SOCIAL AND POLITICAL SOURCES OF DRUG EFFECTS: THE CASE OF BAD TRIPS ON PSYCHEDELICS

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Bad trips occurring during psychedelic drug use are analyzed as social rather than pharmacological products. Survey data from psychedelic users show a dramatic decline in bad trips over the period from the mid-1960s through 1975. Several explanations of this phenomenon are considered. Neither pharmacological explanations nor explanations depending on the growth of supportive subcultures of psychedelic users are supported by the data. Instead an historical analysis of the political conflict that was fashioned around psychedelic use in the 1960s suggests that the terms of this conflict and the policy environment around psychedelics structured social experience with these drugs in such a way as to generate experiences defined as bad trips. By the mid-1970s the shift of social conflict a way from psychedelic issues produced a corresponding decline in bad trips among new groups of users.

As a class psychedelic drugs are regarded as unusually potent agents., Hallucination, fantasy, extraordinary perceptions of one's environment and one's own powers are common themes running through the accounts of users across time and, to the extent we know, across cultures. The modal Western response, if we can speak of such, seats the psychedelic experience in the magico-religious matrix of pre-industrial societies, as if to make clear its antithesis to the premise of everyday experiences demanded by an industrialized, secular culture.

In American society since at least the industrial age, self-control has been the central consideration around which social sanctions governing drug use have been organized .2 Applied to psychedelic use, the moral concern with self-control has come to be articulated not in terms of frequency or compulsiveness 'of user behavior--al though some users have used these drugs steadily (daily) for extended periods of time, more than a year-but in terms of the user's control over his emotional state, perceptual experiences and behavior in the course of single episodes of use. The reasons for the selection of these criteria of control no doubt have something to do with the pharmacology of the drug and the physiology of its effects. The emphasis on sustaining a certain rationalist gestalt throughout the experience may also have much to do with issues peculiar to the social and political climate prevailing at the time psychedelics were first made available. In particular, the professional interests and ideology of those who introduced these drugs in the 1960's, chiefly psychiatrists interested in abnormal behavior and mental illness, have had a critical role in defining the terms for psychedelics and their use. Their influence set the course of discussion, debate and controversy for some time thereafter.

Consequently, due in part to pharmacological reasons and in part to reasons of social structure and politics, hazards and abuses associated with psychedelic use have been defined not in terms of addiction or "psychedelicism," but in terms of certain apparently "uncontrolled" responses to psychedelic intoxication joined under the terminology of "bad trips".

The term "bad trip" was coined by insiders to the subculture of psychedelic users in the mid1960s. Those who began to use psychedelics for consciousnessexpansion early adopted the terminology promulgated by Timothy Leary which referred to psychedelic intoxication as a voyage or trip. Insiders in turn referred to acutely traumatic experiences while using psychedelics as *bad trips*.

Psychotic Episodes, Bad Trips and History

Watts (1971) has traced the attempts to develop interpretations of psychedelic "effects" as outcomes strongly conditioned by social factors. The most important contributions to this perspective have come from anthropologists' emphasis on the role of cultural definitions of drug experiences, particularly variations in the meaning attached to "hallucinations" (Wallace, 1959); from psychologists, including Leary, who emphasized the importance of a positive set and a supportive, guided setting to positively valued psychedelic use (Leary, 1963; 1964); and from the work of symbolic interactionists like Becker (1967) who has emphasized the importance of shared understandings of drug use-a culture (which includes prescription of effects), and the importance of use in a group context as an effective social mechanism in coping with uncertainty surrounding drug effects.

By way of emphasizing the critical role that culture plays in conditioning drug effects, Becker proposes that as cultural assimilation of a new drug occurs, its effects will *change.* The dynamic component of drug effects, particularly concerning anxiety or panic reactions to drug use, is developed by Becker into a theory of the "natural history of the assimilation of an intoxicating drug by a society" (p. 171). The initial availability of a new drug is first met with uncertainty about its effects.

Users do not have a sufficient amount of experience with the drug to form a stable conception of it as an object . . . No drug-using culture exists, and there is thus no authoritative alternative with which to counter the possible definition, when and if it comes to mind, of the drug experience as madness. "Psychotic episodes" occur frequently.

Over time individuals accumulate experience with the drug and communicate their experiences to one another. Consensus develops about the drug's subjective effects, their duration, proper dosages, predictable dangers and how they may be avoided; all these points become matters of common knowledge, validated by their acceptance in a world of users. A culture exists. . . . "Psychotic episodes" occur less frequently in proportion to the growth of the culture to cover the range of possible effects and its spread to a greater proportion of users.

The incidence of "psychoses," then, is a function of the stage of development of a drug-using culture..

Becker argues that the history of marijuana use fits this model, albeit based on admittedly scanty evidence: three journal articles published between 1939-40, which indicate a history of reports of marijuana psychosis up until that time, coupled with Becker's failure to uncover any further reports of such psychosis after 1940. Becker suggested that the "psychotic episodes" (bad trips) being reported for LSD use at the time he was writing would be subject to this same process of assimilation.

Testing the Theory of Assimilation

In the decade since Becker's historical theory first appeared, the prevalence of psychedelic use, according to several national surveys, increased briefly and then stabilized.

Trend data on the use of psychedelics among the general population is available for 1972 (Abelson, et al., 1973), late 1974-early 1975 (Abelson and Atkinson, 1975), and late 1975early 1976 (Abelson and Fishburne, 1976). Table 1 shows that the rates of ever use and recent use (in the past month) have remained about the same during this time period, 1972-76. These data are not for all psychedelics as I defined them above, but instead reflect responses to questions about the use of : "LSD or something like it, such as mescaline, psilocybin, MDA, STP" (1972 form); "LSD or other hallucinogens" (1974-75 form); "LSD and other hallucinogens, like mescaline, peyote, psilocybin and DMV (1975-76 form).

Table 1 Percent of General Population Reporting Use of LSD and Other Hallucinogens, 1972-1976

	Youth	(12 -17)		Adults	(18+)	
	1972	1974-75	1975-76	1972	1974-75	1975-76
(N)	(880)	(952)	(986)	(2411)	(3071)	(2590)
Response Rate	62%	NA	79%	60%	NA	78%
Ever Used	5%	6%	5%	5%	5%	5%
Used in Past Month	1%	1%	1%	1%	1%	.5%

Source: Abelson and Fishbume, 1976.

Table 2 shows the frequency of ever use by age for the 1974-75 survey. Clearly psychedelic use has remained a youth phenomenon, concentrated among then sixteen to twenty-five year olds, even at a point in time a decade after these drugs first became noticeably available. Data on new users in 1974-75 show that 68% of recruits to first time use were fourteen to seventeen year olds; adding in eighteen to twenty-one year olds accounts for 90% of new users.

Table 2 Ever Use of LSD and Other Hallucinogens by Age Chort, Reported in 1974-1975

	12-13	14-15	16-17	18-21	22-25	26-34	35-49	50+
(N)	(322)	(302)	(328)	(412)	(437)	(881)	(531)	(809)
Ever Use	<1%	5%	12%	18%	15%	5%	<1%	~

Source: Abelson and Atkinson, 1975.

The most extensive non-clinical data on psychedelic use is available from the Young Men Drug Study (YMDS) a representative, national sample of young men concerning their use of drugs and effects reported including retrospective data on use going back, in most cases, to early adolescence.

Data from the YMDS permit us to trace the history of psychedelic use up until 1975, and because the survey included a question on bad trips, we are able to test Becker's theory of assimilation of effects during that time.

We can generate from the YMDS data an estimate of the growth of psychedelic use during the 1965-74 decade (Table 3). Among this sample, aged 20-30 during the period of data collection in 1974-75, use was extremely rare until 1966, when the rate of current users reached 1% (at that time the sample ranged in age from 12-22). Thereafter the percent of young men using psychedelics at least once over the course of a year doubled during each of the next three years. Use rates levelled off at 10% of the population in 1970 (at the time this sample ranged in age from 16-26). A gradual decline in use is indicated in 1973 and 1974. Evidently this is a function of the aging of the sample beyond the age range which supplies recruits to replace those discontinuing use, since during 1974-75, 90% of such recruits were fourteen to twentyone year olds, whereas this sample covered the male population between twenty and thirty.

Very likely the YMDS sample is a good estimate of general population levels of use up until about 1972, when the mean age of new users that year reached nearly 21 in this sample. This argument assumes that the 14-21 year old recruitment period has remained roughly constant since psychedelics first became available in the mid-1960s.

The last column in Table 3 indicates that per capita consumption has been increasing at the same time that the percentage of consumers has been growing. "Trips per capita" measures episodes of use *among users* based on a very conservative formula which eliminates the extreme tail of the distribution of consumers from the calculations (see table footnote for details). The significance of Table 3 is that it clearly shows an expansion in both the number of users and in the frequency of use over time, among young men.

Table 3 Psychedelic Drug Consumption Among Young Men Sample, 1965-1974

Year	Current Percent	Consumers (N)	Percent of Consumers First-Time Users	Annual Trips Per Capita*
1965	.3%	(8)	75%	3.9
1966	1.0	(45)	71	7.1
1967	1.8	(45)	69	9.2
1968	3.3	(83)	65	10.4
1969	7.1	(177)	63	11.2
1970	10.0	(252)	44	12.3
1971	10.0	(252)	32	12.3
1972	10.3	(259)	24	10.8

1973	8.8	(222)	18	9.2
1974	7.1	(179)	13	7.9

*Based on frequency of use data for each year provided by men who used psychedelics ten or more times over their lifetime, as follows: those reporting "use once or twice a week" were credited with use once a week, or 52 trips for that year; "once or twice a month" users were scored 12 trips; "less than monthly" users were scored 6 trips. "Almost every day" users were excluded from the computation entirely because though very few in number, never exceeding more than 7 in any year, slight fluctuations in their number from year to year completely distort the general consumption pattern derived from the overwhelming majority of users. Yearly frequency of use data was not available for those who had used psychedelics fewer than ten times in their life; they were conservatively credited with one trip for each year of use.

Respondents to the YMDS were asked "Have you ever had any bad trips from using any of [the drugs that you have used]?" Forty-one percent of those who had ever used psychedelics reported having "bad trips" on psychedelics. Seventy-nine percent of these respondents reported either one or two bad trips. Only six percent reported more than five.

The sample of psychedelic users has been divided into seven cohorts according to the year in which use first began (Table 4). Because psychedelic use was quite rare prior to 1967, all those who began use prior to that year have been grouped together. And because by 1974 our sample is aging out of the age-range during which most initial use of psychedelic drugs occurs (ages 14-21), new users since 1973 have been grouped together.

In Table 4 the rate of bad trips reported shows a clear historical decline. This declining trend is displayed graphically in Figure 1. The graph suggests three epochs with quite different probabilities of bad trips. The early period, dating from the time psychedelics first began to be used outside a clinical setting (1961 being the earliest date of use from this- sample) up through 1968, when current users accounted for just 3.3% of the whole sample (see Table 3), shows a 51% probability of bad trips. In the next year current use more than doubled to 7.1%, and in 1970 it reached a peak of 10.0% These two years of rapid increase in the use of psychedelics form a middle epoch during which the probability of a bad trip fell to 45%. After 1970 psychedelic use appears to have stabilized; in this sample the 10% level of current use was repeated in 1971 and rose fractionally in 1972 (to 10.3%, although the difference from prior years is not statistically significant). Levels of use in the general bopulation remained constant after 1972 (Table 1). This third period then dates from 1971 and runs through the end of this study (1975), showing a substantially reduced probability of bad trips, averaging MO. This is down almost twenty points, or a 37% decrease in bad trips from the first epoch. The historical effect represented by the association between year of first use and bad trips is statistically significant ($p<.001$); Somers' d which is the preferred measure of association in this case, computes to -.17 ' in an extensive tabular analysis of more than one hundred variables and their associations with bad trips, coupled with an elaborate series of AID trials, no other variable showed a stronger association with bad trips. (One other variable, the social pressure to use psychedelics, showed an association with bad trips that was equally strong. The effects of social pressure show no association with history however-the two variables are independent of each other.)

These historical effects can be summarized in a regression equation where Y is the probability of a bad trip, and X indicates which year use began (the X value ranges from 1 to 7).

Y - .57 - .04 (X)

This equation indicates that over each of the seven time intervals measured, the probability of bad trips has fallen, on the average, by 4%; and that over the seven time intervals, the rate of bad trips has been halved.

Further analysis indicated that these apparent historical effects could not be explained away either by (1) frequency of use differentials (since early users could potentially have had more occasions to use, thus more "time" to have had a bad trip); or by (2) the possibility of a shift over time in bad-trip-related characteristics in the population of users.

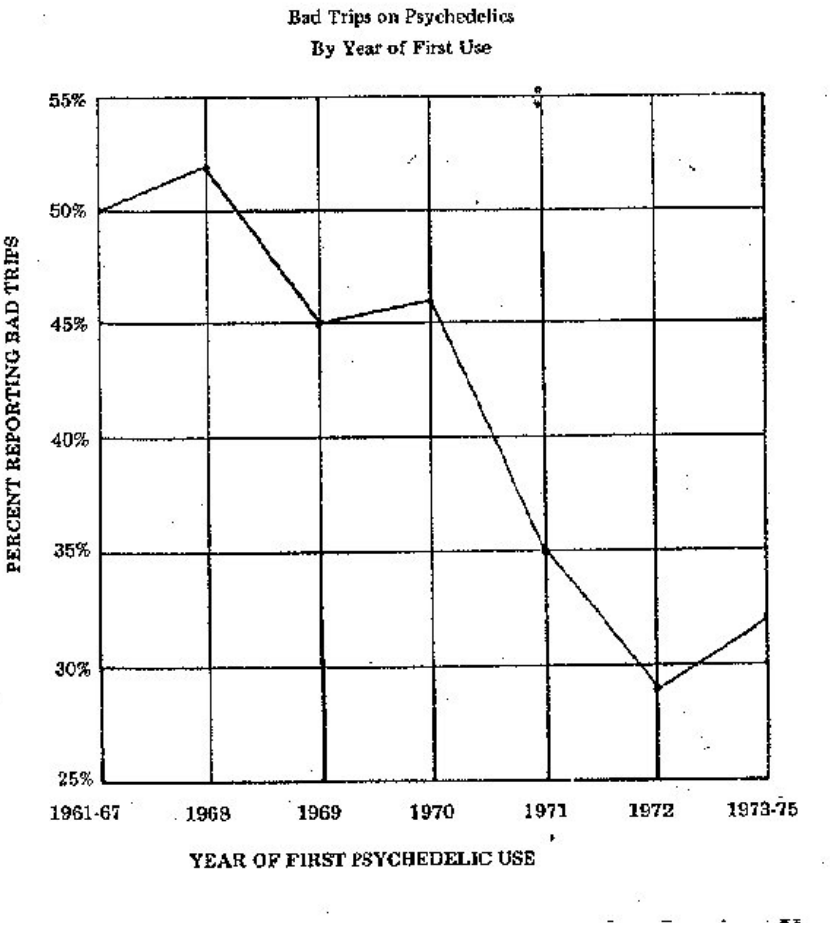
The data clearly show a substantial historical change in the rate of bad trips occurring in the American male population during the period from the mid-1960s through 1975. Can Becker's theory of historical assimilation of drug effects account for these findings? That depends upon, whether Becker's mechanism for assimilation, ties to a subculture of psychedelic users, shows a similar relationship with the rate of bad trips. For the assumption of Becker's historical theory is that a supportive subculture grows over time to encompass an increasing proportion of users.

TABLE 4

Bad Trips on Psychedelics By Year of First Use

Year of First Use (N)		% Reporting Bad Trips
1961-67	(56)	50%
1968	(54)	52%
1969	(112)	45%
1970	(112)	46%
1971	(81)	35%
1972	(63)	29%
1973-75	(66)	32%

FIGURE I



Several items from the YMDS show the access users have to peer cultures of psychedelic users: how many of their friends were using psychedelics when these men first began their own use; how many of their friends are current users; and how easy would it be for them to get hold of psychedelics in one day?

If most of one's friends use psychedelics and one can easily and quickly obtain a supply, then accordingly, one should have little difficulty finding experienced and comfortable companions to take psychedelics with; the more friends one has who use psychedelics, the more reinforcing should be the social environment.

However on all three of these items shown in Table 5, there is no sign of a trend for the rate of bad trips to rise or fall with the proportion of friends who are users, or with the ease of obtaining a supply. According to this evidence the probability of bad trips would not appear to depend upon whether one's social ties are marginal to or embedded in psychedelic subcultures.

An additional pair of items, which taps respondents' identification with a culture of illicit drug users (marijuana rather than psychedelics) shows a similar failure to differentiate the probability of bad trips. Those who say they feel favorable toward marijuana smokers or that they themselves are not very different from a lot of marijuana smokers have the same rate of bad trips as the rest of the sample (Table 5).

Whether we count the relative frequency of friendship ties, use the respondent's evaluation of his ease of access, or take his seff-identification with other illicit drug users, the findings in each case suggest that membership, affiliation or proximity to psychedelic cultures does not reduce the probability of bad trips.

Still, these measures tell us more about access than they do support. It could be that having access to other users isn't as important as the context for use provided by one's friends, however many. Perhaps the terms of one's subcultural participation must reflect evidence of solidarity.

An attempt to find the basis of such solidarity is afforded by another set of items that were included in this survey which tap different bases of participation in counter-cultures.

Psychedelic drug use during the 1960s came to be associated with other underground, defiant popular movements that emerged and spread from the mid to late 1960s. While these countercultures were manifest in political, musical, interpersonal and other terms, collectively they legitimized and gave normative force to behaviors that were in defiance of certain laws and prevailing social customs. [See Roszak (1969) for a discussion of Sixties youth culture in terms of counter norms, and Hodgson's (1976) analysis of normative inversion.] Thus we might expect evidence of participation in counter-culture activities popular in the late 1960s to evidence membership in cultures providing an unusual measure of social solidarity and affording a supportive milieu for those members who were using psychedelics. Accordingly, a battery of items capturing participation in nine forms of popular counter-culture expression is presented in Table 5 as a way of grounding the access measures.

Even though each measure taps a very different dimension of the countercultural experience, neither the religious item (no. 6) nor the consciousness item (no. 8) nor the items on political expression (nos. 2 and 7) reveal any underlying difference in terms of insulation from or reduction of bad trips. The largest difference appearing in the Table is for item 5, where men who have lived in a commune show a 10% greater probability of bad trips than do men without such experiences. Unless we assume that these bad trips occurred prior to communal involvements, this trend is opposed to what would be expected from a form of social organization designed to maximize social solidarity and support. This ten percent variation is not statistically significant however; the true rate of bad trips for communards does not differ from that for the sample as a whole.

Table 5 reports of Bad trips by Variations in Access to Subcultures of Psychedelic users and in participation in Counter Cultures

TABLE 5

Reports of Bad Trips By Variations in Access to Subcultures of Psychedelic Users and in Participation in Counter-Cultures

Access to Subcultures of Psychedelic Users (*)		Percent Reporting Bad Trips
Friends use of psychedelics when R first started using:		
All or Most	(14%)	53%
About Half	(16%)	39%
Less Than Half	(21%)	38%
A Few	(43%)	40%
None	(6%)	44%
Current friends use of psychedelics:		
All or Most	(6%)	48%
About Half	(14%)	29%
Less Than Half	(21%)	46%
A Few	(42%)	41%
None	(17%)	44%
Ease of obtaining supply of psychedelics in 24 hours:		
Easy	(43%)	41%
Difficult	(43%)	39%
Impossible	(14%)	46%
Identification with marijuana users:		
A lot of the people who use marijuana are not very different from me:		
True	(84%)	42%
False	(16%)	40%
How do you feel about people who use marijuana:		
Favorable	(64%)	41%
Indifferent	(33%)	41%
Unfavorable	(3%)	**
How do you feel about people who are searching for alternative life styles:		
Favorable	(58%)	44%
Indifferent	(39%)	40%
Unfavorable	(3%)	**
How do you feel about leftist political or social movements:		
Favorable	(24%)	44%
Indifferent	(51%)	39%
Unfavorable	(25%)	43%

Access to Subcultures of Psychedelic Users (*)		Percent Reporting Bad Trips
Have attended outdoor rock concert or festival:		
Yes	(83%)	41%
No	(17%)	44%
Have bummed around the United States or elsewhere:		
Yes	(38%)	44%
No	(62%)	39%
Have lived in a commune:		
Yes	(14%)	50%
No	(86%)	40%
Have meditated or explored an Eastern religion or philosophy:		
Yes	(34%)	41%
No	(66%)	42%
Have taken part in a political demonstration:		
Yes	(30%)	40%
No	(70%)	42%
Have studied astrology, ESP or the occult:		
Yes	(33%)	45%
No	(67%)	39%
Have followed a vegetarian, macrobiotic or organic diet:		
Yes	(21%)	43%
No	(79%)	41%

***Percents of Ever Users reporting in each category are shown in parentheses (each item sums to 100%)**
****N insufficient to provide meaningful estimate.**

*Percents of Ever Users reporting in each category are shown in parentheses (each item sums to 100%)
**N insufficient to provide meaningful estimate.

Thus Becker's assumption that subcultural growth, encompassing an everincreasing proportion of users, functions to reduce the incidence of bad trips, is not supported by these data. How then can we explain a regular and substantial historical decline in bad trips reported by psychedelic users?

Two explanations are proposed: The first, is that the psychedelic drugs used have changed over time in terms of potency, purity, etc.-in other words, a change in the pharmacology or dosage of the stimulus is behind the continuous decline in reported incidence of bad trips. The only data available to test this explanation are pharmaceutical laboratory reports on anonymously submitted street drug samples. Reporting on 2196 alleged LSD samples submitted to laboratories throughout the United States during 1969-75, PharmChem (1977) concluded: "LSD is one of the most widespread and least adulterated or misrepresented street drugs. Early street drug studies all noted the unusually high rate of purity for alleged LSD, and this rate has remained high: 87% in the current study." Significantly, there is no known systematic evidence supporting a pharmacological explanation.

The second explanation is drawn from a respecification of Becker's approach shifting attention from subcultural assimilation to the existence of social and political conflict surrounding drug use. In the case of psychedelics the conflict became institutionalized as a dominant culturesubculture conflict. This explanation argues that the political and social struggles over the proper role of a new drug, in this case LSD and psychedelics, the nature of their effects and their availability, are not abstractions which develop and proceed apart from the crucible of everyday use, experimentation and discovery. Rather this political conflict informs and channels users experiences with the drug from the purposes for which it is taken to the attribution of its

effects. In the case of psychedelics, its earliest non-clinical use generated sharp conflict within a local academic setting. As the partisans sought support the conflict quickly spread to other institutional arenas where politicians, police and the media joined medical combatants in a struggle to define the proper place of psychedelics in society, the nature of their effects, and who would control access. In the space of a few years the issue of psychedelic drug use came close to condensing symbolically the major political and social upheavals occurring in American society at that time. The debate that emerged around psychedelics provoked a general politicizing of drug issues that had not occurred since alcohol prohibition. This state of intense political conflict and polarization over psychedelic drugs shifted over time to a state where use became depoliticized, social conflict shifted away from the subject of psychedelics, and the question of the effects of psychedelics was no longer a salient public issue nor even a topic flourishing in scientific journals.

In other words we can explain the substantial historical decline in the incidence of bad trips by reference to variations in the political culture which informs psychedelic use.

The second part of this article attempts to buttress this approach.

History of Psychedelic Use

While this is not the place for a detailed account of the rich history of psychedelic developments in American society over the last half-century, a sketch of the social course of these drugs is essential to this explanation of historical changes in psychedelic effects.

Seven lines of influence can be distinguished in a history of American psychedelic developments.

A literary tradition can be dated as far back as Havelock Ellis's writing in 1898 about "a new artificial paradise ... a saturnalia ... an orgy of vision" (quoted by Unger, 1964) produced by eating cactus buttons collected in the American Southwest. The most awesome and provocative literary accounts were supplied in two books by Aldous Huxley, *Doors of Perception* and *Heaven and Hell* which appeared in 1954 and 1956. This tradition has been renewed but reseated in the context of indigenous American pre-industrial culture, in a series of five books by Carlos Castenada which began with *The Teachings of Don Juan,* appearing in 1968.

Following Albert Hoffmann's synthesis of LSD in 1938 and his serendipitous discovery of its hallucinogenic potential in 1943, a psychiatric tradition developed that was absorbed with the capacity of the drug to "mimic" and "model" psychoses, and which has influenced the parameters and terms of the debate over psychedelics far beyond the field of psychiatry.

A therapeutic literature and experience that can be separated from the psychiatric tradition, but which paralleled it, has been notably less important, as schizophrenics, depressives, alcoholics, epileptics, t terminal cancer patients and autistic children were given LSD. Hasset (1977) concludes: "LSD never did find a disease to cure."

An espionage and military interest in psychedelics that was explicit in some of the above literatures may have been more of a formative influence than was previously realized, according to reports on documents of CIA-funded researchdocuments that were made public for the first time in 1977. While some military sponsored research was reported during the 1950s and 1960s, much more may never have been identified as such. More importantly, military -espionage interest reflected particular "madness" agendas which may have contributed to the paradigm of psychedelic drug research.

What began as a humanistic psychological interest in psychedelics among a circle of social psychologists at Harvard in 1960 developed into a social movement organized to popularize use of psychedelic drugs in the pursuit of "expanded consciousness . . . ecstasy . . . mysticism." This whole development emerged first as a methodological break with established canons of scientific inquiry and ultimately involved a renouncing of positivistic origins embracing instead religious, nonWestern and "primitive" cultural traditions. Timothy Leary, Richard Alpert and Ralph Metzner and the popular experimentation with psychedelic drugs which they first set into motion, have been the most important influences on psychedelic developments since 1960. The reaction against popularization, which represents a sixth development, has been much more comprehensive, coming from physicians, police, politicians and editors, but rather singularly trained upon attacking popular use.

The period of popularization and the intense controversy which governed it drew to -a close early in the 1970s. Criminal prohibition became fully established. Leaders like Leary and Alpert were forced into exile and began to pursue more traditionally based forms of mysticism, also more legitimate and respectable. Popular use of psychedelics ceased to grow, instead becoming confined to late adolescence and early adulthood, which meant that by the early *1970s* a whole new generation of users had supplanted those weaned on the psychedelic controversies of the *1960s.* And the political and social movements which had become symbolically intertwined with psychedelic use collapsed under diverse pressures in the early *1970s.*

Working in the Swiss laboratories of Sandoz Pharmaceuticals, Albert Hofmann synthesized LSD in 1938 in an experiment with ergot compounds as part of a search for an agent to stem blood loss. Five years later Hofmann accidentally ingested some of this substance and found himself in a state "which was not unpleasant and which was characterized by extreme activity of imagination . . . there surged upon me an uninterrupted stream of fantastic images of extraordinary plasticity and vividness and accompanied by an intense, kaleidoscope-like play of colors" (Hofmann, *1970).* Hofmann's subsequent experiments were reported and joined a literature developing around possible similarities between schizophrenic visions and hallucinations produced by another psychedelic, mescaline (Zucker, *1930;* Guttman and Maclay, *1936;* Stockings, *1940).* Unger tells *us (1964:206)* that Stoll, who in *1947* reported experimental confirmation of Hofmann's experience, is widely reported to have warned informally of a case of suicide as the aftermath of an experimental trial ... This story, though itself never appearing in print, is referred to in one form or another in nearly all of the early work with LSD; it apparently influenced experimenter attitudes for a number of years.

During the *1950s,* Hoch, writing. usually in the *American Journal of Psychiatry, (1951; 1952; 1955),* elaborated the theme of drug-produced psychosis, and anchored psychiatric understanding of these drugs as "psychomimetic"-mimicking mental illness. Not everyone accepted Hoch's views. Arguing that "they do much more" than mimic psychosis and that "an appropriate name will include the concepts of enriching the mind and enlarging the vision," Osmond in 1956 proposed the term "psychedelic" meaning mind-manifesting (p. 429). McDonald and Galvin that same year argued from Hoch's forum, the AJP, that "It is significant that in the lysergic acid psychosis profound psychic changes may take place with relatively clear consciousness. It would appear that lysergic acid psychosis is not identical in any form with any of the known, naturally occurring psychoses" (p. 972). Still their terminology continued an acceptance of psychedelic intoxication as a psychosis. This too came under criticism, but from outside psychiatry. Psychologist Holliday in 1959 found the whole psychornimetic approach guilty of "unscientific and intemperate terms," a case of an 'Interesting

theory" having "outrun a set of facts" (p. 260). And anthropologist Wallace (1959) criticized the implicit treatment of hallucination "as if it were the essential feature of psychosis."

But the psychiatric interest as articulated by Hoch predominated. Unger (1964) observes that "the opinion leader Hoch, through a decade of observations, consistently maintained: 'LSD and mescaline disorganize the psychic integration of the individual' (1955); and 'mescaline and LSD are essentially anxiety-producing drugs' (1957)."

The military and espionage interest in psychedelics that was developing concurrently reflected these same themes. A CIA scientist wrote in 1952 that "our own current work contains the strong suggestion that LSD-25 will produce mass hysteria" and urged that the drug be made available for chemical warfare against entire populations (Szulc, 1977). The following year Dr. Sidney Gottlieb, a biochemist and passionate believer in psychochernical warfare, established the CIA's psychedelic research program dubbed MK-ULTRA, launching projects involving use of LSD and related drugs in producing what Gottlieb called "chemical lobotomy" as well as memory disturbance, the alteration of sexual patterns, aberrant behavior, dependence, "toxic delirium," and "cerebral toxicity from poisoning" (Szulc, 1977). Ultimately 149 separately funded drug research projects emerged from MK-ULTRA involving 44 universities, 15 research institutes or labs, 12 hospitals or clinics, and 3 prisons (U.S. Congress, 1977).

Yet the first broad, empirically based study of psychedelic effects did not substantiate either Hoch's or the military's perspectives on these drugs. A universally cited article by Cohen published in 1960 reported on side effects and complications based on the results of a questionnaire Cohen sent to 62 researchers who had investigated LSD or mescaline. Replies yielded data on 5000 individuals and more than 25,000 occasions of use, including individual experiences ranging from 1-80 times, with similarly wide ranges in dosages represented. Cohen reported that "the most common, but still infrequent" problem mentioned was "unmanageability." Also mentioned were panic episodes and short-lived depressions. Only eight instances of "psychotic reaction lasting more than 48 hours" were reported in the 25,000 occasions surveyed. Cohen (1960:30,39) concluded: "Reports of untoward events have been surprisingly infrequent ... This inquiry . . . indicates that with proper precautions they [LSD and mescaline] are safe when given to a selected healthy group."

In 1961 at Harvard, Timothy Leary and Richard Alpert began their Psilocybin Research Project at Concord Prison to determine if drug-treated prisoners had a more successful adaptation to release from prison. Simultaneously psilocybin experiments were run on themselves and with student and other volunteers in non-clinical settings. Before the end of the year David McClelland, head of Harvard's Center for Research in Personality (the umbrella organization for the Concord Study), held a Center meeting to formally criticize the methodology and direction of the Psilocybin Project. McClelland's written critique included this analysis (Gordon, 1963):

It is probably no accident that the society which most consistently encouraged the use of these substances, India, produced one of the sickest social orders ever created by mankind, in which thinking men spent their time lost in the Buddha position under the influence of drugs exploring consciousness, while poverty, disease, social discrimination and superstition reached their highest and most organized form in all history.

Leary and Alpert continued their studies, defending the naturalism of their methods in terms of the influential role of setting in producing drug effects. Their own participation in the experiments would have been defensible anthropological and sociological methods, but were quite unorthodox in terms of techniques that dominated experimental psychology at the time.

Over the winter the Harvard *Crimson* reported on the research, and letters followed from Leary and Alpert and from Dr. Dana Farnsworth of the University Health Service. Farnsworth's letter attacked the Project, embracing the psychosisproducing view of psychedelics with this warning (quoted in La Barre, 1969:232): "the ingestion of the drug can precipitate psychotic reactions in some apparently normal persons. It has been known to increase slight depressions into suicidal ones and to produce schizophrenic like reactions."

With the publication of Farnsworth's letter, the Project became a public issue at Harvard. Further criticism by Center staff was aired at a Spring 1962 meeting, which was picked up by the Boston *Herald.* The State of Massachusetts Food and Drug Division promptly announced an investigation, and the Federal Food and Drug Administration very shortly announced its own inquiry. Within a month the State of Massachusetts ruled that the research could continue only if a medical doctor was present during any administration of psychedelic drugs.

The State was siding with the medical profession, legitimating their interest in the drugs and their authority to define appropriate social use. Farnsworth subsequently tried to wrest control of the Project's supply of psychedelics. And in further attempts to frighten undergraduates away from the drugs, Farnsworth and a Dean of students sent warning letters to the *Crimson* about serious mental health hazards that could befall those who used LSD, psilocybin or mescaline.

At about this time an update on side effects and complications from psychedelics was published by Cohen (1962). He reported "an increasing number of untoward events in connection with LSD-25 administration". However, panic or extreme anxiety reactions were not mentioned. The new untoward events seemed to be a few instances of criminal behavior blamed on LSD, and in connection with "the recent appearance of LSD-25 as an item of underworld traffic," Cohen reported that "some of the borderline people who take marijuana also have 'LSD parties' " which he labelled "abuse" and which he entered as a new "complication." Cohen was attempting to merge the question of side effects with the professional interest in "authorized" use.

Indeed, very quickly the two became fused. As controversy spread and grew more partisan, the position on unauthorized use tended to predict the assessment of the drugs' effects. In addition, value conflicts (of the sort implied by McClelland's critique), and methodological disputes all fueled a controversy that quickly overflowed the Harvard campus, carrying with it violently contradictory claims about psychedelics.

In defending themselves Leary and Alpert echoed McClelland's paradigm, accepting a definition of the conflict as involving knowledge and experience threatening to Western culture and science, and provocatively endorsing the definition of psychedelics as terrifyingly powerful drugs, but in a different sense, more akin to the state in which one would expect sudden enlightenment to be received. Leary sought a confrontation with his critics on the very terms they had chosen to discredit him, believing that only by showing them the truth of their worst fears, could they understand the necessity of his position. Leary wrote (1964):

From the standpoint of the established values of the older world, the psychedelic process is dangerous and insane--a deliberate psychotization, a suicidal undoing of the stability, conformity and equilibrium which man should be striving for. With its emphasis on consciousness, on internal, invisible, indescribable phenomena, with its multiplication of realities, the psychedelic experience is dreadfully incomprehensible to one committed to

a rational, Protestant, achievement-oriented, behaviorist, equilibrated, conformist philosophy. But it makes perfect sense to one who is ready to experience the world in terms of the Einsteinian exponential view of the universe.

His standard invitation to use psychedelics was calculated to seduce and frighten: Psychedelics "have always been shrouded in mystery, misunderstanding and controversy because they produce that most sought-after and yet most dread experience known to man. They produce ecstasy." Even when his friends suggested he use less dramatic and paradoxical accounts, he continued to taunt critics and sympathetic audiences alike with this description of the kind of consciousnessexpansion that one experienced on psychedelics: "It becomes necessary for us to go out of our minds in order to use our heads." He spoke of consciousnessexpansion through psychedelics as a Scylla and Charybdis oft terror and truth. Courting popular use, he enticed the curious with a list of tile "five most common fears provoked by the notion of consciousness expansion" (1964):

"the terror of the loss of rational control"

"the terror of doing something shameful or ludicrous; the loss of social inhibitions"

"the terror of self-discovery; of finding out something about yourself that you do not want to face"

"the terror of discovering the painful truth about the institutions with which one is identified"

"the terror of finding a realm of experience, a new dimension of reality so pleasant that one will not want to return"

In defending himself by fanning public curiosity and inviting popular use, Leary flaunted unquestioned norms then governing the use of drugs in psychiatric and psychological research and clinical settings.

The reaction was fierce. The editor of the *Archives of General Psychiatry, Roy* Grinker, editorialized as follows (1963):

Latent psychotics are disintegrating under the influence of even single doses; long continued LSD experiences are subtly creating a psychopathology. Psychic addiction is being developed ... [T]his editorial is a warning to the psychiatric profession that great morbidity, and even mortality, is in store for its patients unless controls are developed against the unwise use of LSD-25.

This warning was carried in the New York *Times* and was widely syndicated to dailies throughout the country by Science Service. *Newsweek* warned of the possibility of psychotic episodes (December 10, 1962:56). U.S. Senator Vance Hartke denounced LSD as "a dangerous and violent poison" (quoted by Metzner, 1964). Advertisements to announce the launching of a new journal, the *Psychedelic* Review, were refused by The American *Psychologist,* official publication of the American Psychological Association, and by The Progressive. Leary and Alpert were fired by the President of Harvard in the Spring of 1963.

Over the next three years the battle was waged in the legal and political arena. Watts (1971:139-145) shows how psychiatrists and spokespersons for the medical profession in the government (e.g. NIMH) and from medical societies and research and clinical settings, appealed to lawmakers to enact laws providing legal access only for physicians. A California Appeals Court ruled that "the use in Indian religious ceremonies constitutes enough of a threat to public safety to make the act illegal without violating constitutional rights to religious freedom" (quoted in La Barre, 1969:236). Congress passed laws making selling or giving away psychedelics a federal crime. Politicians sought to ride the issue to higher political office. California Attorney General Lynch, who had circulated "lurid color photographs of a psychotic reaction to LSD" among California legislators considering a bill to make possession a crime, campaigned with radio spots picturing him as the man who saved California from LSD (McGlothlin, 1967). California and Nevada governors competed to be the first in the nation to sign criminal legislation into law. The Speaker of the New York State Assembly, A. J. Travia, announced that the danger of LSD was so urgent that he would defer public hearings on the bill to criminalize it until after it was passed into law. In New Jersey, State Senator Charles W. Sandiman, who the year before had lost a primary battle for a seat in Congress, announced in his capacity as head of a newly formed drug study commission that LSD was "the greatest threat facing the country today ... more dangerous than the Vietnam war" (McGlothlin, 1967). Several months later Sandiman rode that issue to victory in a Congressional race against an incumbent who was an administration loyalist (Vietnam supporter), and he secured the Republican nomination for governor in the following election.

At the same time FDA Commissioner Goddard was leading an extensive campaign against psychedelics. A personal letter to all college presidents warned them of the dangers of LSD and offered to send federal undercover agents to college campuses A national conference on psychedelic dangers was sponsored, attended by over 1450 college deans. A massive public speaking program was initiated by field agents and a special anti-psychedelic FDA film was prepared called "The Mind Benders."

Sandoz withdrew its support of psychedelic research, turned over its U.S. supply to the FDA, and the agency announced that further research was contingent upon specific approval by Commissioner Goddard. In 1964 there had been 70 researchers authorized to use LSD; by 1967 there were 16.

In 1966 Leary was arrested for possession of less than an ounce of marijuana and was later sentenced to thirty years in jail.

By 1967 possession and sale of psychedelics had been criminalized throughout the U.S., research had all but stopped, therapeutic use was prohibited, and those who had sought to popularize psychedelics were engaged in a struggle to stay out of jail. Psychedelics would stay in the headlines however for several more years. In 1967 and 1968 reports linking LSD with chromosome damage received wide press coverage (Cohen, et al., 1967; Irwin and Egozcue, 1967; but see review of this literature in Dishotsky, et al., 1971). In his January 1968 State of the Union address to Congress and prime time network television audiences, President Lyndon Johnson singled out LSD for attack announcing "the time has come to stop the sale of slavery to the young." In 1970, the Weather Underground sprung Leary from Federal prison in San Luis Obispo, California, and escorted him to asylum in Algeria where he was greeted by Black Panther Party members. At the Republican Convention in 1972, George McGovern (the Democratic Presidential candidate) was attacked as a candidate of "acid, amnesty and abortion."

In this extremely polarized and politicized environment which defined LSD use in the 1960s, it is predictable that anxiety and apprehension would often attend use, and that users keyed to risking "insanity" and "psychosis" in order to experience "ecstasy" and "expanded consciousness" would often have a volatile experience with psychedelics, including "bad trips."

Accordingly, as the social conflict over availability was settled by the victory of those forces seeking thorough criminal prohibition of possession and sale; as the proponents of the value of psychedelics and their popular use were imprisoned, discredited or unable to find employment; and as social and political movements that had become symbollically entangled with psychedelic issues ultimately collapsed, the climate informing user expectations changed. With the force of legal authority established, and the absence of advocates of popular use, there was no longer a controversy to sustain. Psychedelic prohibitionists of various stripes had secured hegemony in law and by overwhelming their opponents, silenced debate. Even the symbolic trappings of psychedelic culture fell out of fashion: light boxes disappeared from the shelves of paraphernalia shops and mystical psychedelic poster art became collector's items, showing up in museum exhibits by the mid1970s. Psychedelic use as a political issue had held great appeal to politicians in both major parties. It appealed to those who were looking for an issue to refocus attention away from the war in Vietnam. For some it had the added virtue of implicitly attacking those groups who opposed the war because of a symbolic association between dissent and psychedelic use. Others embraced it because it offered a haven as a high-consensus issue (if engineered properly) in the context of an era otherwise riddled with political cleavages. Thus as the war ended, the issue of psychedelics was dropped.

Psychedelic use continued at the same level that had been reached by 1970, but a new generation of users gradually replaced the old. Initiates to psychedelic use after 1970 faced blanket prohibition policies that in practice evidenced little distinction between psychedelics and marijuana, or for that matter, cocaine. There were neither crusades for drug-based consciousness expansion nor counterattacks warning about the chemistry of madness. No symbols and artifacts distinguished and asserted the claims of a psychedelic subculture. New users of psychedelics in the 1970s were not positioned by issues that had virtually governed use in the 1960s. In this regard, Harding and Zinberg (1977) report a shift in reasons for use among those beginning their use of psychedelics since 1971:

Subjects who began use in the mid-sixties share a sense that psychedelics should be used for "personal growth" rather than recreational purposes. They discuss tripping as an activity which is undertaken to accomplish a worthy goal--to learn more about oneself, to grow intellectually, to transcend ordinary perceptual boundaries, and so on. However, subjects who began use in the past five years have broadened their reasons for using psychedelics to encompass plainly recreational goals.

Younger subjects may trip for a highly rationalized purpose but they are equally inclined to trip simply to enjoy the high state ... We speculate, however, that the expanded goals of psychedelic users indicate a growing familiarity with psychedelics and less guilt about their use. Without wishing to demean the motives of older users we hypothesize that they needed to assign some constructive purpose to tripping to justify their use of drugs which were then seen as more dangerous and powerful.

The Politics of Bad Trips

In articulating a theory of historical changes in drug effects, particularly in the case of psychedelics, Becker argues that as a positively reinforcing subculture extends its interpretation to cover the full range of "effects", and as this subculture incorporates a greater proportion of users, uncertainty over drug effects should decline and the occurrence of panic reactions or bad trips-which are a manifestation of uncertainty --should be less frequent. We have found striking evidence of a decline in the rate of bad trips at regular intervals during the period from the mid-1960s to the mid-1970s. But the cultural experience with psychedelics during this time is not well-described by "uncertainty," nor do we find during this period an expanding subculture, legitimating and supporting use, as Becker had anticipated might have occurred at the time of his writing in 1966. Instead an intense political conflict was joined over the significance of psychedelics and appropriate social controls. This highly polarized conflict defined the terms of psychedelic use, sustaining (and sustained by) an embattled psychedelic subculture. When the conflict ended in hegemony for prohibition forces, the context of use shifted abruptly as political quiescence ushered in a period where there was much less evidence of an identifiable psychedelic subculture. As the contexts of use shifted, a marked decline in reported bad trips occurred.

The political history of psychedelics suggests that the structural position of those who introduced psychedelics profoundly influenced debate about these drugs and the definition of their effects. Psychedelic drugs have been used continuously by indigenous American populations for several centuries. Yet until mescaline and LSD were developed by pharmacologists as synthetic compounds from available plants, and then marketed commercially, psychedelic drugs were not considered to be useable or available among non Native Americans. Similarly, there has existed since the late 19th century a modest variety of English language literary-artistic accounts which uniformly assign provocatively creative and mystical values to psychedelic use. And yet it was not until scientific-technical authority pronounced the effects and values of these drugs-LSD in part icu lar--that popular interest in them grew.

Psychedelics were first marketed by pharmaceutical companies to medical researchers and practitioners whose interests were focussed on abnormal behavior and many, of whom practiced in mental illness institutions; and to a military espionage elite *interested in psychochemical warfare. Both professional groups proceeded to divine possible uses for these substances, each according to its own search modality. The application of a psychomimetic definition to psychedelics proved to be compatible with the functional agenda of both interest groups, positing effects equally remote from the spiritual powers assigned these drugs by Indian tradition and the creative powers emphasized in literary accounts.

When a small circle of academic psychologists broke with the psychomimetic definition and with traditional research canons that have applied particularly to medically related research, their authority to dispense psychedelics even in the context of their research was challenged. Ultimately psychiatric and other medical professionals mounted a campaign to re-establish their own exclusive authority to determine access to these drugs. Although initially provoked by the issue of access, the conflict itself became focused on the nature of psychedelic effects. Medical interests turned to the political arena to secure laws that would ensure access only for physicians, announcing that the drugs produced madness, insanity, psychosis. Non-medical interests sought to defend their right to access, and in the process they often seemed to concede that psychedelics were dangerous to naive users by emphasizing the importance attached to the authority of their own experience (defined in terms of ecstasy and consciousness-expansion), and to the administration of these drugs in settings and circumstances of which they approved. Political interests responded with their own agenda, symbolically merging wartime political crises with the debate over psychedelics in a fashion reminiscent of previous tendencies in American drug policy debates to align drug use with ethnic and class conflict issues-by calling for a system of prohibition and criminalization. These antagonists, each calling for a system of access which they would control, could agree on only one thing, the awesomeness of these drugs' effects.

This political conflict defined psychedelics as the most powerful drug, use of which entails the risk of "the terror of the loss of rational control" in order to experience consciousnessexpansion, ecstasy, "a new dimension of reality so pleasant that one will not want to return," and users' expectations

at the time must have been structured and positioned accordingly. Such contradictory expectations, it is argued, must have made the outcomes of use highly variable and unpredictable, with feared and valued outcomes equally likely.

But once this political conflict left center stage, the debate no longer reproducing a frightening yet seductive definition for these drugs, and as the subculture which was committed to this definition of psychedelics began to recede, severe anxiety and panic reactions to psychedelics show a corresponding decline.

Thus findings of a dramatic historical shift in bad trips on psychedelic drugs from a rate of 53% of users to 29% in the course of a decade, can be explained in terms of an approach which views bad trips as social products, where experiences of bad trips are to an important degree a function of ascription, reflecting the relative ascendancy of competing definitions of the situation. It is argued that shifts in the societal formulation of the psychedelic experience in terms of law, medical opinion, education, media propaganda, have an effect on the relative ascription of experiences, and hence on the relative occurrence of bad trips among users.

If this analysis is correct, then the case of psychedelic drugs shows that the course of drug policy debates as well as the policies themselves can profoundly structure social experience with drugs as policy assumptions become self-fulfilling prophecies.

NOTES

1. The term *psychedelics* (first given these drugs by Osmond, 1966) means "mind-manifesting" and is used here to refer to a class of drugs which current social usage defines as having the capacity to produce hallucinations. These drugs include the organic substances peyote and psilocybin, and the synthetic compounds LSD (synthesized 1938), mescaline (synthesized 1920; LaBarre, 1969:138), DMT (dimethyltryptamine, synthesized 1931; Shulgin, 1976a), PCP (phencyclidine, synthesized 1958; Garey et al., 1977), MDA (methylenedioxyamphetamine, synthesized 1962; Shulgin, 1976b), and STP ("Serenity, Tranquility and Peace," or dimethoxymethylphenylisopropylamine, synthesized 1963; Shulgin, 1977).

2. Certainly the demand for labor discipline, articulated in the form of bourgeois ethics, has contributed to making self-control such a central issue. Recent historical studies have shown that the emergence of "self-control" as the governing issue concerning alcohol use in American society can be traced back much earlier than the social movements of Temperance in the twentieth century-to at least the early nineteenth century (Levine, 1978). The evolution of the "alcoholism" concept has fundamentally been an elaboration of the notion of "loss of control" (Keller, 1972). Applied to opiate use, it has been used in the development of an "addiction" concept (Coleman, 1976).

3. Fieldwork was conducted between September 1974 and May 1975. To obtain a sample representative of this population of young men, a stratified probability sample was drawn using Selective Service registration data for the sample lists. Ibis was preferred to the more customary household samples since young men, the target population, are least likely to be found in households. Completed interviews were obtained for 2,510 respondents, or 84% of the original sample (after excluding those deceased). Less than 6% of the sample list refused to be interviewed; nearly 9% were not located. The field work was conducted by the Institute for Survey Research, Temple University. Data collection procedures are discussed in detail in O'Donnell, et al. (1976).

4. Over the time period of interest here, 1961-1975, our sample is aging without "replacement" with younger members, so that the mean age of the sample increases by one year each calendar year. However, the mean age of initiates to psychedelic use is increasing much more slowly (a total of five years over the 1965-74 decade) and thus is less influenced by the factor of sample maturation. The fact that the standard deviations of the ages for each cohort are all quite close in value (ranging from 2.4 to 2.8 years among the seven cohorts) indicate that the age distributions within each cohort are basically the same. Thus the array of cohorts shown in Table 4 representing the historical succession of psychedelic users is relatively independent of and not confounded by the issue of age.

5. Because our interest here is in predicting bad trips from historical and other variables, an *asymmetric* measure, like Somers' dy., is superior.

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