But Connell strongly opposed this assumption. At least 6 of the 40 patients for whom adequate personal psychiatric histories were available appeared to have been perfectly normal prior to the development of their amphetamine psychoses, and a clear majority were described as "friendly and good mixers," certainly not schizoid personalities.

That a psychosis may be induced in essentially normal people by amphetamines has been substantiated by at least two clinical experiments using human volunteers conducted by a group of researchers at

the Vanderbilt Medical School.

In the first experiment, four healthy males between the ages of 25 and 33, who had no previous history of amphetamine psychoses or schizophrenia, and were described by the investigators as having "warm, boyish personality traits" were administered hourly doses of 10 mg dextroamphetamine, unless some significant or potentially dangerous physiological changes were noted.

Two of the patients were able to tolerate "relatively large" amounts of amphetamine for 24 hours, at which point they both developed

severe psychoses.

The other two patients were given amphetamine at a much slower rate, because they showed either slight hypertension or fever very early in the experiment.

Since their dosages were low and infrequent, they were both able to withstand the psychosis production effects of amphetamine for 5

days.

However, after 170 hours these two subjects also began to exhibit "unequivocal" and "florid" psychotic symptoms, whose onset was "abrupt" and which included "paranoid ideation which was fairly

well organized."

Soon afterward the same group of investigators repeated almost exactly the same clinical experiment, observing the reactions of six male volunteers, aged 25 to 27, who had been judged by an independent psychiatrist to be of normal intelligence and normal—nonschizoid and nonparanoid—personality.

Furthermore, none showed any signs of brain damage or mental abnormalities as judged by clinical examinations, clinical tests, and psy-

chological examinations.

The same procedure was followed as in the earlier experiment, ex-

cept that doses ranged from 5 to 10 mg per hour.

Because two subjects had experienced a previous amphetamine psychosis, extra precautions were taken, and they were each limited to a total of 110 mg per day.

One of these two subjects was the only one of the six who did not develop a severe amphetamine psychosis. The total cumulative doses of

the other five ranged from 120 mg—1 day—to 700 mg—5 days.

The psychoses were almost identical with those experienced by the

initial group of subjects.

In commenting on the implications of both studies, the researchers emphasized that even short-term administration of dextroamphetamine to persons who were nonpsychotic could precipitate a paranoid pschosis, and that their experiments definitely ruled out the up till then widely accepted hypothesis that only "previously borderline psychotics" would sustain an amphetamine psychosis.