

Responses of Psychotic Patients to the Thurstone Personality Schedule before and after Metrazol Treatment

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This research¹ took place at the Missouri State Hospital for the Insane at Nevada, Missouri, during the summer of 1938. The purpose of the investigation was to see how psychotic patients would respond to the Thurstone personality schedule before and after receiving the metrazol shock treatment.

Because of the short period of time available, the investigation was limited to 26 patients, 12 males and 14 females, ranging from 17 to 52 years of age. According to the hospital classifications, 21 were schizophrenes (12 hebephrenics, 4 paranoids, 3 simplex, and 2 catatonic); 4 were manic-depressives (2 depressed and 2 maniacal); and one was a case of involuntional melancholia. All 26 had been admitted to the hospital since 1930, and half of them had been admitted in 1938.

Before beginning the metrazol treatments 11 of these patients gave "yes", "no", or "doubtful" responses to the questionnaire. The remaining 15 patients were either unwilling or unable to cooperate. Metrazol was given on an average of twice a week for an indefinite period, depending upon the progress of the patient. The initial amount of 2.5 cc. for females and 5 cc. for males was increased from time to time so that each successive injection would produce the so-called "shock" or "convulsion."

The answers to the questionnaire were scored according to the Thurstone scoring system and also according to the method devised by Dr. E. S. Conklin of Indiana University.² With Dr. Conklin's scoring device an abnormal, a psychotic, and a schizoid score were obtained for each personality schedule.

There were only five patients who cooperated by giving "yes", "no", or "doubtful" answers both before and after receiving metrazol. Their Thurstone scores ranged from 39 to 117 with an average score of 81.6 before metrazol and from 42 to 153 with an average score of 82.4 after metrazol. Their abnormal scores (which, for 100 college students, averaged 7.45) ranged from 11 to 26 with an average score of 22.4 before metrazol and from 9 to 38 with an average score of 19.2 after metrazol. Their psychotic scores (which, for 100 college students, averaged 5.18) ranged from 6 to 13 with an average score of 8.6 before metrazol and from 1 to 15 with an average score of 7.4 after metrazol. Their schizoid scores (which, for 100 college students, averaged 3.93) ranged from 3 to 11 with an average score of 6.6 before metrazol and from 1 to 17 with an average score of 7.8 after metrazol. The number

¹ This research was suggested by Dr. E. S. Conklin, Indiana University.

² Conklin, E. S., 1937. Three diagnostic scorings for the Thurstone personality schedule. Indiana Univ. Publ., Sci. Ser. 6.

of metrazol treatments ranged from 6 to 13 with an average of 10.4. Of these five patients, one, a hebephrene, showed definite improvement; two, a hebephrene and a simple type, remained unchanged; and two, a hebephrene and a paranoid type, became definitely worse. These observations were corroborated by the hospital staff, with one exception, a 22 year old girl classified as schizophrenia, simple type, who showed some improvement although her scores indicated no change in her condition.

Six patients gave "yes", "no", or "doubtful" answers before receiving metrazol but were unwilling or unable to cooperate after receiving the treatment. Their Thurstone scores ranged from 36 to 131 with an average score of 88; their abnormal scores ranged from 9 to 33 with an average score of 23.8; their psychotic scores ranged from 3 to 13 with an average score of 9.5; and their schizoid scores ranged from 3 to 13 with an average score of 10. The number of metrazol treatments ranged from 10 to 19 with an average of 13.1. All six (two hebephrenes, one paranoid type, one simple type, one depressed, and one maniacal) became worse during the series of treatments. One of them, a 34-year-old male classified as schizophrenia, paranoid type, had been admitted to the hospital in 1934 and since then had received a series of 53 insulin treatments. He also had received a series of 10 metrazol treatments during the spring of 1938. During the present metrazol series his condition became much worse. These observations were all corroborated by the hospital staff.

Twelve patients were unwilling or unable to cooperate before receiving metrazol but gave "yes", "no", or "doubtful" responses to the questionnaire after the treatment. Their Thurstone scores, which it must be remembered were obtained only after metrazol treatments, ranged from 13 to 106 with an average of 50.4. Their abnormal scores ranged from 5 to 26 with an average of 12.0. Their psychotic scores ranged from 1 to 13 with an average of 7.0, and their schizoid scores ranged from 2 to 10 with an average of 5.3. The number of metrazol treatments ranged from 5 to 21 with an average of 11.5. All twelve of these patients (five hebephrenes, two paranoids, two catatonics, one depressed, one maniacal, and one involuntional melancholia) showed improvement, and six of them were paroled from the hospital.

Three patients were unwilling or unable to cooperate both before and after receiving metrazol. One of them was a 24-year-old male, classified as schizophrenia, simple type. He was admitted to the hospital in 1934 and since that time had received a series of 59 insulin treatments. In the spring of 1938 he received a series of 24 metrazol treatments, and during the present metrazol series he received 7 treatments. His condition was apparently becoming much worse. Another was a 25-year-old female, classified as schizophrenia, hebephrenic type. She was admitted to the hospital in 1930 and had not received any insulin or metrazol prior to the present series of treatments. After receiving 11 metrazol treatments her condition was also becoming much worse. The third patient was a 25-year-old male classified as schizophrenia, hebephrenic type. He was admitted to the hospital in 1937 and later paroled after receiving a series of 25 insulin treatments. This

patient was returned to the hospital last July and immediately started the metrazol series. No change was apparent in his condition after seven treatments.

These results may be summarized as follows: Of 26 patients, five gave "yes," "no," or "doubtful" responses to the questionnaire both before and after receiving metrazol. Only one of these five showed definite improvement, two remained approximately unchanged, and two became definitely worse. Six patients gave "yes," "no," or "doubtful" answers before receiving metrazol but were unwilling or unable to cooperate after the treatments. Twelve were unwilling or unable to cooperate before receiving metrazol but did cooperate after the series of treatments. Three were unwilling or unable to cooperate both before and after the series of treatments. Judged by their reactions to the questionnaire, 13 of the 26 showed improvement, five remained approximately unchanged, and eight became definitely worse. These data are, of course, suggestive rather than conclusive. In general, they indicate that either the metrazol produced no consistent pattern of change in the personalities of the 26 patients or our method of measuring personality changes was inadequate.