

PEAK EXPERIENCES : INVESTIGATION OF THEIR RELATIONSHIP TO PSYCHEDELIC THERAPY AND SELF-ACTUALIZATION

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MASLOW (1962a) has described the peak experience as an individual's most fulfilling, meaningful, and exciting moments in life. Such experiences are assumed to embody man's most creative instances of insight and inspiration. Maslow further contends that these experiences are characteristic of psychological health, particularly in the direction of self-actualization. Peak experiences are described as transient moments of self-actualization — states that transcend deficiency-need satisfaction. Such experiences are typically followed by therapeutic after-effects or dramatic personal growth. Maslow has presented many phenomenological descriptions of the peak experience and its subsequent effects upon the individual (1962a, 1962b, 1962c, 1964). Some individuals (non-peakers) tend not to report peak experiences and apparently do not derive any benefit from such experiences. Instead, the non-peaker devalues, denies, suppresses, rejects, or misrepresents peak-like experiences. Persons who are refractory to peak experiences tend to be other-directed and insensitive to their internal psychic functions or creative potential.

The use of LSD as a vehicle for therapeutic benefit or personal growth offers an experimental basis for investigating the peak experience and its experiential or phenomenological character. A number of investigators have suggested that psychedelic drugs are capable of triggering a peak or transcendental experience (Mogar, 1965; Savage, Terrill, & Jackson, 1962). The present study was designed to test this hypothesis by examining the experiences of individuals who have taken LSD under "optimal" conditions, adequate preparation and medical supervision. It was hypothesized that peakers (Maslow, 1964) would evaluate the LSD session in a more favorable light, i.e., as a more intense, profound experience, than non-peakers, and that the former would manifest greater psychological growth or therapeutic benefit following the experience. The scales designed to measure the "peakness" of the experience and subsequent changes in self-actualizing tendencies were rationally derived from a follow-up questionnaire sent to 119 patients participating in a psychedelic therapy-research program. Savage and his co-workers (1964) have partially summarized questionnaire results in terms of the per cent of respondents endorsing positive and negative evaluations of the experience. For the present study, items extracted from the follow-up questionnaire consisted of state-

ments reflecting two major dimensions: (a) an evaluation of the LSD session in terms of its positive or negative experiential effects, and (b) subsequent changes in attitudes and behavior. The subjects rated the statements according to the degree to which they were descriptive of the psychedelic experience. The Peak Experience Scale (I) and the Self-Actualization Scale (II) are presented in Table 1.

TABLE 1

PEAK EXPERIENCE SCALE (I)

Extent of Congruence and Intensity of Peak Experience

(PK) Peak item; (NP) Non-peak item

- | | |
|---|------|
| Looking back on your LSD experience, how does it look to you now? | |
| 1. A very pleasant experience. | (PK) |
| 2. A very unpleasant experience. | (NP) |
| 3. A very confusing experience. | (NP) |
| 4. Something I want to try again sometime. | (PK) |
| 5. An experience of physical discomfort and illness. | (NP) |
| 6. An experience of great beauty. | (PK) |
| 7. Greater awareness of reality. | (PK) |
| 8. Feel it was of temporary benefit to me. | (NP) |
| 9. Feel it was of lasting benefit to me. | (PK) |
| 10. Gave me great understanding of myself and others. | (PK) |
| 11. The greatest thing that ever happened to me. | (PK) |
| 12. A transcendental experience, beyond my usual comprehension. | (PK) |
| 13. A religious experience. | (PK) |
| 14. A pleasant memory, but nothing more. | (NP) |
| 15. An experience of insanity. | (NP) |
| 16. Did me harm mentally. | (NP) |
| 17. A disappointing experience. | (NP) |

SELF-ACTUALIZATION SCALE (II)

Subsequent changes in self-actualizing tendencies

(SA) Self-actualizing item; (NSA) Non-self-actualizing item

- | | |
|---|-------|
| How were you, or what were you left with after the LSD experience? | |
| 1. A new way of looking at the world. | (SA) |
| 2. A sense of futility and emptiness. | (NSA) |
| 3. A greater understanding of the importance and meaning of human relationships. | (SA) |
| 4. A new understanding of beauty and art. | (SA) |
| 5. A new understanding of music. | (SA) |
| 6. A greater awareness of God, or a Higher Power or an Ultimate Reality. | (SA) |
| 7. A sense of greater regard for the welfare and comfort of other human beings. | (SA) |
| 8. A realization that I need further psychotherapy. | (NSA) |
| 9. A frightening feeling that I might go crazy or lose control at any time. | (NSA) |
| 10. A feeling that I know what I have to do to improve myself. | (SA) |
| 11. A feeling that I "missed the boat" or somehow failed to get out of the experience what was potentially there. | (NSA) |
| 12. A feeling that the experience was misrepresented as I didn't find what I was led to believe I would. | (NSA) |
| 13. More tendency toward feelings of depression. | (NSA) |
| 14. More intense swings in feeling from "high" to "low." | (NSA) |
| 15. More frequent and persistent feelings of happiness. | (SA) |
| 16. More ability to express hostility. | (SA) |
| 17. More ability to handle hostility creatively and get over it. | (SA) |
| 18. More ability to love in general. | (SA) |
| 19. Generally decreased anxiety. | (SA) |

[Table continued on next page]

TABLE 1 — *continued*

20. More ability to relax and be myself.	(SA)
21. Increased self-esteem, higher evaluation of myself.	(SA)
22. Frequent or persistent feeling which might be described as wonderment at the miracle of Being.	(SA)
23. A new and deeper understanding of the concept of God.	(SA)
24. Beneficial changes are noticed by the person closest to me.	(SA)
25. Improved ability to communicate with others.	(SA)
26. Greater tolerance of others whose opinions, preferences, habits, and attitudes differ from mine.	(SA)
27. Deeper understanding of others.	(SA)
28. More sensitivity to the feelings of others, even when not expressed.	(SA)
29. Relatively decreased importance to me of money, status, dependence on others' opinions.	(SA)
30. Increased reliance on my own values and judgement, less dependence on others' opinions.	(SA)
31. More awareness and better realization of what is going on.	(SA)
32. Generally increased ability to handle various types of situations.	(SA)
33. Increased interest in universal concepts, i.e., meaning of life, my place in relation to the rest of life, etc.	(SA)
34. Increased interest in such topics as mysticism, prayer, extra-sensory perception, etc.	(SA)
35. More tendency to view such matters as telepathy, reincarnation, spiritualism, foreseeing the future as possibilities warranting investigation.	(SA)
36. Generally improved relations with persons I work and live with.	(SA)
37. I seem to have more energy.	(SA)
38. I find decision-making easier.	(SA)
39. Find I am generally more active.	(SA)
40. Find I do more daydreaming and introspection which interferes with getting things done.	(NSA)
41. I am less rigid and insistent on having my own way.	(SA)
42. Increased effectiveness in my work.	(SA)
43. Increased sense of responsibility.	(SA)
44. New freedom from old habit patterns.	(SA)
45. More active interest in religious matters.	(SA)

In accordance with Maslow's description of peak experiences (PK), Scale I consists of items designed to estimate the degree to which the LSD session is viewed as an exhilarating personal experience of lasting benefit, greater perception of reality, self, and others. Scale I also assesses felt experiences of beauty and understanding, of self-transcendence and religious inspiration. The non-peak (NP) items reflect the degree to which the psychedelic experience is viewed as unpleasant, confusing, disappointing, and/or characterized by physical discomfort and feelings of insanity. Other NP items depict the experience as having little or no personal meaning and lacking in immediate and enduring beneficial effects. The self-actualizing items in Scale II reflect a clearer, more accurate perception of reality, self, and others; increased understanding and meaningfulness of interpersonal relationships; increased spontaneity, expressiveness, and full-functioning; the importance of personal values and a quasi-religious or spiritual approach to life; a sense of personal worth and increased self-esteem; less anxiety and freedom from restrictive or rigid behavioral patterns.

METHOD

Clinical Procedure

All subjects were patients receiving psychedelic therapy in a private clinic co-operating with the International Foundation for Advanced Study, Menlo Park, California. The therapy included preparation for approximately one month preceding the LSD session, consisting of weekly inhalations of a mixture of 30% CO₂ and 70% O₂ (Meduna, 1950) together with exploratory interviews. The preparatory period was designed to familiarize the patient with altered states of consciousness, develop a trusting patient-therapist relationship, and help the patient clarify specific problem areas he wished to explore. On the session day, the patient was given 200 to 300 mcgs. of LSD plus 200 to 400 mg. of mescaline initially, with 100 to 300 mcgs. of LSD added a few hours later if indicated. The experience was followed by several weeks of interviews focused primarily on the recorded accounts of the session. Throughout the procedure emotional support was provided, but not interpretative psychotherapy. A more detailed account of this procedure has been described by Sherwood and his co-workers (1962).

Subjects

The questionnaire was administered to a sample consisting of 119 consecutive subjects, 77 males and 42 females, who participated in the LSD program during a fourteen-month period. The average time interval between the drug-induced psychedelic experience and completing the Peak Experience/Self-Actualization Scales was approximately nine months. The statements in Scales I and II were rated by the respondents on a 4 point scale: 3 designating a very accurate description, 2 moderately accurate, 1 somewhat accurate, and 0 not at all descriptive of the experience. The score on Scale I was obtained by subtracting the non-peak from the peak items (PK - NP). On Scale II, the ratings ascribed to the non-self-actualizing statements were reversed and summed with the self-actualizing items to obtain an internally consistent total score.

RESULTS

The possible range of scores on Scale I was -24 to +27: from extreme "non-peakness" to profound "peakness," respectively. The obtained range was from -8 to +27. On Scale II, the possible range of scores was from 0 to 135, indicating the extent of increase in self-actualizing tendencies. The obtained range was from 25 to 129. A Pearson product-moment correlation coefficient was computed between Scale I and Scale II yielding a highly significant positive relationship (.731). Based upon the high relationship between "peakness" and increased self-actualization (SA), empirically-defined groups were generated on the basis of scores on Scale I. Peakers (N = 82)

were defined as persons with scores +16 and above. Non-peakers (N = 37) were defined as persons with scores +15 and below. To test the hypothesis that peakers would be significantly more self-actualized than non-peakers, *t*-tests of the difference between the two groups were calculated on total self-actualization scores. The mean SA score for peakers was 98.88 in contrast to 61.32 for the non-peakers. The difference between the two groups on the total SA scale (II) was significant beyond the .001 level of confidence in the predicted direction. In addition, ratings by the two groups on each SA item were statistically evaluated to determine which items significantly discriminated between peakers and non-peakers. Among the total 45 SA statements, 42 significantly discriminated peakers from non-peakers in the hypothesized direction. The SA statements that failed to discriminate the two groups were items 13, 14, and 40 (see Table 1).*

DISCUSSION

Assuming that the psychedelic agent LSD can often trigger an experience highly similar to the more inclusive peak experience, the results of the present study provide support for Maslow's concept of the peak experience and its subsequent effects on psychological growth in the direction of self-actualization. Consistent with Maslow's hypothesis, the peakers evaluated the experience as positive and personally meaningful. Non-peakers, on the other hand, devalue the experience, describing it negatively and lacking in self-enhancement. In addition, peakers consistently report significant therapeutic benefit following the LSD session while non-peakers experience only slight subsequent growth.

Although lacking the breadth and richness of Maslow's comprehensive descriptions, both scales appear to be valid operational definitions of Maslow's pivotal concepts, namely, the peak experience and self-actualization. Items are currently being constructed for the Peak Scale which will be more characteristic of the unitary nature of the experience and the immediacy of self-realization. Scale II, for example, will include more statements adopted from Maslow's writings that are descriptive of self-actualized individuals. Furthermore, to counter response set tendencies, the revision will contain more reversed items and statements indicative of the non-self-actualizing individual. Based on the present study, it is considered premature to assume that the scales devised are valid measures of the characteristics described. Reliability estimates are required and further validation studies using different criterion measures and interventions other than LSD therapy.

The peak experience as investigated in the current context should not be construed as a drug-specific reaction. It has become apparent that the nature, intensity, and content of the psychedelic state are the result of complex transactions between the subject's past history and

* A summary of the statistical results may be obtained from the authors on request.

personality, the set and expectancies of both subject and administrator, and the physical and psychological milieu in which the experience takes place (Mogar & Savage, 1964). Within this framework, the peakness of the experience can be viewed as a process variable that bears significant relationships to both antecedent conditions (e.g., personality style, beliefs and values, modal behavior patterns) and outcome variables (e.g., self-actualizing behaviors, degrees of personal growth, and maintenance of change over time). Considerable evidence indicating the nature and magnitude of such relationships has already been reported (Savage *et al.*, 1966). Earlier investigators developed psychedelic techniques designed to induce a transcendental or mystical experience (Hoffer, 1965; Pahnke, 1966). Advocates of this orientation assume a direct relationship between the attainment of the transcendental state and subsequent transformations in values or personality. The present study provides support for such an interpretation. However, in contrast, the current approach does not view subsequent personal changes as contingent upon an *all-or-none* attainment of the transcendental state, but rather in terms of *degree* of peakness.

It is also worth mentioning that the results reported here are consistent with three independent investigations involving patient evaluations of the LSD experience and its personal effects. In each case, responses to a similar questionnaire were reported which bear a high degree of consistency with the present findings. An integrated summary of these studies has been reported by Metzner (1963).

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