Explorations in Psychotherapy

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The singularly pervasive effectiveness of lysergic acid in altering the subjective experience and objective behavior of those to whom it is given affords unique opportunity for exploring methods of psychotherapy. Two attributes of lysergic acid psychoses especially favor such study. First, there is no impairment of consciousness during the psychotic reactions. Second, the severity and duration of the reactions and their relation to dosage have been well established. The researcher in psychotherapy has the opportunity to observe the psychotic reaction from its inception to its termination and the advantage of having a subject with whom he can communicate during the entire experience. He thus occupies a position which allows him to judge both the immediate and the enduring effects of any psychotherapeutic methods he chooses to use, and which frees him to employ a series of methods on a trial-and-error basis.

Before proceeding with the method of psychotherapy which is the subject of this paper, it is necessary to give an account of certain facts which characterized this study of the effects of lysergic acid on human subjects. In particular, certain subjects volunteered (for a variety of reasons) to take lysergic acid with the knowledge that it has a reputation for producing mental and emotional changes which last about 8 to 12 hours. In taking the drug, they understood that they had entered a contractual relationship in which they had agreed to give investigators information about themselves as experimental subjects. The agreement was nonpersonal and had nothing to do with individual worth or uniqueness. The personal factors which underlay the subject's motivation in volunteering to take the drug were not fully known to the subject himself or to the researchers. Personal and personality factors which underlay interactions between subjects and researchers were also only partly known. Within this context of unknowns were a number of known factors; namely (*a*) the declared willingness of the subject to take the drug and to be examined and experimented upon, (*b*) the dose and chemical structure of the drug, (*c*) the express motivation of observers to give their attention to the subject and to record his words and actions, (*d*) the express motivation, method, and procedure of psychologists, psychiatrists, and physiologists in their examination and experimentation upon the subject, and (*e*) the general plan of the experimental day and the sequence of structured and unstructured blocks of time.

In short, the experimental day was the most inclusive unit with which the research dealt. It represented a drama in which the subject, observers, researchers, patients, and chance subjects were the actors—a drama in which some of the acts and scenes had been rehearsed and prearranged, and in which others were left to the subject's participation in the chance events.

For the subject, the experimental day was a period of time during which he had a variety of experiences arising both from physiological changes in his tissues and from an ever-changing social matrix. He began the day with a more or less well-defined somatopsychic state, altered in some degree by the cues he perceived from those

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who accompanied him and administered to him the drug. From this moment forward, he was distinguished from everyone else both in his own mind and in the minds of those about him as *the subject.* Within about an hour's time, cutaneovascular changes took place which he felt, and which others observed, as blushing, pallor, and perspiration. These changes were soon accompanied by neuromuscular changes, which he felt as heaviness, lethargy, and weakness. These events marked the subject irrevocably and undeniably as different from those about him. Psychological changes also made their appearance during the first hour and increased in magnitude during the following two hours. The subject became confused and anxious; his visual perception of external objects became distorted, as did his general sensory perception of his own body. He was pervaded by an undefinable sense of unreality and by a more definable experience which he could express in words having the connotation of "awareness." He was generally distressed by the over-all unpleasantness of his experiences; yet he became more gregarious and, to a less degree, more hostile with others.

Review of the research records from a purely subject-centered point of view sorely tempted the research workers to evaluate the above phenomena as entirely physiological and endopsychic in origin and as directly attributable to the specific action of lysergic acid, as ringing in the ears is to large doses of acetylsalicylic acid. The nature of the subject's interactions with others was, from this point of view, considered wholly secondary to the specific action of lysergic acid. Such an interpretation, it turned out, became untenable when data about the subject's interpersonal relations were studied from the larger perspective of social psychology. Indeed, when all the available facts were assembled, scarcely any specific psychological effects of lysergic acid could be identified which could not better be accounted for in terms of social factors identified by the research observers. In other words, the personal meaning or significance which the subject attached to his total situation was based fundamentally on reality.

The experimental situation, by its very nature, confronted him with the conflict-provoking problem of a contradiction, for it freed him in large measure from responsibility for his acts but, at the same time, demanded that he reveal the personal and intimate thoughts behind them. He had full license on the condition of full confession. The less he did, the less he had to confess or explain. Yet deliberately doing very little or acting very proper was not fulfilling the obligation or expectation to participate cooperatively in the research endeavor. He was constantly confronted with doubt as to whether his words and actions made public would be interpreted as products of his private self or merely as drug-induced aberrations. He might also have been harassed by pernicious doubt that he had received the drug at all, if he thought of the possibility that he had been chosen as a control subject. He could then contemplate suffering the indignity of being a dupe to his own guilty conscience and of knowing that he was in the position of being "damned if I do and damned if I don't."

A word of comment is necessary to enlighten the reader as to the circumstances which led the research team to regard phychotherapy as a feasible undertaking in a chemical psychosis. The similarity between lysergic acid psychosis and schizophrenia was sufficient to suggest that psychotherapeutic methods developed for treatment of the latter might be of value in the former. More important, however, than the purely theoretical consideration was the circumstance that the research design included continuous observation of every subject throughout the experimental day and a sociological analysis of his interactions with other people during that period. The results of this part of the research demonstrated clearly that the se-

verity of the subject's reaction to lysergic acid and the intensity of his symptoms were extremely variable and fluctuated in accordance with the nature of the subject's social situation and the personalities of the other subjects in it. By actual count, 16 out of 23 subjects experienced alteration of symptoms as a result of fortuitous interaction with others. It was impossible, in effect, to designate in advance which situations would be a "therapeutic situation" and which would be a "pathogenic situation." In addition to these fortuitous interactions was the unplanned circumstance that some of the subjects made direct appeals to the available psychiatrists for help during the most trying period of their reaction to lysergic acid. The occurrence in several instances of rapid and dramatic disappearance of symptoms during ensuing therapeutic interviews was further basis for the conclusion that the research project should include a psychotherapist who would attempt psychotherapy of the subjects on a scheduled basis, rather than leaving it to chance.

Five of the psychiatrists and one sociologist associated with the lysergic acid research project served as psychotherapists to one or more of the subjects. Their collective experience as psychotherapists in this situation is the topic of this paper. Data on six of the subjects are incomplete and hence are not reported here. Three of these were given therapy by psychiatrists and three by a sociologist. The experience of the five psychiatrists with 15 other subjects is reported here.

Psychiatrist J. D. has had 20 years of experience in the hospital care of psychotic patients, has undergone personal psychoanalysis, and has his private practice in which he does psychotherapy. He had taken lysergic acid to learn its effect on himself. His role in the research project was that of interviewing subjects for the purpose of diagnosing their reaction to lysergic acid. In the course of one such diagnostic interview, the subject unexpectedly put him in the role of a therapist. He felt considerable sympathy for the subject and responded to her spontaneously.

Subject 1, a single woman, a college student, aged 19, was a patient in the hospital with the diagnosis of acute undifferentiated schizophrenic reaction. While interviewing this subject, the psychiatrist gave up his goal of making a diagnosis and interceded in a friendly way to spare the subject further distress. His intercession took the form of forceful insistence that her excessive pace of speech and her hyperactivity were a way of escape from thinking about the disturbing preoccupations which had played an important role in leading to her admission to the hospital. He also told her of the strange unreality he himself experienced when he was a subject of a lysergic acid experiment. This was followed by a dramatic change in her behavior, and the expression on the subject's part that she suddenly realized that this was not a prearranged play, and that people were not influencing her thoughts.

Subject 2, a 20-year-old college student, male, another subject interviewed by psychiatrist J. D. for diagnostic purposes, also showed considerable distress, to which the psychiatrist responded by assuming the role of therapist. He exhibited anxiety and feelings of guilt which were related in part to erotic feelings and preoccupations about old sexual experiences not hitherto revealed to anyone. After catharsis of these preoccupations, the anxiety and guilt markedly diminished.

With this subject, the psychiatrist's matter-of-fact approach in interviewing for diagnostic purposes was regarded as a secure situation which permitted him to speak freely about a homosexual situation which had occurred years before, but which had tormented his thoughts ever since. The psychiatrist's matter-of-fact discussion of this subject material greatly allayed the subject's anxiety. Indeed, by his own report at a later date, he said he had felt better since the interview than he had *before* the lysergic acid experiment.

Psychiatrist R. W. H., with seven years' experience in psychiatric research, in care of psychotic patients, and in psychotherapy of character disorders, was director of the lysergic acid project and had taken lysergic acid himself to learn its effects. He was available to subjects throughout the experimental day, and he was sought out by Subject 3, married, aged 28, a registered nurse, and head nurse on the disturbed ward. At the peak of her lysergic reaction, this patient became painfully depressed and lonely to a desperate degree. It was while in this state that she sought out R. W. H., as director of the research project, with the hope that he could help her. He accompanied her to lunch, with two observers, at a restaurant near

the hospital. In this informal setting, he responded to her in a good-humored, chiding way. He informed her that he saw her as more concerned with her duties as a nurse in her lysergized state than he himself and others are in their normal state. Her mood rapidly changed from depression to lighthearted playfulness and a great increase in spontaneity in interaction with everyone she met. Later in the day her mood became depressive, but not to the degree it had been.

Subject 4, real estate salesman, aged 24, sought psychiatrist R. W. H. to accompany him to lunch outside the hospital. While at the restaurant, he brought out his fears of homosexuality and his problem in becoming less dependent on his mother. From the subject's point of view, it was possible to discuss these matters because the psychiatrist communicated complete acceptance of him and indicated that he had similar fears and problems himself. The subject was most impressed that he could let himself be his "real self" and still be accepted as a legitimate subject of discussion, worth understanding. Several days after the experiment he reported this discussion as being of great positive value to him.

The third patient with whom psychiatrist R. W. H. played the role of psychotherapist was Subject 5, a nurse, aged 23, a married woman.

She sought out psychiatrist R. W. H. when she began feeling anxious and disturbed over her perplexed thoughts and unreal body sensations. Her presenting complaint on coming into his presence was that she felt "so queer" but could not understand what she felt queer about or even what the queerness was. She responded to the psychiatrist's encouragement to talk out her experience but still felt very uneasy about her queer feelings. The psychiatrist then changed his approach by seeking to provide her with a concept of how she felt and finally struck on the idea of nonexistence. The idea of nonexistence had an unexpected appeal, which not only allayed the subject's anxiety but also led to the realization that nonexistence was attractive because it would solve a difficult problem in her life. The extent to which the experience was significant to the subject is indicated by the fact that a few days after being a subject she made and acted on a decision which greatly altered her life.

Subject 6 was a single man, a medical student, aged 24. During the severest period of his reaction he underwent a cross examination by four members of the research team. With the pressure of time, the demands put on the subject to satisfy the investigative function of the researchers became progressively severe. At the same time, the experience reported by the subject became more and more devastating until he was finally possessed by the delusion that he was a walnut, the meat of which was his brain. His delusion progressed a step further, to the point that the meat of his walnut-self floated off into space and disappeared. While relating this delusional experience, the subject complained of his energies being drained out into the room in which he was sitting. Finally sensing the real nature of the complaint, psychiatrist R. W. H. responded to it as an expression by the subject of his feelings with respect to being questioned in an impersonal way, as though he were nothing more than a living guinea pig. The other researchers recognized the point of this interpretation and immediately apologized to the subject and told how they resented being asked questions that were purely for the scientific record. With this change in the discourse between the researchers and the subject, the latter visibly brightened and then good-humoredly reported the sensation that energy was flowing back into his walnut-self. Finally, he reported that the "walnut feeling" had gone, that he had arms and legs again, and that he felt like himself. He also ceased reporting delusional material.

Psychiatrist J. S. B. (author of this paper), with six years' experience in the care of psychotic patients and in psychiatric research, was engaged by the lysergic acid project for the express purpose of exploring the feasibility of psychotherapy in lysergic acid reactions. He had not been a lysergic acid subject himself. This psychiatrist attempted psychotherapy with nine subjects.

Interview with the first two of these nine subjects (Subjects 7 and 8) took place in the presence of two sensitive, alert observers whose purpose it was to record the interaction process between therapist and subject. In each case, these subjects impressed the therapist as having the washed-out appearance of dying persons who had lost all hope. This appearance instilled in the therapist a strong sense of urgency, which was accompanied by a feeling of the need to proceed gingerly, lest he have a damaging effect on the subject through his own sense of alarm. He explored surface phenomena by calling them to the attention of the subject and pursued his responses to a deeper and more intimate level whenever the subject showed signs of increased activity in word or action. Toward the end of about an hour's interview, these subjects, in each case, showed a definite change objectively and subjectively in the direction of less feeling of distress and in better organization of verbal production. In the first subject, the change took place after reaching a climax of weeping. In the second, the change was marked by a rush of sensation of warmth over the skin of the chest. With the first subject, the content of the verbal interchange was largely about ideas. In both cases, the therapist gave an account of his own thoughts and feelings about the subject's appearance and

statements, and sought to help the subject to conceptualize in words his own thoughts and feelings.

With the third and fourth subjects (Nos. 9 and 10) interviewed by psychiatrist J. S. B., the settings of the interviews were marked by the presence of three or four curious onlookers, in addition to the assigned observers. The therapist was obliged in both cases to interrupt a continuing verbal exchange between the subject and other persons present. The third subject evaded the attempts of the therapist to reach her and became uneasier with each question he asked or each remark he made. The fourth subject greeted the therapist with a facetious, devaluating remark and gave his attention to the others present in the room. Both the third and fourth subjects left the therapist to see other people a few minutes after his arrival.

Psychiatrist J. S. B.'s fifth subject (No. 11) was interviewed in the presence of one observer. Early in the interview, two interruptions occurred, during which the subject spoke to the person involved. He was from the outset hostile, teasing, and at times offensive in his remarks to the therapist. Fitful giggling also occurred. His behavior resembled most that of a maniac patient. A remark by the therapist to the effect that he was being carried away by himself was followed by a momentary slowing down, accompanied by a dejected facial expression. This was followed by a return to rapid, intense speech about his childhood and family. From this point forward, his thoughts were well organized. Throughout the interview the therapist did little more than serve as the occasion for the subject to assert himself. In view of the subject's high morale and well-organized thought, the therapist concluded that the subject was counteracting the effects of lysergic acid by exploiting its effect of decreasing repression as an occasion for catharsis, and in so doing was opening more neural circuits. In short, the subject was acting as his own therapist.

Psychiatrist J. S. B.'s sixth subject (No. 12) was interviewed alone while undergoing polygraph study. He presented a picture of dreamy confusion with little distress. His thoughts wandered frequently and would not remain organized around a central theme until the therapist asked questions about his present everyday relations with people. From this point on, the subject remained coherent as long as the conversation revolved around his girl-friend and his mother. There was improvement in the patient's thinking during the interview, but no clear-cut change in his psychophysiological status.

The seventh subject (No. 13) was also interviewed alone while undergoing polygraph study. This subject appeared to be in a pleasant, amused, dreamy state. He was curious about the therapist's purpose in interviewing him and incredulous that he could be helped to feel better or think better with psychological help. He was resigned to the effects of lysergic acid and was willing to wait for them to wear off.

The eighth subject (No. 14) was interviewed in the presence of one observer. This subject appeared to be perplexed and uneasy, but not greatly distressed. The outstanding feature of this interview was that the subject could not see the therapist's face clearly and described it as constantly changing in a wave-like fashion, although the observer's face appeared perfectly normal to him. He was also preoccupied with the therapist's Germanic name and expressed a fear and hatred of Germans. There was little change of note until the topic of conversation shifted to the subject's wife and father-in-law, who is a German refugee. Considerable resentment was expressed toward the father-in-law. There was little change noted in the patient's behavior during the interview, although the therapist resorted to prodding to elicit direct expression of hostility toward him. The most significant change of note occurred after the interview, when the subject met a member of the research team whose name and accent are German and addressed him with open hostility.

The ninth subject (No. 15) was seen by the therapist in response to an emergency call, due to the subject's extreme distress. His face was flushed, pupils were dilated widely, and pulse was rapid and bounding. He was greatly confused and unable to express himself coherently. The therapist's reaction to this subject was that of physician to an acutely ill patient. Direct questions were put to the patient which disclosed that he was badly frightened, and convinced that his confusion and miserable subjective state would never cease. The subject was taken to a bed and told to lie down. After a brief physical examination, the therapist assured the subject in a forceful manner that the effects of the lysergic acid would wear off in a few more hours. He calmed down after a few minutes and then got up from the bed and went for a walk with one of the research team.

At the end of the respective interview periods, three subjects (Nos. 7, 8, 15) showed definite improvement in their feeling of well-being and in their objective behavior. With all of these subjects, the therapist was strongly motivated to help them by the feeling of alarm and urgency in himself which was aroused by the subject's acutely ill appearance. The content of the interviews with these subjects revolved around the immediate situation. The setting in which these interviews took place was one in which the observers also showed a serious and positive interest in the subjects' welfare and respect for the therapist's efforts. Two of these subjects were acquaintances of the thera-

pist; one (No. 15) was a complete stranger to him.

In two of the interviews, the subjects (Nos. 9 and 10) were surrounded by a coterie of onlookers, who were already conversing with the subjects. The therapist was both annoyed by their distracting influence and impressed with the pointlessness of his efforts. Both subjects were acquaintances of the therapist.

In two other interviews (with Subjects 12 and 13) there was little that distinguished them from routine psychiatric interviews with new patients. The interviews were information-gathering and probing in character. Both of these subjects talked most freely about their resentments and grievances in their present life situation. Both were a little better organized in their thinking at the end of the interview period. The therapist had no previous acquaintanceship with these subjects.

In two other interviews the subjects (Nos. 11 and 14) declined or denied the need for help from the therapist. One subject (No. 11) talked largely about his family background; the other subject (No. 14) gave brief answers to direct questions and produced almost no organized verbal material. Both claimed to be feeling no particular distress. Both were acquaintances of the therapist.

Comment

The collective experience of the psychotherapists who sought to alter the course of lysergic acid psychosis brought to light the fact that relief of symptoms was limited to those cases in which the therapeutic interview occurred on an impromptu basis. Discussion among the therapists disclosed that the impromptu cases were those in which the therapists acted on an impulse to take care of an acute emergency. The emergency interviews were unlike the usual scheduled interview in that they were attended by a greater degree of spontaneity on the part of the therapists and were largely disorganized and unstructured. Discussion with the subjects several days after the lysergic acid experiment yielded the added information that both the investigative and the reticent therapist made symptoms worse, while the "self-revealing" therapist, who openly discussed his own experiences by comparing them with those of the subject, was able to give the latter a greater sense of reality and security.

The circumstance that four of the therapists had themselves taken lysergic acid was probably a significant factor in prompting them to report personal experiences in therapeutic interviews with lysergic acid subjects. The one therapist who had not taken lysergic acid reported his experiences of other disturbing emotional experiences. He did this partly out of a desire to learn the effects of lysergic acid by making comparisons. His chief effort was to help the subject by providing him with descriptions of experience which he could accept or reject as analogous to his own.

The effectiveness of spontaneity in the psychotherapy of lysergic acid psychosis, as observed in this study, suggests that the position or pose taken by the therapist with respect to his patient is as important in determining the effect of therapy as the therapist's knowledge of psychodynamics and of himself. The capacity of the therapist to empathsize and identify with his patient is generally recognized as playing a positive role in therapy. Spontaneity in therapy may be secondary to one's capacity to identify with a given patient. This was probably the case in several instances in this study. In other instances, spontaneity was not incident to identifying with the subject, but was recognized as indicated in view of the subject's situation. Here the therapist's spontaneity appeared to be a prerequisite for the subject to attain a basis for identification with the therapist.

The therapist may, on the other hand, adopt the position that he functions as an impersonal and neutral spokesman of mental science and possesses means for objective appraisal of the patient which are derived from authoritative sources outside himself. By adopting this position, the therapist forces the patient to choose between the alternatives of rejecting the therapist altogether, thus clinging to his own interpretation of himself, or of accepting the therapist as the voice of objectivity and thereby discarding not only his own interpretation of himself but also his sense of

integrity and self-esteem. The therapist who takes such a position as his point of departure in communicating with the patient leaves out of account everything that is beyond his knowledge which plays a part in determining both his own and his patient's thoughts, feelings, and behavior. In so doing, he acts as if he were as objective as a surgeon suturing a laceration, when, in point of fact, the margin of knowledge he possesses over that possessed by his patient is relatively small and does not endow him with objectivity.

By acting as though he were actually objective, when he is not, the therapist burdens the patient with incongruous, ambiguous, or self-contradictory communications, which derive from the discrepancy between his not wholly concealed subjective responses and his hypothetical objectivity or objective neutrality.

An alternative position which may be taken by the therapist is that which was adopted in our attempt to alleviate symptoms of lysergic acid psychosis by means of psychotherapy. This position is one in which the therapist allows himself to react subjectively but regards his effort to help as empirical research, in which he and the subject collaborate by pooling their individual experiences, including their experiences of each other. The value to the patient of this procedure is assumed to derive from what the two individuals learn together which adds to the self-knowledge of each. A value of greater importance which accrues to the patient, to the extent that he realizes it, is the discovery that he is not alone in suffering from the problems of subjectivity. An example of performance based on the position of subjective orientation is afforded by one of the therapists who was confronted by the problem of mutism and expressionlessness in some of his subjects. He assumed that this behavior was evidence that the subjects regarded him as a dangerous enemy of superior knowledge, to whom he dared not reveal anything of himself. The therapist tried several ways of dealing with this problem. He sat in silence and waited for the subject to speak; he left the subject several times and returned again. None of these methods met the issue squarely, which had to be met from the subject's point of view, namely, that the therapist reveal himself first and provide the subject the opportunity to evaluate him as trustworthy or untrustworthy. The question then was: How was the therapist to reveal himself? The method adopted in this case was that the therapist imparted to the subject his own stream of thought and associations as faithfully as he himself could tolerate. The content of the stream of thought included the therapist's reactions to the subject's appearance and actions, and also, when they occurred, to his verbal productions. He reacted, in short, subjectively to the patient out of his total experience with people, including his experience as a psychiatrist. By allowing the basis of his relationship with the subject to be fully subjective, he placed himself on an equal footing with the subject; that is, his mental operations and verbalizations occurred within the same frame of reference with respect to the subject as did the subject's mental operations and verbalizations with respect to him. This mode of discourse was successful in six of the nine subjects the therapist sought to help.

Conclusion

The observation of symptom alleviation in lysergic acid psychosis in response to psychotherapy based on communication by the therapist of his subjective reactions to the subject strongly suggests that empirical trial-and-error research in psychotherapy is worthy of exploration. A therapeutic armamentarium could feasibly be accumulated by systematic application of such a method, which would supplement psychotherapy based on special theoretical considerations. It is of historical interest that the first half-century of psychiatry as an independent medical discipline did witness the

collection of an empirically derived psychotherapeutic armamentarium. It was discredited and abandoned about 75 years ago on the grounds that "insanity" was a disease of brain tissue.

Today our conception of psychodynamics, psychopathology, and the requirements for recovery from mental disorders tends to minimize the probability that research aimed toward discovery of an armamentarium of corrective emotional experiences would be successful. There are, on the other hand, indications on the basis of psychodynamics that electric shock and insulin coma are effective as corrective emotional experiences, and not solely as agents of physiological change. The same could be said of occupational and recreational therapy.

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