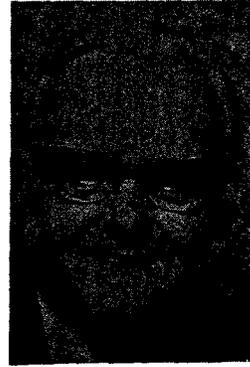


# Treatment, Diagnosis, and Psychological Tests

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We are often told today that we should avoid labeling people as schizophrenic or, indeed, as suffering from any other psychiatric illnesses. Those who support this vision seem to believe in some negative kind of magic which resembles that of the ostrich who, they say, buries his head in the sand in order not to perceive his pursuer. I believe there is no solid foundation for the ostrich story; alas, the psychiatric story is only too true. One only has to look at the newspapers to see some of the consequences of not diagnosing well and not diagnosing early. According to the **New York Times** of Saturday, May 25th, 1974, a polite, soft-spoken young man with no apparent inclination to violence recently hijacked a helicopter demanding a modest \$2 million in ransom for the Jewish Defense League. The League said later it had never heard of Mr. Kanalko. This young man is the son of a professor of social work who has always lived at home, has not attended college, seems to be something of a recluse, and his occupation is that of an unemployed gardener.

I don't think it is labeling him to suggest that he may very well be suffering from a mental illness and, in



view of his age, the odds are that he has a schizophrenic illness. The consequences of not diagnosing that illness early enough are likely to be very serious for him. Schizophrenia in a 22-year-old picked up early is eminently treatable. Seeing that even the permissive society tends to take the hijacking of a helicopter combined with the taking of two hostages seriously, I would guess that Mr. Kanalko will spend many months and possibly some years in a criminal mental hospital such as Mateawan in New York State, which is not a pleasant fate.

The next day the same paper tells an account of Mr. Ian Bull, age 26, who was sentenced to a mental institution "without limit of time," after pleading guilty to trying to kidnap Princess Anne, murdering two police officers, and wounding two other men in a dramatic shoot-out on March 20th, on the Mall, a few hundred yards from Buckingham Palace. He had also demanded a \$7.2 million ransom and full pardon for any crimes committed by himself, from parking offences to murder, with full further pardon for any currency offenses deriving from the ransom. His motives were apparently to improve mental health services in Britain, but also to make himself more interesting to girls. He was known to be mentally ill, heard

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voices, thought about suicide, but also felt that this escapade might help to solve his problems. Indeed, in a way it has, for he will certainly get prolonged medical attention for years to come. It seems a pity, however, that when he first reported sick in 1967 and again in 1969 it was not possible to make a more exact assessment of his condition.

Anyone who reads the newspapers can come across cases of this kind. They come to our attention simply because they are so melodramatic and, for every one of them, there are probably hundreds or thousands of people who struggle on, battered by schizophrenia, but not yet diagnosed.

To the question, "Why diagnose?", the answer is that without diagnosis it is very difficult to give the distressed persons the full benefits and support of the sick role and to induct them into it so that they will undertake their duties and be given their rights as regards to treatment in an appropriate manner.

Miriam Siegler and I have discussed this at considerable length in our book, **Models of Madness: Models of Medicine** (1974). Schizophrenic patients are particularly liable not to get the sick role. For some of them, as these two anecdotes show, this may result in strange, unpredictable, and dangerous behavior. It must be emphasized that grave and dramatic violence is unusual; far more often the sick person, the family, and friends are exposed to months or even years of undramatic, unnecessary, invisible, but corrosive suffering. How then do we diagnose? Clinical observation, noting the patient's behavior, listening to what they say, making intelligent inquiries into their story, and noting the nature of their thinking, mood, and perception. Unfortunately, due to the muddling influence of Eugene Bleuler who coined the term "schizophrenia," too little attention has been paid to perception in recent years, and many vain attempts have been made to discover the special characteristic features of thinking, said by Bleuler to be pathognomonic of schizophrenia. It should be noted that

Bleuler never produced any compelling evidence that what he believed was the primary disturbance in schizophrenia was a disjunction of feeling and thinking which preceded in his view the perceptual changes. It seems that we were expected to take this insight of his for granted. The clinical diagnosis of schizophrenia is fairly accurate, and in clear-cut cases there is a considerable agreement among psychiatrists the world over. In unusual and borderline cases, as in other illnesses, agreement is less. This should hardly surprise us—some years back a study of x-rays showed that there were profound disagreements among competent radiologists as to how one might interpret standard x-ray plates. What equivalent of x-ray plates has psychiatry got?

I shall not discuss the matters of chemical diagnosis of which you will be hearing in this meeting from those who are far more competent than I to do so. Regarding psychological testing, however, I have some personal knowledge arising from my long collaboration with Abram Hoffer.

During the early 1950's, it was evident to us that psychiatry was unfortunate in having few simple, formal tests which were in general use, which were understood by people in many disciplines, and whose value and worth were widely accepted. This was a misfortune. One only has to imagine attempting to practice clinical medicine without a thermometer, a timed quantitative pulse, a blood-pressure apparatus, and a stethoscope. When one has these three quantitative and one qualitative measures combined with history-taking, careful observation of the patient's immediate condition, and a complete physical examination, many useful conclusions can be reached. Lacking such instruments, psychiatry was in much the same position as internal medicine about 1840 which, as Sir Charles Newman, the historian of medical education, noted, was unsatisfactory.

Abram Hoffer and I developed this test because, after an exhaustive survey of the literature, followed by a series of expensive controlled studies of the most promising tests available, lasting from 1957-60, conducted by colleagues of highest competence with wide knowledge of the testing field, we discovered that the tests available which were thought to be the best then in use had little scientific and almost no clinical value. Those tests were the Rorschach test, the MMPI, the Thematic Apperception Test, and the Cattell Indices. Our colleagues had placed especially high hopes on the last since the results of their library research suggested that the other tests were not likely to be useful. It was a great disappointment, then, when we discovered that the Cattell Indices seemed no more useful than the other tests for the purposes which we had in mind, which were to further our plans for both scientific and clinical research, especially in schizophrenia and psychotomimetic substances.

For some years before this, we had discussed the possibility of producing a test based upon our own view of schizophrenia but, since we believed that our colleagues would have resolved the matter before we could develop a suitable instrument, we had done nothing about it. When we discovered that there was no prospect of their doing so, we decided to construct a preliminary test to show that our approach was likely to be of value to those who wish to quantify mental illnesses for clinical or scientific investigations. We knew what we wanted: good acceptance by patients, speed, reliability combined with the capacity to yield information which had some understandable relationship to the patient's clinical condition. An obvious weakness of the Rorschach and the MMPI lies in the fact that if you ask the psychologists or psychiatrists who use them what the findings mean in the patient's everyday life, you frequently get a dusty answer. Because of this, it is difficult to sit down with patients and interpret their Rorschach or MMPI in terms

of everyday living. Indeed, so far as I know, the experts in this field have largely avoided doing anything so vulgar for fear that it would contaminate their tests. But medicine is a vulgar business, and one cannot avoid destroying scientific purity from time to time.

To construct our test, we used our knowledge of narratives written by mentally ill people of which with Robert Sommer (1960) we have made one of the first systematic studies (see MacDonald 1960; Osmond and Hoffer, 1958; and Schreber, 1955). We took advantage of Weckowicz' work on constancy of perception in the mentally ill, drew on our own extensive work with the hallucinogens (Osmond, 1957; Hoffer and Osmond, 1967) and combined this with our belief derived from clinical experience that those mentally ill patients wanted desperately to tell us what is wrong with them and, given a chance to do so, would be only too glad to help us to understand their experiences. When the HOD was completed, it differed from any other tests which we had seen because it was aimed in a very different direction. Its aim was at the patient's *umwelt*, the experiential world of the mentally ill; had we been mistaken, so crude a test could not possibly have competed with, let alone excelled, the many elegant and carefully designed instruments which then existed. This does not **prove** that our aim was correct, for we might have hit a bull's eye in spite of ourselves. Nevertheless, the fact that the HOD has been successful in both clinical and scientific investigations strongly suggests that our aim was good.

It was not our original intention to publish the HOD for it was to be a spur or stimulus to our psychologist colleagues who, with their greater technical skill, would, we believed, produce something to be far better once they recognized that our crude instrument was revealing so much. However, when those colleagues,

with a few notable exceptions, saw the test, they showed no enthusiasm for it and had not the slightest intention of developing something better. Meanwhile, we decided that since it seemed better than the tests available, we would after all publish it. Since that publication, as Harold Kelm, Abram Hoffer, and I show in a forthcoming book, it has proved itself to be very useful and has stimulated our friend Moneim El-Meligi (1967, 1969, 1970, 1971) to produce a far more elegant test which has greater capability.

One might ask, then, why keep the HOD? It is handy, reliable, simple, well received by patients, it gives a rough and ready picture of the patient's experience, and takes only a short time to administer and score. In addition, as we show in the book, by employing various simple maneuvers it can be used to show whether the patient, when first seen, is at the very worst which he has ever endured or not. This can be a most important and sometimes life-saving piece of information. Moneim El-Meligi once said of the HOD, "It is the ideal test for psychiatrists to use in their own offices, but we psychologists need something more complex and elegant." This is a high compliment to our initial effort, and we are in general agreement with Dr. El-Meligi.

The HOD consists of 145 cards which can be rated True or False—there is no intermediate position. With the test goes a necessary score form, keys, manuals, etc. It takes most patients, even very ill ones, no more than 15 minutes to do the test. One has to explain that since this is **not** an intelligence test, there are no correct answers. There is no time limit. I usually tell patients that this is a window into their experience which, if they choose to let me look in, will increase our joint understanding of their affairs. Very few patients refuse, and few fake. I always ask the patient to do the test as they feel **now**.

### I The First Use of the HOD

This is to give us a rough map of our patient's current condition *now*. Scoring takes 5-10 minutes depending on the detail one requires and the skill of the scorer.

A. **The Total Score** gives one a quick though rough and ready assess

ment of the patient's current condition; anything over 40 in adults is suspicious, and scores over 50 always call for careful scrutiny.

- B. **The Depression Score** with a ceiling of 18 gives one a clear and frequently surprising insight into the patient's affective state.
- C. **The Ratio Score** (Total Score divided by Depression Score) is frequently associated with schizophrenia if over 5.
- D. **The Paranoid Score** with a ceiling of 15 is valuable in deciding just how suspicious the patient may currently be.
- E. **Perceptual Scores and Subscores** give much valuable information about the patient's experiences.
- F. **Cards 82-101** show the degree to which formal thinking is intact. The highest score is 15; scores below 5 suggest well-preserved thinking.
- G. **The Special Cards** - 76 shows the presence of insight, when true. 106, 107 suggest severe depression. 131, 145 suggest failure in self perception. 143 shows belief that others hate the testee. It is evident that if card 76 is scored **false** and the others are scored true, suicide should be inquired into.

If 76 is scored false, 143 True, and the paranoid score is high - say 8 or over- one might be well advised to inquire about homicide. The first use of the test is to give one a rapid simplified "map" of the patient's current experience.

### II Retrospective Use At or Before Initial Interview

I frequently have a second HOD set on hand, and while I'm scoring the first I ask the patient to do this test "as if you were at your very worst." Most set to with

zeal; I am thus able in about half an hour not only to gauge the patient's *present* condition but to relate it to his illness more generally. This is often vitally important.

### III Who Can Give the Test?

- A. Psychiatrist
- B. Psychologist
- C. Nurse, technician, attendant, or aide
- D. Secretary
- E. Social Worker
- F. Family Member

### Who Can Score the Test?

At a pinch, any of the above. In my experience, nurses and a secretary are very adept.

### Who Can Assess the Test?

Any professional person can learn to assess the results within the limits of their expertise. I mean by this that while a psychiatrist and a psychologist would most usefully relate the findings to diagnostic and prognostic categories, it seems likely that nurses would be better able to note their relevance to ward behavior and social worker to home and employment behavior.

NB: It should be noted that outside psychiatry a number of general practitioners and internists find the HOD of much use in their practices. They score the test themselves and use it as a basis for referral.

### IV. The HOD and Diagnosis

Several studies have already shown that the HOD is a useful and rapid diagnostic instrument. Dr. Hawkins' study suggests that its diagnosis approximates more closely more often to the final diagnosis than the diagnosis at the first interview. Speed of diagnosis is often as important as accuracy, so that when the two can be combined economically great advantage accrues to everyone.

### V. Measuring Response to Treatment

Several studies have shown that the HOD is an effective way of measuring response to treatment. In patients who have either been discharged from hospital to become outpatients or have never been in hospital, it is often possible to head off relapse

or detect failure to use medication by means of the HOD. Unfavorable as well as favorable responses are shown well.

### VI. Prognosis

Since the amount of improvement obtained from a particular treatment sustained for a particular length of time can be very easily measured with the HOD, it becomes possible to extrapolate from several HOD findings towards normal scores. For instance, if someone has a HOD score of 100 which after three months has dropped to 70, it becomes reasonable to predict that if the patient continues to follow his physician's advice, he will be very nearly well in another six to nine months. This encourages the patient to continue with treatment and may, itself, speed recovery. Other studies have shown that patients who leave hospital with unstable perception, however cheerful they and their relatives may feel, are far more likely to return to hospital within the next year. The patient who knows how far he or she is recovered and what dangers still exist is far more likely to be prudent and continue treatment than one who does not.

### VII The HOD and the Family

The HOD can play an invaluable part in letting the patient's family know just how ill he or she has been. The fact that the illness has been "measured" and is known to be a "real" illness frequently results in far better cooperation from family members than those sermons and admonitions which our colleagues choose to indulge in. The family are much more likely to heed professional advice when they are sure that they are up against a "real" and not an "imaginary" illness. One hallmark of a real illness is that it can be measured.

Of particular importance today, when many professionals follow theories which involve accusations of a harsh kind against family members, is to see how many of them are in fact themselves ill. The HOD can be used very conveniently

to do just this. Puzzling cases where spouses claim that the other is psychotic can often very quickly be resolved, with great benefit to everyone involved and at modest expense.

When progress is occurring slowly, family morale can be maintained by showing that it is occurring at all.

### VIII HOD And Counselling

Two recent papers have shown that in school and other counselling the HOD can be very helpful in assisting counsellors to seek psychiatric advice early rather than late. Much time can be expended and efforts wasted "counselling" those who require immediate psychiatric treatment. Thus counselled and counsellors alike are saved much anguish and disappointment.

I shall not go into further details here. We deal with it at some length in our book, and my intention is simply to show that the HOD is a useful clinical instrument for everyday work under a variety of conditions. It has many uses. It allows one to inform the patient, the family, employers, and those who are likely to be in contact with the patient about the consequences of a very strange illness. We have found that discussions of schizophrenia, using information gathered from the HOD, makes sense to the public at large and can be transmitted effectively by the communications media.

There are many different levels at which these changes in perception and affect can be viewed, but today, when there is so much emphasis on the need for interdisciplinary communication and upon mutual respect deriving from that communication, it becomes essential for those involved in both the treatment and care of patients to have some agreed basis upon which they can conduct their discussions and so act appropriately. Unfortunately, there is often very little interdisciplinary agreement regarding patients' problems, and even when people of the same discipline talk together about patients, the formulations or models in general use today are so disparate, as Miriam Siegler and I (1974) have

shown, that such discussion is far from being symbiotic meetings of minds in which increasing clarity leads to growing consensus and is instead more often like the Tower of Babel, or acquires the inconsequentiality of the Mad Hatter's Tea Party. The HOD focuses our attention on the patients' experience and upon the anguish and agony of a distorted world which they are enduring, often with the greatest courage, and which usually seems quite incommunicable to most of them.

From the HOD my friend Dr. Moneim El-Meligi developed the Experiential World Inventory (1970). Both tests derive from a general notion that human experience is quantifiable and can be used for diagnosing certain illnesses. Nevertheless, there are theoretical differences between them. The authors of the HOD were making a test for medical use; in consequence, it is almost as valuable to internists and general practitioners as to psychiatrists. It can be helpful to psychologists, even very skilled ones, when time is short and many patients have to be seen. It is an admirable instrument for selecting a small number of patients for more complicated testing. Initial screening with the HOD is a sensible way to save time and insure the psychologists' special and costly skills are put to the best possible use. The EWI, on the other hand, was designed within a psychological framework and is not necessarily limited or committed to medicine.

Neither, however, is it in conflict with medicine. The patients' symptoms are seen within a wider conceptual framework which could include personality rather than pathology and might generate hypotheses for future extensions of the EWI aimed at studying normal experience. The authors of the HOD never intended that it should become an instrument for the study of normal personality. Indeed, they have always denied this, unequivocally. This deliberate limitation enhances the value of the handy test by preventing its users from

being distracted away from the pathology into personality theory, something which has frequently happened and which can be seen in the peculiar fate of the MMPI.

At the time of writing, the EWI has no less than 12 scales, the eight original ones being sensory perception, time perception, body perception, self perception, perception of others, ideation, dysphoria, and impulse regulation. Four further scales have been introduced more recently, these being concerned with overstimulation, understimulation, euphoria, and aphoria. Altogether there are a total of 400 true or false statements. These are broken down into two equivalent parts of 200 questions each. Because of the high correlation between the two parts of the test, only 200 questions need be asked on most occasions. The entire EWI answer sheet can be filled out unsupervised by the patient, usually in a matter of 45 minutes to an hour.

The French version of the test has been used extensively in Quebec, thanks to the splendid efforts of Father Guy Bonneau. In the near future, a French manual will be printed which has added much new material to the earlier manual. Father Bonneau's (1971) massive cross-cultural study, which involves some 14,000 young persons, strongly suggests that schizophrenia manifests itself very similarly in French Canada, in English Canada, and in the neighboring United States. Spanish, Portuguese, and German versions of the EWI exist. The German version indicates that Germans suffering from schizophrenia are not very different from Canadians and Americans. This is of theoretical importance for it suggests that we are dealing with a condition which is little influenced by language or culture.

What may we expect of future developments? We must I think aim at relating experiential tests such as the HOD and EWI with highly objective tests such as Norman Walker's Zita which allows one to quantify psychomotor performances in a very exact manner which can then be computed and read. The experiential tests and the psycholo-

gical tests can then be related to the clinical and neurophysiological tests which have already been done so elegantly by Dr. Carl Pfeiffer and his colleagues (1969, 1970). In this way, we may hope to produce a much higher level of diagnostic accuracy with consequent better treatment and a better prognosis. In a later paper I shall show that the HOD and particularly the EWI have many applications in developing and guiding psychotherapy in schizophrenia. Freud and Paul Federn were not mistaken in supposing that "uncovering" therapy rarely helps schizophrenics. Our evidence supports Freud and Federn, whose findings simply confirm the earlier observations of those who used the moral treatment during the 1840's. It is hardly surprising that psychotherapy, whether undertaken with single patients or in groups, is an uncertain business when the ill people are the victims of unknown and unpredictable malperceptions. One would suppose that this might do just as much harm as good unless the psychotherapist has a very clear idea as to what kinds of perceptual disorders are distressing particular patients and how they are being affected by these symptoms.

The effort to employ psychotherapy with schizophrenic patients has been prodigious. This is a tribute to extraordinary persistence. However, since psychotherapy has as its basis a learned relationship involving a greater understanding by the ill person of what is real and what is not, it is difficult to believe that much useful information will be learned when the learner's perceptions are already distorted. Unless the psychotherapist is acutely aware not only of the distortions but of their psychological and social consequences, little good will have come of efforts, however devoted. It is of some interest that psychotherapies which seem to be least harmful to schizophrenics have

emphasized the simple realities and actualities of the world. The moral treatment which was in wide use from the 1830's to the 1880's was among the most successful. It dealt with encouraging good behavior of the sick by giving them the sick role, teaching them about their illness, and relating to them in an appropriate and kindly way. The currently fashionable behavior therapy uses an updated version of this approach and, when it is employed well and humanely by such practitioners as Dr. Theodore Ayllon or Dr. Frances Cheek, has much the same kind of success as was attributed to the moral treatment.

It appears both from the writings of the mortally ill and from discussions with them after recovering that at least some people who have suffered grave malperceptions do indeed require psychotherapy after their perceptions have been stabilized. Once stabilization has occurred, psychotherapy can be directed intelligently, is much more effective, and does not take as long as when perceptions are unstable. Those who undertake the psychotherapy with schizophrenic patients using the HOD and the EWI are likely to develop, simply through discussing the patients' experience with them, an excellent rapport. The reason for this is not difficult to understand. It was put succinctly some time ago by a patient, a member of Schizophrenics Anonymous who, when discussing the value of the HOD at a public meeting, stated that, "When I first took the test and looked at the cards, then I knew that the s.o.b. s who made it knew something about my illness."

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