••	••	·01*	·01*	·001
86	••	••	·20	·01	·01
87	••	••	·01*	·10	·001
89	••	••	· 30	·20	·05
90	••	••	·01	·05	·001
93	••	••	·05*	> · 30	·10
94	••	••	·20	·30	·05
96	••	••	·05*	> .30	·20*
97	••	••	·01	·20	·001
98	••	••	> .30	·05	·05

* Theoretical cell frequency below 5.

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item by chi square tests of independence. Dichotomization point was set at the median for the twenty-eight patients. This was repeated for the even-numbered patients. Finally, chi square tests of independence were made for each item of the ABRS, utilizing the total sample (N=56). Results of the chi square tests are reported in Table II, which includes findings for each of the split halves (N=28) as well as for the total (N=56). Reported in Table II are all ABRS items which differentiated significantly at the 5 per cent. level of probability or better ($\leq .05$) in at least one of the split-half experiments or in the total. This table gives a view of the consistency of the significant individual items, from experiment to experiment. Excluded are all items which did not attain statistical significance at least once.

It will be recalled that the healthier direction for each ABRS item had been previously designated on the basis of clinical judgment. Since the actual chi square test was applied to the hypothesis that membership in ward 9D was unassociated with a *healthier* rating for each item, then the true probability level was P/2 rather than the P figure reported in Table II. The probabilities reported in Table II are therefore very conservative estimates, and the statistical significance of those items is even greater than reported.

It is apparent that some items made only minor contribution to the differentiation of patients from two criterion wards. Nevertheless, they should be retained in the ABRS. Cumulatively they may attain considerable differentiating power. Furthermore, they provide a wide range of items which enlarges the rating scale's scope of applicability. Young or acute patients may manifest behaviour which is ordinarily not shown by older "chronic" patients. The wider range permits multiple facets of the patient to be rated progressively as his behaviour improves or changes radically.

Analysis of the chi square tests for the individual items in each split-half (N=28) showed the following extent of agreement between the results of the two experiments: one item significant at the < .001 probability level for both experiments (No. 41), seven at the .05-.01 level (Nos. 31, 84, 90, 93, 46, 29, 6), and seven at the .10-.06 level (Nos. 87, 78, 42, 80, 35, 77, 44). Twenty-seven attained the .30-.11 level of significance and 58 fell below the .30 probability level in both experiments. In résumé, fifteen items were significant in both experiments at the .10 level or better (Nos. 41, 31, 84, 90, 73, 46, 27, 6, 87, 78, 42, 80, 35, 77, 44). Considered from the viewpoint of the *total* group (N=56), one item of these fifteen was significant at the .01 level and the rest at the $\le .001$ level of probability. Since these fifteen items were the most effective of the scale, they led logically to the possibility of a short form of the ABRS. The original three experiments were therefore repeated, this time with scores derived only from the fifteen more effective items. Highest possible score was 15, and lowest was 0. Results of the three experiments are reported in Table III.

The chi square test of independence between ward adjustment and ABRS score based upon the fifteen most effective items cited above, led to rejection of the null hypothesis ($\chi^2=41\cdot34$, P $<\cdot001$, N=56). The coefficient of contingency, corrected for broad categories, was $\cdot95$. There is no doubt that the abbreviated scale of fifteen items was exceedingly effective in differentiating between the two criterion groups. This was true for the replication as well as for the total group.

Rank order correlations were determined between the total ABRS scores and the scores derived from the abbreviated scale of fifteen items. Rho was $\cdot 92$ for the twenty-eight patients on ward 10C. It was $\cdot 92$ for another sample of twenty-eight patients, fourteen from the better adjusted ward 9D (even-

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F

1.35*

1.45*

1.38*

194.68

Beha vioural	Ratin	g Sca	le (15 Item	s) Compare	ative Data	Ward 10C
Patients			Mean	t	Р	Variance
10C (odd) (N 14)	••	••	3 · 50			1 5 3 · 50
VS	••	••		6 ∙07	< ·001	
9D (odd) (N 14)	••	••	10.85			113.68
10C (even) (N 14)			3.50			115· 50
VS	••	••		7.62	<·001	
9D (even) (N 14)	••	••	11.35			79 · 18
10C Total (N 28)			3.50			269 · 00
VS				9.74	<.001	

11.10

VS 9D

* Not significant at 5 per cent. level of confidence.

numbered) and fourteen from the poorly adjusted ward 10C (even-numbered). The significance of the correlations is two-fold: (a) the short and long forms of the ABRS are closely related, and (b) the correlation is high despite the presence of a narrow "range of talent". An independent sample drawn from one intensive treatment ward yielded a rank order correlation of $\cdot 88$ (N=21) between the total ABRS and its short form of fifteen items.

Readability. A primary goal in the development of the scale was good readability. This, together with rapid administration and effective scoring, would render it suitable for clinical use by nursing and rehabilitation personnel. Special attention was therefore given to its structure.

Flesch's new readability yardstick (1948) was applied to the total scale. This provided two scores, the "reading ease" index and the "human interest" score. The intrinsic value of the latter lies in its heightening of the reader's attention, and its strengthening of his motivation to comprehend the content. Table IV presents results of the separate readability analyses for the instructions and the content of the Albany Behavioural Rating Scale.

TABLE IVA

Reading Ease Score (Flesch), Behavioural Rating Scale

			Score		
			RE	Description	Equivalence
Instructions	••	••	73·0	"Fairly Easy"	Slick-Fiction
Scale Content	••	••	65·5	"Standard"	Digests

TABLE IVB

Human Interest Score (Flesch), Behavioural Rating Scale

			Score	Descriptive Standard	Equivalence
Instructions	••	• •	43 · 8	Highly Interesting	"New Yorker"
Scale Content	••	••	37.4	Interesting	"Readers Digest"

According to standards developed by Flesch, reading ease scores may range from 0 to 100 or "Very Difficult" to "Very Easy". Similarly, human interest scores range from 0 to 100 or "Dull" to "Dramatic". Considered from this standpoint, the instructions for the ABRS were "Fairly Easy" and similar to the reading ease of Slick-Fiction. Their human interest score was "Highly Interesting" and equivalent to a magazine such as the New Yorker in readership interest. The ABRS content was "Standard" in reading ease and similar

9D Total (N 28)

to the style of the *Reader's Digest*. On the basis of this analysis, it may be concluded that the scale meets the criteria cited above: ease of readability and interesting content. Nurses, aides, or rehabilitation personnel can readily apply this scale to problems of ward behaviour and of interpersonal communication.

From Table II and associated text, it was apparent that some items were more diagnostic of the criterion than others when they were considered individually. All were retained in the scale to give it broader scope, although a short scale of 15 items was made available (Table III, text, and Appendix A). Investigations of validity ordinarily show little benefit from differential weighting of items in long tests.

The possibility was tested, that a more complex system of weighting the items of the full rating scale might lead to greater validity. A method was adapted from Guilford (1950), utilizing his abac for graphic determinations of the scoring weights for responses to each of the 100 scale items. Each item thereby received a weight of 1, 2, 3 or 4; 1 signified no differentiating power and 4 signified the most powerful differentiators.

A fresh sample of scales was obtained and scored for twenty long-term patients. They were scored by the previous, simple method of 0 or 1 for each item in accordance with the "unhealthiness" or "healthiness" of the rating. They were again scored by the complex weighting system of 1 through 4. In the first instance the median was 30.5, range 16-66. In the second, it was 57.5, range 28-138. A rank order correlation was computed, yielding rho at .99. This correlation was so high as to show that no change ensued as a result of the new scores based on complex weightings. The rating scales of the original 9D criterion patients were also rescored with the new weightings. The obtained median was 126 with range 52-195. Under the simple scoring system it had been 59.5 with range 30-87. A Pearson correlation coefficient was computed between these two sets of scores. R was $\cdot 95$ (N=28), once again so high as to indicate negligible difference in results from the complex weighting procedure as against the simplified system. Finally, the 9D criterion group of relatively well adjusted mental patients (N=28) was tested against a new sample of relatively poorly adjusted patients (N=20) similar to the first 10C criterion group in ward behaviour. Chi square tests of independence were conducted (N=48) for scores derived from the complex weighting system, and again from the simple system. Results are reported in Table V. Partition points for the chi square tests were set a priori at the medians for the total scoring ranges.

TABLE V

Behavioural Rating Scale Comparative Effectiveness of Weightings

	Simple	Weightin	gs	Complex Weightings			
Patients	Chi Square	P	Phi	Chi Square	P	Phi	
"Better" Adjusted (9D) (N=28)	41.16	~.001	.03	41.16	<.001	.03	
"Poorly" Adjusted (10C) (N=20)	1 10	< 001)	41 10	2 001))	

The two scoring systems gave identical results. Both were unquestionably effective in discriminating anew between the criterion groups; the complex system did not yield an increment in power. It is therefore suggested that the 1955]

simple item weights, 0 or 1, be retained and used additively to constitute the total scale score.

In view of the fact that validation study was based upon differentiation of groups of long-term psychotic patients, these findings are most applicable to the use of the scale for research with and study of groups of patients.

CONCLUSIONS

The Albany Behavioural Rating Scale demonstrates the following characteristics:

- (a) Adequate rater reliability, and test reliability.
- (b) Appropriate validity in reflecting the ward adjustment and social communication of psychotic or long-term mental patients.
- (c) Easily applied and rapidly key-scored.
- (d) High correlation with its short form composed of fifteen effective items.
- (e) Reading ease and human interest consistent with clinical utilization of the scale by nursing and rehabilitation personnel.

SUMMARY

The Albany Behavioural Rating Scale (ABRS) was developed to provide a rapid and effective method for rating the ward adjustment and social behaviour of psychotic or long-term mental patients. It consisted of 100 items covering six areas: Self Care, Orientation, Communication and Socialization, Psychotic Behaviour, Co-operation, and Reaction to Environment. Scores ranged from 100 (healthiest) to 0 (least health).

Two independent reliability studies with two different pairs of raters showed adequate consistency between raters: rank order correlations $\cdot 79$ (N=31) and $\cdot 84$ (N=25) respectively. The ABRS was evaluated by t-test for its ability to differentiate between the patients of

two contrasted wards. The mean ABRS scores obtained by the patients of two contrasted wards were significantly different and in the expected direction (P < 001). This was true for the split-half replications (N=28) as well as for the total (N=56). A chi square test of independence led to a contingency coefficient of $\cdot 60$, with rejection of the hypothesis of independence (**P**<<u>.</u>001).

Each item of the ABRS was tested by chi square for its ability to differentiate between the criterion wards. This was performed as a replication experiment. Fifty-five items differentiated significantly at the 5 per cent. level of probability or better (< 05) in at least one of the splithalf experiments or in the total. Fifteen items were significant in both split-half experiments (P < 05). These fifteen items were studied as a possible short form of the ABRS. Scores derived from the short form were effective in differentiating the patients of the two criterion wards. This was demonstrated on the previous sample, as a replication experiment. Co-efficient of contingency was .95 (N=56), with hypothesis of independence rejected at the < .001 confidence level. Correlation (rho) between the short and long forms was .92 for each of the split-halves, and $\cdot 88$ for an independent sample (N=21).

Analysis of reading ease and human interest, according to the Flesch criteria, showed suitable ABRS readability for clinical use by nursing and rehabilitation personnel.

A complex weighting scheme was developed in accordance with the differentiating power of the individual items. This was highly correlated with the previously utilized simple score schemes. The application of the scale to a new criterion group again demonstrated its validity for this purpose. Complex and simple weighting schemes, both differentiated the new criterion group in identical fashion (P < .001, phi coefficient = .93, N = .48). It was therefore suggested that the simplified scoring method be retained.

It is concluded that this scale is valid for the rating of groups of psychotic or long-term mental patients, shows appropriate rating reliability, and is highly correlated with its short form. It is readable, quickly scored, and suitable for ward use.

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APPENDIX A

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SCALE FOR RATING PATIENTS' BEHAVIOUR

(Revised Research Form)

patient: of 100 statements which characterize some of the ways that various patients behave on a neuropsychiatric ward.

Before each statement you will see YES No. Mark a circle around YES if the statement is generally true for the above named patient. Circle No if the statement is generally not true for the above named patient. Please base your circling of YES or No on your observations of the above patient for the past two weeks to three months. Please answer the following questions:

What is your name and title?-

How long have you known the patient ?--yrs.--mos.-

You are to mark each statement. Therefore, you may need to observe the patient more or obtain the information for certain statements in the Scale from other hospital personnel.

-wks.

BE SURE YOU MARK EACH ITEM. DON'T LEAVE ANY OUT

Simple weighting: score 1 for each item rated in "healthy" direction. Complex weighting: as indicated for each item rated in "healthy" direction. WRITE DOWN WHAT TIME IT IS NOW--A.M. -P.M.

(YES) NO The natient knows who he is. ("Healthy" complex weighted score 1)

1.	(163)	140	The patient knows who he is. (Treating complex weighted score i)
2.	(Yes)	No	The patient sleeps well. (1)
3.	YES	(No)	The patient ignores the activities around him. (3)
4.	Yes	(No)	Has hallucinations. (3)
5.	Yes	(No)	Must be helped along to stick to any activity. (3)
6.	* Yes	(No)	Swears and uses obscene language. (3)
7.	(Yes)	No	Writes sensible and understandable letters. (3)
8.	(Yes)	No	The patient makes his own bed. (3)
9.	(Yes)	No	Follows events in the daily paper. (2)
10.	(Yes)	No	Plays cards occasionally. (2)
11.	(Yes)	No	Asks if there's work to do. (3)
12.	(Yes)	No	Laughs if he is kidded. (1)
13.	YES	(No)	The patient stays by himself. (1)
14.	Yes	(No)	Has to be dressed. (1)
15.	Yes	(No)	Has to be reminded to attend to routine. (2)
16.	(Yes)	No	The patient chooses to talk only to the personnel or to patients who talk
			sensibly. (3)
17.	YES	(No)	Has frequent changes in mood. (3)
18.	(YES)	No	Asks to leave the hospital to visit his family. (2)
19.	(YES)	No	Makes distinctions between new and old personnel. (1)
20.	YES	(No)	Needs supervision on a job. (3)
21.	YES	(No)	Is sloppy. (2)
22.	(YES)	No	Mixes with other patients. (2)
23.	YES	(No)	Is constantly moving about. (1)
24.	(YES)	No	Takes part in back and forth conversation. (3)
25.	(YES)	No	Talks about sports with an aide or nurse. (3)
26.	YES	(No)	The patient resents it if he is asked a question. (3)
27.	*(YES)	No	Is happy. (Do not include psychotic or hebephrenic laughter.) (1)
28.	(Yes)	No	Can tease other patients back into good humour. (1)
29 .	(Yes)	No	Shaves himself. (3)
30.	YES	(No)	Has to be pushed to follow routine. (1)
31.	*(Yes)	No	Answers sensibly if talked to. (3)
32.	Yes	(No)	The patient has delusions. (Queer ideas.) (1)
33.	Yes	(No)	The patient is slow. (1)

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34. (Yes) 35. * Yes No Has close friends on the ward. (3) (No) Yells at aide when he is dissatisfied. (3) (Yes) No Eats well. (3) Is backward about talking to you. (2) Reacts to entertainment. (2) Makes sexual passes at other patients. (1) YES (No) (Yes) Yes No (No) (YES) *(YES) No Will discuss many subjects. (2) Wants to do the right thing on the ward. (4) No *(YES) YES Always combs his hair. $(\bar{3})$ No The patient sits all day. (1) (No) Reads newspapers and magazines. (3) *(YES) No (YES) Does any extra chore. (2) No Does any extra chore. (2) You can hold his attention. (3) Likes to change his clothes. (2) Takes part in ward games. (2) Is making realistic plans for when he leaves the hospital. (1) Behaves exceptionally well when taken off the ward. (2) Knows the names of doctors, nurses, and aides. (1) The patient recognizes that he is mentally ill. (1) Takes part in athletics. (1) *(YES) No (Yes) No (Yes) (Yes) No No (YES) (YES) No No (Yes) No Takes part in athletics. (1) Is interested in O.T. (3) Takes pride in his personal appearance. (2) (Yes) No (Yes) No (YES) No (Yes) No Takes part in recreation. (2) (Yes) No Likes to go for exercise. (2) (Yes) No (Yes) No The patient sometimes remarks when it is time for a family visit. (1) (Yes) Yes No Always attends ward parties. (2) (No) Easily becomes upset when things don't suit him. (2) Yes (No) Repeats words and phrases in a meaningless and mechanical manner. (3) (Yes) No Starts conversation with aides to become better acquainted. (3) (Yes) No Is very interested in his clothes. (3) (Yes) Is a good worker. (3) No (Yes) Often volunteers information about himself. (2) No (Yes) The patient seeks things to do for recreation. No YES (No) Tries to injure himself. (1) (YES) YES Maintains a correspondence. No (3) Does the opposite of what he is asked to do. (2) (No) (Yes) The patient is able to bathe and shower himself. (1) No Writes letters. (3) (Yes) No Is oriented to time. Yes (No)(3) YES (No) Is assaultive. (1) Enjoys being talked to. (3) Chews or swallows things other than food. (1) (YES) YES No (No)Chews or swallows things other than food. (1) Stays neat and clean. (3) Talks over happenings on the ward with the aide. (3) Talks to himself. (1) Is resistive. (3) Plays ball with other patients. (1) Is oriented to place. (3) Wets himself. "(1) The patient is either silent or talks foolishly during visits. (2) Always asks for things he never waits for things to be given to *(YES) *(YES) No No YES (No)* YES (No) (YES) (YES) No No YES * YES (No) (No) Yes Always asks for things, he never waits for things to be given to him. (1) (No) Yes (No) Maintains manneristic postures and movements. (3) *(YES) YES No Chats with other patients. (3) Plays with his penis. (1) (No) Is irritable and grouchy. (2) The patient's words are always understandable. (3) Yes (No)

- 89. *(YES) No
- YES (No) Needs supervision with dressing. (1)
- Yes (No)
- Soils himself. (3) Will always reply if you make some remark to him. (2) (YES) No
- (YES) No Is interested in things. (2) (YES) No Is co-operative. (2)
- 90. 91. 92. 93. 94. 95. 95. 96. 97. Asks for a pass. (Short stay away from the hospital.) (2) (YES) No
- Has trouble remembering. (3) Clothes are unbuttoned. (3) YES (No)
- 98. Yes (No) 99.
- Yes (No) Would sit all day unless directed into activity. (1) 100. (No) Usually looks tired and worn out. (2) YES