

# MEDITATION AND MARIJUANA<sup>1</sup>

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Marijuana use declined in people practicing the Transcendental Meditation technique; the amount of decline was correlated with the number of months they had been practicing the technique. —EDITORS

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*Using a questionnaire survey, the authors sought to discover the effect of meditation on their subjects' use of marijuana. While only 15 percent of a nonmeditating control group had decreased or stopped their use of marijuana during the preceding three months, among the meditators proportions ranging from half to three-quarters (depending on the length of time since their initiation) had decreased or stopped their use during the first three months after initiation into meditation. The authors found that the longer a person had practiced meditation, the more likely it was that he had decreased or stopped his use of marijuana.*

More than 3,000 years ago, Zarathustra (Zoroaster), the Persian prophet, asked how man can attain joy and a peaceful mind. This same question troubles us today. More than ever, man is searching for chemical and psychological methods to calm his anxieties, bring him internal peace and harmony, and allow him to experience higher levels of consciousness (3, 7). The 1972 Gallup Opinion Index, for instance, showed "a dramatic increase . . . over the last five years in student use of marijuana" (4, p. 16); 51 percent of college students reported that they had tried marijuana, compared with five percent in Gallup's 1967 survey. A significant increase in the use of hallucinogens, barbiturates, and amphetamines was also reported.

Is there any alternative to drug abuse? Benson and Wallace's study of 1,862 subjects showed that "following the start of the practice of TM (Transcendental Meditation) there was a marked decrease in the number of drug abusers in all categories" (1, p. 371). In the six-month period before they started meditation, 80 percent of the subjects had used marijuana. After six months of practicing meditation, 37 percent continued to use marijuana. After 21 months of TM, only 12 percent continued to do so. Comparable changes occurred in the use of hallucinogens, barbiturates, amphetamines, and narcotics.

A person who is interested in practicing Transcendental

Meditation (TM) attends four or five sessions to learn the technique taught by Maharishi Mahesh Yogi (5, p. 470; 11). He is asked to abstain from the use of any nonprescribed drugs, including marijuana, for two weeks before his initiation. He is encouraged to sit quietly and practice TM for 15 to 20 minutes twice a day.

If the results of Benson and Wallace's study could be duplicated in similar studies that showed greater care for the research design and methodology, we might find that meditation could be an alternative to or a substitute for drug abuse.

Although the size of the sample in Benson and Wallace's study was impressive, the sample was not representative of the population of meditators. Theirs was a very select group of extremely dedicated and highly motivated meditators who were attending a month-long workshop in order to become TM trainers. Also, the questionnaires were distributed at a time when the subjects were in daily contact with one another, and this might have distorted individual responses. Their study did not have a matched control group of nonmeditators for statistical comparison.

In reviewing the original questionnaire Benson and Wallace used, we found that several items were phrased in a way that might influence the subject's response in favor of the researchers' expectation that following TM a decrease or discontinuation of drug use would occur. Any communication to the subject of the researchers' expectations, even by the most subtle means, is enough to produce artifactual results (6).

1. This work was supported by Public Health Service training grant 360515 from the National Institute of Mental Health, by the University of Michigan Office of Research Administration, and by the University of Michigan Medical Center Computer Fund.

Benson and Wallace's method of reporting the data was confusing. In this type of study it is essential to separate and differentiate the subgroups initially, e.g., according to the number of months the subjects had been meditating. Failure to differentiate the subgroups can result in the shifting of subjects from one subgroup to another, which would distort the data and make statistical comparisons meaningless.

## METHOD

We prepared a questionnaire designed to find out how long and how often our subjects had been meditating and whether they had used marijuana, hashish, nonprescribed drugs, alcohol, and cigarettes during the period that extended from one year before the time they started TM to three years or more after. In designing the questionnaire, we drew on material from clinical contacts with patients in psychotherapy who were also meditators and who had a history of drug and marijuana use (8, 9) and on material from field interviews with meditators who had a history of drug and marijuana use but who were not in psychotherapy. In this paper, we are reporting the effect of TM on the use of marijuana and hashish. Reports of the effect of meditation on the use of alcohol, cigarettes, and non-prescribed drugs will be published later.

To avoid individual interpretations, we asked our subjects to indicate whether they used drugs: never, three times a month or less, once to six times a week, or once a day or more. The time periods were divided into 12 to seven months and six to 0 months before the start of meditation, and 0 to three months, four to six months, seven to 12 months, 13 to 24 months, and 25 to 36 months after the start of meditation. We also asked about the current drug-taking habits of those who had meditated for more than three years. A similar questionnaire was designed for the control group to determine their pattern of marijuana and drug use during the last four years.

The Students International Meditation Society had records of 525 persons in the Ann Arbor and Ypsilanti area who had been initiated into TM under its auspices from the time of its inception until June 1972. We made every possible effort to reach these initiates by phone: we were able to contact 187. Those we were not able to reach had apparently moved (which is not uncommon in our highly mobile university community) or were away for summer vacation.

A meditator, according to our definition, was a person who had been involved in the practice of TM for a period of at least one month at the time of our contact with him. Thirty percent or 57 of the 187 initiates stated that they had stopped meditating; these were, according to our definition, nonmeditators and could not be included in our

sample. Out of the sample of 130 meditators, only four refused to participate in the study (a participation rate of 97 percent). The rate of return of the questionnaires was 100 percent.

It is possible that, since we were not able to contact 338 of the TM initiates and also since 30 percent of the potential subjects whom we contacted were no longer meditating and therefore not included in our study, our sample might not be totally representative of all TM initiates.

A method of getting matched control subjects that is similar to the one described by Detre and Wyshak (2) was used. This method requires that the experimental subject recruit his own matched control. "The choice of a match who is a friend or neighbor would tie in with the concept of comparability on subtle personality traits or 'mode of life,' and possibly general background including such things as race, social class, ethnicity and religion" (2, p. 84). Using this approach, 90 control subjects were found for the 126 meditators.

Ninety-eight percent of the meditators and 99 percent of the controls were white. The meditators were almost evenly matched in sex distribution; in the control group, the number of women was slightly higher. Seventy-six percent of the meditators and 77 percent of the controls were under age 30. Approximately 25 percent of both groups had a professional degree and 41 percent of the meditators and 46 percent of the controls were undergraduate or graduate students; more than two-thirds of both the meditators and controls were therefore already professionals or working toward a degree. Approximately 50 percent of both groups were Protestant, 20 percent were Catholic, and 15 percent were Jewish.

Both the meditators and the control subjects were asked to indicate whether they were users or nonusers of marijuana and hashish during the four preceding years; 112 of the meditators and all of the 90 nonmeditating controls responded to this question. Sixty-nine percent (77 subjects) of the experimental group indicated that they were users of marijuana before their initiation into TM. Fifty-one percent (46 subjects) of the control group indicated that they were users of marijuana. This finding matches exactly the Gallup survey in fall 1971 that found that 51 percent of college students had used marijuana. Because of problems in the method of data collection, comparisons between meditators and nonmeditators were possible only for the six months before the completion of the questionnaire by the nonmeditators.

We divided the meditators into five subgroups according to the length of time they had been practicing TM: Subgroup I, one to three months; Subgroup II, four to six months; Subgroup III, seven to 12 months; Subgroup IV, 13 to 24 months; and Subgroup V, 25 to 36 months or

TABLE 1  
NUMBER OF MEDITATORS AND NONMEDITATORS  
REPORTING USE OF MARIJUANA

GROUP	MEDITATION EXPERIENCE (months)	NO. OF SUBJECTS	NO. REPORTING USE OF MARIJUANA
Meditators			
I	1-3	16	13
II	4-6	24	14
III	7-12	27	16
IV	13-24	28	21
V	25-36	17	13
Nonmeditators	.....	90	46

longer (see table 1). We felt that those who had practiced TM for a longer period of time might be different from those who had practiced only a short time. This division helped us to look at the patterns of marijuana use for each subgroup over time and prevented the shifting of subjects from one subgroup to another.

In any survey research of drug use, it is important to assure confidentiality by obtaining immunity from subpoena and other legal actions. It might be tempting for a law enforcement agency to ask for a subpoena from a federal or local court to obtain the researcher's records or to demand his testimony in a legal proceeding regarding the names of people who might be involved in the illicit use of drugs. We received such protection through the Michigan State Department of Health, Lansing, Mich., according to Michigan Act MCL-A 325-131. One may also request such protection under the federal law through the Drug Control Division of the Bureau of Narcotics and Dangerous Drugs, Department of Justice, Washington, D.C.

The data that we collected were processed by the University of Michigan IBM 360-67 computer system with MIDAS, a Statistical Research Laboratory program.

## RESULTS

Our findings are shown in table 2. During the first three months of meditation, almost half (46 percent) of the subjects in Subgroup I decreased or stopped their use of marijuana following initiation into TM; less than one-sixth (15 percent) of the controls did so during the three months before completion of the questionnaire ( $p < .05$ ). More than half of the subjects in Subgroups II and III stopped their use of marijuana in this period in contrast to the less than one-sixth of the controls who did so ( $p < .01$ ). In Subgroups IV and V more than three-fourths of the subjects decreased or stopped their use of marijuana in this period as opposed to less than one-sixth of the controls ( $p < .01$ ).

Why is there such a difference in the percentage of decreased or discontinuation of marijuana use between Subgroups I, II, and III on the one hand and Subgroups IV and V on the other? There are two possibilities. First, we found from our telephone contact with those who had been initiated into TM that 30 percent had stopped meditating. It is fair to assume that in Subgroups I, II, and III we could expect the same rate of dropout, whereas in Subgroups IV and V we were dealing with people who had already shown a continuing commitment to meditation; by the process of elimination those in Subgroups IV and V tended to be the ones who had taken meditation more seriously from the beginning and who apparently felt less need to use marijuana following their initiation. Second, we should remember that those in Subgroups IV and V were reporting their use of marijuana during a period one to three years past, as opposed to those in Subgroup I, who were reporting recent events that were fresh in their minds. We can assume that Subgroups IV and V had strong positive feelings about the experience of meditation and that this feeling could color their ability to remember the events of one to three years earlier and

TABLE 2  
NUMBER OF MARIJUANA USERS WHO DECREASED OR STOPPED USING MARIJUANA

TIME OF STOPPING OR DECREASING (months)	MEDITATORS										NONMEDITATOR CONTROLS	
	I		II		III		IV		V			
	(N = 13)		(N = 14)		(N = 16)		(N = 21)		(N = 13)		(N = 46)	
	N	%	N	%	N	%	N	%	N	%	N	%
0-3	6	46	8	57	9	56	18	86	10	77	7	15
Stopped*	3	23	8	57	7	44	12	57	9	69	7	15
0-6			5	36	7	44	17	81	11	85	11	24
Stopped			4	28	4	25	13	62	10	77	10	22
0-12					10	62	15	71	12	92		
Stopped					6	38	14	67	10	77		
0-24							16	76	12	92		
Stopped							12	56	10	77		
0-36									12	92		
Stopped									10	77		

\*This category consists of those in the "decreased" category who actually stopped using marijuana.



TABLE 3

FREQUENCY OF MARIJUANA USE BY  
SUBJECTS PRACTICING MEDITATION FOR MORE THAN SIX MONTHS

TIME PERIOD	USE OF MARIJUANA (times per month)
Before initiation into TM	
12-7 months	8.9
6-0 months	8.5
After initiation into TM	
1-3 months	2.5
4-6 months	2.9
7-12 months	2.3

could contribute to an exaggerated report of the decrease or discontinuation of their use of marijuana at the beginning of their TM experience.

The mean frequency of marijuana and hashish use among the meditators before their initiation was 7.3 times per month. The mean for the controls was 3.6. The meditators were therefore using twice as much marijuana as the nonmeditators before their initiation into TM ( $p < .01$ ). After having meditated for from one to 39 months, the meditators' mean frequency of use dropped to 2.8 times per month ( $p < .01$ ). The control group's mean frequency of use did not change.

There were 72 subjects who had practiced TM for more than six months (the longest time a subject reported meditating was 39 months). We compared the use of marijuana by these subjects during the year before their initiation into TM and the year after initiation. As shown in table 3, the mean frequency of marijuana use was 8.9 and 8.5 times per month during the two six-month periods before they began meditating. There was a dramatic decrease in their use of marijuana in the first three months following initiation that brought the mean down to 2.5 times per month ( $t$ -test for paired observations,  $p < .01$ ).

We wondered whether meditators could continue to sustain the decrease in their use of marijuana over a longer period of time. Forty-five subjects had meditated for between 13 and 39 months. As shown in table 4, the mean frequency of marijuana use for this group was 9.7 and 9.1 times per month during the two six-month periods before their initiation. In the first three months following initiation, this mean dropped to 1.6 times per month ( $p < .01$ ), and in the second year (12 to 24 months) following initiation the mean dropped to 1.3 times per month.

## CONCLUSIONS

In the last five years there has been a dramatic increase in the use of marijuana, hashish, hallucinogens, amphetamines, barbiturates, and narcotics among young people and in the community as a whole. It is now urgent

TABLE 4

FREQUENCY OF MARIJUANA USE BY  
SUBJECTS PRACTICING MEDITATION FOR MORE THAN ONE YEAR

TIME PERIOD	USE OF MARIJUANA (times per month)
Before initiation into TM	
12-7 months	9.7
6-0 months	9.1
After initiation into TM	
1-3 months	1.6
4-6 months	1.9
7-12 months	1.8
13-24 months	1.3

and essential to find a psychological alternative or substitute for drug abuse. The practice of meditation, for instance, appears to contribute significantly to freedom from the use of marijuana and hashish.

In our study we found that almost half of those who had practiced Transcendental Meditation for a period of one to three months decreased or stopped their use of marijuana. The longer a person had practiced meditation, the higher was the probability that he would discontinue his use of marijuana. Ninety-two percent of the meditators who had practiced TM for more than two years had significantly decreased their use of marijuana and 77 percent had totally stopped. The mean frequency of marijuana use for the entire population of meditators before their initiation into TM was 7.3 times per month; the control group's mean was 3.6. Following initiation into TM, the mean of the meditators dropped to 2.8 times per month whereas the control group's mean stayed the same. Following the practice of Transcendental Meditation, therefore, there was a significant decrease and discontinuation of the use of marijuana.

Although two of us had had some experience in the practice of meditation, none was involved in the practice of TM or had any connection with the Students International Meditation Society or its parent organization, the International Meditation Society. We feel it is essential in the study of meditation for some members of the research team to have some personal experience in meditation so that the exploration of this subject will be made not only with experimental objectivity but also with experiential sensitivity (10).

## ACKNOWLEDGMENTS

The authors wish to thank Albert J. Silverman, M.D., Professor and Chairman of the Department of Psychiatry, University of Michigan; Sidney Cobb, M.D., Program Director, Institute of Social Research, University of Michigan; Richard D. Jaffe, Director, Institute for Social Action, Chicago, Ill.; and Robert Kline, Howard Ando, and Judith Muench.

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