Advanc.psychosomat.Med. 1, 219-222 (1960). LSD 784

(Symposium of the 4th European Conference on Psychosomatic Research, Hamburg, April 1959)

When we found an objective criterion for the degree of symptoms under L.S.D., we tried to predict the individual differences. We used the scores of 10 objective tests, administered during pre-testing, as predictors. 3 of them were neuroticism-, 2 psychoticism-, 2 introversion-extraversion-, 2 intelligence-tests and 1 level of aspiration test. Our objective criterion, the performance on the F.R.T. during L.S.D., was by none of the 10 tests predicted beyond chance expectation. Contrary to the *nature* of symptoms we could not predict the *degree* of symptoms by means of objective tests.

Author's address: Dr. J.T. Barendregt, Psychologisch Laboratorium der Universiteit van *Amsterdam* (Netherlands).

van Lennep, J.E.: Performance on some projective tests under LSD-25. Adv. Psychosom. Med. vol. 1, pp. 219–222. (Karger, Basel/New York 1960).

Performance on Some Projective Tests under LSD-25

J.E. van Lennep, Amsterdam

The tests used in Mr. van Ree's LSD-experiment, included several projective tests: these were the Zulliger, which is an abreviated Rorschach-test; further: drawing-tests, that is to say the Three Tree Test, the Drawing of the Human Figure and the Drawing of a House, and finally the Four Picture Test.

The subjects were tested in their normal state and about a fortnight later, after taking the LSD.

Among the many things we have investigated, we tried to discover criteria for the classification of our subjects on the introversion-extraversion continuum.

The results achieved have not been very satisfactory yet, in my view because the criteria were not sufficiently sharply defined and consequently left too much room for subjective interpretation by the evaluator.

But, as Mr. van Ree has already told you, the classification in introverts and extraverts and consequently the prediction of the *kind* of disturbance the subjects were likely to acquire, was achieved by other means, notably by objective tests.

For predicting the *degree* of disturbance, the objective tests were of *no* avail, as DR. BARENDREGT has pointed out. Consequently I intend to talk to you about the contribution that projective methods have made in this respect, especially the Three Tree Test and the Four Picture Test.

The Three Tree Test is an elaboration of KOCH's Tree Test. Instead of having to draw one tree, the subjects are asked to draw first a tree, e.g. a fruit tree, after which they have to draw a fantasy tree and finally a dreamtree.

In the FPT, as you may know, the subject is asked to combine four different pictures, which lend themselves to various interpretations, into one story.

In our clinical experience with the Three Tree Test, we have found several pathological signs in the treedrawings of psychiatric patients. I have treated some of these in my book on the pathological aspects of the Three Tree Test, published last year.

We take the following signs to be pathological; Trees without roots, loosely constructed trees, marked leaning of the trunk to left or right, especially when it occurs more than once, unusual position on the paper, e.g. the upper left corner; an impulsive, rash way of drawing, indefinite shape of the tree and poor elaboration, bizar shape, abnormally large or small trees; and insufficient regard for the instructions given. Of course, if several of these signs occur together, it points to a more serious condition.

As these signs are a mean of distinguishing between normal persons and psychiatric patients, we cannot expect to find them in the same gross form and quantity in the drawings made by the LSD-subjects in their normal state. However, the symptoms mentioned might occur in a minor form and this could be interpreted as an indication that these subjects are less stable and more vulnerable than others who do not show these signs in their drawings and consequently they may be more liable to become disturbed under the influence of LSD.

Investigation of the treedrawings of our 21 subjects in their normal state, proved that several drawings showed one or more of the signs mentioned above, whereas the others did not. We have submitted these drawings to an evaluator asking him to award a point whenever one of the indications mentioned above, occurred in the drawings. This might enable us to arrive at a grading, that would tally with the psychiatrists clinical evaluation.

It appeared that of the 12 subjects who according to the clinical diagnosis were severely disturbed, 8 subjects scored three or more points and that of one subject it was dubious whether 2 or 3 points should have been scored. Of the remaining 9 subjects who according to the psychiatrist were only slightly disturbed or were borderline cases, 7 were awarded only one or no points.

Although these were rather promising results our criteria did not, however, enable us to arrive at a distinction between the mildly disturbed and the borderline cases, let alone any subtler distinctions. Other criteria may perhaps be found for this.

In reading and interpreting the FPT-stories of our subjects, in their normal condition, I was struck by the different ways in which the chief characters in the stories solved their problems. The one gets the better of his difficulties in some way or other, the other, on the contrary, does not know how to tackle them, is defeated or runs away from them altogether.

A striking contrast was afforded, for example, by two stories, on the same theme: namely a row with the boss. In the one story the boss, whom the subject despises, falsely accuses him. But instead of his being upset, a plan fostered for some time, suddenly matures. "Now he knows for certain. He will quit and start on his own, even if this is a somewhat risky undertaking. Therefore, even in the heat of the argument, while the boss is covering him with abuses, he feels a liberated man." The subject who wrote this story was only moderately affected by the LSD.

In the other subject's story, the chief character abused the boss and was dismissed on the spot. What was he to do? His wife on hearing the bad news, left him of course. Fleeing from his deserted and chilly home, he roams the streets aimlessly and gets drenched in the rain. Soon this will be the end of him.

The subject who wrote this story was severely affected by the drug.

Taking these and a few other stories as guides, I arrived at the following hypothesis:

People who in their FPT-stories show a certain amount of character, which enables them to tackle life's problems and adversities, or have sublimated their problems, are less liable to become severely disturbed under the influence of LSD .These form group *A*.

Those who in their stories run away from their problems, put too great a distance between themselves and their problems, or are too much involved and consequently harassed by them, being unable to find a sensible solution, are liable to get severely disturbed under the influence of LSD. These form group *B*.

An evaluator was asked to sort the stories into these two groups.

Of the 12 subjects who according to the psychiatrist were severely disturbed, the evaluator placed 9 in group *B*. He placed none of those who were only slightly affected, according to the psychiatrist evaluation, in group *B*. As with the tree drawings the evaluator, however, did not succeed in distinguishing between the subjects who were moderately affected by the drug and those who were mildly disturbed.

All the same the results were significant, at least as far as the investigation has gone. For my hypothesis was an "ad hoc" hypothesis, which will require crossvalidation. This we are hoping to achieve with our next twenty subjects for the Four Picture Test and for the Three Tree Test as well.

Author's address: DR. J. E. VAN LENNEP, Wilhelmina-Gasthuis, *Amsterdam* (Netherlands).