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11792 SENATE HEALTH, EDUCATION & SOCIAL SERVICES

Care less what others

think of what you do. . 16 15 10 18

Feeling of being able

to do anything 6 5 13 77

Have hallucinations 9 8 16 66

Feeling of relaxation.... 50 22 10 18

Feel less angry 31 22 13 34

Feeling of drowsiness

or sleepiness 22 25 25 27

* Less than 1/2 of one percent. Source: Goode, 1972: 21.

The data show that the overwhelming majority of the respondents report "never or almost never" experiencing effects which can be characterized as producing frustration, anger, or aggression, and that they usually do not experience effects which could be taken to indicate an increase in suggestibility. On the other hand, substantial proportions of the respondents reported feeling relaxed (72%), less angry (53%) and drowsy or sleepy (47 %) at least half of the time.

In sum, these data suggest that marijuana does not commonly produce effects which are likely to increase aggression or incite the user to violence. Numerous studies designed to assess the relationship more directly demonstrate, on the whole, that marijuana does not play a significant role in the commission of violent crimes.

MARIHUANA AND VIOLENT CRIME: THE EVIDENCE

Over the years a number of approaches have been utilized in an effort to assess the relationship between marijuana use and violent crime. Perhaps the simplest approach is to compile a list of violent offenses allegedly committed by marijuana users and to establish, retrospectively, the role of marijuana in the commission of these offenses.

The Indian Hemp Drugs Commission (1894), for example, investigated 81 cases of violence allegedly caused by hemp drugs in an effort to determine whether or not a causal relationship existed. Of these 81 cases, 11 were too old to permit adequate investigation. In 23 of the cases examined, however, 18 showed no evidence of a connection between the crimes and the use of hemp drugs. The Commission concluded that:

In respect to his relations with society, however, even the excessive consumer of hemp drugs is ordinarily inoffensive. His excesses may indeed bring him to degraded poverty which may lead him to dishonest practices; and occasionally, but apparently very rarely indeed, excessive indulgence in hemp drugs may lead to violent crime. But for all practical purposes it may be laid down that there is little or no connection between the use of hemp drugs and crime (Indian Hemp Drugs Commission, 1893-1894, reprinted 1969: 204).

Similarly, in 1938 the Foreign Policy Association published the accounts of 10 marijuana crimes, including murder and assault, "culled at random from the files of the U.S. Bureau of Narcotics" (Merrill, 1938: 28). These cases were presented in such a way as to imply that marijuana caused the offenses. According to Grinspoon (1971: 302), they "gave the reader the distinct impression that the -user of marijuana was a violent criminal who was given to rape, homicide, and mayhem." Bromberg (1939), however, questions the validity of the causal assumption.

It is difficult to evaluate these statements, because of their uncritical nature.... Among the ten patients, the second, J. O., was described as having confessed how he murdered a friend and put his body in a trunk while under the influence of marijuana. J. O. was examined in this clinic (Bellevue Hospital); although he was a psychopathic liar and possibly homosexual, there was no indication in the examination or history of the use of any drug. The investigation by the probation department failed to indicate use of the drug marijuana. The deceased, however, was addicted to heroin (p. 9).

Based on retrospective case analyses, some observers have attempted to specify more precisely the nature of the purported relationship or the situations in which aggressive behavior may result from marijuana use. Bromberg (1939), for example, suggested that aggressive or violent behavior may arise when a naive subject develops a panic state in response to marijuana-induced hallucinations. Allentuck and Bowman (1942) believed that aggressive or antisocial behavior following use may occur as a reaction to some unpleasant external stimulus during the phase of hypersensitivity and heightened psychomotor activity. Others have suggested that antisocial conduct of an aggressive or violent nature may occur when marijuana is used, as alcohol often is, to release repressed feelings of hostility (Siler, et al., 1933; Chopra and Chopra, 1939; Allentuck and Bowman, 1942; Freedman and Rockmore, 1946; Murphy, 1963), and to serve as a fortifier for aggressive or violent crimes (Ewens, 1904; South Africa Interdepartmental Committee on Abuse of Dagsa, 1952; Ames, 1958; Watt, 1961; Blumer, et al., 1967; Miller, 1968).

The available evidence bearing on these issues, however, suggests that panic reactions rarely occur; that psychomotor activity is more often reduced than enhanced following use; that aggression rarely follows use, but when it does, it generally occurs among individuals with histories of maladjustment, emotional instability or impulse disorders (Bromberg, 1934, 1939; Charen and Perelman, 1946; Ausubel, 1958; Bloomquist, 1968; Grinspoon, 1971; Kaplan, 1971; National Institute of Mental Health, 1972).

After a series of studies of marijuana and crime, Chopra and Chopra (1939) concluded that if any relationship existed between marijuana use and violent crime, it was an indirect one. They stated that:

So far as premeditated crime is concerned, especially that of a violent nature, hemp drugs . . . may not only not lead to it, but they actually act as deterrents.... One of the important actions of these drugs is to quieten and stupify the individual so there is no tendency to violence. . . . The result of continued and excessive use of these drugs in our opinion is to make the individual timid rather than lead him to commit a crime of a violent nature (p. 92).

Over the years, the conclusion of the Chopras has received increasing support from many quarters of the research community (Mayor's Committee on Marijuana, 1944; Maurer and Vogel, 1962; White House Conference on Narcotic Drug Abuse, 1962; Murphy, 1963; President's Commission on Law Enforcement and Administration of Justice, 1967; National Institute of Mental Health, 1970, 1972).

In the absence of possibilities for addressing the issue more directly, several researchers have relied on statistical studies and have sought to establish the overall and comparative incidence of detected violent crimes among cannabis users. One method has been to compile lists of violent crimes committed during specific periods of time and to determine the proportion of these offenses committed by cannabis users.

Lambo (1965) compiled a list of crimes occurring in three West African countries during a recent two-year period. He claimed that users of cannabis had committed 51% of the 73 murders, 31% of the 263 cases of assault and battery and 26% of the 472 cases against women.

Some have preferred to base their statistical studies on samples of offenders (rather than lists of offenses) drawn from the arrest or conviction files of law enforcement agencies. Several researchers adopting this method are content to identify the marihuana users in their samples and then simply report the number of users charged with violent crimes or the proportions of the total number of violent crimes perpetrated by the users.

The District Attorney of New Orleans, for example, testified before the House Ways and Means Committee that of the 450 men convicted of major crimes in 1930, 125 were identified as regular marihuana users. Approximately one-half of the murderers and one-fifth of those charged with assault, robbery or larceny were said to be regular marihuana users (U.S. House of Representatives, 1937: 23-24).

Bromberg (1939) reviewed the records of 16,854 offenders in the psychiatric clinic of New York County's Court of General Sessions during the period 1932 to 1937. Of the 67 marihuana users identified, only six had been charged with violent crimes. He concluded that there was no causal relationship between marihuana use and aggressive crime.

Others go one step further and attempt to compare the users' rates of violence with those of other selected populations such as non-marihuana using offenders, offenders using other drugs, or all of offenders in a given file.

Bromberg and Rodgers (1946) studied the civilian and military criminal records of 8,280 convicted offenders at the United States Naval Prison in Portsmouth, New Hampshire between January 1, 1943 and July 1, 1945. Of the total number of offenders investigated, 40 or .0048% were identified as marihuana users (23 used to excess, 10 were moderate users and seven were described as light users). Of these 40, only two reported being more aggressive while under the influence of marihuana than they would be under normal conditions and three had been charged with violent crimes (assault or striking an officer) while in the military. Comparison of the users' criminal records with those of 40 randomly selected non-using prisoners revealed that the non-user group had committed more aggressive crimes than the users.

In conclusion, the researchers stated that:

1. *There is no positive relationship between aggressive crime and marihuana usage in the Naval service; . . .*
2. *. . . there is no significant causal relationship between aggressive crime in civilian life (of the naval offenders studied) and the use of marihuana . . .*
3. *Marihuana usage is but an aspect of some type of mental disorder or personality abnormality (p. 826).*

Maurer and Vogel (1962) have stated a similar conclusion.

"It has not been our impression from contact with many hundreds of marijuana users that

these people are violent criminals; ... While there may be occasional violent psychopaths who have used marijuana, have committed crimes of violence, and who have, in court, explained their actions as uncontrolled violence resulting from the use of the drug, these are exceptions to the general run of marijuana users.... Marijuana is not possessed of any mysterious power to force people to commit acts which they would not otherwise perform (p. 281).

Blum (1969) reviewed the data provided in 1966 by the Federal Bureau of Investigation as part of its Careers in Crime Project. The data showed that marijuana users did not differ significantly from either heroin users or from all offenders (drug and non-drug users) in their rate of violent crime relative to their total non-drug offenses (28%, 26% and 26%, respectively).

There have been several statistical studies, also using offender populations, designed to assess the degree to which persons arrested for cannabis use have previous or subsequent arrests for violent crimes.

Bromberg and Rodgers (1946) found that of the 40 offenders in their sample identified as marijuana users, 12 had been charged with previous offenses, three of them for assault.

Gardikas (1950) reviewed the criminal records of 379 persons arrested between 1919 and 1950 for publicly using hashish. Of these, 117 (31%) reportedly progressed from hashish use to other crimes, about one-third of these subsequent crimes involving violence or weapons. Gardikas stated that one subgroup of these, offenders accumulated 420 offenses of assault, woundings, threats, robberies, and manslaughter (p. 5).

In sum, these statistical studies based on samples of violent offenses, violent offenders or arrested marijuana law violators indicate that some individuals identified as marijuana users do commit violent crimes, have committed them in the past and go on to commit them in the future.

Their numbers, however, are generally small, both absolutely and relatively. These studies therefore suggest a very weak and insignificant statistical association between marijuana use and violent crime which may itself be completely attenuated when the proper statistical controls are applied.

These studies do not establish a causal relationship between cannabis use and violent crime; nor do they permit an affirmative response to the crucial question of whether the use of marijuana alters the progression to violent crime at a significantly greater rate than that which might be expected from some other criminal subgroups, more representative samples of cannabis users, or samples drawn from the general population. They also fail to address themselves to the external conditions and circumstances which might serve to mitigate the observed relationships.

Several recent and more sophisticated empirical investigations have addressed some of the critical questions left unanswered by statistical studies of offender populations. Namely, they set about to determine whether marijuana users in the general population commit acts of aggression or violence significantly more frequently than do nonusers; and whether any observed differences between users and non-users may be more directly attributable to extra-pharmacological (social, cultural, psychological) variables than to the use of marijuana itself or to the pharmacological action of the drug per se.

In 1965, Robins and his associates (1970) conducted a survey of 20 black men born in St. Louis between 1930 and 1934. The marijuana users in the sample were then compared with

the nonusers relative to their ratings on a "violence syndrome" constructed by the researchers.

Respondents were rated high on the violence syndrome if they reported having participated or felt like participating in three or more of the following items, one of which was a judgment by the interviewer that the respondent demonstrated hostility during the interview:

1. Getting hurt in a fight.
2. Ever feeling like killing someone.
3. Ever hitting people when angry.
4. Being quick to lose one's temper.
5. Throwing or breaking things when angry.
6. Ever hurting someone in a fight.
7. Ever fighting with a weapon.
8. Getting mean when drinking.
9. Interviewer's observation of respondent's hostility.

The researchers found that those who had used marihuana during adolescence were more likely to score high on the violence syndrome than were those who did not use the drug for the first time until adulthood; 31% of the respondents who had used marihuana and no other drug during adolescence exhibited three or more of these measures, 24% of those who used marihuana only but started as adults scored high, 16% of the non-users were classified as high on the violence syndrome, and 45% of those who used marihuana and other drugs were so classified.

The researchers also found that users were significantly more likely to report the commission of "adult person or property offenses" than were nonusers; 32% of the nonusers, 48% of the marihuana only adult starters, 56% of the marihuana only adolescent starters, and 77% of the multiple drug users reported committing crimes against persons or property as adults.

Based on these data, marihuana users were said to be significantly more likely to have exhibited violent behavior than were nonusers. This conclusion, however, seems somewhat premature.

First, upon the application of three "pathological" controls (dropping out of school, alcoholism and involvement in juvenile delinquency), the original relationship was reduced to some unspecified extent; the researchers reported only that these controls "failed to completely wipe out" the statistical correlation. Secondly, several of the items would not appear to be sufficiently discriminating in that large numbers of people, whether drug users or not, have probably been quick to lose their temper, hit people when angry (most parents, for example), or felt like killing someone in a moment of anger. The subjective nature of the last item the interviewer's observation of hostility has already been noted.

Thirdly, neither the drinkers nor those who were multiple drug users were isolated in the analysis, making it impossible to determine whether or not the apparent relationship between

marihuana use and violence may have been a function of these other drugs rather than the marihuana.

Lastly, but perhaps most importantly, the researchers found several other "pathological" variables correlated with the use of marihuana in their sample: (a) low income, (b) low status jobs, (c) unemployment, (d) receiving financial aid, (e) failing to graduate from high school, (f) fathering illegitimate children, (g) marrying women who had been married previously or who had children, and (h) drinking "heavily enough to create, social or medical problems."

Because none of these variables was controlled in the data analysis (despite the fact that most of them have been found to be significantly related to delinquency and crime and characteristic of persons involved in delinquent, criminal and drug subcultures), it is impossible to determine whether or not any or all of these variables played a mediating role in the observed relationship between marihuana use and antisocial behavior in the sample. As Goode (1972) has noted, the fact that the three controls which were applied did reduce the relationship, makes it likely that "additional controls would reduce the relationship even more, indeed, reduce it to zero, if applied simultaneously" (p. 13).

As such, although this study represented a significant step forward in investigating the relationship between marihuana and crime or violent behavior, its methodological limitations preclude generalizations of the findings to the larger universe.

In a study of drug use among lower class minority group youth, Blumer and his associates (1967) found that marihuana users were much less likely to commit aggressive or violent acts than were those who used amphetamines or preferred alcohol, and that most of the marihuana using youths deliberately shunned aggressive behavior and adopted, instead, a "cool," non-violent style. The researchers did find a small group of youths (termed "the rowdy") who were oriented toward aggressiveness. Generally, these youths preferred alcohol over other drugs and were found, for the most part, to have been raised in an aggressive and combative social milieu. The researchers point out, however, that most marihuana users in the sample were not of the rowdy type, even though it is this small group which often forms the basis of the public and police image of the youthful marihuana user. In commenting on the role of marihuana in the passage of youth from rowdy to a cool style, the authors note, that the passage from the rowdy type to a cool and mellow youngster, as it relates to the use of drugs, involves chiefly a shift to the smoking of marijuana. . . . [The youngsters'] accounts and discussions also stress that the use of marijuana both produces and symbolizes a "mellow" mode of conduct that is opposed to that associated with rowdy behavior. They place great weight on the "socializing" effects of marijuana use, declaring that its use not only leads youngsters away from violence but has the effect of changing them into social human beings (p. 30).

In a large scale, systematic survey (questionnaire and interview) of more than 1300 students at five West Coast colleges and universities, Blum and his associates (1969) found that 19% of the total sample had used marihuana but that 94% had used alcohol. One percent of the marihuana users reported fights or other criminal behavior which they attributed to the drug. Of those who used alcohol, 8% reported fights and 2% reported offenses while under the influence of this drug. The researchers make particular note of the fact that despite the increase of marihuana use on these campuses since the middle and late sixties, there has been no comparable increase in assaultive crimes.

In a Commission-sponsored household survey of 15 to 34 year-old male residents of West Philadelphia, Goode (1972) found that not one of the violent crimes, including "forcing sexual intercourse," was significantly correlated with marihuana use. Among the five offense types showing a very weak relationship to the use of marihuana, the only so-called

violent offense, "hurting someone in a minor way," showed the weakest association. The author notes that "the statistical differences in rates of offenses between users and nonusers rest on adding together a small number of weakly correlated offenses. . . . [They do not indicate] massive differences, or differences indicating higher rates of classic, violent crimes among users" (p. 32a).

These more rigorous studies of the relationship between marijuana use and violent crime suggest that marijuana users in the general population do not commit acts of aggression or violence significantly more frequently than do nonusers; that marijuana does not heighten aggressive tendencies in most users and may, in some cases, serve to reduce aggressiveness; and that much of the observed relationship between marijuana and violence is probably a function of social, cultural or psychological variables such as multiple drug use, set and setting and involvement in a criminal or drug subculture.

There is no reason to believe that marijuana use will cause or lead to the commission of aggressive or violent acts by the large majority of psychologically and socially mature individuals in the general population.

OPINIONS ABOUT MARIHUANA AND AGGRESSIVENESS: THE LAW ENFORCEMENT AND CRIMINAL JUSTICE COMMUNITIES

Several references have already been made to anecdotal case histories, to the claims made and to the opinions formerly held by a number of law enforcement authorities relative to the relationship between marijuana use and aggressive behavior or violent crime. A few systematic efforts have been made to explore the current opinions and attitudes of law enforcement and criminal justice officials.

Probably the first detailed survey of the opinions of police officers was that conducted by a Stanford University law student in 1968. Part of this unpublished study has been summarized by Kaplan (1971) and is reprinted below.

Law enforcement agencies have continuously supported the existence of a strong causal relationship between the use of marijuana and acts of aggression and violence. In order to determine the nature and basis for this belief, sixteen law enforcement and narcotics officers were interviewed. The officers selected for the interview from each police department were those who spent the largest percentage of their time actually working with marijuana users. When the department had several officers working full time on narcotics, the officer in charge was interviewed, on the supposition that as chief officer, he would have the longest and widest range of experience with marijuana users.

Of those interviewed, seven spent 100% of their time on narcotics problems; three spent 75% to 100%; 1 spent about 50%; and the remaining five spent 10% to 25%. All emphasized that of their narcotics work, a major proportion of the time is spent on marijuana problems.

The context in which the officers observe individuals under the influence of marijuana is an important factor in evaluating their observations. Only three had done stakeout work where conduct could be observed while under cover. The remaining thirteen officers had only encountered marijuana users in either arrest or questioning situations. In response to the question of whether they had opportunities for informal contact with people using marijuana while off duty or in a social situation, the officers uniformly answered, "no."

The specific subject of this project, i.e. marijuana and aggression, was never mentioned to

the officers. They were told only that I was interested in the marijuana question. The first question which I asked was to briefly characterize, from their personal experience and observations, the behavior of individuals while under the influence of marijuana. During this original description, 10 of the officers mentioned violence or aggressive behavior as a common characteristic. The six other officers didn't mention aggression as a distinguishing characteristic in their original description. However, in the next question, when specifically asked if marijuana does lead to aggressive behavior, all said that it did.

Every one of the officers pointed out the wide range of conduct which they see exhibited by those that are "high" on marijuana. They emphasized that how a person reacts depends on his particular personality. As one officer commented, "Some individuals are very happy and to them everything is beautiful, while others are always looking for a fight." Six (6) of the officers emphasized how quickly they can see one mood change into the other-at one moment docile and passive, at another extremely aggressive.

A few of the officers commented that along with the direct influence of marijuana, another important factor in aggressive behavior is the arresting situation. One officer, Lieutenant A of the B Police Department, who has done quite a bit of stake-out work as well as undercover investigation, pointed out that this change from "silly, joking, funny and talkative" moods to apprehensive and often aggressive postures is many times precipitated by the realization that a law enforcement officer is present.

Sergeant C of the D Police Department also felt the "arresting situation" was probably the primary factor in aggressive behavior reports about marijuana users. Sergeant E also mentioned "the approach of a known policeman" as a factor in the aggressive behavior which they see. However, Sergeant E also estimated that one fifth

of the males, when under the influence of [marijuana] and when aware that they are being arrested, will break and run or resist. This he feels is a much higher percentage than for other types of arrests. Similarly most of the officers did maintain that even considering all other factors such as arrest, the marijuana was the force in most cases which was responsible for the aggression and violence.

Mr. F of the G County Sheriff's Office, however, maintained that in the last few years, those arrested for marijuana offenses have tended to resist arrest less often than previously. He stated, "They now feel they don't have to fight the officers because of the laws-because of legalizing attempts, they feel they don't have to fight, for they will have their day in court."

Sergeant H of the I Police Department stated that recently (within the last year) he has seen no aggressive reaction to marijuana because of the extremely weak grades of marijuana now available. He felt that the determinative factor in how a person reacts while "high" is the strength of the grass smoked. He reported that the grass they have recently been finding has a very low resin content and its effects are merely "a quick stimulant followed by a depressed mood." However, in another part of the interview, when discussing the type of personality prone to using marijuana, Sergeant H distinguished between those now smoking and the "old grasshead." These latter were, only "Spanish-American or criminals." Now, however, "people without criminal records are joining the ranks of criminals." This major shift in the personality type now using marijuana, it would seem, would be another factor leading to Sergeant H's observation that the problems with aggressive reactions have decreased.

While all stated their belief that marijuana does lead to aggressive behavior, it was in most cases very difficult to elicit from the officers any specific instances where they personally had observed an aggressive reaction to the use of marijuana. Four (4) officers stated that

they had never personally seen someone aggressive under marijuana. They all, however, had heard reports of such instances from other officers. It should be noted also, that these four officers are from small police departments located chiefly in middle class residential areas.

Me officers who did cite specific examples of aggressive behavior from their personal observations cited such conduct as individuals who possessed marijuana fighting among themselves, cases of resisting arrest, a [man] picking a fight in a bar, beating one's wife, sexual promiscuity, stealing, reckless driving, and carrying knives and guns. While citing this type of example most officers emphasized the real difficulty in telling when someone is "high." Except for a few symptoms such as red or dilated eyes, they have to make the judgment from the general actions of the subject. When the subject is acting peculiar and there is no alcohol, or they find marijuana in his possession, then they assume he is "high."

It was also difficult to limit these discussions solely to marijuana. When asked for personal case histories, they often recounted incidents of individuals who had also been using other drugs or alcohol in combination with marijuana. The officers tend to group all of the drugs together, and discuss them together in generalities applying to all. One officer, from J County, recounted as one of his -personal experience histories with aggression and marijuana, a boy who went "berserk" on Christmas day, and who finally had to be shot by the police. On checking newspaper accounts, it appears that LSD was also involved in the episode.

The officers all indicated that they have personally seen many aggressive reactions to the use of alcohol. Most, however, did not feel they could compare the frequency with that of marijuana. Most deal mainly with narcotic problems and thus spend most of their time with marijuana problems. The alcohol problems, and specifically the aggressive or belligerent drunk, are handled by the "beat" cops.

It was also difficult to limit the discussion to personal experiences of the officers themselves. Many of them, when asked for specific examples, went immediately to their desks for reports and articles issued by other law enforcement agencies. This it seems is a problem which developed because of the sample chosen to interview. Because they were usually the most experienced and the chief narcotics officers, most of them are called upon to give speeches before PTA's, church groups, school classes, etc. They all, therefore, were familiar with the literature distributed by law enforcement....

Three of the officers cited as proof of marijuana's danger a recent distribution which pointed out that the "death penalty" is now imposed on marijuana offenders in Nigeria.

When questioned on passive reactions to marijuana, all of the officers could think of personal encounters with people who were "high" and who were decidedly passive and docile. Yet only four of the officers included this trait in their original characterization of behavior under marijuana. Eight of the officers, however, in their original description of behavior while "high" described some persons as "happy," "funny," or "giggly."

One question asked of the officers was aimed at differentiating the aggressiveness (chiefly in terms of frequency of resisting arrest) between those "high" on marijuana and those arrested for sale or for possession. As mentioned previously, the officers indicated that generally they have a very difficult time distinguishing those who are "high." The officers interviewed generally work on [arresting] pushers, and dealers. Their attention is usually not drawn to individuals because of the particular conduct they might be exhibiting, but rather because the individual is dealing in marijuana. When pot parties where everyone is high have been [broken up], Sergeant O of D reported that the places raided have usually been on the peaceful side. Another officer, K, on the narcotics detail in D, felt that users are usually

"very easy to arrest. With others, such as pushers, and sellers, however, officers have to be more careful." Captain L of M disagreed, however, maintaining that those under the influence must be watched more closely and are usually more aggressive and violent because of a lessening of concern for the consequences and a lack of ability to make sound judgments. Deputy Chief N of the O Police Department pointed out that in O at any rate, there is a certain "show" which those arrested feel they must put on; "it is hard to separate this show from the effects of the marijuana." Lieutenant P of the O Police Department said his experience indicated that those under the influence had to be watched closely. He has arrested people, [when they were] "high" three or four times without incident; the fifth time, however, he felt they might go wild.

In response to a question of whether they felt that some persons smoke pot before engaging in crimes against property, such as robbery, ten of the officers replied that they did believe that this occurred often. Seven of these could cite specific examples of people who had been picked up for stickups, car thefts, etc. and who reported using marijuana beforehand to bolster their courage, or sharpen their senses. However, the other three of the ten had only heard of such conduct. The remaining six officers answered that they did not think this was common, and had never seen any examples. . . .

None (of the officers) believed however that marijuana was responsible for any long-term effects resulting in aggressive behavior. The relationship between marijuana and aggression, they feel, is limited strictly to the period of time during which the user is under the influence. In terms of long-range effects of marijuana on aggression, the reactions of the officers confirm that, if anything, there is a negative correlation. That is, marijuana leads to nonaggressive, non-competitive, passive conduct, when viewed in the context of chronic use.

Whatever limitations and qualifications one can cite regarding the conclusions drawn by law enforcement officers, one thing remains certain: they do believe that the use of marijuana leads in a significant number of cases to aggressive behavior (Kaplan, 1971, citing Schofield: 110-115).

In seeking to present to the public as much information about marijuana and its effects, from as many different sources and approaches as possible, the Commission sponsored the design and execution of two opinion surveys of the criminal justice Community. In addition to soliciting their current opinions about the relationship of marijuana to aggressive or violent behavior, and to infer from them the extent to which their professional experience with marijuana users may have changed over the years, the Commission sought to determine the extent to which current opinions and attitudes of the criminal justice community reflect the growing body of empirical evidence on the subject.

To these ends, nationally representative samples of prosecuting attorneys, judges, probation officers and court clinicians were surveyed by mail. The questionnaires mailed to these officials contained items relative to the relationship between marijuana use and aggressive or violent behavior. The results of these surveys show that more than three fourths of the 781 judges, probation officers and court clinicians responding to a mail survey (InTech, 1971) regarded as either questionable or "probably untrue" the statement that "most aggressive acts or crimes of violence committed by persons who are known users of marijuana occur when the offender is under the influence of marijuana. More than 60% however, regard as equally questionable or untrue the statement that most such aggressive acts or crimes of violence occur when the offender is not under the influence of the drug but is attempting to obtain it or the money to buy it. Table 3 shows the percentage of each of the three groups of respondents answering in this manner. (InTech, 1971).

These figures give the impression that neither judges, probation officers nor court clinicians

are certain of the role of marihuana in the commission of violent crime. Their tendency to deny both statements suggests that at the least, the relationship, to the extent that it does exist, is a tenuous one.

Table 3.-CRIMINAL JUSTICE OFFICIALS, BELIEFS ABOUT THE RELATIONSHIP OF MARIHUANA USE TO AGGRESSIVE ACTS

(Figures in Percentages)

A. "Most aggressive acts or crimes of violence committed by persons who are known users of marihuana occur when the offender is under the influence of marihuana."

Probably Probably Not sure

true not true

Judges 17.3 44.2 29.5

Probation officers 14.5 60.0 21.8

Clinicians 6.1 76.5 13.0

Total 15.2 51.2 26.0

B. "When the offender is not under the influence of marihuana but is attempting to obtain marihuana or the money to buy it."

Probably Probably Not sure

true not true

Judges 35.6 30.6 25.0

Probation officers 27.3 44.5 21.8

Clinicians 20.0 60.9 15.7

Total 32.1 37.0 23.2

In its survey of state prosecuting attorneys, the Commission likewise found a tendency for these officials to deny a causal relationship between marihuana use and aggressive behavior; 52% of the respondents stated that they either did not believe or were uncertain about the proposition that use of marihuana causes aggressive behavior. Of those who did believe in a causal relationship, however, two-thirds of the respondents' beliefs stemmed from other than personal observation of aggressive behavior exhibited by marihuana users.

These opinion surveys reveal that at least these members of the criminal justice community have begun to reexamine their earlier beliefs. The data suggest that, in their professional experience, they have not found marihuana users to be aggressive or violent to such an extent as to elicit strong and consistent opinions about the causal relationship between marihuana use and violence.

Marihuana and Sexual Behavior

(not on website)

The Report of the National Commission on Marihuana and Drug Abuse

Marihuana and (Non-Violent) Crime

Much that has been said with respect to aggressive behavior and violent crime also applies to the more general proposition that marihuana causes or leads to (non-violent) crime and delinquency. The popular and professional literature abounds with claims and counter-claims. Public and professional opinion surveys demonstrate a widespread belief in the existence of a marihuana-crime relationship but also reveal considerable uncertainty about the existence of such a relationship.

The empirical evidence is somewhat more consistent. Laboratory studies provide no evidence that marihuana produces effects which can be interpreted as criminogenic. Although some studies of offender populations purport to demonstrate a causal relationship between marihuana and crime, they reveal, at the most, a significant statistical association. Closer examination of these data or more sophisticated analysis, however, generally shows the purported relationship to be spurious. The original relationship is usually found to derive not from the chemical effects of the drug but from the operation of social and cultural variables unrelated to either the drug or its use.

In the following pages the available evidence bearing on the relationship between marihuana and crime will be reviewed in an effort to determine whether marihuana itself or the use of the drug plays a significant precipitating or contributory role in the commission of criminal or delinquent acts.

PUBLIC AND PROFESSIONAL OPINION

The formulation and expression of strong opinions about the relationship of marihuana to criminal and delinquent behavior have persisted despite the inherent complexities of the issue, the relative absence of conclusive empirical evidence and the general lack of knowledge and understanding about the effects of the drug. For the most part, however, neither public nor professional opinion about marihuana and its impact on public safety has been explored in any systematic fashion. As a consequence, public policy with respect to the

drug has been shaped by the most vociferous advocates of one position or another at any given time.

Probably the first official body to explore prevailing opinion about the relationship between marihuana use and crime was the Indian Hemp Drugs Commission of 1893-1894. The Commission spent over a year in making field trips to 30 cities, in receiving evidence from almost 1,200 expert witnesses (335 of whom were medical practitioners) and in reviewing judicial proceedings and the case files from India's mental hospitals. The Commission's Report, reprinted in 1969, contains the following information gathered with respect to the relationship of marihuana use to crime.

First, the Commission found that the majority of hemp drug consumers were moderate rather than excessive users, and that the drug users were rarely regarded as offensive or potentially dangerous by their neighbors (a few objected to the smell of the smoke or the example set by the users for the neighborhood children).

With respect to the drug's possible long-term or chronic criminogenic effects (producing "bad characters"), the Commission reported that two thirds of the witnesses did not believe that marihuana would produce, over time, a large proportion of "bad characters" among the moderate users. A majority felt that even excessive use was unrelated to the production of "bad characters." When the possible relationship was framed more precisely in terms of cause-effect rather than statistical association, a ratio of 8 to 1 of the witnesses held that moderate consumption of these drugs had no connection with crime and a ratio of 4 to 1 denied a causal connection between excessive consumption and being a "bad character."

With respect to the more acute effects of hemp drugs, the Commission set out to determine whether criminals use the drug to fortify their courage prior to the commission of their crimes, whether the drugs were used by criminals "to stupefy their victims," and whether the drugs incited the user to commit unpremeditated crimes. The Commission's conclusion regarding the first question was that "criminals like any other consumers of these drugs go to them for that assistance when they feel they require it" (p. 256).

To the second question, the Commission responded that although some persons had alleged the commission of "thefts of ornaments from children stupefied by sweet meats" containing marihuana, the fact of other readily available, more effective and more disabling drugs, considerably more conducive to surreptitious administration, cast doubt on the use of hemp drugs by criminals for this purpose.

To the third question, the Commission said that the majority of witnesses saw no connection between either the moderate or excessive use of hemp drugs and the commission of unpremeditated crimes, including crimes of violence. The Commission therefore concluded that "for all practical purposes it may be laid down that there is little or no connection between the use of hemp drugs and crime." (p. 264).

The Mayor's Committee on Marihuana (1944) also interviewed law enforcement officers (federal, state and local police) about the purported link between marihuana and crime. The Committee reported that:

In most instances [the police officers] unhesitatingly stated that there is no proof that major crimes are associated with the practice of smoking marihuana. They did state that many marihuana smokers are guilty of petty crimes, but that the criminal career usually existed prior to the time the individual smoked his first marihuana cigarette (Schoenfeld, 1944: 14-15).

Reference has already been made to the results of a small, unpublished survey of the opinions of police officers about the relationship of marihuana to aggression (Schofield, 1968). All of the respondents reported observing a variety of conduct exhibited by users under the influence of marihuana and emphasized that an individual's reaction to the drug depends on his particular personality and, in some instances, the strength of the dose. Some respondents observed a recent shift in the type of individual or personality prone to using marihuana.

In response to a question regarding the use of marihuana prior to engaging in property crimes, 10 out of the 16 officers interviewed believed that this often occurred. Seven cited specific examples of offenders who reported using marihuana before committing their offenses to bolster their courage and sharpen their senses; the views of three rested on hearsay evidence; and the remaining six officers responded that they did not believe this was a common practice and that they had never personally observed such examples.

In the Commission-sponsored National Survey of a representative sample of more than 3,000 American youth and adults (Abelson, et al., 1972), respondents were asked to indicate their agreement or disagreement with the statement that "many crimes are committed by persons who show that 56% of the adults and 41% of the youth agree with the statement. The extent of agreement, however, varies significantly according to age, education, geographic location and the marihuana-using experience of the respondent. Those who are early adolescents (12-13 years), over 25 years of age, have not completed high school, live in the South or North Central regions of the country and have no experience with marihuana are, significantly more likely to agree with the statement than are those who are between 14 and 25 years of age, are at least high school graduates, live in the Northeast or West and have had experience with marihuana. Table 5 below, shows the percentage of respondents agreeing to the statement according to age, education, geographic location and experience with marihuana.

The survey also showed the existence of considerable uncertainty with respect to the proposition that many crimes are committed by persons under the influence of marihuana; 25% of the youth and 17% of the adults were either unsure of its relative truth or failed to respond to the question (p. 69). Adults were considerably more certain, however, about the relationship between alcohol and crime (youth were not asked the question); 7% were either unsure or did not respond and 69% agreed with the statement that many crimes are committed by persons who were under the influence of liquor (pp. 28, 31).

Table 5.-PERCENTAGE OF RESPONDENTS WHO AGREE THAT "MANY CRIMES ARE COMMITTED BY PERSONS WHO ARE UNDER THE INFLUENCE OF MARIHUANA"

Percent agreeing

Youth Adults

Total respondents agreeing 40.7 56.0

Age (years):

12-13 54.5

14-15 35.2

16-17 31.8

18-25 35.1

26-34 48.5

35-49 59.0

50 and over 68.8

Education:

Less than high school graduate 70.9

Eighth grade or less 49.5

Ninth-twelfth grades 31.8

High school graduate 56.8

College or more 39.2

Geographic location:

Northeast 34.1 46.9

North-Central 42.1 54.9

South 48.5 66.8

West 34.0 52.3

Marihuana experience (ever used):

Yes 8.9 24.1

No 46.1 62.0

The surveys of prosecuting attorneys, judges, probation officers and court clinicians also revealed considerable doubt about the existence of a causal connection between marihuana and crime. Although the survey of prosecuting attorneys conducted by the Commission staff asked only about aggressive behavior and violent crime, the data showed that 52% of the respondents either denied or were uncertain that marihuana causes such behavior.

The Commission-sponsored survey of nationally representative samples of judges, probation officers and court clinicians, however, posed several questions bearing on the more general proposition that marihuana is related to crime and delinquency (InTech, 1971). Respondents were first asked whether or not they had witnessed an increase in the incidence of drug or drug-related offenses in their caseloads during the past five years. The large majority of all three groups (86%) responded affirmatively and reported that marihuana was the type of drug most often seen in this connection (83%). However, about two thirds of the respondents reported that marihuana offenders (those arrested for using or selling

marihuana) constituted less than 20% of their caseloads; 56% of the respondents reported that those arrested for non-drug offenses but incidentally found to possess marihuana comprised less than 10% of their caseloads; and 73% of the respondents reported that less than 10% of their caseloads attributed their offenses to marihuana (pp. 31, 34).

To determine better the nature and direction of a possible relationship between marihuana use and crime, respondents were asked to indicate which -of four statements most reflected their own professional experience. On the whole, the respondents were more likely to postulate a statistical association (36.6%) rather than a direct cause-effect relationship (26.9%); 18% of the respondents thought that involvement in a criminal or delinquent subculture caused or led to the use of marihuana (in contrast to the more prevalent belief that marihuana use leads to crime) and 9.1% believed there was absolutely no relationship between marihuana use and other criminal or delinquent behavior. The extent to which uncertainty prevails even among these practicing professionals is reflected in the 9.3% no response category (p. 39).

Table 6 shows the responses of the judges, probation officers and clinicians to each of the four propositions (InTech, 1971: Appendix 1, Section II, Question 3). The data show that judges are significantly more likely to believe that marihuana causes or leads to criminal and delinquent behavior and significantly less likely to believe in either a statistical relationship or in no relationship whatsoever than either the probation officers or the clinicians.

The researchers also attempted to determine these professionals' opinions about crimes actually committed by marihuana users. More specifically, did the respondents think that most non-drug crimes committed by persons who were known users of marihuana occurred when the individuals were actually under the influence of the drug or when they attempted to obtain it? Again, the responses indicated considerable uncertainty in all three groups. One-third of the respondents were either unsure or did not respond to either proposition. About twice the number of respondents thought that the crimes occurred while in the attempt to obtain marihuana (31.0%) rather than while under the influence of marihuana (16.8%).

Table 7 shows the percentage of respondents indicating the probable truth and probable nontruth of the two propositions (Appendix 1, Section II, Questions 2a, 2b).

The data show that half of the respondents denied the commission of non-drug crimes while under the influence of the drug, suggesting that marihuana itself does not have the capacity to produce criminogenic effects. About one-third of the respondents, however, believed that these crimes occur when the user is attempting to obtain the drug, suggesting an addiction model; that is, that users commit crimes to support a "habit."

This interpretation is corroborated by the significant findings that 65% of the respondents either did not know (23%) or thought that a few (21%), some (17%) or most (4.4%) of the regular users were physically addicted to marihuana

Table 7.-RESPONSES OF JUDGES, PROBATION OFFICERS AND COURT CLINICIANS TO STATEMENTS ABOUT NON-DRUG CRIMES COMMITTED BY MARIHUANA USERS

(Figures in Percentages)

Most non-drug crimes committed by persons who use marihuana occur when the offender

is-

Under the in- Attempting to
fluence of mari- obtain marihuana
huana

Prob- Prob- Prob- Prob-

ably ably ably ably

true not true true not true

Judges 17.1 % 46.8 % 34.2 %, 30.4 %,

Probation officers 21.8 47.3 30.0 37.3

Court clinicians.. . . 10.4 65.2 16.5 60.0

Total 16.8 49.6 31.0 35.7

The National Survey of the general public (Abelson, et al., 1972) likewise showed that large segments of the population (65% of all adults and 48% of all youth) regard marihuana as addictive. Even among the users, 40% of adults and 21% of the youth believed marihuana to be addicting (p. 22)

These findings, taken together, suggest that much of the confusion regarding the relationship between marihuana and crime may be predicated on public and professional misconceptions about the drug's addiction potential. The Commission's National Survey showed that, among those persons who believed marihuana to be addicting, 67.5% of the adults and 52.3% of the youth believed that many crimes are committed by persons under the influence of marihuana. Among those who said that marihuana was not addicting, 34.6% of the adults and 30.2% of the youth agreed that many crimes are committed by marihuana users. Table 8 below shows this relationship (unpublished data, Abelson, et al., 1972).

Table 8.-RELATIONSHIP BETWEEN PERSONS WHO THINK MARIHUANA IS ADDICTIVE AND THOSE WHO THINK THAT MANY CRIMES ARE COMMITTED BY PERSONS UNDER THE INFLUENCE OF MARIHUANA

(Figures in Percentages)

Persons who think marihuana is

Addictive Not addictive

Youth Adults Youth Adults

Many crimes are committed under the influence of
marihuana:

Mostly agree... 52.3 67.5 30.2 34.6
 Mostly disagree 20.8 14.5 39.9 41.1
 Other 2.3 3.1 4.4 2.0
 Not sure/no answer 24.6 14.9 25.6 27.3

Table 6.-THE OPINIONS OF JUDGES, PROBATION OFFICERS AND COURT CLINICIANS REGARDING THE NATURE OF THE RELATIONSHIP BETWEEN MARIHUANA USE AND OTHER CRIMINAL OR DELINQUENT BEHAVIOR

(Figures in Percentages)

Judges Probation Court Total

(N=556) officers clinicians (N=781)

(N=110) (N 1.15)

Use of marihuana causes or leads to antisocial behavior in the sense

that it leads one to commit other criminal or delinquent acts 33.8 18.2 1.7 26.9

Involvement in a criminal or delinquent subculture causes or leads

to the use of marihuana 18.3 20.0 14.8 18.1

There is a statistical relationship or association between marihuana

use and other criminal or delinquent behavior, but it is not a

cause-effect relationship 31.1 40.0 60.0 36.6

There is absolutely no relationship between marihuana use and

other criminal or delinquent behavior 6.7 14.5 15.7 9.1

($\chi^2=76.895$, $p<.001$).

To summarize, these opinion surveys demonstrate that there is considerable uncertainty about the existence and the nature of a relationship between marihuana use and crime and that this uncertainty exists among youth and adults, practicing professionals in the criminal justice community and the lay public, marihuana users and non-users alike. The data suggest, however, that the persistent and fairly widespread belief in a cause-effect relationship between marihuana and crime may, at least in part, be predicated on the erroneous but equally prevalent belief that marihuana is physically addicting. To the extent that the general public operates under this misconception, they may be more likely to believe that, like the heroin user, the marihuana "addict" commits crime in order to support his "habit" and obtain the drug.

The logical extension of this belief is that marihuana users, like heroin users, will be considered more likely to commit their crimes in the attempt to obtain the drug than while under the influence of the drug. Stated another way, persons who believe that marihuana is physically addicting would be more likely to base the purported causal relationship between marihuana and crime not on the chemical effects of the drug per se but on the user's physical need for the drug. As such, they would be more likely to postulate that most crimes committed by users occur not when the offender is under the influence of the drug (which, like heroin, makes one passive, lethargic and stuporous) but when the "addict" needs a "fix" and is desperately trying to obtain the drug or the money to buy it. This interpretation is, indeed, supported by the findings of the Commission-sponsored survey of judges, probation officers and court clinicians and is suggested from the findings of the National Survey.

STUDIES OF OFFENDER POPULATIONS

Over the years, numerous studies have relied on offender populations and zero-order statistical correlations to "demonstrate" a cause-effect relationship between marihuana and crime. This method of "proof by enumeration" has become probably the most common approach to "demonstrating" the purported causal relationship.

As Goode (1970) has noted, however:

Not even marihuana's staunchest supporter would argue that a crime has never been committed by a user while high. Yet, incredible as it seems, the burden of many proofs of marihuana's criminal effects has been precisely the simple fact that it is possible to locate crimes committed in conjunction with smoking marihuana. "Proof" by enumeration is no proof at all. By examining an enumeration of crimes which were committed under the influence of marihuana (even were this definitely known), it is impossible to determine the "cause" of the event taking place, in this case the crime-or, indeed, that marihuana has anything whatsoever to do with its commission (pp. 215-216).

Even if these studies are taken at face value, their findings do not generally support the thesis of a positive and significant statistical association. In most instances, marihuana has not been found to predispose one to commit crime or to serve as an initiator of criminal careers; nor does the use of the drug appear to alter the progression to other non-drug offenses among those without prior criminal records or histories of psychological maladjustment. Predictably, however

the data do indicate a greater rate, of progression among marihuana-using offenders (both those arrested specifically for their marihuana offenses and those charged with non-drug crimes) than that which might be expected from similar, non-using offenders or from the general population.

Because these studies do provide at least interesting insights into the possible nature and direction of a relationship between marihuana and crime or, conversely, a non-existent relationship, several of these studies are summarized below.

Bromberg, 1939. Between 1932 and 1937, Bromberg and his team of researchers reviewed all cases eventuating in conviction by New York's Courts of General and Special Sessions; conducted interviews with about 17,000 drug and non-drug-using offenders; and analyzed the statistics from both courts. The report of this work, published in 1939, yielded the following information.

Among the 16,854 offenders convicted of felonies in the court of General Sessions, 67 (.005%) were identified as marihuana users. Of these 67, 46 (69%) had been convicted on charges of possession with intent to sell; 16 (24%) were charged with burglary, robbery and grand larceny; two persons were charged with assault and one each was charged with petty larceny, forgery and murder.

The researcher points out that in only nine cases did the offenders' criminal records commence with a drug charge, "indicating that there was not in those cases a close relationship between drugs and the beginning of a career in crime" (p. 10).

In a 25% random sample of offenders convicted in the Court of Special Sessions (misdemeanors), 135 or 9% were charged with possession of marihuana. Of these 135, 93 or 69% had no previous record, 8 had been charged previously with drug violations only, 5 had mixed drug and non-drug charges and 29 (21%) had only non-drug arrests. In summary, the researcher stated that:

As measured by the succession of arrests and convictions in the Court of General Sessions (felonies)

it can be said that drugs generally do not initiate criminal careers. Similarly, in the Court of Special Sessions (misdemeanors), only 8% of the offenders had previous charges of using drugs and 3.7% had previous charges of drugs and other petty crimes. In the vast majority of cases . . . then, the earlier use of marihuana apparently did not predispose to crime, even that of using other drugs. . . . The expectancy of major crimes following the use of cannabis in New York County is small, according to these experiences (p. 10).

Bromberg and Rodgers, 1946. A study of 8,280 naval and marine prisoners at the U.S. Naval Prison in Portsmouth, New Hampshire (1946) revealed that 40 or .0048% of the offenders were marihuana users. The offenses they committed while in the service were: AWOL or AOL (32, or 80%), assault or striking an officer (3), theft (3), and narcotics violations (2). Their previous civilian offenses included three each of assault, theft and traffic violations and one each of gambling and narcotics violations, drunkenness, draft dodging, and violation of the Mann Act. Twenty-eight or 70% of the marihuana users had no previous civilian criminal records (p. 825).

The preponderance of psychiatric disorders in the user group over the non-users (40 randomly selected non-using naval prisoners) led the researchers to conclude that "marihuana usage is but an aspect of some type of mental disorder or personality abnormality" (p. 826), a conclusion also reached by Charen and Perchan (1946), Ausubel (1958), Andrade (1964), Lambo (1965), Bloomquist (1968), Simmons (1969) and Grinspoon (1971).

Gardikas, 1950. The researcher reviewed the criminal records of "379 individuals either sentenced or arrested *in flagrante delicto* for using hashish publically" between 1919 and 1950. More than half (55%) of these individuals were already known to law enforcement authorities prior to their use of hashish and an additional 14% had no subsequent difficulties with the law except for hashish and vagrancy offenses. The researcher notes, however, that the remaining 117 offenders (31% of the original sample) went on to become "confirmed criminals after their first hashish arrest."

Dividing this last subgroup of 117 into three approximately equal parts, Gardikas then described the subsequent criminality of each group. The first group was given 332 more sentences following their first sentence for using hashish; 142 (43%) were additional hashish offenses, a similar number were for violent crimes or crimes involving weapons, 18

were for "insults" and two were for "high treason."

In a critique of the Gardikas study, Kaplan were accumulated; mostly for hashish offenses (42%) and thefts (20%). Although there were a small number of violent crimes subsequently committed by this group of offenders, most sentences subsequent to their initial hashish sentence were for such relatively minor offenses as illegal gambling, living on immoral earnings, "false statements of identity," and "fishing with dynamite."

The third group discussed by Gardikas, comprised of those "who after having, made use of hashish became criminals," accumulated 332 additional sentences. Hashish offenses were again responsible for 30% of these offenses and most of the rest were for theft. Gardikas notes with respect to this group that although not all of these individuals were criminal before they used hashish, their use of hashish "turned [them] into habitual hashish smokers and habitual criminals with a strong propensity leading toward crime of dishonesty and particularly theft and fraud. At least one-half of them surely and undoubtedly are even to be characterized as dangerous idle, vagrants" (p. 203).

In a critique of the Gardikas study, Kaplan (1971) has stated that:

The basic problem underlying Gardikas' paper is his conclusion that hashish use caused his subsample of 117 arrests to become criminals. This assumes, first, that they had not engaged in crime before beginning to use hashish and, second, that it was the hashish use and not something else that turned -them toward crime. Neither of these assumptions is justified by the data. . . . As for the first assumption . . . all we know is that they had not been arrested or convicted for other crimes first. . . . The second assumption . . . is also impossible to justify. Even if the members of the subsample had not previously been criminals, it may very well be difficult to distinguish the criminogenic effects of hashish from those of conviction and sentence to Greek jails.

Even aside from any criminogenic effect of the Greek penal system, the figures may indicate only that once somebody has been arrested for hashish-and probably served a term in jail as well-lie is more likely to be picked up by the police when further crimes are committed. Finally, the years from 1919 through 1950 . . . were a period of enormous social dislocation [in Greece] It is obviously an almost impossible task to sort out how much of the subsequent criminality in the subsample was due to hashish use and how much to the social chaos that prevailed in Greece (pp. 103-104).

Andrade, 1964. The researcher retrospectively reviewed the examinations of 120 patients sentenced between 1951 and 1960 by a Brazilian Court to Heitor Carrilho insane asylum. Sentencing in all cases was based on the allegation that cannabis was directly responsible for their crimes. The researcher concluded that:

In the 120 patients examined, we did; not find any criminogenic action that could be attributed to cannabis; ... In the majority of cases examined (83), we found patients with psychotic disturbances. . . . In the cases in which we did not find mental disturbances, a total of 37, the crime attributed to them was that of carrying or selling marihuana.... In the study of the dynamics of the crimes of all the others, we saw that there was a link between the crime and the illness, independent of the use of cannabis (Tinklenberg, 1971: 12).

Lambo, 1965. The researcher compiled lists of crimes occurring over a two year period in three West African nations and recorded the number of offenders perpetrating these crimes. He found that approximately one-fourth of the offenders had previous convictions. Forty-seven percent of the 863 offenders convicted for false pretenses, 61% of the 2,880 convicted

burglars and 54% of those convicted on charges of "culpable driving" were said to have histories of cannabis use. Many of these users, however, were also shown to have long histories of psychological maladjustment (p. 10). The researcher suggests that "the use of cannabis enhances suggestibility in certain individuals, and this may be a factor in the commission of crime, by these chronic abusers" (p. 11).

THE RELATIONSHIP BETWEEN MARIHUANA AND CRIME:

AN EXPLANATION

As indicated at the outset, enumerative studies of the crimes committed by apprehended marihuana, law violators and non-drug offenders identified as marihuana users cannot, by their very nature, either prove or disprove a causal connection between the use of cannabis and the commission of crimes; nor can their rates of crime be projected onto the larger universe of marihuana users.

As several researchers have pointed out, those individuals apprehended for marihuana offenses represent only a tiny fraction of all marihuana users (Kaplan, 1971; Weitzner, et al., 1971); likewise, those in other offender samples who are identified as marihuana users represent only a small proportion of the offender populations of which they are a part (Bromberg, 1939; Bromberg and Rodgers, 1946; Kaplan, 1971).

Although the data do indicate that some individuals identified as marihuana users are subsequently involved in crime, both drug-specific and non-drug offenses, they do not provide support for the thesis that cannabis was the determining factor in their criminal careers. Likewise, they fail to indicate that the rate of progression to other crimes manifested by these offenders was significantly greater than that which might be expected in either a non-using criminal subgroup or the general population.

As Tinklenberg (1971) has stated:

The important issue is that unless one has systematic data on the proclivities toward crime of the various subgroups of marihuana users, one cannot answer the crucial question of whether the use of marihuana alters the actual rate of crime among these various subgroups over the criminality which would be expected. At this time, it is unknown whether individuals with these characteristics seek the use of marihuana or whether the use of marihuana in any way contributes to the development of these traits (p. 24).

By reading between the lines of these enumerative studies, however, one would be tempted to postulate that individuals with certain psychological, social and cultural characteristics are more likely to seek the use of marihuana, than is marihuana likely to contribute to the development of delinquent or criminal behavior patterns.

The number of researchers pointing to individuals with long histories of psychological maladjustment or disturbances has already been noted. Others have alluded to persons involved, prior to cannabis use, in criminal or delinquent subcultures (Blumer, 1967; Robins, et al., 1970; Kaplan, 1971; Weitzner, et al., 1971). Still others suggest that marihuana use is more likely to develop among persons living in underprivileged communities or within a social structure that limits achievement and advancement (Asuni, 1964; Blumer, 1967; Goode, 1972).

In recent years, considerable evidence has been gathered to suggest that the use of other drugs and association with drug-using friends are also likely to enhance the probability of

marihuana use (Hochman and Brill, 1971; Goode, 1972; Abelson, et al., 1972).

Because many of these characteristics are likely to be associated with both criminal or delinquent behavior and marihuana, use, some individuals have mistakenly concluded a cause-effect relationship rather than a statistical correlation.

The studies reviewed in the following pages are probably the most methodologically adequate assessments of the purported relationship between marihuana and crime undertaken to date. The data show that the seemingly significant statistical correlation often observed between marihuana, use and crime is spurious; it is dependent not on the chemical effects of the drug but upon the operation of several extra-pharmacological variables which have little or nothing to do with the use of marihuana, per se.

The first of these studies (Goode, 1970) is based on a sample of marihuana users. Because it, like the study by Robins and his colleagues (1967, 1970) referred to earlier, involves a selected population, the extent to which its findings can be applied to the general population remains speculative.

The second study presented, a Commission sponsored survey of young male urban dwellers, is probably the most adequate assessment to date of the relationship between marihuana use and crime. The results are based on a representative sample of the general population of males, 15 to 34 years of age, the self reports of criminal behavior have been cross-checked with Philadelphia Police Department files; and numerous statistical controls have been applied to the data. The study therefore provides at least tentative answers to the following questions:

- Do young, male marihuana users and nonusers in the general population differ significantly in the nature and extent of their criminal activities?

- Is marihuana use, in and of itself, the principal determinant of any observed differences? - If not, what are the variables which explain a statistical correlation between marihuana use and crime?

Goode, 1970. Between February and September of 1967, face-to-face interviews were held with 204 marihuana users residing in the New York City Metropolitan Area. The sample, admittedly nonrepresentative, was drawn from membership lists of drug-related organizations and also included friends and acquaintances of the researcher.

The sample, suspected of differing to some unknown extent from a random sample of marihuana users, can be characterized - as primarily male (53%), young (median age 22 years), white (89.5%), single (78%), middle class urban dwellers, including students, dropouts, business people, housewives and the unemployed (p. 316).

All of the respondents, by virtue of their marihuana use, possession or sale, had engaged in law violative behavior, but, only nine marihuana arrests were reported. This finding indicates that persons who are arrested for marihuana related activities constitute only a small fraction of total marihuana users.

Because of their marihuana-related criminal activity, one would expect that persons in this sample would have a higher probability of being arrested than would the "average" person from the general population. To determine if, in fact, this might be the case, the researcher computed the rate of arrest for his sample and compared it with the national rate of arrest provided by the Federal Bureau of Investigation for the year 1965. Despite the fact that the rates are not strictly comparable (the sample rate is based on arrests ever experienced; the

national rate is based on the number of arrests recorded for one year), the similarity is striking. The national rate was given as 3.7 per 100; the sample rate was computed to be 3.9 per 100 per year, 4.5 if one adds the marihuana arrests (p. 236).

Although the arrest rates of the users and the general population were found to be roughly similar, the types of crimes committed by the users differed significantly from those crimes recorded for the population as a whole. In contrast to the majority of drunkenness and disorderly conduct charges noted for the general population, the offenses of the users most often resulting in arrest involved participation in political demonstrations (19 out of the 55 arrests). No other single offense attracted more than a few arrests (p. 2335).

In addition to examining arrest rates and the types of offenses committed, the researcher also investigated the relationship between the amount of marihuana smoked and the criminal behavior of the user. If it were true that marihuana did produce a dangerous and criminogenic state in the user, the greater would be his likelihood of committing crimes and of being arrested.

The data, however, show no relationship; excluding the "political crimes" (which were most common among the least frequent smokers and least common among the most frequent smokers), the "serious" crimes committed by 15 respondents (non-marihuana narcotics possession, disorderly conduct, drunkenness, burglary, theft, assault, auto theft, serving liquor to a minor and larceny) resulted in a total of 21 arrests. The heavy smokers did not commit these crimes significantly more frequently than did the light smokers.

Similarly, there was no relationship found between the frequency of use and the likelihood of arrest; three of the daily smokers, three of those who smoked three to six times per week, three who smoked one or two times weekly, one who smoked four times monthly and three who were less than monthly smokers were arrested for committing these "serious" crimes (pp. 237-38).

The researcher concludes that:

Although these numbers are extremely small, the fact of their perfect dispersal is perhaps indicative of the lack of a crime-inducing effect of the drug. It is, at any rate, a proposition which ought to be tested more systematically in the future with more complete data. For the moment, there are indications that point to the fact that the marijuana smoker is no more criminal than the rest of the population (p. 238).

Goode, 1972. The Commission-sponsored Philadelphia survey set out to resolve these issues. Goode (1972) analyzed the data collected during August of 1971 from an interview survey of 559 15-to-34-year-old residents of West Philadelphia.

That part of the report devoted specifically to the analysis of the data is presented in its entirety below. The only deletions made were the author's references to previous studies bearing on the issues addressed, the findings of which have been presented earlier in this chapter.

Excerpts From

MARIJUANA USE AND CRIME*

PREFACE

*Prepared by Professor Erich Goode for the National Commission on Marihuana and

Drug Abuse, January 15, 1972. The data on which this report is based were obtained from a survey conducted by the Institute of Survey Research of Temple University. All tables referred to in Professor Goode's text are found at the end of these excerpts. The interview schedule was developed and executed and the data processed for the Commission by Temple University's Institute for Survey Research, in Philadelphia.

The data analyzed in this report were gathered in August 1971 by the Institute for Survey Research of Temple University in Philadelphia; the author of this report did not have a hand in any phase of the data gathering, including constructing the interview schedule, although he is solely responsible for the data analysis. The sample consists in toto of males age 15 through 34 living in households located in a section of West Philadelphia. Each respondent was interviewed; a total sample size of 559 was collected. (The refusal rate was 10%, which is typical for house-to-house surveys of this type.) The area in which the sample was drawn is composed mainly of two heterogeneous populations: lower-middle and working-class, high school educated blacks, and college-associated whites-students and professionals associated with [Drexel University and] the University of Pennsylvania. About four respondents in ten in this survey are black, and just over half are white. (The number of Orientals and Puerto Ricans or Mexicans is too small to permit a meaningful statistical analysis, so that when race is discussed in this report, only the black-white comparison will be made.) The racial composition is roughly equivalent to the census figures for the sample area although no attempt was made, through a weighting of cases, to "correct" any discrepancies which might have prevailed in population composition. More detailed information is available from the Institute for Survey Research.

A quarter of the sample (23%) had never smoked marijuana; in 17 cases (3%), no information on marijuana use was given by the respondent. Of the marijuana users the question asked about frequency of use during the respondent's most recent year of use--about 1 in 10 smoked marijuana daily or more, about 1 in 5 smoked approximately once or twice a week, 1 in 4 smoked once or twice per month, on the average, and about 4 in 10 smoked marijuana several times a year. (The study also asked how often the respondent smoked marijuana in his first year of use a variable which I have not made use of in this report.) Questions were also asked concerning the respondent's use of other drugs--"stimulants or uppers, such as bennies, speed, or dex," "sedatives or downers, such as sleeping pills, anytal or blues, or nembutal, or yellow jackets," "hallucinatory drugs, such as LSD, mescaline, or STP," and "hard drugs, such as heroin, morphine, demerol, cocaine, or codeine." In addition, questions on one's friends' drug use--both marijuana and these other drugs--were asked.

The commission of various offenses formed another segment of the questionnaire. There were 16 of them, and ranged from those which would not be considered crimes in most instances--such as "disturbing people"--to those which would be considered felonies, drawing long prison sentences such as rape, armed robbery, and assault. As would be expected, the serious offenses were committed (or admitted to) by very, very few respondents--and thus, any comparison between users and non-users has to be made mainly on the basis of committing trivial offenses....

III. THE EFFECTS OF MARIJUANA

At this point, I will introduce the data from the Philadelphia marijuana use and crime study, specifically mandated by the National Commission on Marihuana and Drug Abuse. This survey's data will form the bulk of the factual evidence on the marijuana-crime connection in the report which follows.

The question of marijuana's relationship to crime and aggressive behavior is obviously closely related to the drug's effects. One of the most fundamental generalizations in psychopharmacology to be obtained from thousands of recent research efforts is that the same drug does not have standard and invariant "effects," but that effects are sensitive to a number of extra-pharmacological variables, including the personality of the user, the social setting in which drug use takes place, the user's past experience with the drug, his expectations, and so on. Thus, it is elliptical and somewhat artificial, and incomplete, to speak of any drug's "effects," as if they occurred under any and all conditions, in all users. We should bear this qualification in mind when looking at the relationship between the ingestion of a drug and any subsequent behavior-with the latter supposedly "Caused" by the effects of the drug. Drug effects vary, and, in addition, even standard effects do not automatically translate into specific forms of human behavior. Even opposite forms of behavior could follow the same effects, given different individuals taking the drug, different settings in which the drug is used, different definitions of the drug and its use and so on....

The data collected by the Philadelphia survey on the subjective effects of marijuana dovetail precisely with those of earlier studies. The effects agreed to by the users in the sample are clearly inconsistent with aggressive behavior. This does not mean that marijuana cannot be related to the commission of criminal or aggressive acts-but it does suggest that the effects of marijuana, per se, may have nothing to do with the commission of crimes, especially violent crimes. Table 1 summarizes the results from this survey's question on marijuana's effects, which was: "I am going to read to you some of the ways using marijuana may affect people. For each could you tell me whether marijuana had this effect on you almost every time, more than half the time, less than half the time, or never or almost never, when using marijuana." The effects asked about were related to feelings generally thought of as criminogenic either in a positive or a negative direction. Those that are generally considered to be related to crimes deal with anger and frustration, or with derangement, or with suggestibility. Those inversely related to the commission of crimes and aggressive acts dealt with relaxation and sleepiness.

As can be readily seen from Table 1, users overwhelmingly deny that marijuana has effects on them which could be interpreted as criminogenic or violent in nature. Nearly all respondents specifically denied that aggressive feelings came over them during the marijuana intoxication. When asked whether, under the influence of marijuana, they had a feeling of wanting to hurt someone, 96% said that this occurred never or almost never. When asked whether they had feelings of wanting to do something violent, 95% said never or almost never. Almost nine in 10 (88%) said that they never or almost never felt more angry when high. And almost eight in 10 (78%) said that they never or almost never felt frustrated when under the influence. Thus, the frustration-anger-aggressive impulse syndrome seems to be an extremely rare phenomenon associated with the marijuana intoxication. Likewise, the suggestibility syndrome does not appear to be characteristic, although it seems to be somewhat more common than aggressive feelings. About six in 10 (or 59%) of the respondents said that they had a feeling of "being more willing to follow other people's suggestions," never or almost never. And about three-quarters (77%) said that they had a "feeling of being able to do anything," never or almost never. Those sensations, however, which would be seen as inhibiting criminal and aggressive impulses and acts were decidedly more common. Exactly half of the respondents said that they felt "a feeling of relaxation" almost all the time. About a third (31%) said that they felt less angry than usual almost all the time. About a fifth (22%) felt drowsy and sleepy almost all the time-and another quarter (25%) felt this more than half the time.

These data suggest-but do not demonstrate-that the effects of marijuana per se are probably not related in any meaningful or causal manner to aggressive or criminal acts. They give us a clue, but do not prove, that in and of itself, marijuana use does not "cause" the commission

of criminal acts. In fact, if we were to look at the subjective effects of marijuana themselves, they appear to point in exactly the opposite direction—they would seem to inhibit crime, indeed, activity of all kinds. The effect of marijuana would be more in the direction of reducing than stimulating aggressive, criminal or violent activity.

Two final qualifications would appear to be in order before I explore the marijuana-crime link more systematically and fully. One has to do with the length of time that the marijuana Intoxication lasts. Two facts bear on this issue. First, each episode of use generally produces an intoxication which lasts roughly three or four hours, at the most. Marijuana's effects wear off about three hours or so after the user smokes the drug. Secondly, from previous studies ... as well as the survey whose data I am analyzing in this report, it is clear that the average, or median, level of marijuana use is roughly once a week. This means that the typical marijuana user is under the influence about three or four hours per week, or roughly 3% or so of his waking hours, and under a "normal" state of mind the remaining 97%. Now, it is possible that this tiny segment of time would influence some users in some significant way, but the fact of its briefness of duration ought to be kept in mind when reasoning about the impact of the drug on the lives of users. The daily user comprises roughly one marijuana user out of 10, and the individual who is high all, or nearly all, of his waking hours, probably constitutes about 1 or 2% of all marijuana smokers. These facts cannot be ignored in our exploration of the causal connection between the effects of marijuana and criminal activities.

And the last issue I will raise in the marijuana effects topic has to do with the truthfulness of the answers given by users. A plausible objection to taking the word of users concerning the effects of the drug on them would be that they are untrustworthy—that they have a motive for lying, for portraying the drug and their experiences in a positive light. Actually, what nearly all researchers have found in an interview situation with drug users is that they very rarely lie; in fact, their honesty about themselves and their activities and experiences appears to be the rule, overwhelmingly. . . .

The overall picture that we receive from . . . various studies is that, like most interview subjects, marijuana users may occasionally lie or hide the truth, but their answers will, in general, be truthful. This does not mean that everything they say must be taken at face value—as with any other group of interviewees, anything which the researcher is capable of checking independently, and which we have data on, we should corroborate with what we learn in the interview situation. At the same time, we would be as fallacious in assuming that everything that marijuana smoker-, said to be true is suspect as if we accepted everything they said to be true in all respects. What all of this means is that we must reason with caution from self-reported data, use them whenever we must, and check them whenever we can.

IV. CRIMES UNDER THE INFLUENCE

The Philadelphia survey on marijuana use and crime asked several questions concerning 16 different offenses. The questions began as follows: "Many people in every community commit acts which others consider offenses, delinquent acts, and violations. Here is a list of these acts." The specific questions dealt with whether the respondent had ever committed each one, how often, how old he was when the offense occurred, whether he was caught by the police, and whether the respondent had been drinking, or was under the influence of marijuana, 24 hours or less before committing the act—as well as whether the respondent thought that using marijuana influenced him to commit the act; these questions were asked about the first as well as the most recent such of. fense, if they occurred. The offenses were: hurting someone in a minor way, hurting someone badly, carrying a knife, stealing a car,

disturbing people, threatening to hurt someone, taking money, stealing from a store, making an obscene telephone call, forcing sexual intercourse with a woman, breaking into a house or store, damaging property, buying stolen property, setting off an alarm, carrying a gun, and using a weapon to steal. From these facts, it might be interesting to find out what proportion of acts involved some drug use occurring within 24 hours and whether that drug is alcohol or marijuana. I will explain after the data are presented what these facts can and cannot tell us. We must not be too hasty in reading too much into any given set of data.

Table 2 presents summary information from this set of questions. I have presented figures for only six offenses: stealing from a store, damaging property, hurting someone in a minor way, breaking into a house or store, stealing a car, and hurting someone badly. Some of the crimes asked about were committed by so few respondents (such as forcing sexual intercourse) that any statistical analysis would be completely meaningless. Other offenses seem to be unrelated to the aggressive syndrome associated with marijuana use—such as buying stolen property. The six I have chosen are, in any case, representative. The first three are relatively minor, and would usually be classified by the law as misdemeanors; the second two are considerably more serious, and would often be classified as felonies. Table 2 presents the proportion who drank alcohol, and smoked marijuana 24 hours or fewer before the crime was committed; the figures in the first two columns are for the first time the respondent committed the offense, and the second two columns are for the most recent time, if it occurred more than once.

What generalizations may we make from Table 2?

First of all, committing these crimes is atypical. Not one of these six offenses was committed by a majority of the sample. Secondly the more serious the offense, the less likely it was to be committed. Minor offenses were committed at least once by between four and five out of every 10 respondents, but major offenses had been committed at least once by something like one respondent in 25. (And two of the offenses not in the table were rarer still; forcing sexual intercourse was admitted to by six respondents, or about one in 100, and using a weapon to steal was reported by only three respondents, or one out of 200.)

What about drugs and crime? Compared with not being under the influence, drugs tend to be atypical in the commission of crimes. For none of these categories, whether first offense or most recent, was being under the influence of either alcohol or marijuana characteristic of over a quarter of all offenses, and most are considerably below this. Most crimes here were committed when the offender was not under the influence of any drug, marijuana, or alcohol, when he was in a "normal" state of mind pharmacologically.* Secondly, in terms of absolute incidence, alcohol is involved in the commission of crime considerably more often than marijuana. Adding together all of the offenses committed 24 hours before each drug was used, alcohol had been used in conjunction with first offenses a total of 47 times, and marijuana only five times—a ratio of not quite ten to one. For the most recent offenses, alcohol was involved a total of 66 times, and marijuana 19—a ratio of about three to one.

In conjunction with this point, it should be stressed that the classic, aggressive, violent crimes traditionally and historically associated with the marijuana intoxication are very, very rarely committed—by anyone, high or normal, user or non-user alike. Six men in this survey admitted to forcing a woman to have intercourse with him as a first offense, and three admitted to rape more than the first time. In two out of the six first-time cases, the offender said that he had been drinking 24 hours before, and in one out of the three most recent-time cases, drinking was involved as well. But in none of the six first-time cases, and in none of the three recent-time cases, had anyone smoked marijuana 24 hours before. (None of the men had been apprehended for this offense, incidentally.) Only three of the men in the survey said that they had used a weapon to steal as a first offense, and two admitted this

offense more than the one time-and none said that lie had either drunk or smoked 24 hours before the offense.

*Several facts should be born in mind when considering this generalization. First of all, the survey asked about the use of each drug 24 hours before the offense was committed or less-and hence, the respondent was not necessarily under the influence when the offense was committed, although certainly many respondents were under the influence at that time. Secondly, anyone who uses marijuana is far more likely to become intoxicated with each episode of use than is true of each episode of alcohol use.

Considering the fact that the typical marijuana smoker in this study had been intoxicated several hundred times for a total of well over a thousand hours, and therefore in a state of mind which, if the "causal" theory is correct, is aggressive and criminogenic, then this almost total absence of violent and aggressive crimes committed by users should be puzzling. This fact indicates that the "causal" theory may be inadequate and erroneous.

However, it is not possible to tell from Table 2 whether the commission of crimes is more frequent for alcohol or marijuana on a relative basis during the period of intoxication. That is, if anyone wanted to know whether a thousand hours of a marijuana or an alcohol intoxication was more like to result in the commission of various crimes, this table would not convey this information. Unfortunately, this survey did not ask a question on the frequency with which the respondents drank alcohol or, indeed, whether they drank at all so that an alcohol -marijuana comparison cannot be more systematically made. It is entirely possible that alcohol-related crimes are far more frequent than marijuana-related crimes, simply because alcohol is still, even in this sample, probably the drug of choice among young people, and is more often used than marijuana (just as not being under the influence of any drug is more frequently involved with crimes than being under the influence, simply because most people, most of the time, are not intoxicated). As to which drug is more "criminogenic" in the sense of what proportion of the time under the influence of marijuana vs. alcohol one commits various crimes cannot be determined from the data from this study. However, in absolute terms, alcohol is considerably more often used before crimes than marijuana.

Another generalization that may be made from Table 2 is that the contribution of marijuana from first offense to most recent offense grows somewhat relative to alcohol. That is, for the first offense, alcohol is used before it about 10 times as frequently as is marijuana, but for most recent offense, alcohol is only three times as frequent. This probably is a reflection of the following two trends: (1) Marijuana smoking is considerably more frequent today (i.e., closest in time when the most recent offense occurred) than a few years ago (i.e., closest in time when the first offense occurred), and hence, its frequency relative to alcohol would be greater in conjunction with any activity-criminal or non-criminal as well-simply because its use is more common ; (2) Marijuana smoking is more common among young adults (the age group most closely represented by the age when last offense was committed) than among adolescents and preadolescents (the age group most closely represented by the age when first offense was committed) and, moreover, as age rises, marijuana use rises faster than alcohol use rises, at least up, until early adulthood. . . .

It is possible that, as marijuana usage increases, the number of crimes committed under the influence of this drug may increase as well. However, the question as to marijuana's direct contribution to the commission of crimes, especially aggressive crimes, is an independent issue, and one in need of exploration.

V. WHO COMMITS CRIMES AND WHO DOESN'T?

In this section, it is our job to explore two basic issues:

1. Do marijuana users commit crimes and offenses any more frequently than non-users do?
2. Are any variables with which marijuana use is strongly related also correlated with criminality?

In the next section I will deal with a third question, and one which is probably the most crucial one in this report: Can the marijuana-crime connection be explained mainly by the use of marijuana in and of itself, or is use itself dependent on third variables which themselves explain the commission of offenses?

As the principal measure of committing crimes, this study has employed the number of different types of offenses admitted to in the 16 categories asked about. Naturally, there are many other crimes not asked about, and, in addition, some of these crimes would not correspond to the image most people would have of "classic" aggressive offenses-such as "disturbing people," or receiving stolen goods. However, as a general index or overall measure of criminality of different groups or categories of individuals, this one is as good as any others that have been employed, and is probably adequate for our purposes. (The survey, it must be noted, did not ask questions about any white collar crimes, which must be reckoned into an adequate measure of output of criminal behavior-but these crimes do not correspond with the public's image of aggressive crimes committed under the influence of marijuana, and so their absence is less relevant than would appear at first glance.)

Throughout the remainder of this report, the number of crimes and offenses will be employed as the dependent variable-the outcome to be explained. And throughout, I will be examining the marijuana-crime connection-as well as other relationships-insofar as it bears on the basic issue.

Before the analysis proceeds, it should be pointed out that of the 16 offenses, not one of the violent crimes correlated with marijuana use in any meaningful way at all, and a very weak relationship was evidenced with only five of the offenses-stealing from a store, buying stolen property, disturbing people, damaging property, and hurting someone in a minor way (the last of which showing the weakest association of all). The statistical differences in rates of offenses between users and non-users rest on adding together a small number of weakly correlated offenses. When offense differences are discussed, the reader should not hold the mistaken impression that they indicate massive differences, or differences indicating a higher rate of classic, violent crimes among users. With that warning in mind, we may now proceed to user/non-user differences in offenses.

The first relationship to be presented, then, is whether marijuana users as a whole commit offenses any more frequently than non-users as a whole. The answer is yes. I have employed two indicators of marijuana use; one is frequency of marijuana use during the period of most recent use (which may have been in the past, or may be at present), and whether or not the respondent has ever, or has never, used marijuana. Both indicators of marijuana use correlate very powerfully with committing offenses. For both tables, the differences are significant beyond the .001 level, employing Chi-square as a test of significance, which means that the differences observed could occur at random only one chance in a thousand. This is considered extremely significant. There is a regular and step-wise relationship between frequency of use and committing offenses; the more that a given respondent smokes marijuana, the greater is the likelihood that he will have committed four or more offenses, and the lower is his likelihood of committing no offenses at all. Over a third (38%) of those who have never smoked marijuana said that they committed none of the 16 offenses asked about-but this was true of only one respondent in eight (or 12%) of the regular smokers. At the other end, there was a 17% difference between non-users and

regular users (24% vs. 41%) in admitting to four or more of these offenses. Tables 3 and 4 present these data in detail.

We would be remiss in our duties as sensitive and acute social analysts if we ended the analysis there. The simple correlation between marijuana use and offenses may very well mask important and even more basic relationships buried beneath it. Marijuana is correlated in a simple manner with the commission of crimes, but does it remain correlated when controls are applied? In other words, is it a spurious relationship, or one which will remain when crucial variables are held constant? Which factors are also related to the commission of offenses-which might actually themselves explain the simple marijuana-crime connection? There are several such variables-race, age, education, the use of other drugs, and the respondent's involvement in the drug subculture. Blacks are significantly less likely to use marijuana (64% of the blacks in the survey said that they had tried marijuana, but 86% of the whites said that they had done so), but slightly more likely to admit to the commission of offenses-41% of all blacks said that they committed four or more offenses but this was true of only 25% of all whites (see Tables 23 and 25). Does the marijuana-crime correlation hold up for blacks and whites separately? Age was also related to both offenses and marijuana. The oldest respondents (age 29-34) were least likely to have tried marijuana (61%), the youngest (15-20) were next least (73%), and the intermediate age groups (21-23 and 24-28) were most likely to have tried marijuana (82% and 80%). There was a linear relationship between age and offenses, however. The youngest group was least likely to have committed no offenses (20%), and most likely to have committed four or more (42%); the oldest group was most likely to have committed no offenses (35%), and least likely to have committed four or more (22%) (see Tables 29-31). Thus, we would want to know whether marijuana and crime still correlate in each age group separately. The same thing can be said for education (Tables 26-28), the use of drugs other than marijuana (Tables 11-16), and having friends who use drugs (Tables 17-22)-the relationship between marijuana use and crime could be mitigated or even transformed altogether if these third variables are considered. One possibility is that the marijuana-crime relationship is wiped out altogether with the application of these controls-that is, that the relationship is completely spurious. A second possibility is that the marijuana-crime connection may be specific to some groups or categories, but not others. And the third possibility is that the same original relationship remains basically unaltered, or even is strengthened, by the application of these controls.

Special attention ought to be paid to the drug-related variables. There is a powerful and significant association between the use of marijuana and the use of other drugs. Although recent studies have presented evidence that this basic relationship is probably not due to the effects of marijuana per se, but to friendships and associations made in conjunction with marijuana use . . . , the simple relationship between marijuana and other drugs is a statistical fact. There is, in addition, a strong and marked association with using drugs other than marijuana and the commission of crimes. Thus, a legitimate question to be explored is whether "marijuana only" users have a greater crime rate than non-users, whether the higher rate of the commission of offenses cannot be attributed largely or solely to using drugs other than marijuana.

VI. MARIJUANA USE AND CRIME: CAUSAL OR SPURIOUS

Our first clue as to the nature of the underlying relationship between marijuana use and crime is obtained by examining Table 5, which documents the association between number of offenses and marijuana use, taking into account the use of other drugs as well. Table 5 shows that "marijuana only" marijuana users are only very slightly more likely to commit crimes than non-users. The original nine percentage point difference between users and

non-users in committing four or more offenses has shrunk to only two percentage points (in fact, only one percentage point--we are comparing 24.4% with 25.5%, and the original 19 percentage point difference between users and non-users in committing no offenses has been reduced to 13 percentage points. In fact, the "marijuana only" user is far more similar to the non-user in number of offenses committed than he is to the user of marijuana plus two or more other drugs. The application of the control involving other drugs clearly attenuates the marijuana-crime relationship, and much of the user-non-user differences in offenses committed can be traced to the fact that marijuana users are significantly more likely to use other drugs, rather than the use of marijuana per se.*

*The exploration of the "escalation" hypothesis--the question of whether or not marijuana "leads to" the use of other more dangerous drugs--would take us far afield in this report. The issue is dealt with in a separate report by the author prepared for the National Commission on Marihuana and Drug Abuse, however.

Our confidence in the lack of basic association between marijuana use itself and offenses--and our ability to attribute the simple original relationship to the use of drugs other than marijuana--is strengthened when we examine the relationship between frequency of use and offenses, holding the use of other drugs constant. Table 5A presents these data. Among "marijuana only" users, there is no statistically significant correlation between frequency of use and the commission of crimes--the differences are small, insignificant, and in no consistent direction. Among users of one other drug, likewise, frequency of marijuana use is extremely loosely associated with committing offenses--the differences which are observed are small, statistically insignificant, and point in no particular direction. And lastly, among users of two or more other drugs aside from marijuana, the association between frequency of marijuana use and the commission of the offenses described earlier is loose and not at all significant. Table 5A very strongly indicates the validity of the "spurious" model.

Closely related to the use of other drugs is a control which should be explored: the respondent's involvement with a drug-using subculture--with others who also use drugs. Naturally, as we saw in the last section, individuals who use marijuana tend to have friends who also use marijuana. What we would like to know is whether the social patterns they exhibit can be traced to their use of the drug, or to the fact that they have friends who use drugs. Thus, we should be very interested in looking at the individual who uses marijuana, but who does not have drug-using friends, as well as the individual who does not use marijuana, but has drug-using friends. If interesting changes take place in the original marijuana-crime correlation, then we have indications that it is the individual's social relations, and not his use of marijuana, per se, that determine marijuana use's correlation with crime. Tables 6 and 7 deal with this issue; they should be examined in conjunction with one another.

Among respondents with no marijuana-using friends (out of their 10 closest friends), as well as those with no drug-using friends at all, almost an identical relationship between marijuana use and crime obtains as in the original Table 3. Marijuana users are, significantly (but not strikingly) more likely to commit four or more offenses, and significantly less likely to commit none. The percentage differences in Tables 6 and 7 are almost the same (even slightly more) as those in Table 3--about 25% at the "none" end vs. 19% for the original table, and about 18% at the "four or more" end vs. 9% for the original table (Table 3). If we were to rely only on these segments of the table, we would be led to the inference that marijuana is meaningfully related to the commission of crimes.

However, an extraordinary thing happens to the other segments of the table: among those with drug-using friends, there is no relationship at all between marijuana use and committing offenses. The differences are so small as to be statistically insignificant. (And

they are actually in the opposite direction-non-users are slightly more likely to commit four or more offenses than users are.) In other words the marijuana-crime relationship is completely wiped out by the application of controls-in this case, integration into the drug-using subculture. We are led overwhelmingly to the conclusion that marijuana users tend to be somewhat more likely to commit crimes solely because they are part of a drug-using subculture; the actual properties of marijuana appear to be completely unassociated with criminal behavior. Anyone (whether he uses marijuana or not) who makes friends and becomes involved with others who use drugs-especially others who use drugs in addition to and aside from marijuana stands a higher likelihood of committing offenses, simply because this segment of the population tends to be more lax about obeying the law. It is merely because marijuana users tend to associate with others who are part of this subculture that their crime rate is somewhat higher. In other words, the marijuana-crime relationship-in terms of the causal or effects model is completely spurious.

What of the marijuana-using isolate? What of those who use marijuana but who have no friends who use drugs-either marijuana or other drugs? How can we explain the fact that the original difference in offense rate between users and non-users were not wiped out among those without drug-using friends-in contrast to being wiped out among those who had drug-using friends? Looking back at Tables 6 and 7, we are struck by the fact that the offense rate of the marijuana-using group without drug-using friends is as high as the groups with drug using friends. What does this indicate? First of all, involvement with a drug-using subculture is clearly not the only determinant of a high rate of committing offenses. Probably something else is at work. The fact that the offense differences wash out among those involved with the drug subculture indicates that rise by itself (i.e., being high) cannot be a factor in the original marijuana-crime relationships difference cannot explain two things that are similar. The using isolate, however, is probably a (Qualitatively different social being from those who either do not rise, or those who use and have friends who also use. The isolate is probably deviant in a variety of ways crime being one of them. The fact that he uses in spite of having no friends who use (although he may have friends who do not use) means that he uses most of the time alone, has not integrated his activities into a social life or a subculture, and probably pursues some activities which the dominant society would judge to be eccentric and unusual. In other words, it is possible that his involvement with crime is related to his social isolation from a group which pursues drug activities similar to his own, rather than his use of marijuana. However, these remarks must be regarded as speculation, since more complete information is not available.

A related process occurs when race is employed as the control variable. Among blacks, the original relationship remains intact; marijuana users are significantly (although not markedly) more likely to commit four or more offenses, and less likely to commit none, than is true of non-users. (The relationship is significant at the .004 level, using Chi-square.) However, among whites, the original relationship is completely washed out; users are not at all more likely to commit offenses. Table 8 presents these data. The minor differences can be completely accounted for by random fluctuations; the relationship is not significant at any level.

When education is treated as the control variable in this relationship, the marijuana-crime connection follows a pattern parallel to the two previous explorations-that is, it is completely washed out for some groups, but remains for others. In Table 9, we see that marijuana users who have at least attended college, but not graduate school, are not any more likely to commit offenses than college non-users. The percentages committing four or more crimes, and those committing none, are almost identical for users and non-users alike. (The differences are insignificant, and due to random fluctuation.) However, among respondents with only a high school education, the same basic relationship produced in Table 3 is upheld: marijuana users are significantly more likely to have committed offenses than non-

users. However, at least two variables are compounded here, since most respondents with a college education are white. Thus, the retention of the original marijuana-crime correlation among high school education respondents, and its wash-out among college educated respondents, should not come as any surprise. However, among respondents with at least some graduate school education, the original relationship asserts itself; users are more likely to commit offenses than non-users. (The differences observed are significant at the .05 level; in other words, the differences have a one in 20 chance of occurring purely at random.) Table 9 presents the marijuana-crime relationship, holding education constant.

Using age as a control variable also produces mixed results. Among the two youngest age groups (15--20 and 21-23), the differences obtaining between users and nonusers are statistically insignificant, and could have occurred by chance alone; in the youngest of these two groups, the non-user is slightly more likely to have committed four or more offenses, and in the next to youngest of these groups, the user is slightly more so--but in both, the differences are too small to be meaningful. In the 24-to-28-year-old group, the differences approach statistical significance, but they are not substantial (.07 level of significance, using Chi-square). However, among the oldest group (age 29 to 34), the same basic difference in offenses as obtained in the original relationship holds up here; users are about twice as likely to have committed four or more offenses as non-users (28% vs. 13%), and less than half as likely to have committed no offenses (21% vs. 58%). These data appear in Table 10.

VII. SUMMARY AND CONCLUSIONS

The central effort in this report has been to determine whether marijuana use, in and of itself, is meaningfully and causally related to the commission of crime. Two models have been used in the past to answer this issue: the causal model, which holds that using marijuana, being under the influence of the drug, actually does stimulate the will to commit antisocial acts, and the spurious model, which holds that marijuana use is merely a reflection of independent and more powerful forces, and that in itself, marijuana use is unrelated to criminal and aggressive behavior. Some small amount of research has been conducted in the past on this issue, but no consistent findings have been turned up; . . . It is because of these factual lacunae that the National Commission on Marihuana and Drug Abuse mandated a study of marijuana use and crime, which culminated in the Philadelphia survey, as well as this report.

The findings from this study strongly support the view that marijuana, use by itself is not related in any meaningful or systematic fashion to criminal behavior, that marijuana use probably does not "cause criminality. The "spurious" model appears to be a far more accurate description of the marijuana-crime connection than does the "causal" model. The use of marijuana per se is probably completely unrelated to criminal and aggressive behavior. The drug does not "cause" any significant number of users to commit crimes, or aggressive or violent behavior. The effects of the drug seem to be, from what can be gathered from the available data on the question, without criminogenic causality. This does not mean that it is not possible to commit crimes, including aggressive crimes, under the influence of marijuana-but that being high does not increase one's probability of doing so, that on an hour-for-hour, crime-for-crime basis, there are probably no significant differences between being intoxicated on marijuana and being "normal," not under the influence of any drug.

A wide variety of data have been brought to bear on the marijuana-crime issue.

First of all, regarding the subjective self-reported effects of marijuana, all indications are that the effects classically described as being related to aggressive behavior and the

commissions crimes-feeling angry, frustrated, wanting to hurt someone, being willing to follow any and all suggestions of others, being deranged, wanting to do something violent-have no empirical support whatsoever; users consistently describe these "effects" as non-existent or as extremely rare and atypical, no different from normally. In fact, precisely the opposite is the case: if anything, the effects of marijuana would have far more to do with reducing the criminal "impulse," whatever that might be, due to the fact that they tend to be in the direction of relaxation, feeling calm, of not wanting to move about, feeling somewhat drowsy, sleepy. Activity of any sort tends to be inhibited by the marijuana intoxication.

Secondly, the Philadelphia survey asked the respondents about using marijuana and/or alcohol 24 hours or less before various crimes were committed. Marijuana very rarely figured into the commission of crimes in any way. For only a tiny minority of all crimes committed was the respondent under the influence. This was especially the case for serious and aggressive crimes. Alcohol was far more likely to be used soon before criminal activity than marijuana. -

The third type of information brought to bear on the marijuana-crime question was the self-admitted offense rate of users versus non-users. The total number of different types of crimes which respondents said that they had committed was compared. The simple relationship between using marijuana and committing offenses was positive and statistically significant, and there was also a high correlation between frequency of smoking marijuana and committing offenses. However, a wide range of other variables, themselves related to both crime and to marijuana use, were also correlated-race, education, age, the use of other drugs, and having drug-using friends. Thus, the issue became: is it the causal connection with these third variables which produces the marijuana crime simple correlation, or does the correlation hold up even when these factors are controlled? In other words, which is right, the causal or the spurious model? Is marijuana use merely dependent itself on larger, broader, more potent factors-or does it exert an independent power? Do users commit crimes more frequently than nonusers because they use marijuana or because they happen to be the kinds of people who, would have a higher crime rate, marijuana or no marijuana.

The evidence from these three-variable tests support the "spurious" model. The control tables show that the differences in crime rate between users and non-users is, in most cases, dependent not on marijuana use per se, but on these larger factors. The fact that the relationship disappears, or is wiped out, when some controls are applied shows that the marijuana-crime connection is dependent on sociological variables, and not chemical effects. When the use of other drugs was held constant, the marijuana-crime correlation was severely attenuated, and in some cases, washed out entirely. When the variable of having friends who use other drugs-both marijuana as well as stimulants, sedatives, hallucinogens and "hard drugs" was applied, the relationship disappeared among those with drug-using friends, but not those who had no drug-using friends. When race was held constant, the marijuana-crime connection was wiped out completely among whites, but not blacks; among white marijuana users, their crime rate was not statistically different from non-users, but black users did have a higher crime rate than non-using blacks-similar in magnitude to the original relationship. When education was used as a control variable, we saw that among college-educated respondents, the marijuana-crime correlation was nonexistent, but it remained among respondents with a high school education, and for those who had attended graduate school. And lastly, age was applied as a control. Among the youngest groups, the marijuana-crime relationship was attenuated, but it remained somewhat strong among the two oldest age categories.

If there were truly a causal relationship between marijuana use and crime, these disappearing correlations would not occur. The application of sociological variables cannot wash out a chemical reaction in the user. The enormous variability dependent on social

factors indicates that marijuana effects do not inherently produce behavior of a criminal nature. The kinds of people who use the drug tend to follow Patterns of behavior regardless of whether or not they use marijuana. By itself, marijuana, use is not a potent producer of behavior, and certainly not criminal behavior. Individuals who commit criminal acts are those who would do so with or without the use of marijuana.

The data from this study support the conclusion, almost without qualification, that marijuana use does not cause criminal behavior.*

*A subsequent regression analysis with the six variables used independently as controls showed that when all six variables are applied simultaneously, the use of marijuana in and of itself accounts for less than 1% of the variance in committing offenses (personal communication by the author, 24 January 1972).

The Report of the National Commission on Marihuana and Drug Abuse

Summary and Conclusions: Marihuana and Crime

The Commission's review of the available evidence bearing on the relationship between marihuana use and criminal, aggressive and delinquent behavior has yielded the following information.

The once prevalent belief among the general public and the professional law enforcement, criminal justice and research communities that marihuana causes crime, violence, aggression and delinquency has moderated appreciably over the years. Recent evidence indicates that increased attention has been devoted, instead, to a possible statistical correlation rather than a cause-effect relationship.

At present, however, considerable confusion and uncertainty exists among both the general and professional publics, among youth and adults, and among marihuana users and non-users about the relationship between marihuana and criminal, aggressive or delinquent behavior. The confusion and uncertainty stem from a general lack of knowledge and understanding about the effects of the drug, including its potential for physical addiction. Many persons are still under the misapprehension that marihuana is addicting and that crimes are committed in order to support a drug "habit."

In general, recent changes in public and professional opinion have corresponded with and reflected the increased use of marihuana, particularly within the middle class segment of society; more direct observation of and professional experience with the marihuana user; new and more enlightened information about the drug and its effects; and concomitant changes in the public image of the user.

There is no systematic empirical evidence, at least that drawn from the American experience,

to support the thesis that the use of marihuana either inevitably or generally causes, leads to or precipitates criminal, violent, aggressive or delinquent behavior of a sexual or nonsexual nature.

Laboratory studies of effects have revealed no evidence to show that marihuana's chemical properties are, by themselves, capable of producing effects which can be interpreted as criminogenic; that is, that marihuana is an independent cause of criminal or aggressive behavior. If anything, the effects observed suggest that marihuana may be more likely to neutralize criminal behavior and to militate against the commission of aggressive acts.

The research community has recently gathered considerable evidence to show that marihuana and criminal, aggressive and delinquent behavior are statistically and significantly correlated when measured together in isolation from variables which are related to marihuana use and other forms of antisocial behavior. The data also show, however, that this statistical association either attenuates significantly or disappears completely when the proper statistical controls are applied.

In other words, the observed relationship between the use of marihuana and criminal, violent, aggressive and delinquent behavior is spurious. It is dependent on such extra-pharmacological factors as the age, race and education of the user; the type of community in which he lives; his past history of psychosocial maladjustment; and his involvement in a criminal or delinquent subculture (use of other drugs; drug buying and selling activities; associations with friends who also use, buy and sell cannabis or other drugs).

To reiterate what Professor Goode has so cogently stated.

If there were truly a causal relationship between marihuana use and crime, these disappearing correlations would not occur. The application of sociological variables cannot wash out a chemical reaction in the user (1972:52).

To put it still another way, to believe that marihuana causes criminal, violent, aggressive or delinquent behavior is to confuse the effects of the drug with the people who use it.

From the perspective of marihuana's relationship to antisocial behavior of a criminal or violent nature, the drug cannot be said to constitute a significant threat to the public safety. If its use, therefore, is to be discouraged, it must be discouraged on grounds other than its role in the commission of criminal or violent or delinquent acts.

The enormous increases in marihuana arrests over the past several years are ample evidence that the police have taken seriously their role of maintaining law and order with respect to marihuana use and that they have responded to public pressure and concern about the increase in marihuana use. Yet, in their experience with the marihuana user they have been placed in the unenviable position of having to enforce a law either disregarded or discredited by large segments of the population they serve.

Over and over again they have seen their efforts in this respect negated by the de jure or de facto modification, if not nullification, of the laws against possession by prosecutors, judges and even legislators. Their increasing frustration and demoralization, therefore, at least with respect to the marihuana user, is quite, understandable.

These other officials, however, are likewise placed in a difficult position; for they, too, must enforce and apply the criminal law, and they, too, must respond to public pressures and concerns. In some instances, they have demonstrated particular resistance to criminalizing the user and subjecting him to criminal penalties which are deemed to be unwarranted if not

unwise.

In the case of marihuana, recent changes in law enforcement practices with respect to the user have, in fact, reflected the increased use and public tolerance of marihuana. The statutory changes now taking place at the state and local levels are further evidence of the trend toward greater public acceptance of the user. In these instances, the laws and their enforcement were altered because they no longer performed the symbolic function of expressing society's disapproval of marihuana use.

The Report of the National Commission on Marihuana and Drug Abuse

Marihuana and Driving

The United States Department of Transportation has estimated that in 1970, more than 111 million Americans were licensed drivers and that there were approximately 109 million vehicles registered and regularly traversing America's streets and highways. The Commission-sponsored National Survey (Abelson, et al., 1972) has revealed that approximately 21 million or 15% of all American adults 18 years and over have tried marihuana and that about 6.9 million adults currently use the drug.

At the present time, there is no reliable estimate of the proportion of marihuana users who drive while "high," but America's tragic experience with highway accidents and fatalities involving persons driving under the influence of alcohol raises serious questions about the extent to which marihuana impairs driving skills and performance and thereby constitutes a public safety hazard on this nation's thoroughfares.

In recent years, public safety experts, along with the medical and scientific communities, have devoted increasing attention to the effects of any mind-altering drug on driving, but there is as yet little evidence to inform discussion. As part of its more general concern with the impact of marihuana on public safety, the Commission has reviewed the available research and has concluded that the evidence which presently exists is, at best, inconclusive.

In view of this finding and prior to a rather brief summary of the knowledge we now have, the Commission feels compelled to urge the public to consider these findings as only tentative, to adopt an extremely cautious attitude about the effects of marihuana on driving skill and performance, and perhaps most importantly, to avoid driving at all while under the influence of any mind-altering drug or intoxicant.

THE CURRENT STATE OF KNOWLEDGE

The literature on drugs and driving contains several references to the role of drugs, including marihuana, in traffic violations, accidents and fatalities. They differ considerably, however, in the nature and extent to which they influence or affect driving behavior (Waller,

1965; Chetta, 1967, Commission on Narcotic Drugs, 1968; Third Triannual Congress on Traffic Accidents, 1969; Waller, 1970; Klein, Davis and Blackbourne, 1971 National Institute of Mental Health, 1972).

The studies examine the relationship between marihuana and driving and tend to be either statistical and enumerative with regard to traffic accidents or experimental with respect to the physiological and psychological effects of marihuana use deemed to be related to driving skill and performance. All of them suffer to one degree or another from an overabundance or dearth of extraneous variables and have, therefore, precluded generalization of the results and the production of conclusive, and valid findings.

The difficulty in interpreting the data gathered from statistical or enumerative studies of traffic accidents derives primarily from the inability to isolate precise cause. There are no tissue, urine or blood analysis methods currently and systematically in use outside the laboratory, similar to those available for alcohol, for determining the presence of marihuana in the bodily fluids of drivers.

Statistical Studies

The statistical or enumerative studies generally can be characterized as two types. In the first type, samples of arrested marihuana, or other drug law violators are selected and their traffic violations or accident rates are compared with those in the general population. In the second type, samples are drawn initially from lists of persons known to have committed traffic violations or been involved in traffic accidents. The samples are then divided into persons who in some way are identified as marihuana users and those who are not and the incidence of traffic violations or accidents in the two groups is then compared.⁵

⁵ Dr. E. J. Woodhouse, a chemist, is now in the process of developing a marihuana testing method. At the present time he reports being able to detect the presence of marihuana by analyzing urine samples (Polak, 1971).

Waller (1965), compared the crash rates per unit miles of driving of known marihuana users with those of other drivers of similar age distribution. He found that the crash risk was not increased by the use of marihuana.

A similar study yielding similar results was performed in the State of Washington (Crancer and Quiring, 1968). There were no significant differences in the crash rates per 100 drivers between those who did use marihuana and those who did not. The researchers compared the driving records of persons arrested for illegal drug use (100 narcotics users, 123 dangerous drug users and 79 marihuana users) with those of 687,228 licensed drivers living in the same general driving environment (King's County, Washington). Comparisons were made of the number of accidents, the number of violations and the type of violations accumulated between January 1, 1961 and October 1, 1967.

All three drug using groups had significantly higher accident and violation rates than did the comparison group matched for age and sex; the accident rate for the marihuana users was 39% higher; for the narcotics users, 29% higher; and for the dangerous drug users, 57% higher. The violation rates were 180 % higher, 149 % higher and 16% higher, respectively.

Table 9 below shows the percentage of marihuana users and county drivers, by sex, with none and 10 or more traffic violations and accidents between January 1, 1961 and October 1, 1967.

Since the majority of the users were first arrested for their illegal drug use in 1964, the researchers compared their violation rates before and after that time. The data show a violation rate of 1.78 per marihuana driver prior to 1964 (January 1, 1961 to June 30, 1964) ; the rate increased to 3.44 per driver between July 1, 1964 and October 1, 1967. For the same time periods, the county group's violation rate per driver increased from 0.44 to 0.53.

The violation rates for both reckless and hit-and run driving were significantly higher for the marihuana users than for the county comparison group.

In short, these data suggest that marihuana users are much more likely to have many violations and accidents and are much less likely to have clear accident and violation records than are a comparison group of drivers drawn from the same general population. Their findings are difficult to interpret more precisely, however, because such variables as the number of miles driven and overall driving experience were not taken into account.

Table 9.-MARIHUANA USERS AND COUNTY DRIVERS HAVING NONE AND TEN OR MORE TRAFFIC VIOLATIONS AND ACCIDENTS, BY SEX, JANUARY 1, 1961-OCTOBER 1, 1967

(Figures in Percentages)

Marihuana users County drivers

Male Female Male Female

None... 10.0 33.3 41.1 67.7

10..... 22.9 11.1 2.2 0.1

Source: Crancer and Quiring, 1968:9.

A survey of 12,453 Virginia high school students was conducted during 1970 by the Virginia Highway Safety Division (Ferguson and Howard, 1971). The objectives of the survey were to determine the extent of drug use in the Virginia high school population and to assess the number of traffic crashes which could be caused by drug-impaired drivers.

The data show that 2.9% of the sample reported experiencing, either as a passenger or driver, at least one traffic crash in which drug use "could have been a causal factor." The data also show that the students were more likely to attribute the crashes to marihuana (54%) than to other drugs (46%). Use of marihuana was found to be slightly more common than was the use of other drugs among drivers involved in non-fatal collisions but was used with equal frequency in those drivers involved in fatal crashes (p. 31).

The researchers suggest as an explanation for their findings the fact that marihuana usage was greater among this population (12.3%) than was the use of other drugs (7.7%). This explanation is not completely adequate, however, in that the survey ignores both the possible presence of alcohol along with marihuana and other drugs, either separately or in combination. As such, it cannot be said that marihuana causes more accidents than do other drugs, including alcohol.

Klein, Davis and Blackbourne (1971) surveyed students at four academic institutions in Florida in an effort to assess the role of marihuana in traffic involvements. Respondents were divided into five groups of marihuana users: (a) non-users, (b) previous users, (c)

using less than four times a month, (d) using four to eight times per month, and (e) using more than eight times per month. For each group information was obtained relative to the frequency of alcohol and tobacco use; respondents' ability to judge speed, time and reaction time; traffic involvements; and license revocations. In addition, respondents were asked their opinion about whether or not persons under the influence of marijuana should be permitted to operate aircraft and various other vehicles, including taxis and private automobiles.

With respect to traffic involvements, the data show that 18% of the infrequent users and 53% of the frequent users reported having been stopped by the police while under the influence of marijuana. The data also show that as the frequency of use increases, so too does the number of license revocations.

As Nichc's (1971) has pointed out, however:

Apparently no attempt was made to compare the number of times they were stopped while under the influence of marijuana as opposed to the number of times they were stopped while not under the influence. Thus, the data do not give any indication of whether the violations were due to the effects of marijuana or whether they were the result of poor driving habits in the first place (pp. 28-29).

Both experimental and quasi-experimental approaches to assessing the effects of marijuana on driving suffer from methodological shortcomings and inconsistent results. The primary deficiency in the experimental investigations lies in their inability to hold constant the numerous external variables which actually affect driving behavior and which, therefore, precludes valid comparisons of actual driving performance with that simulated in a controlled but unrealistic environment. In the quasi-experimental studies using interviewing techniques, the accuracy of self-reports becomes a question which must be raised with respect to the effects of marijuana on driving skills and performance.

The data derived from these studies, however, suggest that marijuana does interfere, at least in some users, with the ability to judge time, speed and distance; with reaction time; and with the ability to control the vehicle and respond to an emergency situation (Zinberg and Weil, 1969; James, 1970; Hochman and Brill, 1971; Klein, et al., 1971).

Data from a survey of 10% of the undergraduate students at UCLA (Hochman and Brill, 1971) show that one-third of all marijuana users drive occasionally while "high." Of the chronic users, 42% drive frequently while high and 10% always drive while "stoned" (p. 22).

According to the researchers, "both (marijuana) users and non-users were universally of the opinion that (marijuana) 'intoxication' affected driving, but users thought that they compensated by being more cautious, driving more slowly, and concentrating on the driving," (p. 22). The researchers also report that as usage of marijuana becomes more chronic, "fear" and avoidance of driving while intoxicated decreases and the ability to compensate for the drug's effects increases.

With respect to traffic violations, the data show that 4% of occasional and chronic marijuana users had received traffic tickets when they were intoxicated by the drug but that none had been discovered to be intoxicated at the time.

These findings corroborate those, from an earlier study (Zinberg and Weil, 1969) in which the researchers stated that "users appear to be able to compensate 100% for the nonspecific effects of ordinary doses of marijuana on ordinary psychological performance" (p. 39). In another report Weil (1969) wrote that "it appears that once a person becomes accustomed to

the effects of cannabis, he, can compensate fully for the drug's influence on performance of tasks of ordinary complexity." (p. 6).

Experimental Studies

Controlled laboratory experiments have attempted to measure these and other effects on driving with greater specificity. Manno and his associates (1970) found that there are significant impairments of motor and mental performance attributable to marihuana.

In an experiment conducted by Frank and his colleagues (1971), marihuana smokers demonstrated "a marked and very consistent increase in the amount of time required to recover from glare . . . This ranged up to four times as long with a mean peak of almost twice as long (171%) after smoking marihuana. . . . Furthermore, this increase in glare recovery time persisted for several hours" (p. 9) and did not seem to be dose related.

These researchers did not find significant differences between marihuana users and nonusers, however, in pulse, rate, time estimation or dilation of the pupils.

With respect to marihuana's effect on emotional reactions, Dr. S. E. Miller (1959) suggested that "these drugs (including marihuana) have similar abilities for changing normal emotional reactions, even causing individuals to become oblivious or indifferent to their surroundings" (p. 864). Klein and his colleagues (1971), however, urge against generalizing these findings from the laboratory situation to the complex task of actual driving.

Crancer and his coworkers (1969) conducted a study designed to determine the effects of a "normal social marihuana high" on simulated driving performance among 36 experienced marihuana smokers and compared the effects they discovered with those occasioned by alcohol use.

The researchers found that experienced marihuana users under conditions of a "normal social marihuana high" (from two cigarettes totalling 1.7 grams of THC) accumulated significantly more speedometer errors than under control conditions. No significant differences were found, however, relative to accelerator, brake, signal, steering or total errors in simulator scores.

Comparing the effects of alcohol (at a blood level of 0.10%-the legal limit of intoxication) and marihuana intoxication (1.7 grams THC), the researchers concluded that moderate intoxication by marihuana was less detrimental to simulated driving performance than was the presence of alcohol at the 0.10% blood level. The mean error scores were 84.46 for the control group, 84.49 for the marihuana group and 97.44 for the alcohol group (p. 6).

There have been several criticisms leveled at this study, however, and several researchers have cited contradictory findings. Frank and his associates (1971) have pointed out the fact that the subjects did not have complete control over their simulated drive.

Kalant (1969) noted that "it does not follow automatically that lack of effect of a drug on the simulated task will correlate with lack of effect on the actual task" (p. 640). He also criticized the use of dissimilar doses of marihuana and alcohol for the comparison and in this regard stated that "the finding that a heavy dose of alcohol caused more impairment than a mild dose of marihuana is neither surprising nor helpful in assessing the relative effects of the two drugs in the relative doses in which they are normally used" (p. 640).

Lastly, Kalant pointed out that Crancer and his colleagues failed to indicate if any measures

were actually taken to ensure effective absorption of the doses by the experimental subjects. This may be important, if the findings of dose dependent impairments observed by Dagirmanjian and Boyd (1962) and Isbell and his associates (1967) are valid.

Although Crancer and his fellow researchers did not feel that the impairments found were related to either dosage level or experience with the drug, this latter finding is also subject to question in view of the earlier findings of the Mayor's Committee on Marihuana (1944) and Weil and his colleagues (1968) that the performance of drug-naive subject, was more impaired than was that of experienced marihuana users.

In a more recent simulator study, attention was directed to the effects of marihuana on risk acceptance (Dott, 1971). The experimental situation involved the placement of 12 experienced marihuana users under four conditions (non-smoking, placebo, low dose, and high dose) in order to compare subjects' reactions to various passing situations, some of which required an immediate response to an emergency.

The data show that even though more accidents occurred under the two marihuana conditions than under the placebo (and normal) condition, the differences were not significant. Significant differences were found in the number of passes completed and in the time needed to make pass decisions. Not only did the marihuana smokers complete fewer passes (174 in placebo condition, 153 in low dose condition, and 133 in the high dose condition), but they took more time to make the pass decisions while under the influence of the drug. The researcher concluded that "marihuana appears to make the subject less willing to accept risk, and it delays elective decision reaction time. Effects were most noted in situations which did not have a high attention demanding value. . . . In those situations which were of an emergency nature and which demanded immediate attention and response no drug effects were noted" (p. 28).

Dott also found, in contrast to Frank and his associates (1971) that pulse rate did seem to be affected by marihuana intoxication.

Based upon a comparison with the same experiment performed years before in relation to alcohol (Light and Kelper, 1969), Dott stated that "the effects of marihuana on driving behavior are more subtle and less hazardous than the effects of alcohol."

McGlothlin (1971) is presently conducting another simulator study and is attempting to measure the effects of marihuana, methadone and alcohol on simulated driving, attention, information processing abilities and other measures related to driving efficiency such is peripheral vision, depth perception and glare recovery. At this time, five experiments have been conducted and the researcher has stated that:

concentrated and divided attention for both auditory and visual modalities are significantly impaired by smoked marihuana containing 15 mg. THC.... In general, where impairment was found for the marihuana treatments, it appears to be equivalent to that resulting from a blood alcohol level of about 0.01%. Frequent marihuana users (one or two times per week) typically showed less impairment than those using less frequently (p. 22.).

The inconclusive and controversial nature of the research to date suggests that there is enough of a potential risk involved to both the individual and the public safety to recommend strongly against driving while intoxicated-no matter what the intoxicant. Although marihuana does not seem to produce serious impairments of driving skills or performance, to say that the drug does not at all adversely affect driving behavior or that it may not be a factor in traffic violations or accidents is to misrepresent the current state of

knowledge. As the National Institute of Mental Health (1972) has noted, "obviously, more research is needed in elucidating the role of various drugs on highway accidents . . ." (p. 220).

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The Report of the National Commission on Marihuana and Drug Abuse

I. Control of Marihuana, Alcohol and Tobacco

History of Marihuana Legislation*

This chapter traces the legislative histories of marihuana, alcohol, and tobacco.

In the first section, "History of Marihuana Legislation," the origins of the intoxicant use of cannabis in this country during the early 20th century are noted along with the subsequent state and federal statutes enacted prohibiting use, distribution, production and sale.

Descriptions began appearing on the books after about 1914 and continued through 1971, which brings the reader to the point subsequently covered by the rest of this Appendix.

Early colonial laws regarding alcohol are described in the beginning of the next section, "History of Alcohol Prohibition." From that point in history, the national movements which spread over the next two centuries, culminating in the enactment of National Prohibition from 1920 to 1933, are described.

The various state modes of control which appeared after Repeal are then briefly enumerated along with a discussion of the present state controls over production, distribution, and sale of intoxicating beverages.

The introduction of tobacco cultivation in 1613 in the colony of Virginia opens the third section, "History of Tobacco Regulation." The widespread use of tobacco in the latter 1800's into the first half of the 20th century is traced along with the increasing pressure from groups fearful of tobacco's deleterious effects on health.

Federal sumptuary regulations are outlined along with a discussion of the impact further federal controls might have on the tobacco economy.

History of Marihuana Legislation*

**This section is drawn from the manuscript of The Marihuana Consensus: A History of American Marihuana Prohibition, in press 1972, by Professors Charles H. Whitebread, II, and Richard J. Bonnie of the University of Virginia Law School.*

"Marihuana" or Indian hemp, labeled Cannabis Sativa L. by Linneaus in 1753, has been used for centuries in Asia and Africa for its intoxicant properties. It was cultivated as a source of fiber in North America in the early 17th century. Yet, cannabis was not used as an intoxicant in North America until the late 19th century, and in the United States until the early 20th.

Cannabis use was prevalent in Mexico by 1898. Widely cultivated and growing wild, the drug was readily available for eating, drinking, or smoking, the latter being by far the most common method of ingestion. Soldiers in Pancho Villa's army are reputed to have used the drug freely. The path of the introduction of marihuana smoking for pleasure into the United States was not via Europe, which transmitted the fiber, oil, and medicinal uses of hemp, but via Mexico and the West Indies.

The plant and its intoxicant use in the United States in the first decades of the 20th century encountered a political and social climate which was not particularly conducive to hearty growth. Gradually criminal prohibitions appeared on the statute books of nearly every state where the drug was used.

Well into the thirties, however, marihuana smoking attracted little attention from the national policy and opinion apparatus which was deeply ensnared in drug matters of much wider social impact than the limited, regional use of this new drug.

The "villain" theory of American marihuana prohibition - attributing the drug's illegal status to the Federal Bureau of Narcotics and its longtime head, Harry J. Anslinger - has been particularly popular in recent years.

Although the federal narcotics bureaucracy, with Commissioner Anslinger at the helm, was to become marihuana's leading antagonist in the mid-thirties, a restrictive, public policy toward the drug was well-rooted locally before that time. During the "local" phase of marihuana prohibition, lasting roughly from 1914 to 1931, practically every state west of the Mississippi, except for two, had prohibited use of the drug for non-medical purposes.

The real story of marihuana policy in the United States begins as a series of distinctly local tales.

STATE PROHIBITION: 1914-1930

Marihuana use was a familiar phenomenon in the border towns of Texas and New Mexico after 1910. First to note the use of the drug were El Paso law enforcement officials who quickly secured a local ordinance in 1914 banning sale and possession of the drug. El Paso officials and local representatives of the Customs and Agriculture Departments of the Federal Government agitated for state and federal legislation to combat the "killer weed."

After an official request by the Secretary of Agriculture, the Secretary of the Treasury issued a decision under the Food and Drug Act prohibiting importation of cannabis after 1915 for other than medical purposes.

On the state level in Texas, legislation was slow in coming. Marihuana use was still a local problem in the border towns and it attracted little statewide interest. The Texas Legislature included marihuana when it passed a general narcotics statute in 1919, prohibiting transfer of listed narcotics except for medical purposes (Texas, 1919: 278). In 1923, the statute was tightened to prohibit possession with intent to sell (Texas, 1923: 156-157). The legislature's failure to prohibit simple possession or use reflected an objection to interfering with private conduct.

The degree of public interest in narcotics and marihuana is well-illustrated by the limited newspaper coverage. In its only direct reference to the 1923 marihuana legislation, the Austin Texas Statesman, which had given the legislature extensive coverage, stated:

The McMillan Senate Bill amended the anti-narcotic law so as to make unlawful the possession for the purpose of sale of marihuana or other drugs. Marihuana is a Mexican herb and is said to be sold on the Texas-Mexican border (Austin Texas Statesman, 1923).

Even more surprising is the fact that the El Paso Times did not mention the McMillan bill before or after its passage.

New Mexico in the same year prohibited sale, cultivation and importation of cannabis. Mere possession was not expressly prohibited but anyone found in possession was presumed to have imported the marihuana illegally (New Mexico, 1923: 58-59). The Santa Fe New Mexican, hometown newspaper of the bill's sponsors paid scant attention, noting only that:

The Santa Fe representative, however, had better luck with his bill to prevent sale of marihuana, cannabis indica, Indian hemp or hashish as it is variously known. This bill was passed without any opposition. Marihuana was brought into local prominence at the penitentiary board's investigation last summer when a convict testified he could get marihuana cigarettes anytime he had a dollar. The drug produces intoxication when chewed or smoked. Marihuana is the name commonly used in the Southwest and Mexico (Santa Fe New Mexican, 1923).

In addition to coming in via Mexico, marihuana was being smuggled in by sailors from Cuba and other points in the Indies via New Orleans. Dr. Frank Gomila, Commissioner of Public Safety of New Orleans, began his campaign for federal legislation which would later bear fruit. He observed that the traffic was quite organized amounting to thousands of kilograms a year:

... [T]he custom was to keep [marihuana] in warehouses or storerooms for further distribution. It was sold by the wholesaler to the retailer who in turn put the 'weed' through a process known as 'sweating.' The dried leaves and stems were soaked in sugar water and dried on butcher's brown papers (Gomila and Lambow, 1938: 29).

According to Dr. Gomila and the newspapers, the demand in New Orleans in the mid-twenties was so great that the "peddlers" were able to become exceptionally prosperous by dividing the market. One had exclusive jurisdiction over the blacks unloading the fruit boats, another over the lobby in a certain hotel, and so forth. It should be noted that marihuana was also available at the local pharmacy without a prescription before 1923 in Texas and 1921 in Louisiana. After that marihuana had to be bought on the street unless the user could successfully forge a prescription.

Different pictures emerge of the marihuana user in El Paso and San Antonio on the one hand and New Orleans and Galveston on the other. In the border towns, he was a Mexican laborer, indolent to some, volatile to others. Local authorities were, by and large, unable to generate any significant public or political interest, although there were no political objections to making the Mexican weed illegal.

In the port cities, however, the marihuana user was a "dope fiend," the basest element of

American society. He was a narcotics addict, a pimp, or a gambler; she was a prostitute. In New Orleans, marihuana was simply another narcotic in a city with a major narcotic problem. It was always open to sensationalism.

Even before public attention was excited, however, the prevalence of marihuana use came to the attention of the President of the Louisiana State Board of Health, Dr. Oscar Dowling. On August 21, 1920, he advised the Governor of the increasing availability of marihuana, a "powerful narcotic, causing exhilaration, intoxication, delirious hallucinations, and its subsequent action, drowsiness and stupor. . ." (Jones, 1920).

At the same time, Dr. Dowling wrote to the Surgeon General of the United States, Dr. Hugh Cummings, to advise him of the increasing traffic in morphine, opium, and marihuana, and to seek federal cooperation.

An interesting sidelight of this request for assistance from Washington is that four months later Dr. Dowling was to become embroiled in a bitter battle with the Federal Government over an order to close his pet project, the New Orleans morphine clinics (Dowling, 1920). Ultimately he would lose, and one of the earliest attempts to deal with narcotics addiction would be suppressed for a half century (Lindesmith, 1967: 135-161).

Very little, however, was done about the marihuana issue until the press seized upon it. In the fall of 1926, the New Orleans Item dispatched an army of reporters among the smoking and selling population.

A series of articles published by the more widely circulated Morning Tribune (both the Item and the Tribune were owned by the same publishing company) exposed the immense profits being made and commented upon the volatile effects of the drug upon its "addicts." It was reported that marihuana:

Numbs the sense, creates wild fancies and has a hypnotic effect upon the user, making his will easily subordinated to that of others.

What emerged from these articles, however, was not a vision of addicts on the streets and pushers on the docks but rather peddlers who lurked on playgrounds seeking to entrap young minds. "Over two hundred children under fourteen are believed to be addicted to the marihuana habit," the paper reported, and "at least 44 schools were definitely being infected" (Gomila and Lambow, 1938: 29-31).

Local policy-makers wasted no time. The New Orleans Police Department immediately launched a round-up. They arrested more than 150 persons for violation of a law which had lain dormant for two years (Gomila and Lambow, 1938: 29-31; WCTIT, 1928).

Dr. Dowling soon circulated "a warning to parents, guardians, and teachers of children against this menace" (WCTIT, 1928: 1). The Women's Christian Temperance Union jumped on the bandwagon, focusing its attacks on the "soft drink" bars which had sprung up all over New Orleans during Prohibition:

The soft drink stand and the corner drug store have taken the place of the saloon as a social meeting place. Here is where marihuana and liquors can sometimes be bought (WCTU, 1928: 3).

Beyond these immediate effects, a more substantial impact of the local policy reaction in

New Orleans was the formation of a tightly knit coterie of New Orleans law enforcement, public health, and social welfare officials who would carry their campaign to Washington, with ultimate success.

The drug and the practice of smoking it spread during the mid-twenties from the Gulf Coast and border town points-of-entry in two directions north and west from the border together with its ethnic identity and north and east from New Orleans with its identity as a narcotic and enslaver of youth.

Practically every state west of the Mississippi River prohibited the possession or sale of marihuana during the period 1915 to 1930. Most of them acted by 1930: California (1915), Iowa (1921), Nevada (1923), Washington (1923), Arkansas (1923), Nebraska, (1927), and Wyoming (1929).

The Bureau of Immigration records the entry of 590,765 Mexicans during this period, two-thirds of them remaining in Texas, the others settling in states in the Rocky Mountain area, most of them farm laborers (U.S. Bureau of Immigration, 1915 to 1930).

Whether motivated by outright ethnic prejudice or by simple discriminatory disinterest, the proceedings before state legislatures resembled those in Texas in 1923. There was little, if any, public attention and no debate. Pointed references were made to the drug's Mexican origins and sometimes to the criminal conduct which inevitably followed when Mexicans ingested the "killer weed."

The Colorado Legislature first prohibited possession, cultivation and sale of the drug in 1927, the year after the use of marihuana noticeably increased (Colorado, 1927: 309). At that time, according to a subsequent newspaper report, the drug was "used almost exclusively . . . by the Mexican population employed in the beet fields" (Rocky Mountain News, 1931).

Similarly, in 1929, the Montana Legislature amended its general narcotic law to marihuana, prohibiting use, sale or possession without a prescription (Montana, 1929: 5). On seven different days from June 24 to February 10, the date of the bill's passage, the Montana Standard succinctly noted the progress of the bill through the legislature. The legislature's attitude was characterized in the January 27 issue:

There was fun in the House Health Committee during the week when the marihuana bill came up for consideration. Marihuana is Mexican opium, a plant used by Mexicans and cultivated for sale by Indians. "When some beet field peon takes a few rares of this stuff," explained Dr. Fred Fulsher of Mineral County, "he thinks he has just been elected President of Mexico so he starts out to execute all his Political enemies. I understand that over in Butte where the mexicans often go for the winter they stage imaginary bullfights in the 'Bower of Roses' or put on tournaments for the favor of 'Spanish Rose' after a couple of whiffs of marihuana. The Silver Bow and Yellowstone delegations both deplore these international complications." Everybody laughed and the bill was recommended for passage (Montana Standard, 1929: 3).

About the same time, Mexican laborers had begun to appear in Idaho and the mayor of Boise remarked:

The Mexican beet field workers have introduced a new problem-the smoking in cigarettes

or pipes of marihuana or grifo. its use is as demoralizing as the use of narcotics. Smoking grifo is quite prevalent along the Oregon Short Line Railroad; and Idaho has no law to cope with the use and spread of this dangerous drug (WCTU, 1928:).

Idaho passed a law in 1927 (Idaho, 1927: 98).

By 1931, the Texas Legislature finally got around to prohibiting possession of marihuana. By now alcohol prohibition had withdrawn any philosophical barrier to making possession illegal. The San Antonio Light reported that:

At last the state legislature has taken a definite step toward suppression of traffic in a dangerous and insanity-producing narcotic easily compounded of a weed (marihuana) indigenous to this section. This newspaper has urged the passage of prohibitory legislation and is gratified that the solons at Austin have acted, even if tardily, in the suppression of traffic in a drug which makes, the addict [read Mexican] frequently a dangerous or homicidal maniac (San Antonio Light, 1931).

In the East, appearance of the practice was not a necessary prerequisite for prohibition. That Maine (1913), Massachusetts (1914), Vermont (1915), and Rhode Island (1918) barred the sale of cannabis without a prescription before 1920 does not indicate that marihuana smoking had appeared there on any significant scale. Rather, in the course of anticipating and implementing the national anti-narcotics policy declared by the Harrison Act in 1914, medical representatives on the drafting committees recommended the inclusion of "another narcotic" to which addicts could resort once the other opiates became difficult to obtain.

The New York Times in 1914 described cannabis as a "narcotic [having] practically the same effect. as morphine and cocaine." (New York Times, 1914: 6) and it noted in an editorial that:

[T]he inclusion of cannabis indica among the drugs to be sold only on prescription is only common sense. Devotees of hashish are now hardly numerous enough here to count, but they are likely to increase as other narcotics become harder to obtain (New York Times, 1914: 8).

By 1923, the New York Times referred to marihuana as the city's "latest habit-forming drug" when reporting its exhibition at a Women's Club meeting (New York Times, 1923: 24). Finally, in 1927, whether responding to an increase in use or to the substitution admonition, the legislature included marihuana in its definition of "habit forming drugs" in a comprehensive narcotics bill (New York, 1927: 1695).

The situation in Chicago paralleled that in New York until 1927. Large Mexican communities developed in Chicago and Gary, Indiana, during the twenties and marihuana smoking became common in these areas and among journeymen musicians as well. As in New York, there was little public concern. The New Orleans pattern took over around 1927, however, when the attention of local law enforcement officials was suddenly drawn to the Mexicans and their "muggles." One law enforcement official reported that:

There are about 7,000 Mexicans in Gary, 10,000 in Indiana Harbor and 8,000 in South Chicago.... The Mexicans depend on the steel mills, railroads, and construction gangs for

employment. Many are drifters when slack labor conditions prevail.... [T]wenty-five percent of these Mexicans smoke marihuana. In fact, many of them make their living by raising and peddling the drug (Paul, 1929: 4).

A situation perceived to be so widespread was naturally considered likely to infect the rest of the community. As in New Orleans, reports started to appear that high school students were smoking the weed (Paul, 1929: 1; Chicago Tribune, June 3, 1929).

Since there was then neither state nor federal legislation prohibiting sale of marihuana, the local United States attorney declared war armed with an Internal Revenue statute prohibiting production and transfer of "a cigarette substitute" on which tax had not been paid. In June 1929, he raided wholesale houses "believed to have disposed of large quantities of marihuana cigarettes, sold to school pupils and other youthful thrill seekers." He arrested nine men "most of them Mexicans" (Chicago Examiner, June 22, 1929). At the same time, local officials began to use a statute which prohibited transfer of "any cigarette containing any substance deleterious to health" (Chicago Examiner, June 19, 1929).

The Chicago Tribune, lobbying heavily for anti-marihuana legislation then pending before the Illinois Legislature, reported that day-to-day progress of the enforcement activity (Chicago Tribune, July and October, 1929). Every stall in the legislature earned a banner headline such as:

BAN ON HASHISH BLOCKED DESPITE RAVAGES OF DRUG

In an article appearing in June, 1929, the paper noted:

The number of addicts is growing alarmingly according to authorities, because of the ease with which [marihuana] can be obtained. The habit was introduced a dozen years ago by Mexican laborers . . . but it has become widespread among American youths and girls even among school children.

The legislation, however, was killed.

Marihuana prohibition had become widespread. In states where either Mexicans or the drug had appeared, its use was quickly suppressed.

Soon after being apprised of its presence, local lawmakers invoked the criminal law. In New Orleans, Denver, and Chicago the spectre of a doped school population was the cornerstone of the prohibitory effort.

And, during alcohol prohibition, paralleled by the local phase of marihuana prohibition, it was naturally imperative to suppress a drug which frustrated alcohol users might substitute, for their customary intoxicant.

THE UNIFORM NARCOTIC DRUG ACT

Following the ad hoc local phase of marihuana legislation in the United States was the nationalization phase. During this period marihuana became integrated at both the state and federal levels with the nation's narcotics policy which had been manifested forcefully in Congress' adoption of the Harrison Narcotics Act in 1914.

The Harrison Act, a taxing measure, required registration and payment of an occupational

tax by all persons who imported, produced, dealt in, sold or gave away opium, cocaine or their derivatives. The Act required all legitimate handlers of these narcotics to file returns setting forth in detail their use of the drugs.

Since the Act also provided that only legitimate users could register and no one but a registered user could obtain the specified form, any transfer by an illegitimate user was a violation of the Act. For those failing to comply with its registration requirements, the original Harrison Act provided penalties of not more than \$2,000 in fines or more than five years imprisonment, or both.

Drafted as a tax law rather than an outright criminal statute, the Act was intended to do indirectly what Congress believed it could not do directly: regulate possession and sale of the opiates. However, because the Act essentially was a revenue-raising measure imposing a tax on transfers of narcotics, it could not effectively prohibit the possession of drugs.

This indirect regulation of narcotics traffic had a number of significant consequences. First, since the Act could not penalize users of addiction directly, there was an immediate need for complementary residual state legislation in order to deal effectively with the drug problem.

Second, the enforcement of the Act was assigned to the Internal Revenue Service in the Treasury Department. The first enforcement agency for the Harrison Act was the Narcotics Division of the Prohibition Unit of the Internal Revenue Service created in 1920 (Schneckeber, 1929: 143). This division was incorporated in the Prohibition Bureau which was created in 1927 (Act, 1927:1381).

In 1930, the enforcement of the narcotics laws was severed from the Bureau of Prohibition and established as the separate Bureau of Narcotics in the Treasury Department (Act, 1930: 585). The existence of this separate agency has done as much as any single factor to influence the course of drug regulation from 1930 to 1970 (King, 1953: 736).

Although the impact of the Bureau on the passage of the Uniform Narcotic Drug Act and the Marihuana Tax Act will be explained in detail in subsequent sections, it is important here to note that the existence of a separate bureau having responsibility only for narcotics enforcement and for educating the public on drug problems inevitably led to a particularly prosecutorial view of narcotics addiction and the use and abuse of all drugs.

After the passage of the Harrison Act in 1914, there remained a considerable lack of uniformity regarding the offenses prohibited and the penalties imposed by the several states.

In 1919, the American Medical Association asked the Commissioner of Internal Revenue to call a conference, to consider better control of traffic in narcotic drugs. The profession was uncertain of its obligations in the matter because they were faced with an amalgam of conflicting laws. The A.M.A. asked that the wholesale, retail, and manufacturing drug interests be among those attending, along with delegates from the medical profession in each state. The proposal received no official or unofficial response either from the Commissioner of Internal Revenue or the Bureau of Prohibition.

Nevertheless, the American Medical Association, through its own Council on Health and Public Instruction, did hold a conference in early 1922 during which a uniform state narcotic control law was presented. At the November meeting of that conference, there were present 15 representatives of 10 pharmaceutical organizations and two representatives of the medical profession.

The draft of a uniform law was approved unanimously by all present. The American

Medical Association set out to codify the draft and to send it for approval to each of the constituent organizations (White, August 3, 1932; Woodward, August 6, 1932). After securing approval, all the associations agreed to pursue enactment first in New York.

The general lack of uniformity in anti-narcotics legislation, the weakness of state enforcement procedures, and the growing hysteria about dope fiends and criminality converged in several requests outside the medical community for a uniform state narcotic law (Anslinger and Tompkins, 1953: 159).

The drafting of the Uniform Narcotic Drug Act must also be viewed against the background of two larger movements: (1) the trend toward the creation and dissemination of uniform state laws by the National Commissioners on Uniform State laws, a group to which each state sent two representatives appointed by the governor; and (2) the general concern in the late 1920's and early 1930's with interstate crime, manifested, for example, by the creation in 1930 of the nearly autonomous Federal Bureau of Investigation. Because the concept of states' rights and narrowly construed federal power was then so powerful, an appeal to the National Commissioners was the inevitable recourse for those pressing for uniform anti-narcotic regulation.

DRAFTING THE UNIFORM ACT

By 1924, the Commissioners had appointed Committee to draft a uniform narcotic drug act. At the 1925 meeting of Commissioners, the chair man of the Committee reported that he himself had prepared a first tentative draft based on the New York Act, the Washington state legislation, the Harrison Act, and a bill then before the New York Legislature. Presumably this was the one drafted by the A.M.A. Conference after its 192 meeting.

The chairman noted, however, that Dr. William Woodward, head of the A.M.A.'s Bureau of Legal Medicine and Legislation, with whom he had only recently conferred, had made "some very valuable suggestions." Because the tentative draft had already been printed before these suggestions, he requested that it "not be read but be re-committed to the Committee" (1925 Handbook: 977-985). This first draft included cannabis in the list of "habit-forming drugs," although all such drugs could be distributed and used for medical purposes (1925 Handbook: 978).

A second tentative draft was presented in 1928 and again the draft was not discussed at the conference but recommitted for further study. The second draft was essentially an exact copy of the 1927 New York Statute. It also included cannabis in the class of habit-forming drugs (1928 Handbook: 75-78, 323-333).

There was a lack of concern on the part of the Commissioners themselves with the whole narcotics problem between 1924 and 1928. The President of the Conference, introducing Dr. Woodward, said:

In view of the importance of the act I think it would not be amiss to listen to the Doctor for a few minutes, that he may point out to us why it is important. In some of the states we do not recognize the importance because it has not been called to our attention (1928 Handbook: 76-77).

Nor was the Bureau of Prohibition particularly concerned at this time with the cannabis provision. Lack of official concern and interest continued to be the Bureau's attitude toward the second tentative draft (Nutt. June 13, 1929).

Since neither the Commissioners nor federal narcotics officials were particularly concerned about state and local control of narcotics generally and marihuana in particular, it seems clear that neither was responsible for the inclusion of marihuana in the category of "habit-forming drugs. Rather, it would appear that it was included in the first draft because that had been drawn from the 1923 Washington statute which had listed cannabis.

Insofar as the second draft was a copy of the 1927 New York Act, inclusion of cannabis in this draft is not unusual. Few, if any, of the persons involved in the drafting were concerned about marihuana smoking or even aware of its use.

Two third drafts were submitted, the first in 1929 and the second in 1930. The initial one closely resembled the second tentative draft, and once again it included cannabis in the category of "habit-forming drugs." Again, the growth, distribution, and possession of cannabis was prohibited except for medical purposes.

The nascent Congressional interest in marihuana in 1929 and the Bureau of Prohibition's subsequent resistance to amending, and thereby endangering, the Harrison and Export and Import Acts, caused the Bureau to take full notice of this 1929 third draft. Like its predecessors, however, the initial third draft was recommitted for further study (1929 Handbook : 43, 332-346).

The second third tentative draft, submitted in 1930, was the first to remove cannabis from the definition of "habit-forming drugs" and to include only a supplemental provision for dealing with the drug (1930 Handbook: 485,97).

When the Conference of Commissioners met to consider the second third tentative draft, Judge Deering, the Chairman of the Committee on the Uniform Narcotic Drug Act, recommended its recommitment for further study because the Committee had not yet had an opportunity to consult the newly created Bureau of Narcotics.

At the time of this conference, August 14, 1930, no one had yet been appointed Commissioner of the Bureau, although Harry J. Anslinger was Acting Commissioner (1930 Handbook: 126-127). The Senate confirmed Anslinger's appointment as Commissioner on December 18, 1930.

The Bureau of Narcotics then became actively involved in the drafting process. Commissioner Anslinger was pressing for inclusion of the cannabis provision. He stated that he felt the limited medical use for cannabis was far outweighed by the need to control potential cannabis addiction (Anslinger, July 28, 1930).

Dr. Woodward and the pharmaceutical industry advocated optional inclusion of marihuana on the one hand, and federal narcotics representatives urged not only inclusion but elimination of medical use, on the other.

The fourth tentative draft retained the optional cannabis provision. At a session before the convening of the full Conference of Commissioners from September 9-12, 1931, Commissioner Anslinger and A. L. Tennyson of the Bureau met with Judge Deering to discuss the Bureau's feelings about the fourth tentative draft.

At this time Commissioner Anslinger stated that the Bureau felt strongly that inclusion of

cannabis in the state law ought to be mandatory. Moreover, the Bureau urged that the only successful way to deal with the marihuana drug traffic, because of its domestic nature and the easy availability of the weed, was to prohibit the cultivation of the plant altogether and to find some substitute for the limited medical use (Tennyson, September 16, 1931). However, the fourth tentative draft presented to the Conference of Commissioners included the optional marihuana provision. And, the Conference tentatively approved the fourth tentative draft and directed the Committee to prepare a final draft (1931 Handbook: 127-128, 390-402).

The American Medical Association played a key role in the drafting process prior to 1931. Their efforts had been largely responsible for consideration of the Uniform Drug Act in the first place. From the beginning in 1925, Dr. William Woodward, the Director of the A.M.A.'s Bureau of Legal Medicine and Legislation, actively assisted in the drafting of the Act and widely circulated the drafts to interested persons for their comments.

It appears, however, that Dr. Woodward's personal style and the preeminent position of the American Medical Association in the drafting process were resented by the two remaining interest groups—the Federal Bureau of Narcotics and the retail and wholesale pharmaceutical associations. The Bureau had been commenting on drafts only after they had been drawn by the A.M.A. and did not feel it was playing an active role in the drafting process. The pharmaceutical industry felt that their interests were considered only peripherally and that they had been excluded from the heart of the drafting process.

As a result of the dissent, a conference of interested parties was scheduled before the final draft was to be presented to the Conference of Commissioners.

Present at this preliminary conference on September 15, 1932, were representatives of the Drug Committee the Federal Bureau of Narcotics, the Department of State, the Public Health Service, the American Medical Association, and delegates from the drug industry and other medically related industries and organizations. The final version of the Uniform Narcotic Drug Act was hammered out at this session. The Bureau was central to the drafting process and Commissioner Anslinger made a major effort to involve the drug manufacturers and the wholesale and retail drug trade in it to protect the Act from possible subsequent political disagreement (Anslinger, August 1, 1932): Finally, the conference agreed on a draft to be presented to the National Conference.

The manufacturers of drug products were strongly opposed to the inclusion of cannabis under any criminal regulatory scheme. Representatives of the industry opposed a mandatory cannabis provision. The final conclusion reached by all the parties present was:

After considerable comment, it was decided to eliminate Section 12 (Cannabis) and leave it to the Conference of Commissioners as to whether it should be included under the general provisions of the Act (Report of Preliminary Conference, 1932: 23).

The Bureau was no longer insisting on the mandatory inclusion of in absolute marihuana prohibition; it did not want to risk the opposition of the drug industry to the entire Act.

The fifth tentative draft did, however, include a significant change in form which would have important consequences in the decades to come. Although the marihuana provision remained supplemental to the main body of the Act, any state wishing to regulate the sale and possession of marihuana was instructed, simply, to add cannabis to the definition of "narcotic drugs." All the other provisions of the Act would their apply to marihuana as well

as to the opiates and cocaine. The Commissioners adopted this form as it had been prepared at the September 15, 1932, preliminary Conference.

The only recorded opposition to the adoption of the final draft came from some Commissioners who objected to tying the Uniform State Law to the terms of the federal Harrison Act. This last obstacle was over-come by the argument that a number of states already had passed such legislation so that the states' rights problem need not stand in the way. The Act was adopted 26 to 3 (1932 Handbook: 107).

ENACTMENT OF THE UNIFORM ACT BY THE STATES

After final acceptance of the Uniform Act, the Bureau set to work at once to secure state enactment-including an adequate marihuana provision. A comprehensive campaign was undertaken in the press, in legislative chambers, and in any other forum to gain public support for the Uniform Act.

In addition, perceiving the absence of public awareness of marihuana and needing to encourage positive action to overcome the drug's optional status, the Bureau also sought to arouse public interest in marihuana through "an educational campaign describing the drug, its identifications and its evil effects" (Federal Bureau of Narcotics, 1937 : 59).

That there was little general knowledge about cannabis is illustrated by the fact that as late as 1934, it was necessary to show marihuana to the New York police so that they could recognize it growing or in dried, smokable form (New York Times 1934: 6).

The Bureau's district supervisors and local agents were campaigning actively in the legislatures before which the Act was pending. A press campaign was conducted across the country to gain the support of civic groups and other interested parties. Mr. Anslinger sought editorial support in newspapers (Anslinger, October 22, 1936) and assisted in the drafting of articles for popular magazines (Anslinger, December 23, 1936). To mobilize the Bar, Bureau officials wrote an article for law journals explaining the need for the Uniform Narcotic Drug Act (Anslinger, 1932: 52; Tennyson, 1932: 55).

Despite these efforts, it appears that the Uniform Act had a rough time in state legislatures during its early life. By April 26, 1933, only two states had enacted it in full. As late as March 1935, only 10 states had enacted the Uniform Law.

A number of significant objections had emerged in the state legislatures considering the passage of the Uniform Narcotic Drug Act. First among these was the potential cost to the state of enforcing the Act. Second, there was concern over the number of registrants who would have to be licensed due to the belief that the Uniform Act would require special licensing of doctors, dentists, and veterinarians. Third, the limit on the amount of exempt preparations which could be sold caused a great deal of technical difficulty with the Act. Fourth, many criticized the right of the court to revoke or suspend the license to practice medicine or pharmacy. And finally, there seemed to be widespread misunderstanding of the record-keeping requirements of the Act.

Although these objections were largely administrative, they nevertheless posed what appeared to be serious stumbling blocks to the successful passage of the Uniform Law in all the states.

The combination of public apathy and administrative resistance necessitated a new approach in generating public interest. Beginning in late 1934, Commissioner Anslinger

gradually shifted the focus of the FBN's educational campaign away from the liability of federal law enforcement agencies to deal effectively with the local drug problems to the need to cope with the new drug menace-marihuana.

The clearest reflection of the change in Bureau policy is found in two official statements of Commissioner Anslinger, one made in 1933 and the other in 1936.

One 1933 statement explains the need for a Uniform Narcotic Drug Law and emphasizes United States international obligations, the need for more effective coordination in law enforcement, and the impact the law will have on the dangers of morphine, cocaine, and opium addiction (FBN Paper, July 1933). In the later statement, however, more than half of the time is devoted to a discussion of the "worst evil of all" the marihuana problem.

To aid the new approach's objective, Commissioner Anslinger made speeches and contributed articles to journals. The most influential of his efforts was "Marihuana Assassin of Youth" which appeared in the widely circulated American Magazine in July 1937 (Anslinger and Cooper, 1937).

The FBN files contain more than 50 letters addressed to the Commissioner which say: "Your article was the first time I ever heard of marihuana."

Among the most effective proponents of the Uniform Act was the Hearst newspaper chain. These papers began editorializing in favor of enactment within days after the Act had been approved in 1932.

The Hearst chain was not alone. A Birmingham, Alabama, paper on August 22, 1935, emphasized the need to control marihuana as a reason for adopting the Act (Birmingham Age Herald, August 22, 1935). A Washington Post columnist in September, 1934, devoted three quarters of his article to marihuana with quotes from Anslinger and Stanley urging adoption of the Uniform Act (Washington Post, September 29, 1934).

Other large-city newspapers such as the Cleveland Plain Dealer and the St. Louis Star Times kept a steady, if intermittent, stream of anti-marihuana articles flowing in the period just before the passage of the Uniform Act in those areas. In Missouri, especially, local concern generated by the extensive coverage in the Star Times speedily pushed the legislature to adopt the Uniform Act.

Often it has been supposed on the basis of this increased coverage that the use of marihuana increased around 1935. Since there was some larger design involved, however, a firm conclusion is unwarranted. At the same time, it is possible that use did spread after the publicity campaigns, especially among the young.

Judging from the tremendous expansion in coverage by the New York Times beginning in 1935, the evidence supplied by the LaGuardia Commission in its 1944 Report and the leap in enforcement activity, marihuana, finally came to New York City in the 1930's, though then probably on a smaller scale than in Denver and the border towns of Texas.

Apart from the press, another influential participant in the marihuana campaign, especially after the Repeal of Prohibition, was the Women's Christian Temperance Union. Although the WCTU had distributed a pamphlet on marihuana as early as 1927, their publication, the Union Signal, does not reflect any significant interest either in the Uniform Act or marihuana, until 1934. Before that year the "narcotic" receiving the most attention was nicotine. Beginning in 1936, however, the Union Signal had a direct line to the FBN

national office, and from then on every issue contained material on marihuana (WCTU bound volumes, yearly).

The World Narcotic Defense Association and its head, Richmond P. Hopson, were also involved in the drive for state enactment. They were continually in postal contact with almost every state legislator in the country (WNDA, 1937). The most well-financed group in the campaign, the Association underwrote national broadcasts and distributed a lengthy pamphlet on marihuana, in 1936.

The General Federation of Women's Clubs also contributed energetically. The Federation educated its membership about the need for the Uniform Act and about the evils of marihuana in particular. The Chairman of the Federation's department of legislation noted:

The situation concerning club women particularly is the accessibility of the frightening degenerating marihuana weed, which is rolled in cigarettes ... and has been playing such havoc with young high school boys and girls (WCTU, 1936: 285).

The state and local clubs immediately began to unite local legislators and to conduct educational campaigns for parents, teachers and children (WCTU, 1937: 36; Wood, January 13, 1936). An FBN agent appeared at a New York meeting of the local Federation with two marihuana plants. They were exhibited at a local flower show:

Marihuana Plant exhibit at Flower Show

of Katrina Trask Garden Club

Tomorrow, 3 P.M. on at the Casino

This plant is the cause of a dread menace which in being fought by the State Department of Health.

Public Invited to Show-25 cents (Saratogian, 1936: 5)

Other groups such as the YWCA, the National PTA and the National Councils of Catholic Men and Women were all in touch with the Bureau and were made aware of the Bureau's dual aims of "influencing and creating public opinion in favor of the passage of the Uniform Narcotic Drug Act and awakening the parents of the country to the increasing danger of the use of marihuana." (Anslinger, March 28, 1935).

However, arousing public opinion alone was not the ultimate goal of the campaign. The FBN was interested in the enactment of the Uniform Act along with prohibitory marihuana legislation in all the states.

By early 1935, only 10 states had adopted the Uniform Act. And, three of these states had not included marihuana (Anslinger, March 1, 1935). The Bureau embarked upon its marihuana strategy in 1935, the turning point in state enactment. Whether or not public interest actually existed, public opinion-makers influenced legislative opinion and created a "felt need" for legislation.

Within the next year, 18 more states adopted the Act and every one of them which did not have previous legislation included marihuana (Anslinger, January 13, 1936; WCTU, 1937:

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75).

ENACTMENT OF THE MARIHUANA TAX ACT

Despite the public opinion campaign conducted in the early 1930's the general public was largely unaware of the drug, its use, or its alleged effects; only regional interest was aroused.

A change seems to have occurred after 1935. The increased national awareness played a significant role in the decision of the Treasury Department to seek federal legislation. On April 14, 1937, the "Secretary of the Treasury, on behalf of the Commissioner of Narcotics," submitted the "administration proposal to Congress to impose an excise and transfer tax on dealings in marihuana" (Schaller, 1970: 70).

The scheme of the Marihuana Tax Act was threefold: a requirement that all manufacturers, importers, dealers, and practitioners register and pay a special occupational tax; a requirement that all transactions be accomplished through use of written order forms; and the imposition of a tax on all transfers in the amount of \$1 per ounce for transfer to registered persons and a prohibitive \$100 per ounce for transfers to unregistered persons.

The key departure of the marihuana tax scheme from that of the Harrison Act is the notion of the prohibitive tax. Under the Harrison Act, a person not required to register, that is, a non-medical user, could not legitimately buy or possess narcotics. To the dissenters in the Supreme Court decisions upholding the Act, this clearly demonstrated that Congress' motive was to prohibit conduct rather than to raise revenue.

The seemingly bizarre legal formulation of this tax measure was precipitated by the recognized need for the Federal Government to take action forbidden to it under prevailing constitutional doctrine.

Hearings on the proposed marihuana taxation were held before the House Ways and Means Committee. During five mornings of testimony by FBN officials, government witnesses, and industry representatives, the Bureau presented the following four-fold argument: (1) marihuana was a disastrous drug; (2) its use was increasing alarmingly and had generated public hysteria; (3) state legislation was incapable of meeting the threat posed by the drug, thus, federal action was required; and (4) the government might best act through separate legislation rather than through an amendment to the Harrison Act.

No definite scientific study of the effects of marihuana was presented to substantiate the position that marihuana was a dangerous drug. No synthesis of available scientific information was submitted nor was there any statement by the Public Health Service. Neither of the government's own public health experts, Assistant Surgeon General, Dr. Walter Treadway, and Dr. Lawrence Kolb, testified, nor did Drs. Walter Bromberg or J. F. Siler who had recently published scientific articles on the effects of cannabis in humans (Siler, et. al., 1933: 269-280; Bromberg, 1934).

Instead, the scientific aspects were presented by a law enforcement agency, the FBN:

Despite the fact that medical men and scientists have disagreed upon the properties of marihuana, and some are inclined to minimize the harmfulness of this drug, the records offer ample evidence that it has a disastrous effect upon many of its users. Recently we have received many reports showing crimes of violence committed by persons while under

the influence of marihuana.

The deleterious, even vicious, qualities of the drug render it highly dangerous to the mind and body upon which it operates to destroy the will, cause one to lose the power of connected thought, producing imaginary delectable situations and gradually weakening the physical powers. Its use frequently leads to insanity.

I have a statement here, giving an outline of cases reported to the Bureau or in the press, wherein the use of marihuana is connected with revolting crimes (U.S. Congress, 1937: 30).

Instead of having one of the few researchers who had done any significant research into the effects of cannabis on humans, the Bureau chose a Temple University pharmacologist, Dr. James Munch, whose experience was confined to experimentation of the effects of cannabis on dogs.

The second component of the Bureau's case was the contention that marihuana use had spread alarmingly in recent years, provoking a public outcry. To demonstrate this, the Bureau submitted, for the record, the Gomila article cited earlier, and a 1936 letter from the city editor of the Alamoosa Daily Courier (U.S. Congress, 1937: 32-37). The letter described an attack by a Mexican-American, allegedly under the influence of marihuana, on a girl of his region.:

I wish I could show you what a small marihuana cigarette can do to one of our degenerate Spanish-speaking residents. That's why our problem is so great; the greatest percentage of our population is composed of Spanish speaking persons most of whom are low mentally, because of social and racial conditions (Baskette, September 1, 1936).

The third component of the Bureau's case was that even though every state now had marihuana legislation, local authorities could not cope with the marihuana menace. To support this proposition editorial pleas from the Washington newspapers were offered along with Bureau testimony that officials of several states had requested federal help.

Senator Brown asked Commissioner Anslinger "to make clear the need for Federal legislation." He continued:

You say the states have asked you to do that. I presume it is because of the freedom of interstate traffic that the states require the legislation.

Anslinger agreed:

[W]e have had requests from the states to step in because they claimed it was not growing in that state, but that it was coming in from another state (U.S. Congress, 1937:16).

Nothing was presented to support that statement; no letters from local authorities and no investigative reports by FBN agents describing the trafficking apparatus.

The congressmen and senators participating in the hearings accepted the Bureau's argument. In fact, Senator Brown, Chairman of the subcommittee which considered the

legislation in the Senate, and Chairman Doughton of the Ways and Means Committee, had been thoroughly briefed by the Bureau in advance of the hearings. There was no probing of the Government witnesses. In fact, the Government made its case in the House in one session, and the next three sessions were devoted to countering the technical objections of the oilseed, birdseed, and hemp industries (U.S. Congress, 1937:59-65 67-86 .

On the last morning of scheduled hearings, Dr. William C. Woodward appeared on behalf of the AMA to oppose the bill. Dr. Woodward objected to H.R. 6385 because he believed that its ultimate effect would be to so restrict medical use by red tape that any medical use would be impossible. He admitted that there were currently few therapeutic applications but he observed that the bill inhibited further research which might bear fruit. He went even further to imply that the bill was designed with this objective in mind. He noted that if federal legislation was considered necessary, it could be achieved without sacrificing medical usage by simply amending the Harrison Act.

Dr. Woodward's most pointed attack was directed against the assumption that federal legislation was needed to control the marihuana habit. He argued that existing state legislation was more than sufficient if properly enforced and that if lack of coordination was the problem, that was the FBN's fault.

Noting that the FBN already had the authority to "arrange for the exchange of information concerning the use and abuse of narcotic drugs in [the] states and for cooperation in the institution and prosecution of suits . . .," he asserted that the Bureau had not done its job:

If there is at the present time any weakness in our state laws relating to cannabis or to marihuana, a fair share of the blame, if not all of it, rests on the Secretary of the Treasury and his assistants who have had this duty imposed upon them for 6 and more years (U.S. Congress, 1937: 93).

Dr. Woodward also contended that the law would be a useless expense to the medical profession and unenforcible. He noted: "Since marihuana grows so freely, and every landowner was a potential producer, whether wittingly or unwittingly, full enforcement would require inspection of the entire land area of the country, a task which would be unseemly for the Federal Government to undertake" (U.S. Congress, 1937: 94-95).

Finally, Dr. Woodward wondered why, if federal legislation was considered necessary, the Congress did not simply amend the Harrison Act. To the Bureau's argument that such a course would be unconstitutional, he inquired how Treasury's counsel could argue that the present bill was constitutional since the technique was identical. Dr. Woodward's own view was that the amendment of the Harrison Act would be constitutional and that such a course would dispel the professional objections which he raised (U S. Congress, 1937:97).

After accusing Dr. Woodward of obstructionism, evasiveness, and bad faith, the Committee did not even thank him for his testimony (U.S. Congress, 1937: 121). When the Senate Finance Committee conducted hearings on the bill, now styled H.R. 6906, two months later, Dr. Woodward submitted instead a short letter which stated the AMA's reasons for opposing the bill (U.S. Congress, 1937: 33-34).

Both Committees reported the bill favorably despite Woodward's objections. The Ways and Means Report stated:

Under the influence of this drug the will is destroyed and all power of directing and controlling thought is lost. Inhibitions are released. As a result of these effects, it appeared from testimony produced at the hearings that many violent crimes have been and are being committed by persons under the influence of the drug. Not only is marihuana used by hardened criminals to steel them to commit violent crimes, but it is also being placed in the hands of high-school children in the form of marihuana cigarettes by unscrupulous peddlers. Cases were cited at the hearings of school children who have been driven to crime and insanity through the use of the drug. Its continued use results many times in impotency and insanity (U.S. Congress, 1937: 1 2).

The Marihuana Tax Act passed the House of Representatives very late in the afternoon of a long session on June 14, 1937; the only opposition came from congressmen who had no idea what marihuana was and desired further information before voting (Congressional Record, 1937: 5575, 5689). Instead of a detailed analysis they received a statement of one of the members of the Ways and Means Committee, which repeated uncritically the lurid criminal acts attributed to marihuana users at the hearings. After less than two pages of debate, the Act passed without a roll call (Congressional Record, 1937: 5575).

TIGHTENING THE LAW

After the passage of the Marihuana Tax Act, the FBN began with a four-pronged enforcement policy:

1. Control of cultivation of the plant for legitimate purposes and eradication of wild growth;
2. Pacification of marihuana-sensationalism in the press;
3. Education of the federal judiciary toward strict application of the law; and
4. Allocation of federal enforcement resources toward major trafficking rather than petty possession offenses.

The scope of the plant's growth, the transportability of the seeds, the dormancy of the seeds, and the lack of a highly efficient herbicide militated against a comprehensive eradication program. The cost of such a program would have been substantial even if success were assured. No active effort was undertaken to conduct an acre-by-acre survey of the United States.

The eradication "program" became simply a matter of reaction to routine information-letters from farmers who had identified the plant and discoveries of acreage by law enforcement agents.

As the Bureau's interest in marihuana subsided during the 1940's, so did the effort to eradicate the wild growth. In fact, the Federal Government encouraged the cultivation of hemp during the war, even though an inactive strain had not been developed, because sources of sisal rope had been severed by Japan's occupation of the Philippines. All over the United States, the weed remained plentiful and largely undetected.

After passage of the Act, Commissioner Anslinger directed his agents to discourage local officials from playing up any alleged involvement of marihuana with crime to the press. On April 11, 1938, the Commissioner told his New York District Supervisor that:

Our present policy is to discourage undue emphasis on marihuana for the reason that in some sections of the country recently press reports have been so exaggerated that interest in the subject has become almost hysterical and we are therefore trying to mold public opinion along more conservative and saner lines (Anslinger, April 11, 1938).

Immediately following passage of the Act, the FBN also directed an "educational" effort toward the federal judiciary to emphasize the need for severe sentences for marihuana offenders. The Bureau also concentrated on the stifling of suppliers, large interstate traffickers, and smugglers. Small possession cases were to be left to local authorities.

Several factors, however, served to frustrate this policy. First, marihuana traffic was highly disorganized and there was no national or regional network as such (New York City, 1945). Second, use was still concentrated geographically and socioeconomically and was not a major enterprise. Finally, during the war years, the Bureau abandoned responsibility for most marihuana law enforcement to the states, where the disorganized traffic and regional use could be most effectively controlled. The FBN chose instead to concentrate on the opiates.

After the relative quiet of the war years there was apparently a significant increase in narcotic drug abuse in the late, 1940's and the public began to be concerned with the spread of narcotic addiction, particularly among young persons. Congressional furor was aroused by the assertion that the use of marihuana inevitably led to the use of these harder drugs, particularly heroin.

The new legislation came in two waves. In 1951, Congress passed the Boggs Act (Boggs Act, November 2, 1951: 767) which increased penalties for all drug violators. For the first time in federal drug legislation marihuana and the narcotic drugs were lumped together, since the Act provided uniform penalties for the Narcotic Drugs Import and Export Act (Boggs Act, November 2, 1951: 767) and the Marihuana Tax Act (21 USC 1964). The states followed the federal lead. Then, in 1956, Congress passed the Narcotic Control Act, escalating the penalties still further. Once again the states responded in kind.

The hearings before the Subcommittee of the House Ways and Means Committee and the floor debate indicate that the Boggs Act was motivated by a perceived increase in narcotic use in the period 1948 to 1951 (Kefauver Committee Hearings, 1951: 240-241; New York Times, 1951).

Representative Boggs, speaking during the Congressional debate on his bill, enunciated a concern which was reflected in many other quarters. After noting that there had been a 24% increase in arrests for narcotic violations between 1949 and 1950 and a 70% increase between 1948 and 1950, Representative Boggs stated:

The most shocking part about these figures is the fact that there has been an alarming increase in drug addiction among younger persons. In the first six months of 1946, the average age of addicted persons committed . . . at Lexington, Kentucky, was 37.5 years. Only three patients were under the age of 21. During the first six months of 1950, only four years later, the average had dropped to 26.7 years and 766 patients were under the age of 21... (Congressional Record, 1951: 8197).

Representative Boggs and others supported the mandatory minimum sentences for drug peddlers because they felt that some federal judges had been lax in enforcing the narcotic laws (Congressional Record, 1951: 8197, 8207, 8211). Public opinion was overwhelming that harsh sentences, including the death penalty for peddling narcotics to minors would strangle the drug monster then stalking the American youth (Kefauver Committee Hearings, 1951: 430-431).

The Boggs Act was directed in large part at the federal judiciary since a key provision removed judicial discretion in sentencing by providing that upon conviction for a second or subsequent offense the imposition or execution of the sentence could not be suspended nor probation granted.

There had been no concerted lobbying effort by the judicial community during the legislative process; however, James V. Bennett, Director of the U.S. Bureau of Prisons, aroused the judges in the Fifth U.S. Circuit District into eventually recommending the amendment of the law to remove provisions for mandatory minimum sentences (Yew Orleans Statesman, May 28, 1954; New Orleans Times-Picayune, May 28, 1954).

Even while the Boggs Act was still pending in Congress, the Bureau of Narcotics encouraged the states to modify their existing narcotic and marihuana legislation to enact "penalties similar to those provided in the Boggs Bill [which] would be of material assistance in the fight against the narcotic traffic" (Federal Bureau of Narcotics, 1950: 6).

Seventeen states and the territory of Alaska responded by passing "little Boggs Acts" by 1953 and 11 other states increased their penalties by 1956. Two of the latter group, Ohio and Louisiana, enacted penalty provisions which were substantially more severe than those passed previously in any jurisdiction (Federal Bureau of Narcotics, 1956: 28).

The Ohio law, approved June 16, 1955, provided a 20 to 40 year sentence for the sale of narcotic drugs. The Louisiana measure, adopted the following year, provided severe prison sentences without parole, probation, or suspension for the illegal sale, possession, or administration of a narcotic drug. The sentences ranged from a five-year minimum to a 99-year maximum (Federal Bureau of Narcotics, 1951: 8).

Underlying the inclusion of marihuana in the scheme of increased penalties was the progression theory. In the Boggs hearings many witnesses testified to the link between marihuana use and ultimate heroin addiction. Commissioner Anslinger, for example, testified:

The danger is this: Over 50 percent of these young addicts started on marihuana smoking. They started there and graduated to heroin; they took the needle when the thrill of marihuana was gone (Boggs Act Hearings, 1951: 206).

Representative Boggs himself summed up the stepping-stone thesis in House floor debate:

Our younger people usually start on the road which leads to drug addiction by smoking marihuana. They then graduate into narcotic drugs-cocaine, morphine, and heroin. When these younger persons become addicted to the drugs, heroin, for example, which costs from \$8 to \$15 per day, they very often must embark on careers of crime ... and prostitution ... in order to buy the supply which they need (Congressional Record, 1951:

8197-8198).

The stepping-stone theory thus supplanted the older hypotheses which had linked marihuana to addiction, insanity and violent crime.

In a paper filed as an exhibit to the hearings on the Boggs Act, Dr. Harris Isbell, Director of Research at the Public Health Service Hospital in Lexington, Kentucky, stated that marihuana was not physically addictive, although he paid lip service to the psychological dependence hypothesis (Boggs Act Hearings, 1951: 147-148).

Acknowledging the possibility of "temporary psychosis" in "predisposed individuals," Isbell otherwise disputed the crime and insanity thesis. Before the Kefauver Committee in the Senate he testified that:

[M]arihuana smokers generally are mildly intoxicated, giggle, laugh, bother no one, and have a good time. They do not stagger or fall, and ordinarily will not attempt to harm anyone.

It has not been proved that smoking marihuana leads to crimes of violence or to crimes of a sexual nature. Smoking marihuana has no unpleasant after-effects, no dependence is developed on the drug, and the practice can easily be stopped at any time. In fact, it is probably easier to stop smoking marihuana cigarettes than tobacco cigarettes (Kefauver Committee Hearings, 1951: 119).

Some observers felt that the narcotics problem had disappeared almost entirely from the national scene after the Boggs Act was passed. Nevertheless, state and federal law enforcement authorities, armed with data suggesting that the strengthening of the drug laws had at least halted the increase in drug use, pressed for further increases in penalties in order to root out the drug menace entirely (Federal Bureau of Narcotics, 1956: 28). Without extended debate or widened public interest, Congress passed the Narcotic Control Drug Act in 1956 (Daniel Committee Hearings, 1955: 57).

There was less attention paid to marihuana during Congressional debate in 1956 than had been the case in 1951. But, the established precedent of classifying marihuana with hard narcotics continued and resulted in a proliferation of marihuana offenses and a further increase in penalties based on the theory that the end of the American narcotics experience could thereby be assured.

However, efficacy of still higher penalties was not uniformly accepted among law enforcement officials; the Deputy Commissioner of the FBN suggested that more severe penalties might press grand juries not to indict and the petty juries not to convict in drug cases. Others rejected this view and felt strongly that more severe penalties were imperative if society was to be rid of its present peddlers and if new entrants into the narcotics business were to be deterred (Good, July 31, 1954).

Among congressmen considering the Bill, there was no dissent from the proposition that harsher penalties were the means to eliminate the illicit use and sale of all drugs (Congressional Record, 1956: 10689).

In addition to facilitating enforcement of narcotics laws through a number of ancillary provisions, the Narcotics Control Act of 1956 established the following penalties:

Possession
Minimum sentence

First offense
2 years

Second offense
5 years

Third and subsequent offense
10 years

Fine
\$20,000

Sale
Minimum sentence

First offense
5 years

Second offense
10 years

Sale to minor by adult
10 years

Parole or probation were made unavailable to all except first offenders in the possession category (26 TTSC, 1964).

The Act also created a new offense by prohibiting illegal importation of marihuana. Simple possession was by statute sufficient to convict the possessor of knowingly receiving illegally imported marihuana (21 USC, 1964).

Few legislators recognized that marihuana was in any way different from the physically addictive narcotics. The House Subcommittee on Narcotics, which produced what became the essentials of the 1956 Act, had inserted a footnote to the major heading "Narcotics" which stated in fine print that the term narcotics included marihuana (U.S. Code Cong. and Ad. News, 1956: 3294). Only once during the Congressional debates on the House and Senate versions of the Bill was the subject of marihuana as a separate substance even raised.

Moreover, in a statement reflecting the general acceptance of the stepping-stone concept, Senator Daniel, Chairman of the Senate Subcommittee that investigated the drug problem, described marihuana:

That is a drug which starts most addicts In the use of drugs, Marihuana, in itself a dangerous drug, can lead to some of the worst crimes committed by those who are addicted to the habit. Evidently, its use leads to the heroin habit and then to the final destruction of the persons addicted (U.S. Code Cong. & Ad. News, 1956: 3294).

By the fifties, marihuana had been fully integrated into the narcotics legislation of every

state in the Union and of the national government. Possession of the drug, even for one's own use, was a felony everywhere, and the user was subject to long periods of incarceration as punishment for his indulgence.

1960-1970: NEW LEGISLATIVE APPROACH

From the mid-fifties to the mid-sixties, federal activity in marihuana and narcotic law enforcement was relatively stable. The number of offenders apprehended and convicted in both areas remained constant (U.S. Courts, 1956-1964).

However, in the early and mid-sixties a new phenomenon was occurring. Drug abuse began to spread. It no longer confined itself to the ghettos and certain socioeconomic and ethnic groups; the new users were the sons and daughters of the middle class. It began striking home at the average American and became a national, major issue of concern (Rosevear, 1967: 117-131; U.S. Bureau of Narcotics, 1966: 40).

The new middle class use of marihuana induced significant medical inquiry into the nature of the drug and spurred a new legislative approach. One commentator stated:

Nobody cared when it was a ghetto problem. Marihuana-well, it was used by jazz musicians or the lower class, so you didn't care if they got 2 to 20 years. But when a nice, middle-class girl or boy in college gets busted for the same thing, then the whole community sits up and takes notice. And that's the name of the game today. The problem has begun to come home to roost-in all strata of society, in suburbia, in middle-class homes, in the colleges. Suddenly, the punitive, vindictive approach was touching all classes of society. And now the most exciting thing that's really happening is the change in attitude by the people. Now we have a willingness to examine the problem as to whether it's an experimentation, or an illness rather than 'an evil' (New York Times, Feb. 5, 1970: 14).

Congress initially acted by passage of the Drug Abuse Control Amendments of 1965 (Public Law 89-74, 1965). This legislation established a Bureau of Drug Abuse Control within the Food and Drug Administration and created criminal, misdemeanor penalties for the illegal manufacture and sale of depressant and stimulant drugs and hallucinogens.

The dramatic increase in the use of marihuana and other drugs during the latter 1960's was a matter of high public visibility. In response, President Johnson offered Reorganization Plan No. 1 of 1968 (H. Doc. No. 249, 1968). This reorganization was effective on April 8, 1968 and placed the Federal Bureau of Narcotics (of Treasury) and the Bureau of Drug Abuse Control (of FDA) in the Department of Justice and designated it the Bureau of Narcotics and Dangerous Drugs.

What had been obvious with the passage of the 1965 Drug Amendments became glaring with this reorganization, that is, the tremendous disparity in penalties for violations involving dangerous drugs as opposed to narcotics and marihuana. As a result of increased medical and scientific inquiry, LSD and several other drugs were acknowledged as being more powerful hallucinogens than marihuana.

To compound the disparity, tetrahydrocannabinol (THC), the major active ingredient in marihuana, was placed under controls whereby someone in unauthorized possession of THC was subject to no penalty, but someone in possession of marihuana was subject to a minimum mandatory penalty of two years imprisonment (Federal Register, 1968: 14880).

Congress then changed the possession penalty, under the Drug Abuse Control Amendments, to a misdemeanor and increased the penalties for sale or manufacture of LSD and the other controlled drugs to up to five years (Public Law 90-639, 1968).

Nevertheless, a great disparity regarding penalties for these substances still existed. The atmosphere for change was ripe. Adding pressure to the situation was the criminalization of increasing numbers of young persons whose sole crime was possession of marihuana for their own use.

In late 1968, the newly formed Bureau of Narcotics and Dangerous Drugs drafted legislation which would nationalize control of the drugs under the Bureau's jurisdiction. The proposed law vested on the commerce clause rather than on the taxing powers.

The change in authority was prophetic because the Leary decision, which was handed down by the Supreme Court on May 19, 1969, held that the order form procedure necessary to meet the requirements of the Marihuana Tax Laws, forced an individual to incriminate himself in violation of the Fifth Amendment (Leary v. U.S., 1969). Ostensibly, this decision left BNDD with no marihuana possession law and was another factor in evidence of the need for a revision of the law.

This new bill, H.R. 13742, covered the regulation of narcotic drugs, "dangerous drugs" and marihuana. It was transmitted by President Nixon on July 14, 1969.

Emerging from this legislation was an overall balanced scheme of criminal penalties. Minimum mandatory offenses were essentially abolished and the offense of possession of a controlled substance for one's own use was made a misdemeanor. Further, in first-offense, simple possession cases, the court was given the discretion to place a defendant on probation, for up to one year. If, at the end of the probation period, the defendant had not violated any of the conditions of the probation, his conviction could be expunged.

The same misdemeanor penalty and opportunity for first offender treatment was provided for the distribution of a small amount of marihuana for either: (1) no remuneration; or (2) the cost of the drug.

This provision was included in recognition of the large number of such transactions which take place among youth and in recognition of a phenomenon which surfaced as a substantial challenge to the traditional picture of the national marihuana trade. Legislators had formerly stereotyped the "seller" as the vicious criminal pushing his wares for high profit and felt that extraordinarily harsh penalties were justified for sellers (Narcotics Legislation Hearings, 1969: 4).

But several studies showed that the structure of marihuana traffic bore little or no relation to the traditional stereotype. One survey of 204 users found that 44% had sold to friends at least once. Many casual users sold to leave themselves enough profit to cover the amount of their own use (Goode, 1969: 7). Under the new Act, they would not be punished as distributors.

The new legislation also made a distinction between marihuana and narcotic drugs. Marihuana was placed in a category with hallucinogenic drugs and their difference from narcotics was emphasized by the difference in penalties as follows:

Maximum sentences

Marihuana and other non-narcotic controlled substances
Narcotics

1st offense
2nd offense
1st offense
2nd offense

Simple possession:*

Years

1
2
1
2

Dollars

5,000
10,000
5,000
10,000

Unlawful distribution, possession with intent to distribute, manufacture, importation or
exportation:

Years

5
10
15
30

Dollars

15,000
30,000
25,000
50,000

* Distribution of small amounts of marihuana for no remuneration is treated the same as
simple possession.

The bill was passed by Congress (and signed into law by President Nixon) on October 27,
1970, as the Comprehensive Drug Abuse Prevention and Control Act of 1970.

In conjunction with this new federal law, a uniform state act was drafted by the National Conference of Commissioners on Uniform State Laws and approved by them as the Uniform Controlled Substances Act at their annual conference August 1-7, 1970.

The following statement in the preface of the Act explains its purpose:

This Uniform Act was drafted to achieve uniformity between the laws of the several states and those of the Federal Government. It has been designed to complement the new federal narcotic and dangerous drug legislation and provide an interlocking trelis of Federal and state law to enable government at all levels to control more effectively the drug abuse problem.

The Uniform Act does not recommend penalties except with respect to possession for one's own use. For such offenses, the Conference recommended that it be treated as a misdemeanor.

To date, 26 states and three territories have adopted the Act in its entirety or in a varied form. Currently, 10 to 15 states are considering it.

The most recent chapter in the legal history of marihuana appears in other pages of this Appendix. The appointment of the National Commission on Marihuana and Drug Abuse and the issuance of its Report are themselves significant events from an historical point of view.

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