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Considering the state of our knowledge, we still do not seem sufficiently daring and experimental about therapeutic tactics . . . we know so little about the process of helping that the only proper attitude is one of maximum experimentalism [Meehl, 1955, p. 374].

LSD-Type Drugs and Psychedelic Therapy[1]

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In the search for new techniques which might enhance the efficacy of psychotherapy, LSD-type drugs have been claimed or conceived for some time to hold unusual promise (see Unger, 1963, 1964). The development and systematic assessment of psychedelic therapy, incorporating a procedure of high dose LSD administration first reported by Osmond (1957), has been underway at Spring Grove State Hospital for over 3 years. Although complete data are not available at this time, all present results from this work point to the following conclusions: (*a*) that trained personnel can implement the psychedelic procedure with relatively high safety; and (*b*) that its judicious use can importantly and perhaps uniquely facilitate the achievement of a variety of psychotherapeutic objectives.

PSYCHEDELIC THERAPY

1. *Nomenclature and overview. Psychedelic therapy* refers to an overall theory and practice of treatment. The *psychedelic procedure,* alternatively called "the session" or the LSD session, refers to a specialized set of techniques for programming and guiding the reaction to LSD (or an LSD-type drug) within the context of ongoing psychedelic therapy. (Thus, a patient may receive psychedelic therapy for 6 months but have only one LSD session.) The psychedelic procedure is expressly designed to produce the *psychedelic reaction.* The psychedelic reaction may occupy only intermittent minutes of the full 10-12 hours of an LSD session; however, such episodes, characterized, subjectively, by profound meaningfulness and an extraordinary depth and intensity of positive emotion, are the hallmark of psychedelic therapy. In other (nondrug) contexts, such reactions have been referred to as "peak," "identity," or "conversion" experiences, or "encounters." The emergence of psychedelic therapy as a distinctive treatment form is based on the reliable reproducibility of the psychedelic reaction.

At present, psychedelic therapy is composed largely of strategies and tactics of treatment; theory development has been sketchy. In general, pathological functioning in the patient is presumed to have been determined by a reinforcement history which would have predisposed toward root "defects" in the self-system (self-image, self-esteem, self-trust, sense of basic worth), and associated value attitude distortions and "inadequacies." The major effort of psychedelic therapy is re-

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constructive, premised on the possibility—via the psychedelic reaction—of rapidly establishing and then consolidating the patient's functioning on a core of positive self-acceptance and regard.

2. *LSD and the psychedelic reaction.* In dosages of 200 micrograms or more, LSD produces a 10-12 hour period of unusually striking, varied, and anomalous mental functioning; the range of possible effects and/or episodes of reaction is panoramic. Certain dimensions of possible reactivity are therapeutically irrelevant (e.g., sensory changes); others are of distinctly antitherapeutic consequence (e.g., panic or terror, or psychotic reactions). The major dimension of therapeutic relevance of drug-altered reactivity is the affective or emotional sphere; intense, labile, personally meaningful as well as ego-transcending emotionality is uniformly produced, with periodic episodes or "shock waves" of overwhelming feeling.

It is perhaps needless to note that the use of LSD is not predicated on any conventional drug or chemotherapeutic model. In the context of psychedelic therapy, the LSD session is undertaken only after the therapist (*a*) has gained intimate knowledge of the patient's developmental history, dynamics, defenses, and difficulties; (*b*) close rapport has been established; and (*c*) the patient has been specifically and comprehensively prepared for the procedure. The therapist, in a demanding and arduous role, attends the patient throughout the entire period of drug action. The purpose of the high dose LSD session is not conceived as diagnostic or uncovering but rather as corrective and remedial. Overall, beyond forestalling or attenuating antitherapeutic developments, the psychedelic procedure is designed to program and guide the evolving episodes of experience so as to regularly achieve meaningful catharsis, reciprocal inhibition of anxiety, conflict resolution, emotionally validated insight, attitude redirection, elevated self-esteem, and deepened philosophical perspective.

The *rapidity* with which major changes in certain aspects of a patient's psychological picture may be accomplished is one of the unique advantages of psychedelic therapy. As indicated, the pivotal event in accomplishing this turnabout is conceived to be the psychedelic reaction. While paroxysmal electrical activity triggered by LSD in limbic systems (Monroe, Heath, Mickle, & Llewellyn, 1957) is guessed to constitute the key neurophysiological substrate of psychedelic reactivity, such reactions are not simple drug effects. Rather, they seem to be a complexly determined outcome of adequate (high) dosage, structured preparation, therapeutic session management, and selected auditory input.

The effects of the first several hours of a psychedelic session are nonspecific and pervasive: perseverative preoccupations and emotional distress patterns are "broken" or fragmented; subsequent recall for this period is nearly always poor. During the fourth to fifth hours, psychedelic reactivity usually appears at peak intensity (though this is somewhat unpredictable). With skillful handling, the remainder of the session may be stabilized in an elevated mood state—psychotic and other turbulent phenomena are no longer spectres. Resistance (defensiveness) is much reduced; psychodynamic resolution may proceed efficiently, and depths of positive interpersonal emotion may be mobilized and re-educatively explored.

The short-term consequences of a stabilized psychedelic reaction are often quite remarkable. Mood is elevated and energetic; there is a relative freedom from concerns of the past, from guilt and anxiety; and the disposition and capacity to enter into close interpersonal relationships is enhanced. This psychedelic "afterglow" generally persists for from 2 weeks to a month and then gradually fades. The therapeutic challenge has re-

volved, first, on reliably producing the psychedelic reaction, and then more importantly, on learning to utilize this extraordinary, "paranormal" phenomenon as a fulcrum of enduring personality reconstruction.

3. *Advantages.* As already indicated, the rapidity of meaningful impact is one principal virtue of psychedelic therapy. Within a matter of a month into therapy persisting depression may be relieved, generalized anxiety and preoccupying distress reduced in salience, and constructive motivation established. The patient may already be able to resume his position in society, while therapy proceeds in increasingly productive fashion.

The significance of a rapid and radical benign alteration in the patient's pattern of functioning, while it would seem of general value, is crucial in the treatment of alcoholism. Conventional therapy has been singularly unsuccessful with this patient category as the very nature of the condition, the inability to maintain sobriety, has seemed to compromise the possibility of therapeutic progress. Hence, the especial affinity and relevance of psychedelic therapy for the alcoholic patient is apparent.

Another advantage, as it has emerged during the course of our work, has been the apparent effectiveness of psychedelic therapy with culturally deprived patients of low intelligence. Needless to note, these patients are very poor candidates for conventional therapy. The route to emotional reeducation represented by the psychedelic procedure, however, seems not at all prejudiced against individuals of poor verbal skills or sophistication.

Additionally, other patients who ordinarily would be considered exceedingly difficult or inappropriate candidates for conventional treatment, by virtue of their inability to enter into a therapeutic relationship (e.g., sociopathic and other personality disorders), may apparently be engaged by the psychedelic procedure and continue much more meaningfully and effectively in therapy.

4. *Safety.* In view of the oft-expressed concern about the dangers of LSD, although it has been repeatedly shown that trained personnel can use the drug without danger (see Cohen, 1960), the safety record at Spring Grove should be mentioned. Despite severe pathology in many of the approximately 175 cases treated, there has been only one adverse reaction, that occurring in a schizophrenic patient in remission, and was readily reversible by standard chemo- and psychotherapy. In addition, it may be worthy of note, in view of persistent concern about LSD abuse, that not a single patient treated at Spring Grove, to our knowledge, has engaged in subsequent illegitimate use of the drug.

IN PROGRESS RESEARCH

After a somewhat extended period of exploration and development, during which time 69 alcoholic and 7 neurotic patients were treated (see Kurland, Unger, Shaffer, Savage, Wolf, Leihy, & McCabe, 1967), two controlled studies of the efficacy of psychedelic psychotherapy were initiated. Both studies, still in progress at the present time, are about two-thirds through the clinical phase; both utilize double-blind methodology, both cover an active treatment period of 6 months.

In the study of psychedelic therapy with alcoholics supported under United States Public Health Service Grant MH-08074, volunteer patients hospitalized in the Spring Grove alcoholic rehabilitation unit are randomly assigned to experimental and control groups. All testing and treatment is exactly the same for both groups with the single exception being the dosage of LSD in the implementation of the psychedelic procedure. Under strictly double-blind conditions, control patients receive 50 micrograms of LSD, considered to be an active placebo dose in that it is inadequate to produce

the psychedelic reaction. The experimental group receives 450 micrograms. This dosage differential is maintained through any repeat sessions deemed indicated by clinical judgment throughout the active treatment period. Follow-up contact, assessment, and evaluation, performed entirely independently of the clinical staff, is accomplished for all patients at 6 months, 12 months, and 18 months after entry into the program. The objectives of this study are to systematically assess whether and in what dimensions or degree the psychedelic (high-dose) procedure materially affects the outcome of therapy with chronic alcoholic patients. Over 60 patients of an anticipated 99 have completed or have been started in active treatment in this program. Recently, for purposes of this presentation, the blind was broken on the cases who had passed the first 6-month evaluation point. (Note: The blind was broken in such a way as not at all to contaminate the continuing evaluation.) Out of a total of 29 patients who had been located and interviewed, ratings of global improved adjustment were over twice as high in the experimental as compared to the control group, with the rate of complete abstinence in the experimental (high-dose) group running well over 50%.

The study of psychedelic therapy with neurotics supported under United States Public Health Service Grant No. MH-11001, in fact includes a diversity of patient types: severe depressives, sociopaths,

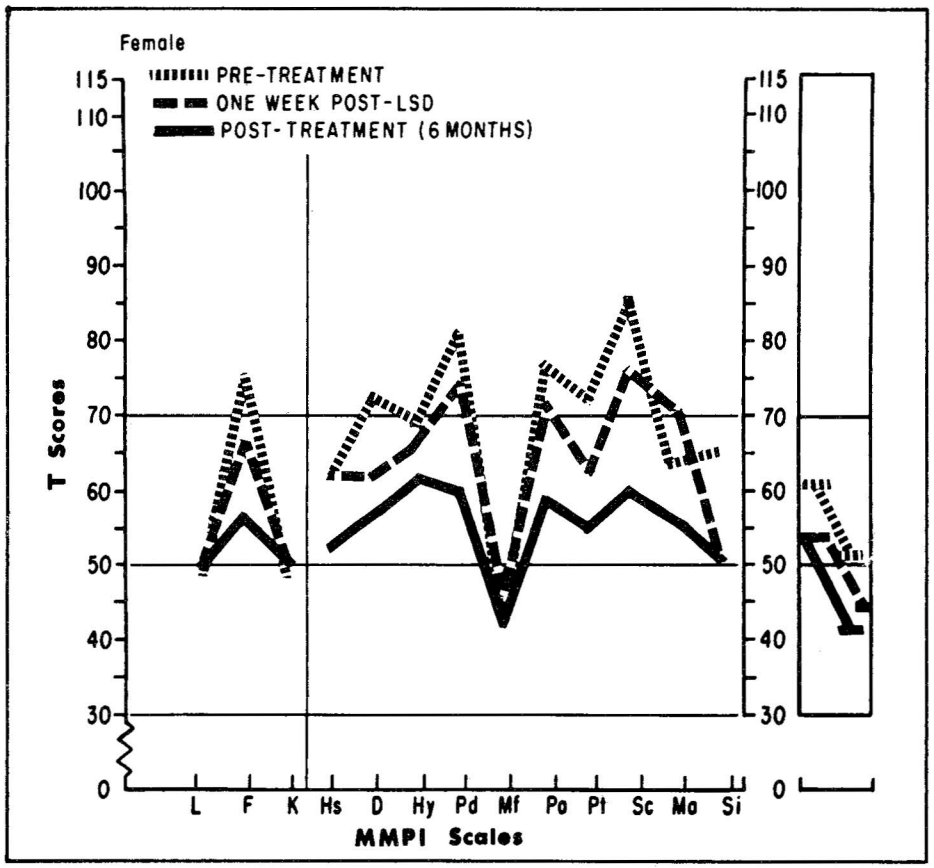

Fig. 1. Composite MMPI profiles for first seven neurotic patients.

and borderline cases. The objectives and methodology of this study are similar to those outlined above, with the addition of another comparison group. Patients referred by ward psychiatrists, acceptable to the study, are randomly assigned to (*a*) an intensive group psychotherapy condition, and to (*b*) experimental, or (*c*) control psychedelic therapy groups, with the controls receiving the active placebo (50-microgram dose) and the experimentals receiving 350 micrograms under double-blind conditions, with all other treatment and evaluation considerations being identical. Nearly 60 patients of an anticipated 99 have either completed or are in process of completing the 6-month treatment period. While clinical impressions are favorable, data are not yet available from this study; hence, it may prove of value to examine the MMPIs of the first seven patients who comprised an open psychedelic therapy pilot study prior to the controlled phase. These patients covered a range of diagnoses, and in two cases had had many years of prolonged hospitalization. Composite MMPI Profiles (see Figure 1) shows their pretreatment status, their improvement after the first high dose LSD session (about 1 month after beginning psychedelic therapy) and their status at the end of the 6-month treatment period. Patients were released from the hospital as soon as seemed clinically advisable and carried through the treatment period as outpatients, with brief rehospitalization if and when indicated—four of the seven patients did have at least one additional LSD session. All of the patients, to present knowledge, have done well since the close of active treatment; none has been rehospitalized.

CASE ILLUSTRATION

In order to illustrate the details of the therapeutic process, it is the intention to present the case of one of the pilot study "neurotic" patients, N-5. Though no case is "typical," this one recommends itself because of unusual difficulty; it demonstrates both the strengths and limitations of the treatment. In addition, the patient wrote an especially articulate account of her first session, conveying more effectively than can discursive discussion the nature and impact of the psychedelic procedure.

Pretreatment Assessment

Prior to the initiation of therapy, upon referral to the program by the ward psychiatrist, a social history is taken and psychometric testing performed; relevant data are summarized below.

Patient N-5: Social history.

This is patient N-5's fourth admission to Spring Grove. She is a 23-year-old Baltimorean, unmarried, but has one child—a 1½-year-old son. This young woman had an unpleasant and unhappy childhood. Her father deserted the family when she was an infant. She describes her mother as being cold and indifferent.

By age 14 she had been found delinquent by the Juvenile Court of Baltimore County, spent 6 weeks at the girls' training school, and was put on probation. At age 16, by the order of that court, she was committed to Spring Grove and remained over 1½ years. The diagnosis was Adjustment Reaction, Childhood. When discharged, she began a pattern of loose and promiscuous living.

At age 20, while working at a private psychiatric institution, she met an alcoholic patient with whom she eloped from the institution. She lived with him off and on for over 2 years. Twice within 1 year, in 1963, she was admitted to Spring Grove. The diagnosis was Depressive Reaction. In 1964 she had 4 months of private psychiatric treatment.

For several months before this admission to Spring Grove she says she "ran wild." She held a clerical job in a downtown office but was out every night frequenting all the night spots and was neglectful of the baby. She blandly admits being promiscuous and ultimately became very depressed. She was arguing with everyone constantly, was crying, and upset. Finally, she voluntarily came to the hospital.

This young woman recounts events in her background coldly and casually—in a detached manner. The impression is that her demeanor is very unpredictable.

Patient N-5's presession Raven IQ score was 94. Her MMPI profile is shown in Figure 2. Clinical evaluation of the MMPI follows:

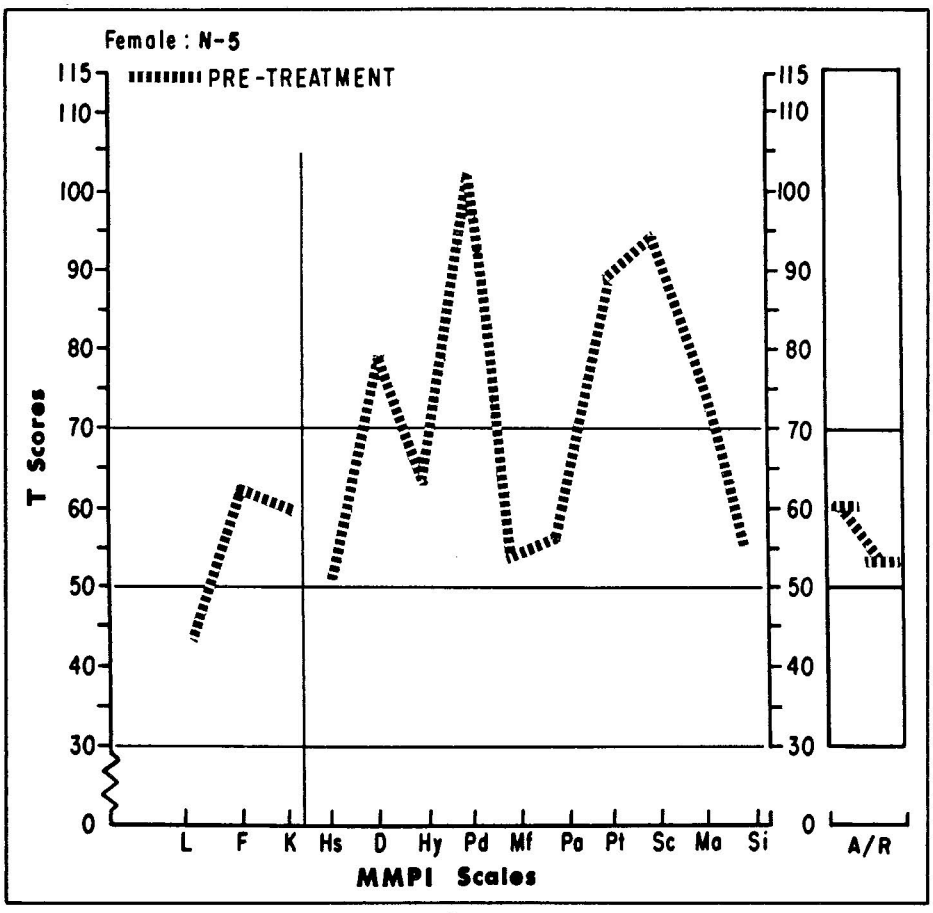

Fig. 2. Patient N-5's profile on the MMPI.

The profile of this patient suggests the presence of severe psychopathology. Primary elevations are on scales measuring psychopathy and unusualness of thought content. Secondary evaluations are on scales measuring depression and anxiety—"psychic pain," in short. Diagnostically, this is the profile of a personality disorder, currently experiencing severe anxiety and depression. Reality contact appears tenuous, and psychotic episodes are a distinct possibility. Poor judgment and impulsive acting-out are likely characteristics. The relatively low *Mf* score in the presence of the other scale elevations suggests masochistic feminine attitudes.

Presession Therapy

We have much to learn about peak experiences: their differentiation from some brands of psychotic experiences which subjectively appear very similar, their different contexts and the preconditions of their occurrence and of their dynamic effectiveness. Should we at anytime incorporate similar exceptional states into the therapeutic process—e.g., through the use of consciousness expanding drugs—I believe that patients would have to be prepared for them just as they must be prepared to make effective use of insights . . . to be prepared means having a real need for new answers; it means expecting them and knowing concretely how to put them to use, the *right* use, and realizing clearly that one might be tempted to put the experience to neurotic uses. Unless exceptional experiences are integrated with the pattern of health, the very fascination they arouse can actually divert the person from the task of reorganizing his life . . . [Angyal, 1965, p. 297].

The treatment program begins with the patient intensively engaged in near

daily psychotherapy. Although a brochure of information and expectation-structuring articles on the use of LSD in treatment is given to the patient for outside reading, the forthcoming session itself is largely ignored during this period. With the therapist assuming the role of compassionate taskmaster, concentrated and repeated attention is focused on tracing and delineating the influences and determining factors in the emergence of the patient's self-system and related attitudes and assumptions—pinpointing their dynamic involvement in unproductive, self-defeating behavior patterns. The therapist, via his commitment and concern, also transmits his belief in the capacity of the patient to establish his functioning on a foundation of positive self-acceptance—in a world perceived, not as alien, but as a source of potential satisfaction.

Presession therapy with Patient N-5 filled out the developmental picture as follows: The predominant influence in the patient's first 5 years was the maternal grandmother; the patient's mother worked and was largely out of the home. The grandmother pampered the child in a manipulative way, demanding loyalty to herself rather than the mother.The patient's most vivid recollections from this stage of childhood were of squabblings at the dinner table, and her own consistent refusal to eat unless she was literally spoon-fed by the grandmother.

When the patient was 5 years old, her mother began a new courtship. The grandmother, disapproving, issued dire warnings to the patient about its consequences—effectively training the child to dislike and fear her prospective stepfather.

The patient's mother did marry, and amidst great turmoil, a move was made to an apartment shared with the stepfather's mother, that is, N-5's step-maternal grandmother. The patient's new grandmother, from the very beginning, openly disliked and resented her. She was irked by the overcrowding—the patient, at this time, shared a bedroom with the grandmother—and she engaged in vicious verbal abuse of the child.

Two sons were born to the new couple in rapid succession. When N-5 was about 8 years old, she attempted to drown one of her infant half-brothers in the bath tub—which was only narrowly averted by the stepfather. At this point also, a full-blown pattern of stealing, indiscriminate lying and like rebellious behaviors emerged in the child. She recalls only feelings of hate for the stepfather and stepgrandmother; she did periodically try, though unsuccessfully, to win the mother's affection and approval by occasional conformity. By age 10, after setting a fire in the kitchen of her home, the patient ran away for the first time.

The feelings of self-disgust and self-hatred in Patient N-5 were profound; as she described herself, "I am filled with filth." Increasingly, during 3 weeks of presession therapy, she seemed definitely to be engaged and reached, with the development of a modicum of insight. The therapeutic relationship approached to as good rapport as seemed possible at the time.

Presession Preparation

> Vergil guided Dante into the Inferno and returned him safely, chastened and enlightened. Those who would use LSD should do as well for their patients [Savage, 1962, p. 434].

Largely, "expectations" regarding the LSD session are structured by outside readings, although the therapist, also, implicitly and explicitly, reinforces the hope that there are resources of strength and goodness within the patient whose existence has been buried by the pathogenic influences and pathological functioning of the past. It is the aim, primarily, to see that such potentials are revealed. At the same time, the pathways to such desired objectives, it is conveyed, may be difficult to negotiate and require courage and faith.

Specifically, in the pre-LSD preparation several key issues are worked through and emphasized.

The patient is enjoined that "LSD does not put anything into him;" that it alters the experience of oneself by unlocking "silent" and closed-off areas, but that "everything that he experiences comes from him, reflects what is *in him,* makes manifest some aspect of his functioning or potential." Further, the patient is assured that there is nothing within that he cannot face; nothing that can emerge that cannot be "handled," that does not have meaning, that cannot be understood with beneficial result.

The patient is enjoined against excessive discussion, intellectualization, or analysis—rather, he is told to "just be," to let the music carry him. (In LSD dosages of 200 micrograms or more, the capacity for normal ego functioning and "volitional" control is much attenuated; especially in the first 3 to 4 hours of a session, efforts at prolonged verbalization or logical formulation are likely to lead to distressed confusion.)

The patient is prepared for the possibility of unusual somatic effects, for fear reactions (either general or specific), for depression, and for the dynamic significance of "distrust," as well as all other potentially alarming, frightening or antitherapeutic reactions or developments.

Insofar as it is possible, the patient is literally rehearsed for the course and conduct of the session day, including a brief exposure, while wearing a sleep shade (designed to cut down on the distracting instability of the external visual world), to stereophonic headphones. The importance of music in programming an LSD session should not be underestimated; next of his knowledge of the patient and the established relationship, music is probably the therapist's most important tool in guiding the course of the session. Music not only "speaks" a direct emotional language but, in addition, choral and vocal selections contain specific verbal-symbolic (attitudinal) input.

As a final item of the presession preparation, the course of therapy is reviewed. The dynamics of the patient's difficulties and "disorders" are summarized, along with reinforcement of hopefully identified, if heretofore submerged, potentials.

The Session

> Emotions grasp vitally that of which thoughts are merely a pale reflection; they are concrete value experiences and thus are the springs of our actions. Insight can pave the way to change only if, seeing the state of affairs differently, we also come to *feel* differently about it . . . . Insights accompanied or followed by a strong and appropriate emotional response—one might call them *vital insights*—have the best chance of becoming effective, at once or in time [Angyal, 1965, p. 271].

For the therapist, the session is arduous, often exhausting—but very rewarding. Along with a female nurse, the therapist spends the 12 hours of the session day in constant attendance on the patient. The nurse keeps a time-indexed record of the patient's statements and significant events, including the musical selections; this is given to the patient at the end of the day and usually helps in the session write-up requested of all patients.

Patient N-5 received a total LSD dosage of 300 micrograms—200 in a first administration, followed by an additional 100 an hour later. Her report, slightly edited, follows:

Patient N-5: LSD session report.

> I must admit that in the beginning, I was quite apprehensive and more than a little afraid. The nurse had come and got me at about 8:30. I felt a little more comfortable when I got in the treatment room where I had spent so many hours in therapy. When the doctor came in I was even more comforted as I knew he understood and would be there to help and guide me.
>
> I drank my LSD at 8:45. From that point on time had no perspective. The doctor, the nurse, and I looked at some pictures of myself and my family. I began to feel dizzy

and wanted to lie down. Then the thought occurred to me that I'd better go to the bathroom first. When I got up the floor seemed to tilt and roll. It wasn't an unpleasant sensation, however. I came back from the bathroom and the eye shades and earphones were put into place. The doctor squeezed my hand and suddenly I wasn't afraid anymore. I drifted with the music and was at one with the music.

My sense of touch became very intensified. The blanket that was covering me became alive. I remember touching my face and feeling every particle of my skin.

I was drifting with the music and I had the sense that I was dying. I was at my funeral. I could smell all of the flowers. I cried, but I didn't want to escape from the feeling. I somehow knew that I had to die in order to be born again.

The music was stopped and the eyeshades and earphones removed. The colors in the room were vibrating and alive. I talked with the doctor and asked him if I had died. I was still crying.

I lay back down and the shades and earphones were put in place. Again, I drifted with the music.

Suddenly my body seemed to grow very warm. I felt with every sense of my being that I was in Hell. My body grew warmer and warmer, then suddenly burst into fire. I was afraid; then the doctor took my hand. I lay there and let my body burn up. The fire seemed to cleanse me. Then all sensation seemed to fade and I asked to sit up.

The doctor showed me some pictures. One was called The Guardian Angel. To me, at the time, it represented a mother and child. I said with amazement, "It's me. I'm crying. My baby!"

All at once, after all the doubts and fears, I knew I was a mother and that I loved my child!

The earphones and shades were put back in place and the music playing was "The Lord's Prayer." There must have been a short pause in the music but to me it seemed an eternity. I said, "Don't stop it. God is whole in me." At this point, I felt as if God were holding me in His arms and revealing Himself to me. I smiled and said, "I've found Him, I've found Him!" I had such a tremendous sense of peace and well-being. After so many years of running alone and afraid, God was now with me.

The music stopped and I lay relaxed and said, "But I found a reason for it all." God's place in the universe, in the world, and in myself seemed so clear. He is love and He is life. He is in everything. And finally, at long last, He was also in me.

I looked at a picture of my son and I felt an overwhelming sense of love and for the first time gratitude for my motherhood. I was crying but crying with joy and thankfulness. I wiped away the cleansing, wonderful tears.

I then looked at a picture of myself when I was 15. I knew that the girl in that picture never was; the person was never real. I tore up the picture and pointed to myself. "This is what she is." I was on the road to discovering myself.

It was now 11:20. I had been under LSD for only 3 hours, however, it seemed as if it had been eternities. I had no sense of time. I can remember at one point asking the doctor what time it was and he answered, "Twenty minutes to eternity."

I lay relaxed and smoked a cigarette. I was shown a picture of the Christ Child and His mother. I said with wonder, "She's not afraid of Him—I'm not afraid!" It had been fear of love that had kept me from loving my son.

The earphones and shades were put in place and again I drifted with the music. I had a tremendous sense of life and living. I exclaimed, "I'm alive! All the 23 years I had been here I had never really been alive. I had only existed!" The music again paused and again I said, "Don't let it go away. I don't want it to go away!"

Then, the music changed. The record was Mahalia Jackson. The sound pounded around me. It seemed as if the music was trying to consume me. I knew fear, stark, naked fear. Fear was all around me, covering me. The music shouted at me and vibrated through me. I tore off the earphones and shades and shouted, "Turn it off!" It was as if it didn't stop, it would destroy me.

The doctor turned off the music and blessed silence filled the room. I said, "I don't think I've ever been so afraid!" I knew then that I was running away. My words were, "I was running away, wasn't I? I was all the way back in Hell and I wasn't afraid. What frightened me? I was never so afraid!"

The doctor talked to me of fear and fear of fear. I realized that I had been consumed with fear all my life. He said, "This is the time. Let's go toward it." I said, "I'm afraid—I don't want to go."

Then, suddenly, I knew that I had to face whatever there was to come. It was now or never. I held to the doctor's hand and said, "Don't let me run anymore." I was too tired to run anymore.

The music again took over and I felt comforted. I relaxed and just was one with the music.

When the music stopped, I looked about the room and the colors were alive. They glowed.

I wanted a purple glass that was on the table. I wanted to feel the color. I seemed to be one with the soft glowing purple.

I went to the bathroom and looked out the window. The earth seemed to vibrate with life. I exclaimed, "It's alive! It's a wonderful world. I don't have to run anymore."

Back in the treatment room the rose seemed to radiate life. I felt it, smelled it, savored it.

Again the shades and earphones were put into place and I drifted with the music. The record was "Oh Come Immanuel." Again, I had the sense of being with God. He was holding me in His arms and He was revealing life to me. Then suddenly, light was all around me, and love, wonderful, overwhelming love, was all around me.

I could love and be loved. After so many years of wandering I had come home. My words were, "I walked with God, completely with God. I know what love is. I have *so much* to give. I've been so empty–that's not important now." I was crying for joy and thankfulness. I had received the most priceless gifts there are–the gifts of life and love. The music continued and I cried, "I'm crying for joy!"

The music stopped and I removed the shades and earphones and sat up. The doctor gave me a mirror. I looked and saw myself. I radiated love. I said, "I see love, so much love. It was there all along. Oh, I love me!"

I know now where I was. I was at the beginning of my life. I had just been born. I was alive! After 23 dead, wasted years I had been born. Thank God I was finally alive! I said in awe, "I don't have to run anymore. I can be with myself–it's so wonderful, so wonderful. I'm so thankful. I can just feel it all over me."

Again, I went back with the music and knew only joy. The music flowed over me and I was elated. The sound flowed through every fiber of my body. The music stopped and I laughed and laughed with pure joy. I asked for a drink of water and it was nectar. I cried, "I want to embrace the whole world. I found God–it was so important. I'm not alone any more. I'll never be alone again." I looked at a picture of my son, and felt as if I would burst with love.

Again I listened to the music. When it stopped, I looked at a picture of my mother. The hate I had once felt dissolved and I knew only compassion. I said, "I feel so sorry for her."

I went again to the bathroom and this time the sun came in through the window and I travelled up the rays and went into the sun. It was warm and dancing and vibrating with golden color.

Once again I returned to the couch and listened to the music. When the music stopped, the doctor and I had sandwiches. I ate a salami sandwich and relished every bite. I can truthfully say it was the best thing I've ever eaten.

Later, the doctor and I went for a walk and I literally discovered the world. I saw, smelled, and touched the trees, flowers, and grass. I touched the bark of a tree and felt the life running through it feeding the deep green leaves. I touched the grass and it felt like velvet. The soft warm air embraced me. This was life; this was my world and I was at home.

We returned to the treatment room and continued to listen to music. The music seemed to reach and awaken a depth in me that I never knew existed. When Beethoven's ninth was playing, I was completely at one with the music. With each note I seemed to soar to higher heights.

At about 9:00 P.M. I returned to the ward and drifted off into a dreamless sleep. When I awoke, the next morning, I saw my rose on the nightstand and for the first time in my life, I thanked God that I was alive.

Postsession Assessment

A neurotic individual carries in himself a secret concept which may be stated as: If people knew all there was to know about me (that is, my 'bad unconscious'), they would think that I was a pretty unpleasant, worthless individual . . . . Under LSD some actually experience walking into the shadow and finding a great inner light . . . . The result . . . is that the individual has a new, total view of himself. He sees that he has good in him, that he has value. He finds that he can like himself more, that he can love himself. Such positive changes towards one's self also alter one's view of other people, for one's concept of others is always colored by the way one sees himself. If the individual accepts himself more, trusts himself more, loves himself more, he can also trust others and love others to a greater degree [Downing & Wiegant, 1964, p. 191].

On the day following the session, and for a while thereafter, N-5 was described as "radiant" (the psychedelic "afterglow"). She reflected, as William James would have it:

"A feeling of being in a wider life than that of this world's selfish little interests . . . . An immense elation and freedom. A shifting of the emotional center towards loving and harmonious affections . . . [James, 1902, p. 289]."

N-5's postsession Raven IQ tested at 112—a significant increase over the pretreatment score of 94. Her MMPI, administered 1 week postsession, is shown in Figure 3 below; the evaluation follows:

Post-LSD session, marked improvement has taken place in a number of symptom areas. Depression and anxiety have both been reduced to within normal limits. Perhaps even more striking, however, has been the reduction in psychotic elements. Reality contact appears firm and there is no longer any suggestion of an imminent psychotic break. However, although the patient is undoubtedly more psychologically comfortable, in view of the continuing indications of an "acting-out" personality disorder, any long-range prognosis must be guarded.

Postsession Therapy

For the majority of patients, the task of recovering falls into two parts: getting well and staying well [Angyal, 1965, p. 256].

The fundamental aim of the psychedelic procedure is to frontally assault the negative assumptive systems which have mediated an essentially unproductive contact with life. The profound, directly confronted, corrective emotional experiences of a session pave the way for the establishment of psychological functioning on a positive foundation. However, for the majority of patients, this is just the beginning.

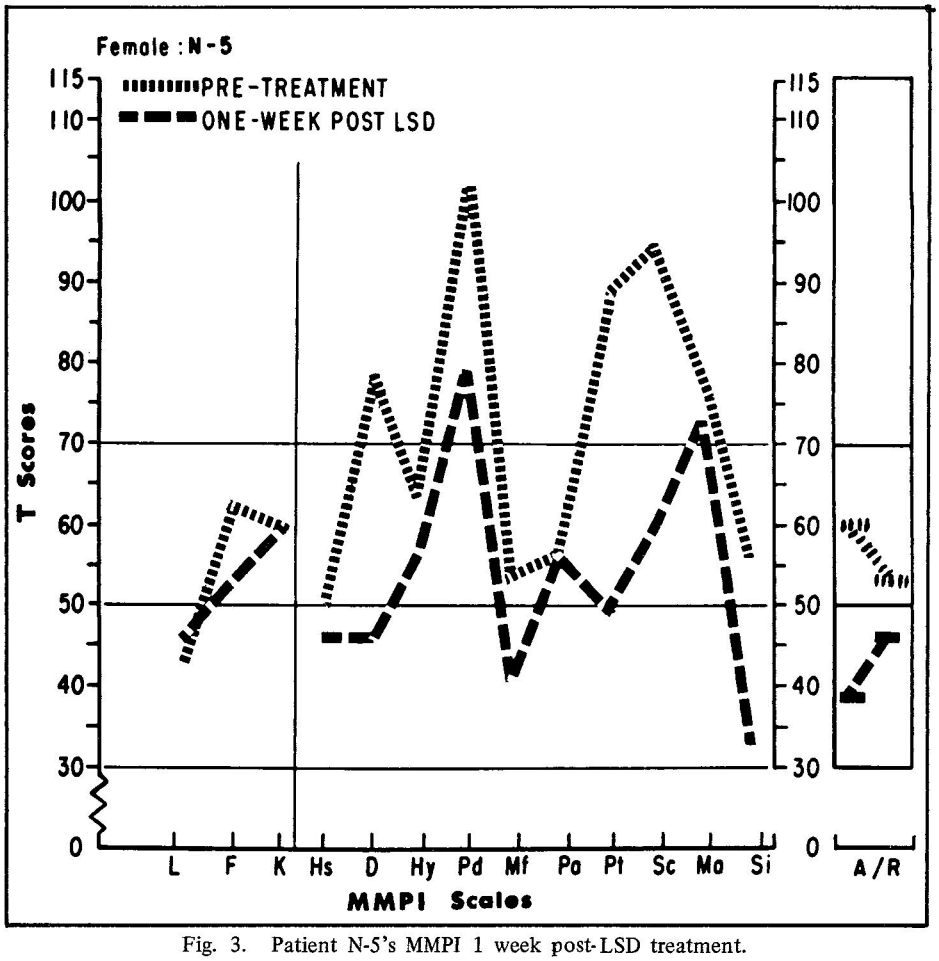

Fig. 3. Patient N-5's MMPI 1 week post-LSD treatment.

The therapeutic task remains of effectively reinforcing the patient's commitment to his discovered potentials, of consolidating a set of stable "self-equilibrating" reactions, which will call the patient back to his "new identity" whenever relapses into old thought and feeling patterns occur. At the same time, habits of constructive growth must be widened and entrenched, ensuring an increasing range and frequency of such positive emotional states as satisfaction, joy, and love.

Through a continuing reinforcement period, sometimes gently, sometimes forcefully, unequivocal commitment is engendered to *the basic assumption:* that life can make sense and provide satisfactions. Periods of depression and anxiety are seen for what they are: part and parcel of the human condition, to be expected, but not to be unnecessarily prolonged or perpetuated. In times of stress, patients must learn, "take one day at a time," making that day as good a day as possible by remaining open and attentive to the opportunities for positive emotional experiences that are offered; additionally, to be clinically perceptive to other people as well as themselves—to be compassionate and constructive in human relationships, seeing beneath objectionable "defensive" behaviors, and understanding them in others as one has learned to understand and forgive in oneself. And over and again: the basic, affirmative commitment to life, to growth toward stability in inner comfort, zest, and self-respect.

In the days following the session, any tendencies toward euphoria must be firmly moderated. Integration of gains, it is reiterated, requires time, self-discipline, and increased self-knowledge. As soon as possible after the session, the patient begins writing a detailed account of its significant events in order both to "imprint" major accomplishments and to provide an enduring record which may often or occasionally be reread.

Presuming that a sufficient degree of improvement has been achieved, patients are returned rather quickly to the community, and therapy continues on an outpatient basis. Patient N-5, after obtaining a job and inexpensive living quarters, left the hospital several weeks after her session.

During her hospitalization, her son had been placed in a foster home through the auspices of a welfare agency, and with the patient's consent, this arrangement was continued. She ended an ill-starred affair that had been begun before therapy, visited her child regularly, and eagerly awaited and desired therapeutic appointments. She tried, with moderate success, to live according to the credo: Do not do anything for which you will dislike yourself. At the same time, she read avidly and entered into several wholesome social activities.

Nevertheless, she grew increasingly restive with the tedium of her job, despaired of really making something of her life, and at such times, would relapse into manipulative and destructive behaviors.

Her mother, who had heretofore disowned her, "allowed" her to return home for the Christmas holiday. She reacted to "Christmas with mother" with renewed feelings of deep unworthiness. Leaving the family home in a depressed state of mind, she entered into a casual sexual liaison which "filled her with self-revulsion." Shortly thereafter, arrangements were made for rehospitalization, specifically for further intensive therapy and another LSD session.

As has been frequent in our experience, the second session was very different from the first; repeat sessions tend to be more psychodynamic and less psychedelic in content. Although, before the session, there had been considerable "working through" of her decision to have her son adopted, feelings of guilt and remorse over her plan of action and past treatment of the child emerged explosively. She was finally able to accept, though late in the session, that such feelings came from and reflected a basic

"goodness" in her. Persistently, she was haunted by a sense of frightening isolation and feelings that she could never escape from her past—which mocked her present aspirations and marked her as evil and dirty. Working through these feelings, resolution emerged with deep emotional insight into her own developmental dynamics: she grasped at core levels the relation and transition between the loneliness, fright, hurt, and rejection that she experienced as a child, and the hard, bitter, unfeeling, self-destructive adolescent she became. Again, she could finally accept that while she *feared* that she was "all bad," that these were just fears, that she (the essential self) was not her fears.

There was no psychedelic reaction, and no afterglow. At the end of the session, the patient was exhausted but relieved. She had been stripped bare, she felt; she had faced her deepest fears, without distortions or fantasies, and she had clearly seen into her own developmental dynamics and the vicious circles of destructive thought and behavior in which she had been caught.

The confrontation of the second session seemed to complement the discoveries of the first. During the postsession period, stable self-acceptance and self-compassion appeared to consolidate.

Within a week after the session, N-5 left the hospital; her 6-month therapy was at an end, and subsequent therapeutic contacts were less than sporadic. In closing accounts, it may be noted that ward nursing personnel, long familiar with the patient, considered the changes which had taken place in her to be "impressive."

Follow-up

Patient N-5 occasionally wrote to her therapist in the months that followed. One letter began: "Happy anniversary to me!" It was 1 year after the *first* session, and since it sheds light on the significance of the psychedelic reaction, the first paragraph of the letter is reproduced:

> Do you realize that exactly one year has gone by since the most memorable day of my life? At this time last year, I was enraptured in divinity. I guess I still am only its not as magnified. There's just a warm place deep inside me. A place that knows that I'm a part of everything and everyone. A place that knows beauty and love. A place that reaches blindly and without question toward the infinite. A place that is at peace even while the rest of me is at war. And no matter what happens, that place will be there forever and ever.

The last follow-up interview with the patient, conducted 15 months after her initial entry into therapy and 9 months after the conclusion of therapy, reported on her course and status as follows:

Patient N-5: Follow-up interview.

After her second LSD session, the patient went to work as an aide at a private mental hospital, where she lived in. While there, she met and befriended a young male patient of very good family background. A satisfying relationship developed and was continued after the patient's discharge.

During this time, N-5 consented to the adoption of her son. She states that she worked out her guilt over this matter and feels sure that it was in the best interests of the child.

Shortly thereafter, in a church wedding, and with the consent and approval of the groom's parents as well as her own, she was married to the aforesaid expatient. From that time to date, she has had a more satisfying and meaningful adjustment than ever in her life.

At times, there have been rough spots in her relationship with her husband, who is finding his own way since his hospitalization. However, there have been no insurmountable problems and this period has been stable. She seems to feel more sure of herself and more comfortable than this interviewer has ever seen her before. She does have a health problem, though. In the past month, she has lost 15 pounds and is seeing a physician regularly. He has diagnosed that she has an ulcer of the colon.

All in all, she is adjusting well.

CONCLUDING NOTE

We have no faith in human nature, if you mean that men are naturally good or naturally prepared to get along with each other. We

have no truck with philosophies of innate goodness—or evil, either, for that matter. But we do have faith in our power to change human behavior [Skinner, 1948, p. 196].

While the psychedelic therapy program has now seen a goodly number of treatment-resistant patients display sustained change, in a beneficial direction, over a wide spectrum of behavioral functioning, a major limitation or disadvantage of the psychedelic procedure had best be noted. It revolves on the lengthy period of action of LSD. The session places a very heavy burden on the therapist, and as well, unorthodox schedules are necessary for all clinical personnel. This drawback would seem to render the procedure, as presently implemented, difficult of accommodation or assimilation to existing treatment facilities on a wide scale without great cost.

A number of shorter-acting LSD-type compounds have been identified and tested in recent years: shorter-acting derivatives of Psilocybin and Psilocin, CEY-19 and CZ-74, as well as the chemically related drugs diethyltryptamine (DET), dipropyltryptamine (DPT), and dimethyltryptamine (DMT). The agents are mentioned above in decreasing length of average period of action, ranging from 3½ hours (CEY-19 and CZ-74) to 40 minutes (DMT).

Szara[2], the discoverer and most persistent worker with the tryptamine series, has expressed the hope "that the shorter acting dialkytryptamines (DET and DPT), which produce qualitatively the same effects as LSD-25, could effectively and conventienly replace the much longer acting LSD-25 [1965.]" Clinical trials with DPT and DET, with alcoholics, along modified psychedelic therapy lines, have already been performed by Szara and his coworkers at St. Elizabeth's Hospital in Washington, D.C., with promising outcome (see Vourlekis, 1966). Both test data and clinical impressions strongly indicate that the psychedelic reaction may be regularly and reliably produced with these compounds in doses of around 1.0 mg/kg.

Leuner, probably the most experienced clinical LSD investigator in Europe, reporting his experimental trials with CEY-19 and CZ-74, concluded: "These new drugs would seem to be suitable to replace the known hallucinogens in experimental psychiatry and psycholytic therapy." He added: "There is little risk involved in their use in outpatient treatment [1965]."

One major objective of anticipated future research is to explore and develop a psychedelic procedure which, utilizing a short-acting LSD-type drug, might be more readily and widely implemented.

Though it is clear that maximally safe work in this area requires specialized experience and training, LSD-type drugs apparently hold major psychotherapeutic import. Certainly, all present indications call for expanded systematic exploration of techniques of harnessing and utilizing their possibilities in planned (therapeutic) "reprogramming" of nervous system circuitry.

[2]S. Szara, Background information on the pharmacological and clinical data of N. N-dialkyltryptamine derivatives, 1965, unpublished manuscript.

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