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The Present State Examination Change Rating Scale

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The development and use of a new psychiatric symptom change scale based on the Present State Examination (PSE) – the PSE Change Rating Scale – is described. The advantages of the PSE are retained (the extensive glossary, the diagnostic facility and the standardised interview technique) while improving its sensitivity to change and decreasing its administration time. The scale has been designed to prevent feedback of results and 'halo' effects: it has proved highly reliable in use across raters with different backgrounds and experience. The scale has been used to monitor drug effects on clinical state across a variety of diagnoses and examples of its use are given.

One of the problems affecting research on the biological concomitants of psychotic illness has been to elucidate the causes of change in clinical state. A common approach has been to test patients initially when they are not receiving medication and to repeat the test some time later after treatment has been instituted. Changes in response to the test between the two occasions could then be due either to the natural history of the symptoms or to an effect of the medication itself. In order to decide between these two alternatives it is necessary to be able to measure sensitively changes in clinical state.

Ideally, a psychiatric clinical rating instrument should:

(1) generate data which provide the basis for clinical classification;
(2) be sensitive to change in symptoms;
(3) provide clear and mutually exclusive definitions of the symptoms;
(4) utilise a standardised interview;
(5) be acceptable to interviewers and subjects alike.

Manchanda & Hirsch (1986) surveyed five psychiatric journals over 3 years to establish which rating scales were in common use for schizophrenia. Of the six scales in most common use only four were applicable for all psychiatric diagnoses and for both acute and chronic disorders. These were: the Brief Psychiatric Rating Scale (BPRS) (Overall & Gorham, 1962), the Comprehensive Psychopathological Rating Scale (CPRS) (Åsberg *et al*, 1978), the In-patient Multidimensional Psychiatric Scale (IMPS) (Lorr & Klett, 1967) and the Present State Examination (PSE) (Wing *et al*, 1974). They found that the BPRS is able to satisfy points 2 and 5 above but does not give data for a clinical classification, provide clear definitions or use a standardised interview. The same criticism is true for the IMPS whereas the CPRS satisfies points 2, 3 and 5. The PSE, while satisfying points 1, 3, 4 and 5, was found to be somewhat insensitive to change with, for most symptoms, a 3-point scale and, for some, a 2-point scale compared, for instance, to the 7-point scale for the BPRS. Three points seem to provide too narrow a scale for the sensitivity to change required. This reflects the fact that the PSE was constructed as an instrument for assessing the patients' current psychopathology, and was not primarily designed as a change measure. However, its suitability for measuring change is an empirical question to be studied.

This was the starting point for our attempt to modify the PSE in order to increase its sensitivity to change. A further consideration was the length of the interview. In a floridly ill, psychotic patient, the PSE generally takes 45–60 min to administer. To repeat this procedure at regular intervals on a large number of patients would clearly exhaust the interviewer, might well alienate many of the patients, and would be difficult to fit in with the demands of a clinical job. Therefore, we were also concerned to decrease the administration time of repeated interviews.

Method

The PSE Change Rating is administered in the following manner. Initially, a PSE (9th edition) is administered to the patient by a trained interviewer according to the method described in Wing *et al* (1974). The symptoms that are not rated positively on this interview are discarded, (along with symptoms rated 8 or 9) and the subsequent ratings are made only on items that are rated positively. *The interviewer retains the PSE form throughout the rating period and uses it as the baseline for the ratings.* The words the patient employed to describe the symptoms initially are used as probes in subsequent interviews.

The subsequent ratings are made using a booklet made up of slips of paper. Each slip has only one of the symptoms

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Symptom ratings compared to admission

0 Completely remitted
1 Markedly improved
2 Moderately improved
3 Minimally improved
4 Unchanged
5 Minimally worsened
6 Moderately worsened
7 Markedly worsened

FIG. 1 Symptom change scale used for the PSE change rating.

rated positively for that patient typed on it and the slips of paper are in random order. The exception is behavioural observations (PSE items 108–139) which are presented at the end of the booklet when the rater will have observed the patient for the length of the interview. The rater is asked to rate each symptom separately using the obligatory questions and probes from the PSE schedule on a scale 7—markedly worsened to 0—completely remitted (see Fig. 1 for complete scale) *compared to the state of the patient at the initial PSE.*

The rater works through the booklet in the order given without returning to any symptoms. This eliminates the possibility of 'halo' effects (Hilgard *et al*, 1971)—the tendency to rate all related symptoms as better or worse together. When the booklet is completed it is returned to the secretariat so that 'carry-over' effects from one occasion of rating to the next are minimised i.e. the raters do not see their ratings again. Any new symptoms that appear (raters are asked to use general probes) are written on blank slips provided at the end of the booklet and are then included in the next rating booklet. When a symptom has been absent (score of 0—completely remitted) for 3 weeks it is omitted from the booklet.

Certain of the symptoms are not suitable for the increased frequency of assessment associated with a change score and these have been dropped or modified. They comprise symptoms 26 (primacy of anxiety or depression), 27 (diurnal variation of mood), 39 (pre-menstrual exacerbation), 93–97 (general ratings of delusions and hallucinations), 97–107 (organic psychiatric symptoms). Questions that specify a time period for the occurrence of the symptoms need to be changed to the time period since the last rating. The question for symptom 34 (loss of weight due to anorexia) has been modified to take appetite only into account.

In general the ratings, compared to the initial interview, take into account the frequency, severity and, in the case of psychotic symptoms, conviction (insight) and delusional elaboration. Although a symptom needs to reach a certain level of intensity or conviction to be rated as present on the initial PSE it would need to be totally absent to rate 0—completely remitted—on the change rating. This would often mean that a change rating of 1—markedly improved—would not be severe enough to be rated as present if a full PSE were done. Similarly a psychotic symptom, such as delusion, may no longer be present but, if the patient still believes it *was* happening, the symptom is not completely remitted and should be rated as 2—moderately improved, or 1—markedly improved, depending on the strength of conviction.

Examples of repeated ratings carried out on acute admission psychiatric patients

Five examples of ratings carried out on patients admitted to the research ward are given below. They represent a spectrum of diagnosis from acute-onset schizophrenia to prolonged neurotic depression. All patients had been unmedicated for at least 4 weeks prior to admission. In presenting the change ratings graphically each PSE item can be charted separately. In practice, we have found it most useful to present all psychotic symptoms combined, all neurotic symptoms combined, and then an amalgam of all symptoms (which can be seen in Fig. 2). This gives an overall picture of change.

Case A

This 23-year-old woman had suffered three previous psychotic episodes, each of which began abruptly and resolved within a week or so. She had been prescribed lithium, but was not taking it regularly. The present episode began a week before admission while the patient was holidaying abroad. She experienced auditory hallucinations and delusions of control, and exhibited histrionic and uninhibited behaviour. She was treated with haloperidol up to 6 mg twice daily. Her psychotic symptoms resolved within 2 weeks (see Fig. 2A).

Case B

This 35-year-old woman was admitted after a long period of gradual social decline. On examination she showed self-neglect, irrelevant speech and inappropriate laughter. She complained that people interfered with her thinking and put thoughts into her head. She also heard voices calling her. It was considered that she had been suffering from untreated schizophrenia for several years and she was prescribed oral haloperidol up to a dose of 24 mg twice daily. She showed some improvement and was then changed to injections of haloperidol decanoate, 300 mg every 4 weeks. Her clinical condition stabilised, but she developed uncontrollable akathisia. For this reason her medication was altered to fluphenazine decanoate, 100 mg weekly. Unexpectedly, her symptoms showed a further substantial improvement, which first became evident from the PSE Change Ratings (see Fig. 2B). She was eventually discharged to live with a foster family.

Case C

This 52-year-old man had experienced 17 previous admissions for manic-depressive psychosis. On this occasion he had been sleeping rough for several days and then spent 3 days with the Simon Community prior to admission. On examination he was elated, jocular, irreverent and overactive. He showed flight of ideas, pressure of speech and expressed grandiose delusions about writing a best-seller. He was treated with haloperidol up to a dose of 15 mg twice daily. Lithium was added after the second week, following which all his symptoms rapidly resolved (Fig. 2C).

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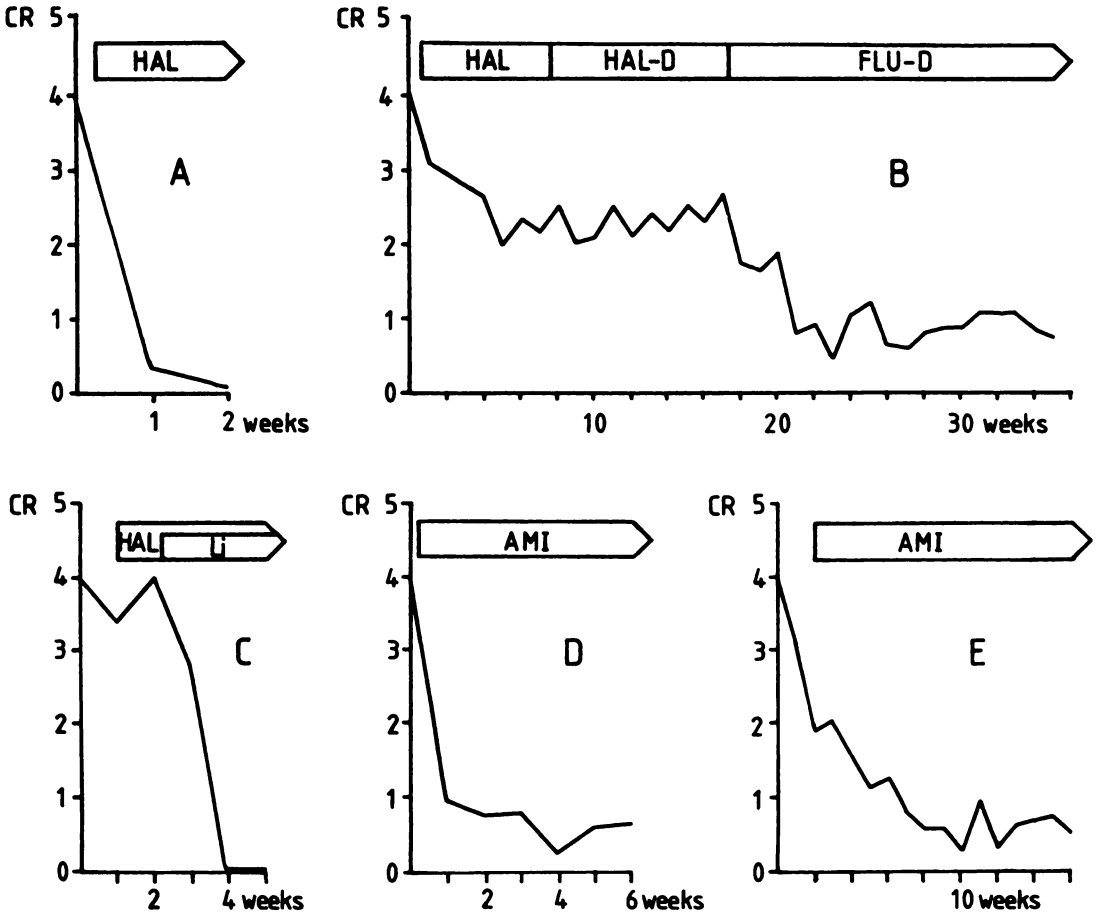


FIG. 2 Illustrations of the symptom change scores over time of cases A–E described in the text. The abscissa is the time in weeks from admission (week 0) and the ordinate is the mean clinical rating for all symptoms (CR). Medication is represented by the names above the graphs. HAL = Haloperidol (oral); HAL-D = Haloperidol Deconate (depot injection); FLU-D = Fluphenazine Deconate (depot injection); LI = Lithium carbonate (oral); AMI = Amitriptyline hydrochloride (oral).

Case D

This 44-year-old man was admitted following an attempt to hang himself. He was divorced and had not worked for 4 years. He had been living in a hostel for 3 months prior to admission. On examination he was depressed and tearful and expressed feelings of severe guilt. He heard people in the street talking about him. He also heard the sound of knives being sharpened at the hostel and believed that he was going to be killed. He was treated with amitriptyline, 150 mg nocte and the psychotic features resolved rapidly (see Fig. 2D), although he was left with persistent feelings of inadequacy.

Case E

This 56-year-old man was admitted with a prolonged bereavement reaction to his mother's death a year previously. He had lived with his parents all his life and never married. Following his mother's death he had moved into a flat of his own, but was completely isolated. He had been drinking excessively and gave a long history of compulsive gambling. He was treated with amitriptyline, 150 mg nocte and showed considerable improvement in his depressive symptoms (see Fig. 2E). However, he remained a very dependent person and continued gambling.

Experiment 1: Inter-rater reliability of the PSE Change Rating Scale

As with any instrument it is necessary to test the reliability of the rating procedure by comparing ratings made on the same patient by different, independent raters. In administering the PSE Change Rating Scale, as with the PSE itself,

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TABLE I
Psychiatric diagnosis, sex and age of the patients rated in Experiment 1

Patient no	*Sex*	*Age*	*CATEGO diagnosis*	*Clinical diagnosis*
1	M	21	S+	Schizophrenia
2	F	34	S+	Schizophrenia
3	M	42	S+	Schizophrenia
4	F	39	S+	Schizophrenia
5	M	35	P+	Schizophrenia
6	F	41	P+	Schizophrenia
7	F	33	P+	Schizophrenia
8	F	25	P+	Manic psychosis
9	F	62	M+	Manic psychosis
10	M	29	D+	Depressive psychosis
11	M	44	D+	Depressive psychosis
12	M	37	D+	Depressive psychosis
13	M	41	N+	Depressive neurosis
14	M	26	N+	Depressive neurosis

there are two independent skills involved. One is the actual interview technique and the other is the rating of the patient's replies and behaviour. As the interview technique was identical to that used with the PSE and all raters had been trained to the same standard for administering the interview, it was not thought necessary to check the reliability of this aspect of the procedure. It was decided, therefore, to have one rater interview the patient in the presence of three other raters and for all four to rate the patient independently and simultaneously. This allowed the inter-rater reliability to be calculated for the symptom change ratings.

Subjects

All subjects were psychiatric patients recently admitted to research beds on an acute admissions ward. None of the patients had received medication for at least 2 weeks prior to admission. Patients with a history of drug or alcohol dependence were excluded, as were those over 65 years of age and those suffering from dementia. Apart from these exclusions, the patients were 14 consecutive admissions, who gave consent to the procedures. Information about the patient sample is shown in Table I.

All patients were started on drug regimes after the initial diagnostic PSE and before the first measure of clinical change was made. All the psychotic patients except 2 and 11 were given haloperidol in standard doses, rising weekly until the patient was judged to be well. Patients 8 and 12 also received lithium, patients 10 and 12 received amitriptyline, patient 8 received chlorpromazine and patient 12 had a course of ECT. Patient 2 received only fluphenazine deconate and patients 11, 13 and 14 received only amitriptyline.

Raters

The raters were from varied backgrounds and with differing amounts of clinical experience. Three of the raters remained constant throughout the study but part way through the study one rater (the psychiatric registrar) was changed so that half the patients were rated by one registrar and the other half by the other registrar. Two of the raters were psychiatrists — one a consultant psychiatrist (A) working in psychiatric research and 17 years experience in using the PSE, the other a psychiatric registrar (B) with a few months experience with the PSE. The other two raters were both clinical psychologists — one a senior research psychologist (C) with 4 years' experience of the PSE and the other a basic grade psychologist (D) with 6 months' experience of the PSE. Neither of the two clinical psychologists was involved in the treatment of the patients and they only saw the patients at initial test and to rate them at weekly intervals. The two psychiatrists were involved in the daily care of the patients.

Procedure

Each patient was assessed using the 9th edition of the PSE within 48 hours of admission and before drug treatment was initiated. The initial PSE was carried out by one of the raters in the presence of the remaining three raters who rated the interview independently. At the end of the interview the raters came to a consensus on the symptoms that were present and these were the symptoms used for the ratings the following week. Ratings took place at weekly intervals following the initial PSE. Again, one rater interviewed and rated the patient, while three of the raters rated the patient. All four 'symptom booklets' contained the symptoms in the same random order, with the behavioural observations (PSE items 108–140) at the end. Occasionally, a rater was unable to attend a session and then the session was audio taped for her/him to rate as soon as possible after the interview. This resulted, occasionally, in lost data when behavioural items (other than those rated from speech) were rated. Each patient was rated for 4 weeks or until discharge or other factors made weekly testing impossible. All booklets were handed to a research assistant at the end of the interview. No rater saw the ratings from another rater until the end of the experiment, nor did they discuss their own ratings with each other.

Results

Four of the 14 patients were rated for only 2 weeks and two for 3 weeks. The remaining 8 patients were rated for 4 weeks. Two of the patients had no psychotic symptoms, one patient had no neurotic symptoms and one patient had no behavioural symptoms. The inter-rater reliabilities of the ratings were measured using the Intra-class Correlation Coefficient (unbiased estimator method) (Winer, 1971) and significance tested by the F statistic (Bartko & Carpenter, 1976). The results are shown in Table II.

The coefficients range from 0.75 to 0.99, with all but one of the 28 coefficients exceeding 0.8. All the F values in the table are significant beyond the 1% level.

This shows an extremely high degree of reliability between raters for these measures. The lowest reliabilities (although still statistically significant) are for the behavioural items. This result is consistent with the findings from studies of the PSE itself (summarised in Wing *et al*, 1974) which also

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TABLE II

Intra-class correlation coefficients of total symptom ratings and grouped symptom ratings for the four raters (r_4') in Experiment 1

	Week 1			Week 2			Week 3			Week 4		
Mean score	r_4'	*n*	*F*	r_4'	*n*	*F*	r_4'	*n*	*F*	r_4'	*n*	*F*
All symptoms	0.98	14	46.8	0.98	14	42.8	0.98	10	46.5	0.97	8	42.3
All psychotic symptoms[1]	0.98	12	62.8	0.97	12	36.3	0.97	8	34.9	0.87	6	8.8
All neurotic symptoms[2]	0.99	13	136.1	0.98	13	55.9	0.99	10	78.7	0.98	8	69.7
All behavioural symptoms[3]	0.75	11	4.2	0.91	11	11.3	0.84	7	6.8	0.91	6	12.3
All delusions[4]	0.96	12	73.1	0.98	12	46.0	0.97	8	42.1	0.87	6	8.7
All hallucinations[5]	0.98	9	43.2	0.94	9	17.1	0.83	6	6.6	0.93	3	19.7

1. Includes possible ratings of PSE symptoms 55–64, 66–81, 83–92
2. Includes possible ratings of PSE symptoms 4–25, 27–38, 40–54
3. Includes possible ratings of PSE symptoms 108–139
4. PSE symptoms rated in this group of patients 59, 71–81, 86–88, 91, 92
5. PSE symptoms rated in this group of patients 60–63, 68, 70.

found that the reliabilities for behavioural items were lower than for symptoms. Individual symptoms (where these symptoms were sufficiently common to occur in at least four patients) were also subjected to analysis by the Intra-Class Correlation Coefficient and the results are shown in Table III.

Again, the coefficients are high and range from 1.00 (complete accord) down to 0.70. All the *F* values are significant beyond the 1% probability level.

Pearson Product Moment Correlation Coefficients (Ferguson, 1976) were also calculated on the data to compare pairs of raters across the 4 weeks and with all the symptom subgroupings shown in Table III. The smallest range of *r* values was from 0.27 to 0.98 for delusions.

However, the majority (76%) of the correlations were above 0.80. Individual raters also followed this pattern — of the *r* values associated with each rater approximately 75% were above 0.80 (A = 74%; B = 79%; C = 80% and D = 73%). It is evident, that high levels of reliability were achieved, even by raters who had relatively little clinical experience.

Experiment 2: A comparison of the PSE Change Rating Scale with the standard PSE scoring method

The results of the previous two sections show clearly that the PSE Change Rating Scale measures clinical change in psychiatric patients and that it has high inter-rater reliability across symptom groupings. However, the introduction of

TABLE III

Intra-class correlation coefficients of individual symptom ratings for the four raters (r_4') in Experiment 1

	Week 1			Week 2			Week 3			Week 4		
Score	r_4'	*n*	*F*	r_4'	*n*	*F*	r_4'	*n*	*F*	r_4'	*n*	*F*
Symptom 20 (poor concentration)	0.85	7	7.5	0.97	7	39.4	0.99	5	82.0	0.89	3	11.8
Symptom 23 (depressed mood)	0.98	7	45.9	0.95	7	21.6	0.99	4	139.7	1.00	4	∞
Symptom 62[1] (voices talking about the pt.)	0.97	4	35.4	0.70	4	4.0	0.92	3	15.1	—	—	—
Symptom 72 (delusions of reference)	0.99	8	94.0	0.98	9	45.1	0.90	5	8.5	0.85	5	8.5
Symptom 131 (pressure of speech)	0.75	5	4.7	0.95	6	20.9	0.89	4	10.6	0.94	3	21.0

1. Insufficient data were available for performing the test at the 4th week for admission.

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TABLE IV
Psychiatric diagnosis, sex and age of additional patients rated in Experiment 2

Patient no.	*Sex*	*Age*	*CATEGO diagnosis*	*Clinical diagnosis*
15	M	31	S+	Schizophrenia
16	M	24	S+	Schizophrenia
17	M	20	S+	Schizophrenia
18	F	25	M+	Manic psychosis
19	F	32	D+	Depressive psychosis
20	F	21	N+	Neurotic depression
21	F	28	N+	Neurotic depression

the 0–7 scale might be an unnecessary complication (Kazdin, 1977) and the relative nature of the remission/relapse ratings might make cross-comparisons of clinical severity difficult. The existing scoring scheme for the PSE (0, 1, 2) is one way of overcoming these possible problems. Thus, it was planned to introduce the existing PSE scoring scheme in parallel with the PSE Rating Scale. In this experiment each patient, on each occasion, was rated by the same rater on the two different rating schemes.

Subjects

The criteria for selection of patients were the same as for experiment 1 and 13 of the patients in Experiment 1 were included in this experiment (patient 9 was not rated). A further seven patients were included making a group of 20 patients. Information about these seven patients is shown in Table IV. Patients 16, 17 and 18 received haloperidol, patient 19 received amitriptyline, patient 15 received diazepam, patient 20 received thioridazine, and patient 21 received dothiepin hydrochloride, and chlorpromazine.

Procedure

The patients were rated by the psychiatric registrars using the symptom booklets in the manner described above but also assigning a score on the existing PSE scale. Each patient was rated weekly—eight by one registrar and 12 by the other registrar. As in Experiment 1 each booklet was given in by the rater as soon as it had been completed.

Results

It became apparent during the course of this experiment that the raters experienced a great deal of difficulty in using the existing PSE scale to reflect the change that they observed. This was seen in the large percentage of symptoms that were not rated on this scale. Of the 90 rating sessions in only 40% were all symptoms on the existing PSE scale rated. In 15.5% of sessions more than 75% but fewer than 100% of symptoms were scored. In a further 15.5% of sessions between 50% and 75% of symptoms were rated and in 29% fewer than 50% of symptoms were rated.

The major problems occurred with those symptoms of the PSE in which the difference between a score of 1 and a score of 2 is a qualitative rather than a quantitative one. That is when an improvement in the patient would not necessarily be associated with a change score from 2 to 1.

In particular for the Schneiderian first-rank symptoms 56–58 and auditory hallucinations 60–64 and visual hallucinations 66 and 67 ratings of 1 and 2 indicate quite different symptoms. For example symptom 57 rates 1 for thought echo and 2 for thought commentary. Symptom 61 rates 1 for hearing single words, 2 for hearing voices based on depressed mood and 3 for voices based on elated mood.

The raters, although well aware of the criteria for rating symptoms on the PSE, found it extremely frustrating being unable to reflect the changes they saw in the symptoms (which is what they had been asked to do) so, instead of marking a symptom absent (by PSE criteria) when it was still present (by PSECRS criteria) they did not rate the symptom by PSE criteria. They also commented on the fact that, when a symptom was originally rated 2 on the PSE criteria there was no way of registering a worsening of the symptom.

Discussion

The difficulty of the raters in using the standard PSE to assess clinical change over short periods of time reflects the fact that its primary purpose was to standardise the cross-sectional examination of the mental state. The clinical examples given demonstrate that its modification has rendered it sensitive to change. The PSE Change Rating Scale was constructed *using psychometric principles* to reduce any possibility of 'halo effects' to a minimum and to avoid the possibility of 'carry-over' effects from one occasion of testing to the next. We have found the inter-rater reliability to be extremely high overall, regardless of the length of clinical experience of the rater. The lowest reliabilities were found for the behavioural items, as with the standard PSE.

A disadvantage of this scale is that, by restricting questioning to symptoms that were present at the original interview, new symptoms might be missed. In practice, with a newly admitted acute psychiatric population, new symptoms seem to be rare. However, this certainly would be a problem with a more chronic population. Supplementary questions could be devised for these populations based on symptoms known to have been present in the past (from notes) or on observation from ward staff. Indeed, this latter source is also available for acute populations and was made use of for probes in this study.

We have found it useful to analyse the data generated by this new instrument as psychotic symptoms, neurotic symptoms, and total symptoms. However, the scores may be displayed for any group of symptoms of interest, or even for individual items.

The assessment of symptom change over short periods of time is essential for the evaluation of any psychiatric treatment, whether pharmacological or

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social in nature. We have shown the modified PSE to be sensitive to change, easy to use by trained raters, and reliable across diagnostic groups.

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References

ÅSBERG, M., PERRIS, C., SCHALLING, D. & SEDVALL, G. (1978) The CPRS — Development and applications of a psychiatric rating scale. *Acta Psychiatrica Scandinavica* (Suppl.) **271**, Copenhagen: Munksgaard.

BARTKO, J. J. & CARPENTER, W. T. (1976) On the methods and theory of reliability. *Journal of Nervous & Mental Diseases*, **163**, 307–317.

FERGUSON, G. A. (1976) *Statistical Analysis in Psychology and Education*, 4th ed. New York: McGraw-Hill Book Company.

HILGARD, E. R., ATKINSON, R. C. & ATKINSON, R. L. (1971) *Introduction to Psychology*, 5th ed. New York: Harcourt, Brace, Jovanovich.

KAZDIN, A. E. (1977) Artefact, bias and complexity of assessment: The ABCs of reliability. *Journal of Applied Behaviour Analysis*, **10**, 141–150.

LORR, M. & KLETT, C. J. (1967) *Inpatient Multidimensional Psychiatric Scale: IMPS* (revised manual) Palo Alto, California: Consulting Psychologists Press.

MANCHANDA, R. & HIRSCH, S. R. (1986) Psychopharmacological Research in schizophrenia. 1. Review of Rating Scales. In *The Psychopharmacology and Treatment of Schizophrenia*. (eds P. B. Bradley & S. R. Hirsch). New York, Oxford: Oxford University Press.

OVERALL, J. E. & GORHAM, D. R. (1962) The Brief Psychiatric Rating Scale, *Psychological Reports*, **10**, 799–812.

WINER, B. J. (1971) *Statistical Principles in Experimental Design*, 2nd ed. Kogakusha, Tokyo: McGraw-Hill.

WING, J. K., COOPER, J. E. & SARTORIUS, N. (1974) *The Measurement and Classification of Psychiatric Symptoms*, Cambridge: Cambridge University Press.

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