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11789 SENATE HEALTH, EDUCATION & SOCIAL SERVICES

distant, unemotional father. In some cases, the drug-use ritual and the sense of community closeness offered by the drug subculture appear to satisfy certain personal needs. Additionally, joining the subculture provides a release from sheltered life, a test of competence, an opportunity to participate, and a chance to express anger. When the anger is turned inward instead of directed at society and family, drug use becomes a form of passive, self-destructiveness.

### **Sociocultural Factors**

After the individual views himself as a drug user and has become immersed in the drug-using subculture, the drugs he chooses to experiment with and his pattern of use are determined primarily by non-drug factors well beyond the simple properties of the psychoactive chemical. These factors are predominantly socioeconomic and sociocultural, although psychic and somatic factors also play a role in determining who will continue and how intensively.

The availability of a distribution system which stocks the other drugs is essential. Most often, contact with this distribution system is increased by having friends or acquaintances who use or sell other drugs. However, much of the marijuana selling takes place, at the customer level between friends, and involves little profit and relatively small quantities of the drug. The marijuana user who only buys has little contact with the professional multidrug dealing system. However, the user-buyer-seller of marijuana is more involved with the multidrug system, uses more himself and has more friends who use and sell other drugs. This factor of being a seller rather than only a buyer-user is influential in determining the degree of an individual's involvement with and commitment to the use of other drugs.

Marijuana use does not itself determine which drugs the heavily involved user will choose to use. Generally, the selection of other drugs is influenced by the social group. For example, blacks and whites have roughly equal rates of trying and using marijuana, but their choice of other drugs and the styles of drug use are quite different and distinctive, due to their frequently different sociocultural

backgrounds. Additionally, one recent study of white high school and college students revealed different patterns of further drug use among males and females. Men and women used marihuana in equal numbers, but the men who used other drugs tended to use hallucinogens while the women tended to use amphetamines.

An extensive survey of drug use among 3,500 liberal arts undergraduates attending 14 campuses in the New York area demonstrated the racial character of drug use among this population (Table 5).

**Table 5.-RACIAL CHARACTER OF DRUG USE**

**Meth- Amphet- Hallu-**

**Percentage tried drugs Heroin Cocaine amphet- amine cinogens  
mine**

**Blacks..... 9 16 5 9 13**

**Whites..... 4 7 11 19 21**

According to recent studies, heroin usage is not common among white marihuana users. Heroin is most strongly linked to marihuana use in black and Spanish-speaking ghettos where many feel they have little chance of personal advancement and self-fulfillment. In such communities, a segment of the population constructs new illegitimate but accessible avenues for social coping. For some this involves the hustle (non-violent stealing) and the excitement of obtaining and using heroin and cocaine. They regard marihuana as a "cool" drug and use it for its social and calming effects.

In contrast, studies have demonstrated that the psychedelics are more often used by the white, middle to upper middle class, collegeeducated populations. The typical use of these drugs in high school college and working populations is episodic and

experimental, and is usually discontinued rather rapidly in contrast with marihuana use, which for many persons is of long duration. In many instances, psychedelic drug use begins almost simultaneously with marihuana.

For a few, drug use becomes an ideologic focus, reflecting disillusionment with society and rejection of the "establishment." These and other motives, including mere pleasure-seeking, lead to continued use of LSD and other hallucinogens. Marihuana is viewed as a dilute LSD and is often used to enhance or prolong the effects of that drug. Sometimes it is encountered after first LSD use.

Methamphetamine, or "speed," use is more characteristic of those lower socioeconomic white, youth who are not school or work oriented. Living for the moment is the characteristic attitude of the speed scene. The speed user views marihuana as he does alcohol and uses it for fun or for its calming effects.

For these three groups of illicit drug users, marihuana use has different meanings and is secondary in importance to the use of the other drugs. Whether or not marihuana leads to other drug use depends on the individual, on the social and cultural setting in which the drug use takes place, and on the nature of the drug market. Its use, however, is neither inevitable nor necessary.

### The Effects of Marihuana on the User

The previous section has attempted to paint a broad picture of the marihuana user. This section will deal with the drug and its effects on these individuals.

The meaning of drug often varies with the context in which it is used. The physician would define a drug as any substance used as a medicine in the treatment of physical or mental disease. Today, due to the influence of many factors, the layman may focus on the negative connotations of drugs, such as the stupefying, poisoning, habit-forming misuse of the opiate drugs. The considerably wider and more scientific definition of a drug which will be used in this

section is: any chemical substance which has an action on living tissues.

*A psychoactive drug is any substance capable of modifying mental performance and individual behavior by inducing functional or pathological changes in the central nervous system.*

As defined, psychoactive drugs exert their major effect on the state of the mind including emotions, feelings, sensibility, consciousness and thinking. The definition implies neither positive nor negative meanings. Chemical substances are not inherently good or bad. All substances, including medicines and foods, which man has chosen to consume have certain desired effects (whether therapeutically beneficial or pleasurable) and undesired effects (whether detrimental or unpleasant). For example, eating food is certainly a necessary and pleasurable activity. However, obesity plays an important role in many diseases, including diabetes, high blood pressure and heart attacks, and tends to limit physical activities.

The classification of any drug effect as either beneficial or harmful often greatly depends on the values the classifier places on the expected effects. This is especially relevant with respect to the psychoactive drugs such as tranquilizers, stimulants, coffee, cigarettes, alcohol, marihuana and other licit or illicit drugs. For all of these drugs, the weights of benefit and harm are difficult to determine when viewed merely in terms of their stated effects.

## **BOTANY AND CHEMISTRY**

Marihuana refers to a preparation derived from a plant, *cannabis sativa* L. The preparation contains varying quantities of the flowers and their resinous secretions, leaves, small stems and seeds. These important parts contain many chemical substances. The chemical substance which produces the major drug effects is tetrahydrocannabinol (THC). According to current information, the amount of THC present determines the potency of the preparation. Hereinafter, any reference to drug content or drug effect of marihuana will, for all practical purposes, mean that of

tetrahydrocannabinol.

The drug content of the plant parts is variable, generally decreasing in the following sequence: resin, flowers, leaves. Practically no drug is found in the stems, roots or seeds. The potency and resulting drug effect of marihuana fluctuates, depending on the relative proportions of these plant parts in the marihuana mixture.

Most marihuana available in this country comes from Mexico and has a THC content of less than 1%. Marihuana of American origin often contains less than two-tenths of 1% THC. Marihuana originating in Jamaica and Southeast Asia often has a 2% to 4% THC content.

Marihuana is the least potent preparation of the plant. Jamaican ganja, containing primarily the flower tops and the small leaves or bracts, has a THC content of about 4% to 8% depending on the mixture. Indian ganja is less potent. The most potent preparation is hashish (charas) which is composed of only the drug-rich resinous secretions of the flowers. Generally, the THC content of hashish is 5% to 12%.

## FACTORS INFLUENCING DRUG EFFECT

A number of variable factors exert an important influence on the psychopharmacologic effects of marihuana in man, as is true for all drugs. Failure to take these factors into consideration probably accounts for a large part of the inconsistency and controversy surrounding the description of the drug effect.

### Dosage

The dosage or quantity of the drug (tetrahydrocannabinol) consumed is the most important variable. As with most drugs, the larger the dose taken, the greater the physical and mental effect will be and the longer the effect will last. The effect of a high dose of marihuana on an individual would be quite different from the effect of a low, usual

"social" dose.

### **Method of Use**

The method of use has a bearing upon the drug effect. The method is directly related to both dosage and time lapse before the drug effect is felt. Injection directly into a vein delivers the total dose immediately, producing a rapid, maximal response of minimal duration. Smoking and inhalation cause rapid but less efficient delivery of the dose; variable quantity of the drug is destroyed during burning or escapes into the air and does not reach the lungs. Oral ingestion produces different effects, according to the system in which the drug is dispersed. Generally, oral ingestion diminishes the drug effect, but prolongs it.

### **Metabolism**

Another factor which influences the effect of the drug is metabolism. During the metabolic process, the body cells, principally in the liver and lungs, chemically alter drug substances, changing their activity and providing for their elimination from the body. Increasing evidence indicates that marihuana is first changed by the body in a way that activates or enhances the drug effect and is subsequently altered in a way that inactivates the drug prior to its removal from the body.

The rate and direction of these metabolic steps can significantly influence the effect of marihuana. For instance, individuals with extensive exposure to marihuana or other drugs metabolize more rapidly, and perhaps differently, from those individuals with no drug exposure.

### **Set and Setting**

An important variable in discussing the effect of marihuana on the user is the social and emotional environment; that is, the individual's

"set" and "setting."

"Set" refers to a combination of factors that create the "internal environment" of the individual, including personality, life style, and philosophy, past drug experiences, personal expectations of drug effect, and mood at the time of the drug experience.

"Setting" refers to the external environment and social context in which the individual takes the drug. These factors are most influential when drugs are taken at low dosages and, like marihuana, produce minimal physical and subtle subjective mental effects. The effect of marihuana generally will be quite different for an intermittent social adult smoker from that of a youth deeply involved in the youthful drug subculture. These factors partially account for the belief of a marihuana user that he is experiencing a "high" in certain experiments even when he is given a non-marihuana substance (placebo) but is told it is marihuana.

#### Tolerance

Another important factor that determines the immediate effect of any drug is tolerance. Tolerance has two different connotations. The first, initial tolerance, is a measure of the amount of a drug which a subject must receive on first exposure to produce a designated degree of effect. A variety of innate and environmental factors contributes to initial tolerance among individuals. Different individuals require varying amounts of the drug to attain the same physical and mental effect.

The second connotation, which shall be referred to when we use the word tolerance, is that of an acquired change in tolerance. That is, within the same individual, as a result of repeated exposure to the drug, the same dose of the drug may produce a diminishing effect so that an increased amount of the drug is required to produce the same specified degree of effect.

Tolerance develops at differential rates to given effects of the same drug. If tolerance has developed to one specific effect, it has not necessarily developed to other specific effects.

By definition, the development of tolerance is neither beneficial nor detrimental. If tolerance develops rapidly to the desired mental effect of a "high" but slowly to the behavioral or physical effects, rapid increase in dose would be necessary in order to have the desired effect, and progressive behavioral and physical disruption would be seen. This is the pattern for amphetamines.

However, if tolerance develops slowly or not at all to the desired mental effects but more rapidly to the behaviorally or physically disruptive effects, no dosage increase or only a slight one would be necessary and the unpleasant and undesired effects would progressively diminish.

With regard to marihuana, present indications are that tolerance does develop to the behaviorally and physically disruptive effects, in both animals and man, especially at high frequent doses for prolonged time periods. Studies in foreign countries indicate that very heavy prolonged use of very large quantities of hashish leads to the development of tolerance to the mental effects, requiring an increase in intake to reach the original level of satisfaction. However, for the intermittent use pattern and even the moderate use pattern, little evidence exists to indicate the development of tolerance to the desired "high," although the high may persist for a shorter time period. During the Boston free-access study, no change was apparent in the level of the high produced by a relatively large dose of the drug over a 21-day period of moderate to heavy smoking.

The fact that some individuals smoke more of the drug than others may merely reflect a desire for a different level of "high." There is a tendency to develop a tolerance to the physical effects and behaviorally disruptive effects, especially the depressant effects, in heavy daily users. The development of such behavioral tolerance of this nature may explain the fact that experienced marihuana smokers describe a lower occurrence rate of undesirable drug effects. The development of tolerance may also explain why these smokers exhibit normal behavior and competent performance of ordinary tasks, while not appearing intoxicated to others even though they are at their usual level of intoxication.

### **Reverse Tolerance**

Repeated exposure to marihuana has been said to cause an individual to need lesser amounts of the drug to achieve the same degree of intoxication. This "reverse tolerance" may be related to one's learning to get high or to the recognition of the subtle intoxication at low doses. Or perhaps, such tolerance reflects an increase in the body's ability to change the drug to an active chemical. To date, the existence of "reverse tolerance" has not been substantiated in an experimental setting.

### **Duration of Use**

Tolerance development is only one of a variety of occurrences which possibly are related to repetitive use of marihuana. Any discussion of drug effect must also take into account the time period over which the drug use occurs. Immediate effects of a single drug experience must be contrasted with effects of short-term use and the effects of longterm use in order to detect any cumulative effects or more subtle, gradually occurring changes.

This issue of an individual's change over a period of years is quite complex; a multitude of factors other than marihuana use may affect his life. As previously defined, short-term refers to periods of less than two years, long-term to periods of two to 10 years, and very long-term to periods greater than 10 years. Most of the American experience involves short-term and long-term use, with low doses of weak preparations of the drug.

### **Patterns of Use**

The drug effect of marihuana can be realistically discussed only within the context of who the user is, how long he has used marihuana, how much and how frequently he uses it, and the, social setting of his use.

In general, for virtually any drug, the heavier the pattern of use, the greater the risk of either direct or indirect damage. For purposes of this discussion, the patterns of use developed in the first section of this chapter will be utilized. Because frequency of use is presently the primary determinant of use patterns in this country, we employ similar designations:

(1) The *experimenter* who uses marijuana, at most a few times over a short term and then generally ceases to use it, or uses once a month or less;

(2) The *intermittent user* who uses marijuana, infrequently, that is more than once monthly but less than several times a week;

(3) The *moderate user* who uses it from several times a week to once daily, generally over a long term;

(4) The *heavy user* who uses it several times a day over a long term and;

(5) The *very heavy user* who is constantly intoxicated with high tetrahydrocannabinol content preparations, usually hashish, over a very long term.

Again, these classifications are not intended to be rigid but are designed to facilitate a discussion of the many usage patterns.

### Definition of Dependence

Before describing the effect of marijuana, on the user, two additional definitions are required. They concern the concept of *dependence* which has so clouded public and professional consideration of psychoactive drugs. Throughout the remainder of this report, we refer separately to psychological and physical dependence, defined as follows:

*Psychological dependence* is the repeated use of psychoactive drugs leading to a conditioned pattern of drug-seeking behavior. The intensity of dependence varies with the nature of the drug, the method, frequency, and duration of administration, the mental and physical attributes of the individual, and the characteristics of the physical and social environment. Its intensity is at its peak when drug-seeking becomes a compulsive and undeviating pattern of behavior.

*Physical dependence* is the state of latent hyper-excitability which develops in

the central nervous system of higher mammals following frequent and prolonged administration of the morphine-like analgesics, alcohol, barbiturates, and other depressants. Such dependence is not manifest subjectively or objectively during drug administration. Specific symptoms and signs, the abstinence syndrome, occur upon abrupt termination of drug administration; or with morphinelike agonists by administering the specific antagonists.

## **EFFECTS RELATED TO PATTERN USE**

Set out below is a brief summary of effects of marihuana, related to frequency and duration of use. The remainder of the Chapter discusses the effects of immediate, short-term, long-term and very long-term use of the drug.

Experimenters and

intermittent users ----- Little or no psychological dependence.

Influence on behavior related largely to

conditioning to drug use and its social

value to the user.

No organ injury demonstrable.

Moderate users ----- Moderate psychological dependence in-

creasing with duration of use.

Behavioral effects minimal in stable per-

sonalities, greater in those with emo-

tional instability.

Probably little if any organ injury.

Duration of use increases probability of

escalation of all effects including shift

from moderate to heavy use.

Heavy users ----- American "pot head."

Strong psychological dependence.

Detectable behavior changes.

Possible organ injury (chronic diminution of pulmonary function).

Effects more easily demonstrable with long-term use.

Very heavy users ----- Users in countries where the use of cannabis has been indigenous for centuries.

Very strong psychological dependence to point of compulsive drug seeking and use.

Clear-cut behavioral changes.

Greater incidence of associated organ injury.

## **IMMEDIATE DRUG EFFECTS**

The immediate effects are those which occur during the drug intoxication or shortly following it. The user is aware of some of these effects, for they often cause him to use the drug. At the same time, many changes may occur in his body which can be measured by others but are not obvious to him.

### **Subjective Effects**

A description of an individual's feelings and state of consciousness as affected by low doses of marijuana is difficult; the condition is not similar to usual waking states and is the result of a highly individual experience. Perhaps the closest analogies are the experience of day dreaming or the moments just prior to falling asleep. The effect is not constant and a cyclical waxing and waning of the intensity of the intoxication occurs periodically.

At low, usual "social" doses, the intoxicated individual may experience an increased sense of well-being; initial restlessness and hilarity followed by a dreamy, carefree state of relaxation; alteration of sensory perceptions including expansion of space and time; and a more vivid sense of touch, sight, smell, taste, and sound; a feeling of hunger, especially a craving for sweets; and subtle changes in thought formation and expression. To an unknowing observer, an individual in this state of consciousness would not appear noticeably different from his normal state.

At higher, moderate doses, these same reactions are intensified but the changes in the individual would still be scarcely noticeable to an observer. The individual may experience rapidly changing emotions, changing sensory imagery, dulling of attention, more altered thought formation and expression such as fragmented thought, flight of ideas, impaired immediate memory, disturbed associations, altered sense of self-identity and, to some, a perceived feeling of enhanced insight.

At very high doses, psychotomimetic phenomena may be experienced. These, include distortions of body image, loss of personal identity, sensory and mental illusions, fantasies and hallucinations.

Nearly all persons who continue to use marihuana describe these usual effects in largely pleasurable terms. However, others might call some of these same effects unpleasant or undesirable.

As discussed earlier, a wide range of extra-drug factors also influences marihuana's effects. The more the individual uses marihuana and the longer he has been using it, the more likely the experiences will be predominantly pleasurable, and the less likely the effects will be unpleasant. An increasing sensitization to those effects viewed as pleasant occurs as the user has more experience with the drug.

Persons subject to unpleasant reactions may eliminate themselves from the using group although the occasional experience of an unpleasant effect does not always discourage use.

## Body Function

A large amount of research has been performed in man and animals regarding the immediate effect of marihuana on bodily processes. No conclusive evidence exists of any physical damage, disturbances of bodily processes or proven human fatalities attributable solely to even very high doses of marihuana. Recently, animal studies demonstrated a relatively large margin of safety between the psychoactive dose and the physical and behavioral toxic and lethal dose. Such studies seemed to indicate that safe human study could be undertaken over a wide dose range.

Low to moderate doses of the drug produce minimal measurable transient changes in body functions. Generally, pulse rate increases, recumbent blood pressure increases slightly, and upright blood pressure decreases. The eyes redden, tear secretion is decreased, the pupils become slightly smaller, the fluid pressure within the eye lessens and one study reports that the eyeball rapidly oscillates (nystagmus).

A minimal decrement in maximum muscle strength, the presence of a fine hand tremor, and a decrease in hand and body steadiness have also been noted. Decreased sensitivity to pain and overestimation of elapsed time may occur.

The effects of marihuana on brain waves are still unclear and inconsistent. Generally, the intoxication produces minimal, transient changes of rapid onset and short duration. Sleep time appears to increase, as does dreaming.

Investigation of the effects of marihuana on a wide variety of other bodily function indices has revealed few consistently observed changes.

These few consistently observed transient effects on bodily function seem to suggest that marihuana is a rather unexciting compound of negligible immediate toxicity at the doses usually consumed in this country. The substance is predominantly a psychoactive drug. The feelings and state of consciousness described by the intoxicated seem

to be far more interesting than the objective state noted by an observer.

### **Mental Function**

Marihuana, like other psychoactive substances, predominantly affects mental processes and responses (cognitive tasks) and thus the motor responses directed by mental processes (psychomotor tasks). Generally, the degree of impairment of cognitive and psychomotor performance is dose-related, with minimal effect at low doses. The impairment varies during the period of intoxication, with the maximal effect at the peak intoxication. Performance of simple or familiar tasks is at most minimally impaired, while poor performance is demonstrated on complex, unfamiliar tasks. Experienced marihuana users commonly demonstrate significantly less decrement in performance than drug-naive, individuals.

The greater his past marihuana experience, the better the intoxicated individual is able to compensate for drug effect on ordinary performance at usual doses. Furthermore, marked individual variation in performance is noted when all else is held constant. The effect of marihuana on cognitive and psychomotor performance is therefore highly individualized and not easily predictable. Effects on emotional reactions and on volition are equally variable and are difficult to measure under laboratory conditions, but can be significant.

### **The Intoxicated State**

Studies of intoxicated persons have suggested possible explanations for the subtle effects on mental processes produced by marihuana. Generally, a temporary episodic impairment of short-term memory occurs. These memory voids may be filled with thoughts and perceptions extraneous to organized -mental processes. Past and future may become obscured -as the individual focuses on filling the present momentary memory lapse. His sense of self -identity may seem altered if he cannot place himself in his usual time frame.

This altered state of mind may be regarded by the individual as pleasant or unpleasant. The important factors of dosage and set and setting play a most important role in this determination. When the nature of the drug-taking situation and the characteristics of the individual are optimal, the user is apt to describe his experience as one of relaxation, sensitivity, friendliness, carefreeness, thoughtfulness, happiness, peacefulness, and fun. For most marihuana users who continue to use the drug, the experience is overwhelmingly pleasurable.

### **Unpleasant Reactions**

However, when these circumstances are not optimal, the experience may be unpleasant and an undesirable reaction to the marihuana intoxication occurs. In these instances, anxiety, depression, fatigue or cognitive loss are experienced as a generalized feeling of ill-being and discomfort. A heavy sluggish feeling, mentally and physically, is common in inexperienced marihuana smokers who overshoot the desired high or in persons who might orally ingest too large a dose. Dizziness, nausea, incoordination, and palpitations often accompany the "too stoned" feeling.

### **Anxiety States**

"Novice anxiety reactions" or feelings of panic account for a majority of unpleasant reactions to marihuana. When the distortion of self image and time is recognized by the individual as drug-induced and temporary, the experience is viewed as pleasurable. Anxiety -and panic result when these changes cause the individual to fear that the loss of his identity and self-control may not end, and that he is dying or "losing his mind." These anxiety and panic reactions are transient and usually disappear over a few hours as the drug's effects wear off, or more quickly with gentle friendly reassurance.

The large majority of these, anxiety reactions occur in individuals who are experimenting with marihuana. Most often these individuals have an intense underlying anxiety surrounding marihuana use, such

as fears of arrest, disruption of family and occupational relations, and possible bodily or mental harm. Often they are older and have relatively rigid personalities with less desire for new and different experiences.

The incidence of these anxiety reactions may have decreased as marihuana use has become acceptable to wider populations, as the fears of its effects have lessened and as users have developed experience in management of these reactions.

### **Psychosis**

Rare cases of full-blown psychotic episodes have been precipitated by marihuana. Generally, the individuals had previous mental disorders or had poorly developed personalities and were marginally adjusted to their life situation. Often the episode occurred at times of excessive stress. These episodes are characteristically temporary. Psychotherapy and sometimes medications are useful in prompt control and treatment of this psychological reaction. In addition, rare nonspecific toxic psychoses have occurred after extremely high doses. This state of nonspecific drug intoxication or acute brain syndrome is self-limited and clears spontaneously as the drug is eliminated from the body.

### **Conclusions**

In summary, the immediate effect of marihuana on normal mental processes is a subtle alteration in state of consciousness probably related to a change in short-term memory, mood, emotion and volition. This effect on the mind produces a varying influence on cognitive and psychomotor task performance which is highly individualized, as well as related to dosage, time, complexity of the task and experience of the user. The effect on personal, social and vocational functions is difficult to predict. In most instances, the marihuana intoxication is pleasurable. In rare cases, the experience may lead to unpleasant anxiety and panic, and in a predisposed few, to psychosis.

## SHORT-TERM EFFECTS

The effect of an enormous daily oral dose of the drug (up to about one hundred thousand times the minimal behaviorally effective human dose) was recently studied in rats and monkeys for three months. A severe, generalized nervous system depression was evident the first few days. Evidence of cumulative toxicity was observed at these doses. Severe central -nervous system depression produced fatalities in some rats in the first few days until tolerance developed. Later, extreme hyperactivity developed.

The monkeys experienced severe central nervous system depression and one group showed mild hyperactivity but all rapidly returned to normal behavior after the development of tolerance to these effects. Minimal dose-related toxic effects on bodily organs were noted at autopsy at the conclusion of the experiment. These non-specific findings of unknown meaning included hypocellularity of the bone marrow and spleen and hypertrophy of the adrenal cortex.

A 28-day study employing intravenous administration of from one to ten thousand times the minimal effective human dose to monkeys produced -similar findings clinically. In the high dose groups delayed deaths from acute hemorrhagic pneumonia were possibly caused by accumulation of clumps of THC in the lung producing irritation similar to that seen at the injection sites. No other organ pathology was noted. These animal studies illustrated that the margin of safety between active dose and toxic dose was enormous.

A few studies have recently been carried out to observe the effect of a few weeks of daily marijuana smoking in man. The amount smoked was a relatively large American dose. Frequency of use was once to several times daily.

During the 21-day Boston free-access study, no harmful effects were observed on general bodily functions, motor functions, mental functions, personal or social behavior or work performance. Total sleep time and periods of sleep were increased. Weight gain was uniformly noted.

No evidence of physical dependence or signs of withdrawal were noted. In the heaviest smokers, -moderate psychological dependence was suggested by an increased negative mood after cessation of smoking.

Tolerance appeared to develop to the immediate effects of the drug on general bodily functions (pulse rate) and psychomotor-cognitive performance (time estimation, short-term memory, and shootinggallery skill) but not to the "high." Marihuana intoxication did not significantly inhibit the ability of the subjects to improve with practice through time on these psychological-motor tasks.

Neither immediate nor short-term (21 day) high-dose marihuana intoxication decreased motivation to engage in a variety of social and goal-directed behaviors. No consistent alteration that could be related to marihuana smoking over this period of time was observed in work performance of a simple task, participation in aspects of the research study, or interest and participation in a variety of personal activities, such as writing, reading, interest and knowledge of current world events, or participation in athletic or aesthetic activities.

Marihuana smoking appeared to affect patterns of social interactions. Although use of the drug was found to be a group social activity around which conversation and other types of social behavior were centered, it was not uncommon for some or all of the smokers to withdraw from the social interaction and concentrate on the subjective drug experience.

During the first part of the smoking period, both intermittent and daily users demonstrated a marked decrement in total interaction. Total interaction continued to diminish among intermittent users but increased above presmoking levels among the daily users during the later parts of the smoking period. The quality of the interaction was more convivial and less task-oriented when marihuana was available to the group.

Additionally, an assessment of the effect of marihuana on risktaking behavior revealed that daily users tended to become more conservative when engaging in decision-making under conditions of

risk.

### **LONG-TERM EFFECTS**

Our knowledge about marihuana is incomplete, but certain behavior characteristics appear to be emerging in regard to long term American marihuana use which, for the most part, is significantly less than 10 years. These impressions were confirmed in the Boston free-access study. The group of American young adults studied averaged five years (range 2-17 years) of intermittent or daily use, of marihuana.

No significant physical, biochemical, or mental abnormalities could be attributed solely to their marihuana smoking. Some abnormality of pulmonary function was demonstrated in many of the subjects which could not be correlated-with quantity, frequency or duration of smoking marihuana and/or tobacco cigarettes. (One other investigation recently completed uncovered no abnormalities in lung or heart functioning of a group of non-cigarette smoking heavy marihuana users). Many of the subjects were in fair to poor physical condition, as judged by exercise tolerance.

The performance of one-fifth of the subjects on a battery of tests sensitive to brain function was poorer on at least one, index than would have been predicted on the basis of their IQ scores and education. But a definite relationship between the poor test scores and prior marihuana or hallucinogen use could not be proven.

In the past few years, observers have noted various social, psychological and behavioral changes among young high school and college age Americans including many who have used marihuana heavily for a number of years. These changes are reflected by a loss of volitional goal direction. These individuals drop out and relinquish traditional adult roles and values. They become present rather than future oriented, appear alienated from broadly accepted social and occupational activity, and experience reduced concern for personal hygiene and nutrition.

Several psychiatrists believe they have detected clinically that some heavy marihuana-using individuals appear to undergo subtle changes

in personality and modes of thinking, with a resulting change in life style. In adopting this new life style, a troubled youth may turn toward a subculture where drug use and untraditional behavior are acceptable.

This youthful population resembles in many respects the marihuana smoker described in the Boston study. No evidence exists to date to demonstrate that marihuana use alone caused these behavioral changes either directly or indirectly. Many individuals reach the same point without prior marihuana use or only intermittent or moderate use; and many more individuals use marihuana as heavily but do not evidence these changes. For some of these young people, the drop out state is only a temporary phase, preceding a personal reorganization and return to a more conventional life style.

If heavy, long-term marihuana use is linked to the formation of this complex of social, psychological and behavioral changes in young people, then it is only one of many contributing factors.

#### VERY LONG-TERM EFFECTS OF HEAVY AND VERY HEAVY USE

Knowledge of the effects of very heavy, very long-term use of marihuana by man is still incomplete. The Commission has extensively reviewed the world literature as well as ongoing studies in Jamaica and Greece, and carefully observed very heavy, very long-term using populations in countries in other parts of the world, such as Afghanistan and India. These populations smoke and often drink much stronger drug preparations, hashish and ganja, than are commonly used in America. From these investigations, some observable consequences are becoming much clearer.

#### Tolerance and Dependence

Some tolerance does occur with prolonged heavy usage; large drug doses are necessary for the desired effects. Abrupt withdrawal does not lead to a specific or reproducible abstinence syndrome and physical dependence has not been demonstrated in man or in

animals. The very heavy users studied did evidence strong psychological dependence, but were able to cease use for short periods of time. In these users,

withdrawal does induce, symptoms characteristic of psychological dependence. The anxiety, restlessness, insomnia, and other non-specific symptoms of withdrawal are very similar in kind and intensity to those experienced by compulsive cigarette smokers.

Although the distress of withdrawal exerts a very strong psychogenic drive to continue use, fear of withdrawal is, in most cases, not adequate to inspire immediate criminal acts to obtain the drug.

#### **General Body Function**

In the Jamaican study, no significant physical or mental abnormalities could be attributed to marihuana use, according to an evaluation of medical history, complete physical examination, chest x-ray, electrocardiogram, blood cell and chemistry tests, lung, liver or kidney function tests, selected hormone evaluation, brain waves, psychiatric evaluation, and psychological testing. There was no evidence to indicate that the drug as commonly used was responsible for producing birth defects in offspring of users. This aspect is also being studied further.

Heavy smoking, no matter if the substance was tobacco or ganja, was shown to contribute to pulmonary functions lower than those found among persons who smoked neither substance. All the ganja smokers studied also smoked tobacco. In Jamaica, ganja is always smoked in a mixture with tobacco; and many of the subjects were heavy cigarette smokers, as well.

In a study of a Greek hashish-using population preliminary findings revealed poor dentition, enlarged livers, and chronic bronchitis. Further study is required to clarify the relationship of these to hashish use, alcohol or tobacco use, or general life style of this user population.

### **Social Functioning**

Similarly, the Jamaican and Greek subjects did not evidence any deterioration of mental or social functioning which could be attributed solely to heavy very long-term cannabis use.

These individuals appear to have used the drug without noticeable behavioral or mental deviation from their lower socioeconomic group norms, as detected by observation in their communities and by extensive sociological interviews, psychological tests and psychiatric examination.

Overall life style was not different from non-users in their lower socioeconomic community. They were alert and realistic, with average intelligence based on their education. Most functioned normally in their communities with stable families, homes, jobs, and friends. These individuals seem to have survived heavy long-term cannabis use without major physical or behavioral defects.

### **Mental Functioning**

The incidence of psychiatric hospitalizations for acute psychoses and of use of drugs other than alcohol is not significantly higher than among the non-using population. The existence of a specific longlasting, cannabis-related psychosis is poorly defined. If heavy cannabis use produces a specific psychosis, it must be quite rare or else exceedingly difficult to distinguish from other acute or chronic psychoses.

Recent studies suggest that the occurrence of any form of psychosis in heavy cannabis users is no higher than in the general population. Although such use is often quite prevalent in hospitalized mental patients, the drug could only be considered a causal factor in a few cases. Most of these were, short-term reactions or toxic overdoses. In addition, a concurrent use of alcohol often played a role in the episode causing hospitalization.

These findings are somewhat surprising in view of the widespread belief that cannabis attracts the mentally unstable, vulnerable individual. Experience in the United States has not involved a level of heavy marijuana, use comparable to these foreign countries. Consequently, such long-lasting psychic disturbances possibly caused by heavy cannabis use have not been observed in this country.

### **Motivation and Behavioral Change**

Another controversial form of social-mental deterioration allegedly related to very long-term very heavy cannabis use is the "amotivational syndrome." It supposedly affects the very heavy using population and is described world-wide as a loss of interest in virtually all activities other than cannabis use, with resultant lethargy, amorality, instability and social and personal deterioration. The reasons for the occurrence of this syndrome are varied and hypothetical; drug use is only one of many components in the socioeconomic and psychocultural backgrounds of the individuals.

Intensive studies of the Greek and Jamaican populations of heavy long-term cannabis users appear to dispute the sole causality of cannabis in this syndrome. The heavy ganja and hashish using individuals were from lower socioeconomic groups, and possessed average intelligence but had little education and small chance of vocational advancement. Most were married and maintained families and households. They were all employed, most often as laborers or small businessmen, at a level which corresponded with their education and opportunity.

In general, their life styles were dictated by socioeconomic factors and did not appear to deteriorate as a result of cannabis use. The Jamaicans were working strenuously and regularly at generally uninteresting jobs. In their culture, cannabis serves as a work adjunct. The users believe the drug provides energy for laborious work and helps them to endure their routine tasks.

In contrast, others have described Asian and African populations where heavy to very heavy hashish or charas smoking for a very long time is associated with clear-cut behavioral changes. In these societies, the smokers are mostly jobless, illiterate persons of the lowest socioeconomic backgrounds. They generally begin to use the drug in their early teens and continue its use up to their 60's.

The users prefer to smoke in groups of two to 20, generally in a quiet place out of the reach of non-smokers. Weakness, malnutrition and sexual difficulties, usually impotence, are common. Some of them report sleep disturbances.

Most users who have used the drug for 20 to 30 years are lazy and less practical in most of their daily acts and reluctant to make decisions. However, their ability to perform non-complicated tasks is as good as non-smokers.

Although the smokers think they become faster in their daily work, a general slowness in all their activities is noticed by others. This user population is typically uncreative. They make little if any significant contribution to the social, medical or economic improvement of their community.

## **SUMMARY**

Once existing marijuana policy was cast into the realm of public debate, partisans on both sides of the issue over-simplified the question of the effects of use of the drug on the individual. Proponents of the prohibitory legal system contended that marijuana was a dangerous drug, while opponents insisted that it was a harmless drug or was less harmful than alcohol or tobacco.

Any psychoactive drug is potentially harmful to the individual, depending on the intensity, frequency and duration of use. Marijuana is no exception. Because the particular hazards of use differ for different drugs, it makes no sense, to compare the harmfulness of different drugs. One may compare, insofar as the individual is concerned, only the harmfulness of specific effects. Is heroin less harmful than alcohol because, unlike alcohol, it directly

causes no physical in-jury? Or is heroin more harmful than alcohol because at normal doses its use is more incapacitating in a behavioral sense?

Assessment of the relative dangers of particular drugs is meaningful only in a wider context which weighs the possible benefits of the drugs, the comparative scope of their use, and their relative impact on society at large. We consider these questions in the next Chapter, particularly in connection with the impact on public health.

Looking only at the effects on the individual, there is little proven danger of physical or psychological harm from the experimental or intermittent use of the natural preparations of cannabis, including the resinous mixtures commonly used in this country. The risk of harm lies instead in the heavy, long-term use of the drug, particularly of the most potent preparations.

The experimenter and the intermittent users develop little or no psychological dependence on the drug. No organ injury is demonstrable.

Some moderate users evidence a degree of psychological dependence which increases in intensity with prolonged duration of use. Behavioral effects are lesser in stable personalities but greater in those with emotional instability. Prolonged duration of use does increase the probability of some behavioral and organic consequences including the possible shift to a heavy use pattern.

The heavy user shows strong psychological dependence on marijuana and often hashish. Organ injury, especially diminution of pulmonary function, is possible. Specific behavioral changes are detectable. All of these effects are more apparent with long-term and very long-term heavy use than with short-term heavy use.

The very heavy users, found in countries where the use of cannabis has been indigenous for centuries, have a compulsive psychological dependence on the drug, most commonly used in the form of hashish. Clear-cut behavioral changes and a greater incidence of associated biological injury occur as duration of use increases. At present, the Commission is unaware of any similar pattern in this

country.

## **National Commission on Marihuana and Drug Abuse**

### **Marihuana: A Signal of Misunderstanding**

#### **Chapter III**

# **Social Impact of marihuana use**

"Man is a creature who lives not upon bread alone but principally by catchwords." -Robert Louis Stevenson,

*Virginia Puerisque (1881)*

Implicit in existing social and legal policy toward marihuana is the view that society suffers in some way from use of the drug. When the widespread practice of marihuana smoking appeared in the United States in the early decades of the 20th century, the medical, law enforcement, newspaper, and legislative communities immediately indicted the drug. They assumed that the drug posed serious dangers to individual health; but more importantly, they viewed it as a menace to the public order. Crime, insanity and idleness were thought to be the inevitable consequences of its use.

That some of these original fears were unfounded and that others were exaggerated have been clear for many years. Yet, many of these early beliefs continue to affect contemporary public attitudes and concerns. Consequently, one of the Commission's most important tasks is to evaluate carefully all data relevant to the social impact of marihuana use. We must determine whether and in what respects social concern is justified. What is myth and what is reality?

The literature pertaining to -the presumed effects and consequences of marihuana use still reveals a wide diversity of opinion about social impact. Careful scrutiny is inhibited by the prevalence of hearsay, rhetoric and undocumented assertions about the effects and consequences of marihuana use. Nonetheless, evidence is mounting and a number of significant trends have recently emerged. In the previous Chapter we explored the evidence regarding the nature and scope of contemporary marihuana use, and the effects of the drug on the individual user. Now we must consider the impact on society of behavior resulting from use of marihuana.

In dealing with the behavioral consequences of marihuana use, the Commission has made, a concerted effort to review and evaluate the enormous body of existing popular and scientific literature, and has itself initiated new empirical research, including national surveys, retrospective studies and controlled laboratory experiments.

Awareness of the difficulties involved in investigating an inherently complex social phenomenon and applying its research findings to policy decisions has fostered particular sensitivity to the quality of previous and Commission-sponsored research. As such, considerable attention was given to such basic research questions as:

What behavioral effects are most relevant in assessing the consequences of marihuana use?

What measures produce the most valid data concerning given effects?

What reliance should be placed on various research techniques, such as self-reporting, controlled experiments, clinical observations and statistical relationships?

What generalizations can be made from particular populations studied?

What are the limits of given data in terms of inference, interpretation and attribution of cause?

With respect to the Commission's own research program, the process of selection and allocation of resources was indeed difficult, and some areas of inquiry have undoubtedly been either neglected or shortchanged. Nonetheless, we believe that the studies undertaken and information gathered will add significantly to our understanding of the conditions and circumstances under which marihuana use is likely to affect adversely the public safety, public health and welfare, and dominant social order.

### **Marihuana and Public Safety**

The belief that marihuana is causally linked to crime and other antisocial conduct first assumed prominence during the 1930's as the result of a concerted effort by governmental agencies and the press to alert the American populace to the dangers of marihuana use. Newspapers all over the country began to publish lurid accounts of "marihuana atrocities." In the absence of adequate understanding of the effects of the drug, these largely unsubstantiated stories profoundly influenced public opinion and gave birth to the stereotype of the marihuana user as physically aggressive, lacking in self-control, irresponsible, mentally ill and, perhaps most alarming, criminally inclined and dangerous. The combination of the purported effects of the drug itself plus the belief that it was used by unstable individuals seemed to constitute a significant danger to public safety.

Now, more than 30 years later, many observers are skeptical about the existence of a cause-effect relationship between marihuana use and antisocial conduct.

### **MARIHUANA AND CRIME**

Over the years, there have been several hypotheses about the relationship between marihuana and antisocial conduct. The earliest view was that marihuana causes or leads to the commission of aggressive and violent criminal acts such as murder, rape and assault. These acts are committed, it has been argued, because marihuana allegedly produces a relaxation of ordinary inhibitions, a weakening of impulse control and a concomitant increase in aggressive tendencies while the user is under its influence.

Marihuana's alleged criminogenic role is not always limited to violent or aggressive behavior. Some commentators also postulate that marihuana leads to or causes non-violent forms of criminal or delinquent conduct, ranging from sexual promiscuity to grand larceny. Underlying this second causal hypothesis are the assumptions that marihuana frequently impairs judgment, distorts reality and diminishes, at least temporarily, the user's sense of

personal and social responsibility. Regular or heavy use over an extended period of time is felt to interfere, perhaps irreversibly, with the orderly development of psychosocial and moral maturity.

As indicated above, however, a growing uncertainty prevails about the existence of a causal link between marihuana use and antisocial conduct. In fact, recent surveys, including several sponsored by the Commission, suggest that large segments of the professional public, particularly the law enforcement and criminal justice communities, are no longer willing to assert a cause-effect relationship but observe, instead, the existence of a statistical association.

### **The Issue of Cause and Effect**

The controversy over the cause-effect relationship between marihuana use and criminal, violent or delinquent behavior poses a number of serious problems for the investigators. Proponents and opponents of the causal view tend to rely on different kinds of evidence and to call upon different types of experts, thereby differing substantially in the kinds of information they accept as relevant, reliable or valid.

Practitioners, such as police and probation officers for example, frequently cite case examples in which apprehended offenders are found to be in possession of marihuana at the time of arrest. The mere presence of the drug or the fact that an offender is a known user of marihuana is sometimes deemed sufficient to establish a causal link between the marihuana and the offense.\*

Empiricists, on the other hand, would deny that the simple presence of the drug constitutes a satisfactory demonstration of a causal relationship between marihuana use and the crime in question. They would defer, instead, to the results of empirical studies designed explicitly to test the assertion. Essentially, they emphasize that even if some offenders do use marihuana, an equal or larger number of offenders do not, and there are certainly large numbers of marihuana users in the population-at-large who never engage in the kinds of antisocial conduct deemed to be related to or caused by the use of the drug.

Proving any positive and direct relationship, be it causal or otherwise, between two inherently complex social phenomena is fraught with enormous difficulties. The relationship of marihuana use to crime, violence, aggression or juvenile delinquency presents no exception. Before examining the evidence with respect to the existence of a causal connection, certain basic considerations deserve at least brief mention here.

To prove the existence of a positive and direct relationship, one would be required to demonstrate that the alleged offender was, indeed, a marihuana user; that he was under the influence of the drug at the time he committed the offense; and that the crime was directly attributable to the effects of the marihuana. The kinds of evidence necessary to establish these facts are not easy to obtain.

First, evidence of the use of marihuana by the accused is generally dependent upon either direct admission of use, hearsay evidence, or inferences derived from knowledge of possession (that is, the offender was found to have marihuana on his person or in his possession at the time of arrest).

Second, because no chemical tests presently exist outside the laboratory to identify the presence of marihuana in the body of the accused, it is difficult if not impossible to prove

that the offender was definitely under the influence of marihuana when he committed the offense.

Third, in order to prove that the marihuana represented the significant contributory or precipitating variable, all other factors possibly related to the offense would have to be examined and excluded.

The problems of validation are further compounded by additional variations in behavior attributable to: (a) the pharmacological potency of the drug; (b) possible adulteration of the marihuana; (c) the interaction of marihuana with other drugs simultaneously ingested; (d) differing individual response to similar dosage levels; (e) the time-action function; (f) the cumulative effect of marihuana use; and (g) various social, psychological and situational variables such as set and setting, individual expectations, personal predispositions or preexisting impulse disorders.

Despite the inherent complexities of the issue and the difficulties in securing reliable and valid evidence, a relatively large body of research is now available pertaining to the criminogenic effects of marihuana upon the individual and the nature and extent to which the drug constitutes a danger to public safety. In the following section, we present the available evidence and assess the strength and direction of the alleged relationships between marihuana use and violent or aggressive behavior and also non-violent forms of criminal and delinquent behavior.

\* In the widely publicized Licata case of the 1930's, for example, a 16-year-old cannabis user was charged with the ax murder of his family and the offense was directly attributed to the effects of marihuana. There was, however, no precise information available regarding the use of marihuana in relation to the crime. Nor, in the various accounts of the case, was there generally any reference to the fact that several of the boy's relatives had previously been committed to mental institutions; that the police hall, about one year prior to the offense (and presumably before the youth's alleged use of marihuana) attempted to commit him for his bizarre behavior; or that shortly after the crime, the boy began to exhibit the symptoms of paranoid schizophrenia.

### **Marihuana and Violent Crime**

As indicated earlier, the belief that marihuana causes or leads to the commission of violent or aggressive acts first emerged during the 1930's and became deeply embedded in the public mind. Until recently, however, these beliefs were generally based on the anecdotal case examples of law enforcement authorities, a few clinical observations and several quasi-experimental studies of selected populations comprised of military offenders, convicted or institutionalized criminals or delinquents and small groups of college students. Few efforts were made to compare the incidence of violent or aggressive behavior in representative samples of both user and non-user populations.

Even in these early observations and investigations, however, no substantial evidence existed of a causal connection between the use of marihuana and the commission of violent or aggressive acts. Indeed, if any relationship was indicated, it was not a positive and direct causal connection but in inverse or negative statistical correlation.

Rather than inducing violent -or aggressive behavior through its purported effects of lowering inhibitions, weakening impulse control and heightening aggressive tendencies,

marihuana was usually found to inhibit the expression of aggressive impulses by pacifying the user, interfering with muscular coordination, reducing psychomotor activities and generally producing states of drowsiness lethargy, timidity and passivity.

In fact, only a small proportion of the marihuana users among any group of criminals or delinquents known to the authorities and appearing in study samples had ever been arrested or convicted for such violent crimes as murder, forcible rape, aggravated assault or armed robbery. When these marihuana-using offenders were compared with offenders who did not use marihuana, the former were generally found to have committed less aggressive behavior than the latter.

In an effort to accumulate data on the relationship between marihuana use and aggressive or violent criminal behavior, the Commission sponsored several studies designed to assess the purported causal relationship.

First, the Commission wanted to tap the unique experience of the law enforcement and criminal justice communities. Representative samples of prosecuting attorneys, judges, probation officers and court clinicians were asked their opinions about the relationship between marihuana use and the commission of aggressive or violent criminal acts. When asked to evaluate the statement that "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," three-quarters of the judges, probation officers and clinicians indicated either that the statement was probably untrue or that they were unsure of its accuracy. Of these three groups, a greater proportion of clinicians (76.5%) thought the statement false than did the probation officers (60%) and judges (44.2%).

In a separate mail survey of the chief prosecuting attorneys in the 50 states-the group which has often supported the causal hypothesis-52% of the respondents stated that they either did not believe or were uncertain of the truth of the proposition that use of marihuana leads to aggressive behavior.

We have already noted that only a small fraction of the offender populations in past studies were found to have been arrested for crimes of violence. Similarly, in a Commission-sponsored study of 1,776 16-to-21-year-olds arrested in five New York counties for marihuana law violations between 1965 and 1969, only a small percentage had either previously or subsequently come to the attention of authorities for such offenses as assault or robbery. In fact, less than 1% of the offenders in this sample had been arrested for these offenses prior to their first marihuana arrest, and less than 3% were known to the Federal Bureau of Investigation for these offenses subsequent to their marihuana violation.

Perhaps more important than professional opinion or the incidence of violent offenses in an offender population, however, is the determination of the extent to which marihuana use is related to violent or aggressive behavior in the general population.

In a Commission-sponsored survey, face-to-face interviews were conducted with a representative sample of 559 West Philadelphia residents in order to ascertain the extent of marihuana use in this heterogeneous population and the relative involvement of marihuana users and nonusers in violent criminal behavior. In corroboration of the earlier findings, the researchers found no significant differences in the proportions of users and non-users; who stated that they had committed any of the aggressive or violent crimes enumerated.

Further, no findings indicated that marihuana was generally or frequently used immediately prior to the commission of offenses in the very small number of instances in which these offenses did occur. In contrast, however, the aggressive and violent offenders in this sample

did report with significantly greater frequency the use of alcohol within 24 hours of the offense in question.

These findings should be considered in light of an earlier West Coast study of disadvantaged minority-group youthful marijuana users, many of whom were raised in a combative and aggressive social milieu similar to that found in several of the West Philadelphia sampled neighborhoods. The data show that marijuana users were much less likely to commit aggressive or violent acts than were those who preferred amphetamines or alcohol. They also show that most marijuana users were able to condition themselves to avoid aggressive behavior even in the face of provocation. In fact, marijuana was found to play a significant role in youth's transition from a "rowdy" to a "cool," non-violent style.

The Commission is aware of the claim that a few emotionally unstable or impulsive individuals have become particularly aggressive or impulsive under the influence of marijuana. As we have noted, some newspaper accounts have attributed sensational homicides or sexual assaults to marijuana-induced transitory psychotic states on the part of the user. No evidence exists, however, to indicate that marijuana was responsible for generating or creating excessive aggressiveness or impulsivity in individuals having no prior history of impulse or personality disorder. The most that can be said is that in those rare instances, marijuana may have aggravated a preexisting condition.

In sum, the weight of the evidence is that marijuana does not cause violent or aggressive behavior, if anything, marijuana generally serves to inhibit the expression of such behavior. Marijuana-induced relaxation of inhibitions is not ordinarily accompanied by an exaggeration of aggressive tendencies.

No evidence exists that marijuana use will cause or lead to the commission of violent or aggressive behavior by the large majority of psychologically and socially mature individuals in the general population.

### **Marijuana and Non-Violent Crime**

A second hypothesis reflecting the statements of significant numbers of government officials is that marijuana plays a major role in the commission of other, essentially non-violent, forms of criminal and delinquent behavior.

In general, those espousing this more general cause-effect relationship assume that the drug frequently produces, in addition to the lowering of inhibitions, impairment of judgment, distortion of reality and at least temporary reduction of a sense of personal and social responsibility. Indeed, the earlier stereotype of the marijuana user was that of an immoral, physically debilitated, psychologically unstable and criminally marginal man whose state of severely and irreversibly underdeveloped psychosocial and moral maturity was said to derive directly from his continued use of marijuana.

As indicated earlier, neither the inherent complexities of the issue nor the previously inconclusive empirical evidence has deterred the formulation and expression of strong opinions about the relationship of marijuana use to crime and delinquency. Opinion in this area, quite apart from the empirical evidence, has long assumed critical importance in the development of social policy.

The Commission has addressed the issue in three different ways. One was to assess the state of current public and professional opinion relative to the general proposition that

marihuana causes or leads to the commission of criminal or delinquent acts. A second approach was to review the professional literature addressed to the issue, and a third was to initiate empirical investigations of our own.

The opinion surveys found that substantial numbers of persons raised serious questions about the existence of a causal relationship between marihuana use and criminal or delinquent behavior. Confusion and uncertainty about the existence of such a relationship have been expressed by both youth and adults, including practicing professionals in the criminal justice system.

Recent data suggest that some of this confusion may be the result of a fairly widespread misconception about the addiction potential of marihuana. To the extent that persons believe marihuana users are physically dependent on the drug, they may assume that, like the heroin user, the marihuana user commits his offenses in order to support what is perceived as a drug habit; and that, like the heroin model, offenses are committed more often in the desperate attempt to obtain the drug rather than under its influence following use. There is no evidence that this is the case, even for those who use the drug heavily.

In the Commission-sponsored National Survey, the respondents were asked whether they agreed or disagreed with the statement that "many crimes are committed by persons who are under the influence of marihuana." Fifty-six percent of the adult population and 41% of the youth indicated agreement. As in the Survey generally, there was a significant difference of opinion according to age in the adult population. While 69% of the over-50 age group agreed with this statement, only about one-third of the 18-to-25 age group and the 14-to-17-year-olds agreed. One of every four youth respondents and 18% of the adults said they were "not sure" of the existence of such a relationship between marihuana use and crime.

Much greater consensus exists, even between generations, regarding the association of alcohol and crime. While 56% of all adults expressed their belief that many crimes are committed by persons under the influence of marihuana, 69% of these same adults believed that alcohol was related in the same way. Only 7% felt unsure about the alcohol crime relationship, in contrast to 18% who expressed uncertainty about the relationship between crime and marihuana.

The Commission also surveyed opinion within the criminal justice community. A sample of 781 judges, probation officers and court clinicians replied to a questionnaire which asked respondents to indicate whether or not their professional experience led them to believe that "use of marihuana causes or leads to antisocial behavior in the sense that it leads one to commit other criminal or delinquent acts." Of all respondents, 27% believed this to be the case. Within each professional group, 34% of the judges, 18% of the probation officers and 2% of the clinicians indicated their agreement.

On the assumption that some, proportion, however small, of marihuana users might ultimately be arrested for non-drug offenses, these officials were also asked to assess the relative truth of the statement that "most non-drug offenses committed by persons who are known users of marihuana or are found to have marihuana on their person or in their possession occur when the offender is under the influence of marihuana." Seventy-one percent of the responding judges, 75% of the probation officers and 85% of the court clinicians either thought the statement false or were unsure of its accuracy.

Respondents likewise rejected, however, the proposition that these crimes perpetrated by marihuana users occur when the offender is attempting to obtain the drug rather than while under its influence; 65.6% of the judges, 64.6% of the probation officers and 78.3% of the court clinicians either denied or were unsure of the truth of this proposition.

In short, marihuana, is not generally viewed by participants in the criminal justice community as a major contributing influence in the commission of delinquent or criminal acts.

This increasing professional skepticism is buttressed by the weight of research findings. A comprehensive review of the literature revealed that in the various offender populations studied for this purpose, only a small percentage were marihuana users. In only a handful of cases did researchers report that criminal conduct followed the use of marihuana. Generally, the rate of self-reported, non-drug crime did not significantly differ between users and non-users.

Both of the Commission-sponsored studies (the New York and Philadelphia studies referred to earlier) corroborated this research consensus. In the Philadelphia study, for example, less than 10% of the sample were known to the police, and there were no significant differences among marihuana users and non-users in the sample who reported the commission of major criminal acts when statistical controls were applied. Further, most of the first offenses committed by users occurred prior to their use of marihuana, and only in rare instances did the offenses immediately follow (within 24 hours) upon the use of marihuana (five cases out of 741 first offenses and 19 cases out of 516 most recent offenses).

Likewise, the New York study revealed that about one-fifth of the marihuana law violators arrested between 1965 and 1969 were found to have previous arrest records. Of those with previous arrests, the great majority of offenses (86%) involved traffic violations and minor violations of the vagrancy statutes. In but 10% of the cases the previous arrests were for assault, robbery, burglary or larceny.

In essence, neither informed current professional opinion nor empirical research, ranging from the 1930's to the present, has produced systematic evidence to support the thesis that marihuana use, by itself, either invariably or generally leads to or causes crime, including acts of violence, juvenile delinquency or aggressive behavior. Instead the evidence suggests that sociocultural and cultural variables account for the apparent statistical correlation between marihuana use and crime or delinquency.

### **A Sociocultural Explanation**

The persistent belief that some relationship exists between marihuana use and crime is not without statistical support. Undoubtedly, the marihuana user of the 1920's and 1930's was overrepresented in the nation's jails and penitentiaries and in the general crime and delinquency statistics. Especially during the late 1920's and early 1930's when the nation was preoccupied with lawlessness, the translation of this statistical correlation into a causal hypothesis is not surprising.

The increasing incidence of use in the mid-sixties by white, affluent, middle class, high school youth, college students and adults has occasioned a reevaluation of the marihuana user and a reexamination of the crime issue. The overwhelming majority of the new marihuana offenders have had no previous arrests, and come from the normally low risk, middle and upper socioeconomic population groups.

Recent public opinion surveys suggest that considerable social disapproval is attached to the "hippie" life style, unconventional mode of dress and apparent disregard for the law

displayed by many of these individuals. Nonetheless, fewer persons are now willing to classify as criminal those marihuana users whose only contact with the law has been as a result of their marihuana use. Perceptions have undergone a change as a result of the increased usage of marihuana among youth of the dominant social class. Nonetheless, a statistical association remains.

First, the majority of both marihuana users and offenders other than actual marihuana law violators fall into the 14-to-25-year age group. Second, the majority of those arrested for marihuana law violations as well as other delinquent or criminal acts were, and to a much lesser degree, still are, drawn from the same "high risk" populations, such as minority groups, socially and economically disadvantaged, young, male, inner-city residents.

Third, various offender populations subjected to study often included a number of marihuana users, although it was not the marihuana violations per se but other, more serious criminal conduct that originally brought most of them to the attention of the authorities. Finally, during the past five years, marihuana law violators have increasingly swelled the crime and delinquency statistics; in most cases, their only contact with the law has been for these marihuana-specific offenses.

The Philadelphia study corroborated this continuing statistical association. The simple relationship between using marihuana and committing offenses was positive and statistically significant, and there was also a high correlation between frequency of smoking marihuana and committing offenses. These direct associations were reduced to insignificance, however, upon further analysis of the data, and other explanations for the coincidence of marihuana use and crime became evident. These included: race, education, age, the use of other drugs, and having drug-using friends.

We conclude that some users commit crimes more frequently than non-users not because they use marihuana but because they happen to be the kinds of people who would be expected to have a higher crime rate, wholly apart from the use of marihuana. In most cases, the differences in crime rate between users and non-users are dependent not on marihuana use per se but on these other factors.

In summary, although the available evidence suggests that marihuana use may be statistically correlated with the incidence of crime and delinquency, when examined in isolation from the other variables, no valid evidence was found to support the thesis that marihuana by itself, either inevitably, generally or even frequently causes or precipitates the commission of crime, including acts of violence, or juvenile delinquency.

Within this framework, neither the marihuana user nor the drug itself can be said to constitute a danger to public safety. For, as two researchers have so cogently stated for the Commission, "Whatever an individual is, in all of his cultural, social and psychological complexity, is not going to vanish in a puff of marihuana smoke."

## MARIHUANA AND DRIVING

Within the context of public safety another issue which merits attention is the extent to which drivers under the influence of marihuana constitute a hazard on the nation's streets and highways. Although in recent years increasing attention has been given to this issue, at present little empirical evidence exists to inform discussion.

To assess the actual and potential impact of marihuana on traffic safety, a number of basic research questions must be answered.

the extent to which marihuana users actually drive while under the influence of the drug

the extent to which marihuana users driving while "high" commit traffic violations and are involved in traffic accidents

the amounts of marihuana consumed immediately prior to the commission of traffic violations or the involvement in traffic accidents and the drug's role in these events

the nature and extent to which marihuana actually impairs psychomotor skills, judgment and driving performance

To date, the generalizations made concerning the effects of marihuana on driving behavior have generally been based on statistical studies of traffic violations and accidents and inferences drawn from more general studies of the physiological and psychological consequences of marihuana use, such as changes in pulse rate, reaction time, neuromuscular coordination, time estimation and spatial perceptions.

Such studies pose serious limitations in the nature, reliability and validity of the data. The basic problems derive from difficulties in identifying and attributing cause. A major obstacle in such retrospective analysis is the inability to separate the effects of marihuana from those possibly engendered by the use of other drugs, such as alcohol, tranquilizers and amphetamines. Finally, conclusive analysis is impossible until a reliable technique is developed for measuring the level of marihuana present in the body of the driver at the time of his violation or accident.

Prospective experimental studies of actual reactions to road conditions and traffic emergency situations would undoubtedly provide the most reliable and valid data, but such studies would themselves endanger the public and have not been undertaken. Researchers have relied, therefore, on controlled laboratory simulator studies and direct interviews with those who have admitted to driving while under the influence of marihuana.

With respect to the simulator studies, the available evidence suggests that while, in some cases, marihuana has produced interference with certain motor or mental abilities which affect driving behavior, these effects were generally believed to be readily overcome by the exercise of extreme caution by the driver and a significant reduction in speed.

The few driving simulator tests completed to date have generally revealed no significant correlations between marihuana use and driving disabilities. Comparison of the simulator scores of users and nonusers, however, did reveal small but nonsignificant differences in the number of speedometer errors made.

These simulator studies also examined the comparative effects of alcohol and marihuana on driving scores. The findings of one study, though controversial, suggested that intoxication resulting from low doses of marihuana was less detrimental to driving performance than was the presence of alcohol at the legally prohibited blood level of .10%.

The methodological limitations of the study raise serious questions about the reliability and validity of the findings. As one critic has noted, "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."

Further, the use of dissimilar doses of alcohol and marihuana has led another critic to assert that "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."

Recent research has not yet proven that marihuana use significantly impairs driving ability or performance. The Commission believes, nonetheless, that driving while under the influence of any psychoactive drug is a serious risk to public safety; the acute effects of marihuana intoxication, spatial and time distortion and slowed reflexes may impair driving performance. That the risk of injury may be greater for alcohol than for marihuana matters little.

Obviously, Much more research needs to be undertaken in this area. Hopefully, recent studies sponsored by the National Institute of Mental Health and other agencies will soon provide the concrete information that is needed.

#### Marihuana, Public Health and Welfare

As the feared threat to public safety through violent crime has diminished in recent years, policy-makers and the public have begun increasingly to view marihuana and other illicit drug use as a public health concern. The National Survey indicates that American adults regard drug abuse as the third most pressing problem of the day, closely following the economy and Vietnam. However, public attitudes reflect considerable confusion about the facts concerning marihuana and drugs in general.

This confusion has resulted from too little understanding of the motives for drug use as well as inadequate knowledge of the classification of drugs according to their main effects. Legal penalties have frequently mirrored this confusion, and the resulting inconsistencies cause, many young people to lose confidence in adult authority. Even in the medical profession, much uncertainty is evident, and for most of the general public there is no clear authority to whom they can turn for guidance.

#### A PUBLIC HEALTH APPROACH

The Commission broadly defines public health concerns as all health problems which affect people en masse and are thereby difficult to treat on a traditional physician-to-patient basis. This category would include social and economic dependence and incapacity. A health problem which spreads to other susceptible members of the society cannot be controlled by the individual physician. This view coincides with the concept of preventive medicine, recognizing that all public health problems must be dealt with on both an individual and societal level.

To illustrate, the increasing incidence of deaths due to lung cancer subsequent to chronic, heavy tobacco usage is a major public health concern. In this instance, prevention of smoking and ascertaining the cause of the malignancies, rather than the individual treatment of each case by a physician, define the public health dimension. A major concern exists because the population at risk is large and growing, and the risk of harm is great.

In addition to the risk of large numbers of the populace being affected, the issue of contagion must also be examined. Unlike infectious diseases such as influenza and

smallpox, where the person affected "catches" the ailment unintentionally, those individuals who use marihuana choose to come into contact with it. The contagion model is relevant only insofar as social pressure from proselytizing friends and social contacts play a role in spreading the use of the drug. This dimension exists with marihuana, as well as alcohol and tobacco.

After assessing the potential harm to the individual and society, the size of the population at risk and the contagion aspect, society must determine the nature of the control mechanism used to deal with the problem, and how (nine) of its health resources, manpower and facilities will be allocated to meet the perceived threat to the public health. Therefore, an analysis of the relative risk of marihuana use must be undertaken. We must examine not only the effects of the drug on the individual but also determine which groups are at risk and why.

Practically all substances consumed by man are potentially dangerous to the physical or mental health of the individual if used irresponsibly or by particularly sensitive persons. Certain substances are sufficiently complex in their effects that societal control is necessary to reduce risk, for example, fluorides added to the water supply, prescription drugs, and food additives. The degree of concern and control varies, depending on relative public health dangers.

### **The Population At Risk**

Before the dangers can be assessed, the population at risk must be defined. Viewing the public health picture on a large scale, the United States in 1972 may still be considered fortunate with regard to marihuana usage. While it is the third most popular recreational drug, behind alcohol and tobacco, it has not been institutionalized and commercialized.

Most of the Americans who have used marihuana have been merely experimenting with it. As noted in Chapter I, there are 24 million Americans who have tried marihuana at one time or another, with 8.3 million still using it. Of those who have quit, most say they have simply lost interest in it. The same Survey shows that experience with marihuana peaks in the 18-to-25-year-old group and falls off sharply thereafter. A fact of some significance is that at least 71% of all adults (18-years and older) and 80% of youth (12-to-17-years) have never used marihuana at all.\*

The Survey also indicates that the majority of those youth and adults who continue to use marihuana do so intermittently, that is, between one and 10 times a month. These individuals are classified as intermittent marihuana smokers who use the drug for its socializing effects. They are, for the most part, ordinary Americans who are either in school or are employed.

About 2% of those who have ever used marihuana, or 500,000 people, now use the drug heavily. They use the drug several times a day. These individuals use marihuana for its personal drug effects in addition to its socializing effects. Generally, their life styles, values, attitudes, behaviors and activities are unconventional. Marihuana plays an important role in their lives. Because the risk of psychological, and perhaps physical, harm from marihuana increases with the frequency quantity and duration of its use, these heavy marihuana users constitute the greatest at-risk population in the United States today.

The heavy marihuana user presents the greatest potential concern to the public health. It is the Commission's opinion that these heavy marihuana users constitute a source of contagion

within American society. They actively proselytize others into a drug-oriented way of life. The effectiveness of peer group pressure has been described earlier in Chapter II

We anticipate that this at-risk population would increase in number should a policy of institutionalized availability be adopted toward marihuana. Although marihuana is readily available illicitly in the United States today, a policy permitting its legal distribution could be expected to bring about an increase in users, with some percentage of them becoming heavy users. It is the availability of the drug, coupled -with a governmental policy of approval or neutrality, that could escalate this group into a public health and welfare concern. While this is speculative, it is a concern which cannot be dismissed. The experience with the rise in the use of tobacco and alcohol makes clear the probable consequences of commercial exploitation.

Another concern of the Commission is the experience of other countries which have large heavy user populations. While the pattern of behavior in one country is not automatically similar to a pattern of behavior in another country, the existence of heavy user populations constitutes a serious public health concern which must be avoided in this country. The availability of the drug alone does not seem to determine increased usage; supply and governmental inaction appear to tip the balance toward increased use. The proportion of our population susceptible to this pattern of use is conjectural but good preventive public health requires limiting the number to an irreducible minimum.

\*In the self-administered instrument, several separate questions were utilized to elicit the respondent's experience with marihuana. This technique permitted an analysis of consistency of responses, and also minimized the possibility of nonresponse. Nevertheless, 14% of the adults and 6% of the youth did not respond to enough of these questions to ascertain whether they had ever tried marihuana or not.

#### Percentage who- Adult Youth

Ever used -----	15 14
Never used -----	71 80
No response -----	14 6

#### Confusion and Fact

One of the primary sources of confusion surrounding the use of marihuana and other psychoactive drugs is the ambiguity of the term "drug abuse." In many quarters the excessive use of any drug is considered drug abuse, regardless of the effect of the drug on the individual or his behavior. In order to clarify this issue the Commission defines psychoactive drug abuse as follows:

*Drug abuse is the use of psychoactive drugs in a way likely to induce mental dysfunction and disordered behavior.*

It should be emphasized that demonstrable pathology of organ systems, including the brain,

is not a necessary characteristic of psychoactive drug abuse. There are numerous non-psychoactive drugs which can induce extensive organ pathology but do not modify behavior; such drugs leave their imprint primarily on the individual, not on society. The Commission believes that many of the perplexing issues relating to psychoactive drugs, including marihuana, can be clarified if drug abuse refers only to the impact of drug-induced behavior on society.

Three types of such drug-induced behavior are considered unacceptable in most organized societies: (1) aggressiveness leading to violence; (2) loss of psychomotor control; (3) mental or physical disorder leading to social and economic incapacity or dependency.

This is not to say that society is unconcerned about the harmful effects of psychoactive drugs on the individual, or that such effects do not merit the attention of public health officials. Cigarette smoking, although affecting primarily the individual, is surely a matter of public health concern. We believe, however, that the term drug abuse, with its attendant societal disapprobation, should be reserved for drug taking which has a more direct effect on society through disordered behavior.

Beyond the confusion surrounding the term drug abuse, a rational evaluation of the public health impact of marihuana use is also inhibited by extensive misinformation about the drug. Recently, a great deal of research has increased significantly our knowledge about marihuana. Further research data are necessary before a conclusive statement about marihuana and public health can be made. However, enough is known today to discuss some of the public perceptions in detail. And sufficient data are presently available to allow for rational decision-making.

## ASSESSMENT OF PERCEIVED RISKS

The Commission believes that marihuana, as perceived by the American public, presents the following risks to the public health:

lethality

potential for genetic damage or teratogenicity

immediate adverse physical or mental effects

long-term physical or mental effects including psychosis and "amotivation" syndrome

"addiction" potential

\* progression to other stronger drugs, especially heroin

### Lethality

The Commission's National Survey revealed that 48% of adults believe that some people have died from marihuana use. A careful search of the literature and testimony of the nation's health officials has not revealed a single human fatality in the United States proven to have resulted solely from ingestion of marihuana. Experiments with the drug in monkeys

demonstrated that the dose required for overdose death was enormous and for all practical purposes unachievable by humans smoking marihuana. This is in marked contrast to other substances in common use, most notably alcohol and barbiturate sleeping pills.

Of comparative note, 89% of all adults in the same Survey believe that some people have died from using alcohol. This indicates that public opinion regarding alcohol and its potential lethality is more accurate than it is for marihuana. At the same time, factual knowledge regarding the inherent danger in using a substance, for example alcohol, seemingly does not deter many persons from using it irresponsibly.

### **Potential For Genetic Damage**

The thalidomide tragedies of the 1950's have taught us to ponder carefully the possibility of genetic damage subsequent to any drug use. The much publicized controversy regarding LSD and subsequent genetic damage has led investigators to study marihuana and its possible genetic effects. Although a number of studies have been performed, at present no reliable evidence exists indicating that marihuana causes genetic defects in man.

Early findings from studies of chronic (up to 41 years), heavy (several ounces per day) cannabis users in Greece and Jamaica also failed to find such evidence. In all its studies, the Commission found no evidence of chromosome damage or teratogenic or mutagenic effects due to cannabis at doses commonly used by man. However, since fetal damage cannot be ruled out, the use of marihuana like that of many other drugs, is not advisable during pregnancy.

### **Immediate Effects**

The intoxicant effects of marihuana on the mental function of the user does have potential health significance both for the individual and others with whom he may come in contact. Because marihuana is a psychoactive drug, it is important to examine the acute toxic effects which may occur in certain predisposed individuals and which increase with the potency of the preparation.

The Commission has reviewed numerous clinical studies describing acute panic reactions and transient psychotic-like episodes which occur as acute effects of the drug intoxication. In addition, a predisposed individual might experience aggravation of a latent psychotic state or other underlying instability. Although severe abnormal psychological states are rare when compared to the total number of marihuana users, lesser problems are not rare, and they may endanger both the individual and those around him at the time of their occurrence. The individual contemplating use is not capable of predicting whether he is predisposed by his particular circumstances to an undesirable mental reaction. The undesirable consequences occurring while an individual is involved in complex tasks such as driving or operating machinery or tasks requiring fine psychomotor precision and judgment are all too imaginable.

From a public health point of view, the immediate effects of marihuana intoxication on the individual's organs or bodily functions are of little significance. By and large these effects, which have been carefully outlined in Chapter 11 of the Report, are transient and have little or no permanent effect upon the individual.

## **Effects Of Long-Term, Heavy Use**

To determine the long-term chronic effects of heavy marihuana use, the Commission has carefully reviewed the world literature and contemporary studies of heavy, chronic (up to 41 years) cannabis users in the world. In addition, lower socioeconomic populations in Afghanistan, Greece, and Jamaica have been examined.

### *Effects On The Body*

These recent studies in Greece and Jamaica report minimal physical abnormalities in the cannabis users as compared with their non-using peers.

Minimal abnormalities in pulmonary function have been observed in some cases of heavy and very heavy smokers of potent marihuana preparations (ganja or hashish). However, one study concluded the cause was smoking in general no matter what the substance. The other study could not express any conclusion because of the absence of a control population. Such decrements in normal pulmonary capacity may represent early warning signals in the development of chronic lung disease. They must be considered in any program of early prevention of disease and future disability.

No objective evidence of specific pathology of brain tissue has been documented. This fact contrasts sharply with the well-established brain damage of chronic alcoholism.

### *Effects On The Mind*

No outstanding abnormalities in psychological tests, psychiatric interviews or coping patterns have been conclusively documented in studies of cannabis users in other countries of the world. Further research in this important area is necessary before definite conclusions can be drawn relating or linking marihuana to mental dysfunction because available psychological tests do not measure certain higher mental functions very accurately.

Cannabis use has long been known to precipitate short-term psychotic-like episodes in predisposed individuals or those who take excessive doses. Some observers report that the prevalence of short-term psychoses as well as the psychotic episodes of longer duration in heavy cannabis users are compatible with the prevalence rate of psychosis in the general population and, therefore, may not be attributable to cannabis use. In fact, some believe that in populations under stress where marihuana is widely used, occurrence of the acute psychotic-like episodes occur less often than one would expect in such a population. Other researchers have disagreed with these conclusions, and the matter is still controversial.

### *Effects On Motivation*

The Commission is deeply concerned about another group of behavioral effects that have been described in other nations as being associated with the heavy, long-term use of cannabis. This behavioral condition has been termed the "amotivational syndrome." An

extreme form has been reported in populations of lower socioeconomic males in several developing nations. These reports describe lethargy, instability, social deterioration, a loss of interest in virtually all activities other than drug use. This state of social and economic disability also results in precipitation and aggravation of psychiatric disorders (overt psychotic behavior) and possible somatic complications among very heavy, very long-term users of high potency cannabis products. However, in the populations so far observed in Jamaica, Greece, and Afghanistan, physical and psychosocial deterioration was not reported. The life styles of these populations appeared to be conditioned by cultural and socioeconomic factors. Some researchers believe cannabis' may serve to keep these individuals stratified at this lower socioeconomic level.

The occurrence of a similar, though less intense, syndrome has been identified recently with heavy marihuana use among young persons in the Western world, including the United States. Some clinicians have described the existence of a complex of subtle social, psychological and behavioral changes related to a loss of volitional goal direction in certain individuals, including some long-term heavy users of marihuana. Such persons appear to orient only to the present. They appear, alienated from generally accepted social and occupational activities, and they tend to show a reduced concern for personal hygiene and nutrition.

Some clinicians believe that this picture is directly caused by the action of marihuana. However, other behavioral scientists believe that among impressionable adolescents, marihuana-induced suggestibility may facilitate the rapid adoption of new values and behavior patterns, particularly when the drug is taken in a socially alienated subculture that advocates and strongly reinforces such changes.

Whichever interpretation one accepts, the fact is apparent that the chronic, heavy use of marihuana may jeopardize social and economic adjustments of the adolescents. We believe this is one concern which merits further research and evaluation. On the basis of past studies, the chronic, heavy use of marihuana, seems to constitute a high-risk behavior, particularly among predisposed adolescents. This consideration is especially critical when we consider the adolescent who is in the throes of a normally turbulent emotional process. The Commission has reviewed numerous reported studies and heard the testimony of several clinicians dealing with heavy users of marihuana who exhibit this particular behavior pattern. Although the United States does not, at the present time, have a large number of such persons within its population, the incidence is too frequent to ignore. Expanded epidemiologic studies are imperative to obtain a better understanding of this complex behavior.

#### Addiction Potential

Unfortunately, fact and fancy have become irrationally mixed regarding marihuana's physiological and psychological properties. Marihuana clearly is not in the same chemical category as heroin insofar as its physiologic and psychological effects are concerned. In a word, cannabis does not lead to physical dependence. No torturous withdrawal syndrome follows the sudden cessation of chronic, heavy use of marihuana. Although evidence indicates that heavy, long-term cannabis users may develop psychological dependence, even then the level of psychological dependence is no different from the syndrome of anxiety and restlessness seen when an American stops smoking tobacco cigarettes.

#### Progression To Other Drugs

As noted in Chapter 11, to say marihuana leads to any other drug avoids the real issue and reduces a complex set of variables to an oversimplified premise of cause and effect. If any one statement can characterize why persons in the United States escalate their drug use patterns and become polydrug users, it is peer pressure. Indeed, if any drug is associated with the use of other drugs, including marihuana, it is tobacco, followed closely by alcohol. Study after study which the Commission reviewed invariably reported an association between the use of tobacco, and, to a lesser extent, of alcohol with the use of marihuana and other drugs.

The fact should be emphasized that the overwhelming majority of marihuana users do not progress to other drugs. They either remain with marihuana or forsake its use in favor of alcohol. In addition, the largest number of marihuana users in the United States today are experimenters or intermittent users, and 2% of those who have ever used it are presently heavy users. Only moderate and heavy use of marihuana is significantly associated with persistent use of other drugs.

Some persons in our society are interested in experimenting with a series of drugs, and there is no uniformity regarding which drug these multidrug users take first. In some cases, the drug used is a matter of preference; in others, a matter of availability; and in further instances, it matter of group choice.

Citizens concerned with health issues must consider the possibility of marihuana use leading to use of heroin, other opiates, cocaine or hallucinogens. This so-called stepping-stone theory first received widespread acceptance in 1951 as a result of testimony at Congressional hearings. At that time, studies of various addict populations repeatedly described most heroin users as marihuana users also. The implication of these descriptions was that a causal relationship existed between marihuana and subsequent heroin use. When the voluminous testimony given at these hearings is seriously examined, no verification is found of a causal relationship between marihuana use and subsequent heroin use.

Again, we must avoid polarity on this issue. To assume that marihuana use is unrelated to the use of other drugs would be inaccurate. As mentioned earlier, the heavy or very heavy marihuana users are frequently users of other drugs. The stepping-stone theory holds that the adolescent begins the use of illicit drugs with marihuana, and later proceeds to heroin in the search for greater thrills. The opposing viewpoint holds that the large majority of marihuana users never become heroin addicts and denies the validity of a causal relationship.

In the National Survey, among the adult respondents, 70% thought that marihuana makes people want to try stronger drugs such as heroin; 56% of the youth in the 12-to-17-year-old category agreed with the same statement. These perceptions contrast with another finding in the same Survey which revealed that 4% of current marihuana users have tried heroin. On the other hand, very few respondents perceived alcohol and tobacco to be precipitants of other drug use.

Studies of the escalation process demonstrate that the rates of progression vary from one group to another and from one segment of the population to another. There is no set proportion of marihuana users who "escalate" to the use of other drugs. The other drugs which some marihuana smokers use vary according to the social characteristics of the population in question. Within some groups, heroin may be the choice; in other groups, it may be LSD.

Marihuana use per se does not dictate whether other drugs will be used; nor does it determine the rate of progression, if and when it, occurs, or which drugs might be used. As discussed in Chapter 11, the user's social group seems to have the strongest influence on whether other drugs will be used; and if so, which drugs will be used.

## PREVENTIVE PUBLIC HEALTH CONCERNS

The hallmark of a good health care delivery system is preventing as much illness as possible. This objective is achieved by means of immunizations, regular routine checkups, and educational programs.

Education programs regarding marihuana have been notably ineffective, partly due to an exaggeration of the effects of using the drug and partly because the effects of the opiates and marihuana have been compared inaccurately. As a result, many persons have developed a conscious or unconscious denial of nearly all dangers associated with marihuana use. Some educators believe that drug programs merely sharpen the curiosity of children and tempt them to use drugs which they otherwise would not use. Others believe that the responsibility should not be lodged with the schools but rather with the home or the community.

Because of the uncertainty about the efficacy of these programs, education programs dealing with drug usage simply do not exist in the school systems of a number of major cities; in others, token programs are offered in response to the demand that something be done. Health educators have the responsibility to help this vulnerable group of Americans become aware of all options so that they are able to make enlightened choices.

The educational role of physicians and other clinical health personnel should not be underestimated. The National Survey shows that the public believes young people should receive information concerning marihuana first from schools and second from family physicians. The health professional has a unique position as both teacher and confidant to an individual struggling with a "drug abuse" problem. Honest, sincere, and confidential guidance from a physician may prevent later difficulties to both the individual and the society. The Commission believes that action must be taken to inform and support the physician in his role as confidant and counsellor to those seeking assistance.

Considering the current patterns of marihuana use in the United States, the need for treatment and/or rehabilitation does not appear necessary for the vast majority of persons who are experimenting with the drug or using it intermittently. Rather, these persons need to be realistically educated regarding the potential hazards they face. To this end, a comparison of the personal and public health risks of marihuana and those of heroin, cocaine, amphetamines, and other drugs would be useful.

A concern for public health also requires thoughtful consideration of the consequences of any change in public policy. We have objectively appraised the present scope of public health concerns concluding that the most serious risk lies with the population of heavy users, which is, at this time, quite small in this country.

Now, we must soberly consider the likely effect of adoption of a social policy of neutrality or approval toward marihuana use. Any legal policy which institutionalizes availability of the drug carries with it a likely increase in the at-risk population. This factor is not necessarily conclusive in itself, but it does weigh heavily for the policymaker. Even though the

proportion of heavy users in the total using population might not increase if such a social or legal policy were adopted, the absolute number of heavy users would probably increase. Thus, we would have an increase in the at-risk segment of the populace. A greater stress would thereby be placed on the general health care delivery system in all the areas of health concern described earlier.

Regardless of emerging social policy, greater emphasis must be placed on educating our youth regarding the prospective dangers inherent in expanded marijuana use. This anticipatory guidance can serve to defuse or at least forestall a potentially serious social phenomenon.

### Summary

From what is now known about the effects of marijuana, its use at the present level does not constitute a major threat to public health. However, this statement should not lead to complacency. Marijuana is not an innocuous drug. The clinical findings of impaired psychological function, carefully documented by medical specialists, legitimately arouse concern. These studies identify marijuana-related problems which must be taken into account in the development of public policy. Unfortunately, these marijuana-related problems, which occur only in heavy, long-term users, have been over generalized and overdramatized.

Two percent of those Americans who have ever used marijuana are now heavy users and constitute the highest risk group. Strong evidence indicates that certain emotional changes have taken place among predisposed individuals as a result of prolonged, heavy marijuana use. The clinical reports in the literature describing transient psychoses, other psychiatric difficulties, and impairment of cognitive function subsequent to use of marijuana and of other drugs do not prove causality but cannot be ignored.

The causes of these emotional difficulties are much too complex to justify general conclusions by the public or the press. The mass media have frequently promoted such clinical reports to appear as far reaching events affecting the entire population. The clinician sees only the troubled Population of any group. In evaluating a public health concern, the essential element is the proportion of affected persons in the general group. The people responsible for evaluating public health problems must concern themselves with the proportion of people out of the total population who are affected by any specific condition. The highest risk groups should be identified as the source of primary concern. A recognition that a majority of marijuana users are not now a matter of public health concern must be made so that public health Officials may concentrate their attention where it will have maximum impact.

The concept of relative risk is crucial to an evaluation of the impact of marijuana on public health. We believe that experimental or intermittent use of this drug carries minimal risk to the public health, and should not be given overzealous attention in terms of a public health response. We are concerned that social influences might cause those who would not otherwise use the drug to be exposed to this minimal risk and the potential escalation of drug-using patterns. For this group, we must deglorify, demythologize, and deemphasize the use of marijuana and other drugs.

The Commission reemphasizes its concern about the small minority of heavy, long-term marijuana users who are exposed to a much greater relative risk of impaired general functioning in contemporary America. Public health officials should concentrate their

efforts on this group. Fortunately, the group has to date not grown sufficiently in size to warrant its being considered a major public health concern.

We reiterate, too, the public health implications of an increase in the at-risk population. We suspect that such an increase is most likely if a sudden shift in social policy significantly increased availability of the drug. One of the factors we consider in Chapter V when evaluating the various social policy options and legal implementations is the effect of each policy on incidence and patterns of use. Regardless of how heavy this particular variable will weigh in that process, we must state that a significant increase in the at-risk population could convert what is now a minor public health concern in this country to one of major proportions.

### **Marihuana And The Dominant Social Order**

For more than 30 years it has been widely assumed that the marihuana user constitutes a threat to the well-being of the community and the nation. Originally, the users were considered to be "outsiders" or marginal citizens. Included were such people as hustlers, prostitutes, itinerant workers, merchant seamen, miners and ranchhands, water-front day laborers and drifters, many of whom were drawn from the lower socioeconomic segments of the population.

Concerns about marihuana use expressed in the 1930's related primarily to a perceived inconsistency between the life styles and values of these individuals and the social and moral order. Their potential influence on the young was especially worrisome. When marihuana was first prohibited, a recurrent fear was that use might spread among the youth. And in the late 1930's and 1940's, the attraction of young people to jazz music was thought to be in part related to marihuana use by this "outsider" population.

Throughout this early period, American society, in reaction to its fear of the unfamiliar, translated rumor about the criminality and immorality of the marihuana user into "unquestioned fact" which, in turn, was translated into social policy.

From the mid-thirties to the present, however, social perceptions have undergone significant change in response to the emergence of new and challenging social problems. As marihuana use has spread to include the affluent, middle class, white high school and college-age youth as well as minority group members of lower socioeconomic circumstances in urban core areas, the concept of marginality has become blurred.

Also, as the use of marihuana has increased, those individuals formerly labeled as marginal and threatening have been replaced by a more middle class, white, educated and younger population of marihuana smokers. A stereotyped user no longer exists, and therefore, the question now properly focuses on who poses a threat to the dominant order.

### **The Adult Marihuana User**

Despite the fact that substantial numbers of adults use marihuana, society does not appear to feel greatly threatened by this group, probably because included in the group are a considerable number of middle class individuals who are regularly employed and whose occupational and social status appear to be similar to those of peers and colleagues who do not use marihuana.

In the course of its fact-finding effort, the Commission has met with several groups of socially and economically "successful" marihuana users in the professions of law, medicine, banking, education and business. In most cases, these persons, in their external appearances, seemed to be mature and responsible adults whose social attitudes and behavior did not mark them as radical ideologues or essentially irresponsible individuals.

For the most part, use of marihuana by adults has been found to be more directly related to the facilitation of social interaction (much like the adult use of alcohol in social gatherings) than to any other factor. Although their marihuana smoking behavior is illegal, most adult users are not ordinarily considered by their peers to be criminal nor is their use generally likely to result in arrest.

Because the adult user generally maintains low visibility, is primarily a recreational user, is not usually involved in radical political activity and maintains a life style largely indistinguishable from his non-using neighbors, he is not ordinarily viewed as a threat to the dominant social order. In short, aside from his use of marihuana, the adult recreational user is not generally viewed as a significant social problem.

### **The Young Marihuana User**

The widespread use of marihuana by millions of young people of college and high school age has been viewed by many as a direct threat to the stability and future of the social order.

Many parents, adults in general, and government officials have expressed concern that young people who use marihuana often reject the essential values and traditions upon which the society is founded. Some have suggested that youthful marihuana use is, in itself, an indication of the rejection of responsibility and a sign of reckless hedonism which may well interfere with an orderly maturation process. Others see youthful marihuana use as part of a pattern of conduct which produces dropping out, underachievement and dependency.

In short, the mass character of youthful marihuana use has been frequently interpreted as a rejection of the institutionalized principles of law and a lack of concern for individual social responsibility, which threatens the social and political institutions.

Implicit in this view is the assumption that a young person who uses marihuana in spite of the law cannot be expected to assume an individually and socially responsible, adult role. The strength of this fear is drawn largely from the vocal and visible "counterculture" to which marihuana is often tied. Not surprisingly, the concerns posed by an alternate youthful life style are extended to the drug itself.

Threats to the social order are often seen, for example, in the character of youthful leisure time activities, such as attendance at rock concerts, occasioned by the high mobility and affluence of today's youth. They are also seen in the new modes of speech and dress and in the seemingly casual manner of their day-to-day living. Equally troublesome for many, however, is the idea of intentional intoxication for purposes of recreation.

Such conduct and the more casual attitude toward sexual relationships as well as participation in radical politics have provoked increasing concern throughout the adult society. The National Survey illustrates the extent to which the older adult perceives youthful marihuana use as part of a much larger pattern of behavior which bodes ill for the future of the nation.

First, the older the adult respondent, the more likely he was to picture the marihuana user as leading an abnormal life. Only 9% of the over-50 generation agreed with the statement that "most people who use marihuana lead a normal life." Nineteen percent of the 35-to-49 age group and 29% of the 26-to-34-year-olds were of the same belief. Conversely, half of the young adults (18-to-25) considered most marihuana users normal. This fact is not surprising since many of their contemporaries are marihuana users.

Second, the marihuana user, as envisioned by adults, is typically a youthful dropout from society. He doesn't like to be with other people, is uninterested in the world around him, is usually lazy and has an above-average number of personal problems.

Third, the less optimistic the adult respondent was about the nation's youth, the more likely he was to oppose alteration of the marihuana laws and to envision major social dislocations if the laws were changed. Fifty-seven percent of the adult population in general agreed with the statement, "if marihuana were legal, it would lead to teenagers becoming irresponsible and wild." Among those adults who most disapproved of youthful behavior in general, 74% agreed with the quoted statement. Similarly, 84% of the non-approving adults favored stricter laws on marihuana.

As we discussed in Chapter I, marihuana's symbolic role in a perceived generational conflict has brought marihuana use into the Category of a social problem. Today's youthful marihuana user is seen as a greater threat to the social order than either the marginal user of earlier times or the adult user of the present. Since the concerns about marihuana today relate mostly to youth, the remainder of this section will focus on these youth-related issues.

## THE WORLD OF YOUTH

Youth of today are better fed, better housed, more mobile, more affluent, more schooled and probably more bored with their lives than any generation which has preceded them.

Adults have difficulty understanding why such privileged young people should wish to offend by their language and appearance and spend so much effort trying to discredit those institutions of society which have made possible the privileges which those youth enjoy. Many adults perceive the present level of youthful discontent to be of a greater intensity than has been true of past generations.

Marihuana has become both a focus and a symbol of the generation gap and for many young people its use has become, an expedient means of protest against adult values.

Adults in positions of authority, parents, teachers, policy officials, judges, and others often view marihuana use as the sign of youth's rejection of moral and social values and of the system of government under which they live. The problem is that both youth and adults tend to make pronouncements and are frequently unable to reason together in logical fashion. Instead they overstate their positions in such a way that effective resolution of their differences becomes very difficult.

In effect, each group takes the rhetoric of the other at face value. For youth, however, marihuana use plays many roles, only one of which is a symbolic assault on adult authority and values.

Marihuana use, for many young people, has become a part of a ritual. It takes on the aspect of participating in a shared experience which, for some if not all, is enjoyable in itself. For many, it becomes an even more interesting experience because it is forbidden.

Some of the rituals concerned with the purchase, storage, preparation, and use of marihuana take on a mystique similar to the time of Prohibition when people went through certain rituals necessary to get a drink in a speak-easy. The three knocks and "Joe sent me" cues have been replaced by the not-so-secret handshakes, the new vocabulary of youth and other exclusionary devices to delineate the "in" group.

The use of marihuana is attractive to many young people for the sense of group unity and participation which develops around the common use of the drug. This sense tends to be intensified by a sense of "common cause" in those circumstances where users are regarded as social or legal outcasts.

They know, too, that many of their peers who share the marihuana experience and also share the designation of lawbreaker are, in reality, productive and generally affirmative individuals who are interested neither in promoting the downfall of the nation nor in engaging in acts which would harm the general well-being of the community.

In short, many youth have found marihuana use to be a pleasurable and socially rewarding experience. They have found that the continuance of this behavior has brought them more pleasure than discomfort, more reward than punishment.

Youth have increasingly come to see law enforcement activity directed at marihuana use as an unreasonable and unjustifiable rejection of their generation. Most of these youth have grown up with a positive image of the police as protectors of society. Now, many are confronted with the possibility of police intrusion into their private lives and the threat of a criminal record. The unfortunate result, in many instances, has been a blanket rejection and distrust of both the agents and institutions of government.

In part, marihuana use as a social behavior is an unintended byproduct of the formal and informal educational process. Some persons even suggest that youthful drug usage is a "success" in terms of the educational and socialization process. Our society values independence of thought, experimentation, and the empirical method, often reinforcing this attitude by such advertising cliches as "make up your own mind," "be your own man..... judge for yourself."

Although experimentation with regard to drugs should not be considered a "success, the Commission does believe that the educational efforts necessary to discourage this curiosity, which may be valuable in other matters, have not succeeded. We understand why teenagers and young adults encouraged over the years to make up their own minds have not been restrained by exaggerated accounts of marihuana's harmful effects, or by the more recent assertions that a true evaluation of marihuana uses requires more research. The Scottish verdict of "not proven" does little to restrain youthful curiosity.

In the previous Chapter, we emphasized the difference between the vast majority of experimenters and intermittent users and the small group of moderate and heavy users who generally use drugs other than marihuana as well. The former do not differ significantly from non-users on many indices of social integration. Various studies indicate that they maintain normal patterns of living and social interaction, and are employed, competent citizens.

On the other hand, there undoubtedly are a number of persons who have used marihuana

and have exercised poor judgment, performed inadequately, or behaved irresponsibly while under the drug's influence, thus jeopardizing themselves or others. The fact remains, however, that a certain number of these persons were immature and irresponsible individuals even prior to marihuana use, who would be expected to have poor or impaired judgment whether or not marihuana was involved.

The marihuana user is not, for the most part, a social isolationist or a severely disturbed individual in need of treatment or confinement. Most users, young or old, demonstrate an average or above-average degree of social functioning, academic achievement and job performance. Their general image of themselves and their society is not radically different from that of their non-marihuana-using peers. The majority of both groups tends to demonstrate equal interest in corporate concerns.

Based upon present evidence, it is unlikely that marihuana users will become less socially responsible as a result of their marihuana use or that their patterns of behavior and values will change significantly.

### **WHY SOCIETY FEELS THREATENED**

Society appears to be concerned about marihuana use primarily because of its perceived relationship to other social problems. We noted in the discussion of marihuana and public health that the focus of social concern should be the heavy users and the possibility that their numbers will increase. Here we consider the perceived impact of marihuana use upon the institutions and proclaimed goals of the society.

#### **Dropping Out**

Many parents have a genuine fear that marihuana use leads to idleness and "dropping out." During the 1960's, marihuana use, as well as the use of other psychoactive drugs, became equated with unconventional youth life styles. When a number of young people adopted unconventional life styles, many adults tended to view long hair, unkempt appearance and drugs as symbols of counterculture.

They concluded that anyone who allowed his hair to grow or gave little attention to his clothing or appearance was probably a drug user with little or no motivation to achieve and no interest in conventional goals.

A number of researchers and clinicians have observed the use of marihuana or hashish in other societies, particularly among poor, lower class males. Some have observed that many of these individuals are generally unmotivated and ordinarily appear to show little aspiration or motivation to improve their way of life, regardless of whether they are judged by the standards of the more prosperous members of their own society or by middle class standards of contemporary American society.

One of the problems with this type of analysis is that it fails to perceive the social and cultural realities in which the phenomenon takes place. In the Middle East and in Asia where hashish is used, the societies, in all instances, are highly stratified with people in the lower classes having virtually no social or economic mobility. Poverty, deprivation and disease were the conditions into which these people were born and in which they remain, regardless of whether they use cannabis. In this context, a person's resignation to his status in life is

not likely to be caused or greatly influenced by the effects of cannabis. Any society will always have a certain number of persons who, for various reasons, are not motivated to strive for personal achievement or participate fully in the life of the community. Therefore, the determination is difficult to make whether cannabis use influences a person to drop out and, if it does, to what extent.

Some individuals possess particular personality as well as psychosocial characteristics which in specified instances could produce amotivation or dropping out. However, little likelihood exists that the introduction of a single element such as marihuana use would significantly change the basic personality and character structure of the individual to any degree. An individual is more likely to drop out when a number of circumstances have joined at a given point in his lifetime, producing pressures with which he has difficulty in coping. These pressures often coincide with situations involving painful or difficult judgments resulting from a need to adjust to the pressures of the social environment.

Many young people, particularly in the college population, are shielded in their earlier years from experiences which might be emotionally stressful or unpleasant. Some young people, so sheltered, are neither equipped to make mature and independent judgments nor prepared to enjoy the new-found freedom of the university or college in a mature and responsible way. Some of these students are often unable to cope with social or academic adversity. After being sheltered for so long, some of these young people may be easily attracted to experiences which promise new excitement and to fall under the influence of a peer group whose values and living patterns may be inimical to a productive, healthy and continuous process of personal growth and maturity. In these instances, marihuana serves as the medium by which these individuals encounter social and psychological experiences with which they are ill-equipped to cope.

Certain numbers of these young people have demonstrated what is described as amotivation long before the smoking of marihuana became fashionable. Adolescence is often a particularly difficult period of search in many directions at the same time. In addition to seeking a concept of "self" the adolescent is, at the same time, attempting to comprehend the nature of the world around him and to identify his status and role in society.

Different individuals, with different backgrounds, socialization patterns, belief systems and levels of emotional maturity cope with the period of transition from childhood to adulthood in different ways. For a small number, dropping out might be one of these coping mechanisms whether or not they use marihuana. For others, the response to the difficult adjustments of adolescence takes other forms, some of which are more acceptable, "normal" and easier for adults to understand.

The young person who does not find it possible to cope with the pressures of his adolescent developmental period in ways convenient to the understanding of adult society should not be rejected, stigmatized or labeled. He requires both support and understanding and the opportunity to participate in roles which have meaning for him and in ways in which he feels comfortable. For a certain number of young people, marihuana and the mystique of the experience eases this passage by helping them share their feelings, doubts, inadequacies and aspirations with peers with whom they feel safe and comfortable.

### **Dropping Down**

Apart from the concern over youthful dropping out and idleness, there is also widespread concern about "dropping down" or underachieving.

Parents frequently express fear that marihuana will undermine or interfere with academic and vocational career development and achievement by focusing youthful interests on the drug and those associated with the drug subculture. Some parents make considerable sacrifices for their children to go to school, and the fears that marihuana might undermine the academic, emotional and vocational development of their young are quite understandable.

The Commission reviewed a number of studies related to marihuana use by high school and college youth. No conclusive evidence was found demonstrating that marihuana by itself is responsible for academic or vocational failure or "dropping down," although it could be one of many contributory reasons. Many studies reported that the majority of young people who have used marihuana received average or above-average grades in school.

In part, underachievement is related to a view of what one individual judges to be the achievement capacity of another. This judgment is often made without concern for what the individual himself feels about his potential, his interests and his goals. Perceptions about achievement also frequently fail to take into consideration the individual feelings about the goals of his peers and the values of the larger society, including the relative prestige and status attached to various academic programs, occupations and professions.

### **Youth and Radical Politics**

Aside from the issue of unconventional life styles and the concerns evoked by them, the other major concern of the sixties which related to youth and drugs was radical politics.

During the latter half of the decade, youthful anti-war groups were organized on many of the nation's college campuses and high schools. These groups could be divided into two segments. The largest segment consisted of concerned, sometimes confused, frustrated and well-meaning petition signers and demonstrators. Within this large group there was a small coterie of individuals who constantly sought to turn the demonstration into a confrontation and to protest for peace by means of violence. The second segment consisted of organizations of individuals whose stated purpose was to undermine the social and political stability of the society through violent means.

What must be clearly understood, however, is that among the young people, and some not so young, who protested against the war in Vietnam, only a minority were bent on violence and manipulated and corrupted these otherwise peaceful demonstrations for their own purposes.

At the various gatherings, a number of the young people protesting in these mass groups did smoke marihuana. We will never know how many were initiated to marihuana use during the course of these peace demonstrations. The fact remains, however, that in the large camps, such as those in Washington, marihuana was involved in two ways. First, there was the "normal" use in which the smoking was part of the social experience. Individuals came together and smoked, in part, to acknowledge and strengthen group solidarity. Second, another quite different aspect of the marihuana use at these gatherings said, in effect, "we know it's illegal but go and arrest all of us for doing it. . . ." This aspect can perhaps best be characterized as a symbolic challenge to authority.

Unfortunately, however, the media, particularly television and some of the news magazines, sometimes portrayed the image of a group of young people plotting the overthrow of the

nation by violent means while under the influence of marihuana. In those relatively few instances where explosives and other violent means were employed, the evidence points to a cold and calculated plan which was neither conceived nor executed under the influence of marihuana.

As a result of these protests and demonstrations, therefore, radical politics has been seen by many as a mechanism through which large numbers of young people would be introduced to marihuana as well as to other drugs. Radical political activity or mass political protest is viewed by some as a threat to the welfare of the nation and is assumed to be aided and encouraged by our enemies.

The involvement of large numbers of youth in political activism and the concomitant public concern about drug use have beclouded the issue of marihuana use and have led to a broadening of the concerns about marihuana on the part of adults.

Some of the radical movement's leaders abetted this tendency by pointing out the alleged irrationality and unfairness of the marihuana laws to recruit members to their ranks. Not surprising is the fact that 45% of the adult respondents in the National Survey felt that marihuana is often promoted by people who are enemies of the United States. Nor is it surprising that this belief is a function of age. While 22% of all young people (12-to-17 years of age) and 26% of young adults (18-to-25 years) identified marihuana with national enemies, more than one-half (58%) of those persons 50 years and older did so.

### **Youth and the Work Ethic**

Of the many issues related to youth and the use of marihuana, one that greatly troubles many adults, is youthful attitudes toward work. The work ethic in our society is based on a belief that work is a good and necessary activity in and of itself.

The traditional view holds that work is not only a right and moral act but that it keeps people from mischief and from wasting time on harmful recreational pleasures. The rationale for this thesis is that work in American society has served as the primary means by which persons acquired the treasured symbols of society.

In fact, throughout much of our history, with the exception of the small number who inherited or married wealth, no ethical alternative to work existed. In recent years, the increased emphasis placed upon leisure time activities has resulted in shorter work weeks, longer vacation periods and more paid holidays.

Among the concerns of the adults about today's youthful attitudes toward work and leisure are that young people seem to enjoy their recreational pursuits so much that they forget that to a considerable degree their enjoyment is paid for by the labor of others.

Many young people do not express the same level of concern as their parents did about preparing themselves for a career and "getting ahead in the world." In part, this attitude is attributable to the fact that increasingly, the results of this labor are not tangible, material goods. Service occupations generally do not produce such tangible products, and even in manufacturing industries the individual worker is usually too remote from the product to feel any pride or interest in it. In both instances, the traditional symbol of the "manhood" of work, a tangible product, is no longer present.

In sum, society has become increasingly disturbed by certain attitudes of today's youth

which seem to stress pleasure, fun, and enjoyment without a counterbalancing concern for a disciplined and sustained work effort. Nevertheless, the number of young people who view work as unimportant is small when compared to the total number of young people. The Commission has found no evidence to suggest that the majority of youth are unwilling or incapable of productive and disciplined work performance. In fact, the great majority of young people are performing their tasks in industry, the professions and education quite effectively.

Although many young people delay entry into the work force to enjoy the fruits of our prosperous society, this delay does not mean they will not one day contribute their best efforts to the continued growth and advancement of the nation.

### **The Changing Social Scene**

The present confusion about the effects of youthful marihuana use upon the dominant social order is caused by a variety of interrelated social concerns, many of them emotionally charged issues, including anti-war demonstrations, campus riots, hippie life styles, the rising incidence of crime and delinquency and the increased usage of all illicit drugs. The focus of concern about marihuana is aggravated by the data overload mentioned in Chapter 1, by the outpouring of incidental information about the drug and its effects in a form and volume far beyond the capacity of the readers or listeners to assimilate or interpret. Rather than informing the public, much of the data disseminated has produced frustration and misinterpretation of the information presented.

Adult society, including parents and policy-makers, finds it difficult to comprehend and account for many of the attitudes and behavior of the young, including the use of marihuana. In many cases the adults are still influenced by the myths of an earlier period which overstated the dangers of the drug. At a time of great social change and turbulence, the tendency to depend on the "traditional wisdom," and its moral justification, is a strong one.

Just as youth must try to understand and appreciate the strengths of the institutions of our society, adults must try to understand the times through the eyes of their children. Where marihuana is concerned, society must try to understand its role in the lives of those who use it. The key to such understanding lies in the changes which have taken place in society within recent years and the effects these changes have had on succeeding generations of youth. The increased use of marihuana is only one of these effects.

One focal point in discussion between generations is the contrast between the use of marihuana and the use of alcohol. Many young people perceive that marihuana is less dangerous than alcohol in terms of its addiction potential and long-term physical and psychological consequences. Many believe also that marihuana - and other psychoactive drugs make it possible to expand their perceptions and see this as a perfectly legitimate objective.

Viewed against the background of the profound changes of recent years in the fields of economics, politics, religion, family life, housing patterns, civil rights, employment and recreation, the use of marihuana by the nation's youth must be seen as a relatively minor change in social patterns of conduct and as more of a consequence of than a contributor to these major changes.

When the issue of marihuana use is placed in this context of society's larger concerns,

marihuana does not emerge as a major issue or threat to the social order. Rather, it is most appropriately viewed as a part of the whole of society's concerns about the growth and development of its young people.

In view of the magnitude and nature of change which our society has experienced during the past 25 years, the thoughtful observer is not likely to attribute any of the major social problems resulting from this change to marihuana use. Similarly, it is unlikely that marihuana will affect the future strength, stability or vitality of our social and political institutions. The fundamental principles and values upon which the society rests are far too enduring to go up in the smoke of a marihuana cigarette.

# **The Report of the National Commission on Marihuana and Drug Abuse**

## **Chapter IV**

# **social response to marihuana use**

"I find the great thing in this world is not so much where we stand, as in what direction we are moving: To reach the port of heaven, we must sail sometimes with the wind and sometimes against it-but we must sail and not drift, nor lie at anchor."

Oliver Wendell Holmes, *The Autocrat of the Breakfast Table* (1858)

A general interpretation of the National Survey indicates that roughly one-quarter of the American public is convinced that criminal sanctions should be withdrawn entirely from marihuana use. Another fourth of the public is equally convinced that existing social and legal policy is appropriate, and would ordinarily jail possessors, with the exception of young first offenders. Approximately half of the citizenry is confused about what marihuana means and ambivalent about what society ought to do about its use. This half of the population is unenthusiastic about classifying the marihuana user as a criminal, but is reluctant to relinquish formal control over him.

In considering social and legal policy alternatives, the Commission has analyzed the pattern of social response to marihuana use.

### **The Initial Social Response**

As we noted in Chapter I, the initial social reaction to marihuana use was shaped by the narcotics policy adopted by the Federal Government. In the early legislation, marihuana was officially characterized as a narcotic on the basis of the widely shared assumption that it was a habit-forming drug, leading inevitably to a form of dependence. Although the medical community was aware that marihuana was distinguishable from the opiates in that it did not produce physical dependence, no functional distinction was drawn; it was assumed that most users were psychologically compelled to continue using the drug. As one psychiatrist noted in 1934, the marihuana "user wants to recapture over and over again the ecstatic, elated state into which the drug lifts him . . . The addiction to cannabis is a sensual addiction: it is in the services of the hedonistic elements of the personality."

The notion of psychological dependence is still ill-defined, and was understood even less in the early days of American marihuana use. The Commission has concluded that the automatic classification of marihuana as "addictive" was derived primarily from an

underlying social perception of the substrata of society which used the drug: aliens, prostitutes, and persons at the bottom of the socioeconomic ladder.

Additional characteristics of the opiates were also transferred to marihuana. Particularly important in this regard was the association of marihuana with aggressive behavior and violent crime. One district attorney in New Orleans, where marihuana use was particularly common, wrote in 1931:

It is an ideal drug to cut off inhibitions quickly . . . At the present time the underworld has been quick to realize the value of this drug in subjugating the will of human derelicts to that of a master mind. Its use sweeps away all restraint, and to its influence may be attributed many of our present day crimes. It has been the experience of the Police and Prosecuting Officials in the South that immediately before the commission of many crimes the use of marihuana cigarettes has been indulged in by criminals so as to relieve themselves from the natural restraint which might deter them from the commission of criminal acts, and to give them the false courage necessary to commit the contemplated crime.

By 1931, those states in which marihuana use was at all common had formally responded with a total eliminationist policy. They generally amended the preexisting narcotics legislation to include marihuana. Meanwhile, in 1929, the Federal Government already had classified marihuana officially as a "habit-forming drug along with the opiates and cocaine, in the legislation which established two federal "farms" for treating narcotics addicts in Fort Worth, Texas, and Lexington, Kentucky.

During the 1930's, the remaining states criminalized marihuana use by adopting the Uniform Narcotic Drug Act, in which the drug was included (optionally) in the definition of narcotic drugs. Then, in 1937, Congress adopted the Marihuana Tax Act, completing the initial period of official response to marihuana use.

A difference of opinion among historians still exists as to why policymakers thought national legislation was necessary at that time. Whatever the reason, however, Congress responded swiftly, without much attempt to learn the facts about the drug and its use. The assumptions underlying that legislation were summarized in the Report of the House Ways and Means Committee:

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 this drug. Not only is marihuana used by the 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 this drug. Its continued use results many times in impotency and insanity.

When Congress escalated penalties for narcotics offenses in 1951 and again in 1956, marihuana was included, with the following effects:

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 and subsequent 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.

The perceptions of 1937 were perpetuated in the comments of Senator Price M. Daniel, Chairman of the Senate subcommittee considering the 1956 Act, although by now an important new factor had been added:

Marihuana 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.

### The Change

With the adoption of marihuana use by middle and upper class college youth in the mid-60's, the exaggerated notion of the drug's dangers and the social tension so widespread during this period combined to reopen the question of the impact of marihuana use. But governmental policy held to the appropriateness of existing law.

Arrests, prosecutions, convictions and sentences of imprisonment all increased at both the federal and state levels. Marihuana arrests by the U.S. Bureau of Customs increased approximately 362% from fiscal year 1965 to 1970. Arrests by the Bureau of Narcotics and Dangerous Drugs, an agency which concerns itself primarily with sale, rose 80% from 1965 to 1968. Because major responsibility for enforcing the possession laws lies at the state level, state arrests rose dramatically (1,000%) during the five years from 1965 to 1970. Although the data compiled by the Federal Bureau of Investigation are not comprehensive, the FBI sample tracks the continuing increase of state arrests (Table 6).

Table 6.-STATE MARIHUANA ARRESTS

Year  
Arrests  
Percentage increase

1965  
18,815

1966  
31,119  
65.39

1967  
61,843  
98.73

1968  
95,870  
55.02

1969  
118,903  
24.02

1970  
188,682  
58.68

In the wake of this upsurge in marihuana arrests, the criminal justice system faced a far from usual "criminal" population. Nonetheless, judging from federal figures, the number of people prosecuted, convicted, and incarcerated did rise substantially as prosecutors and judges attempted to carry out the law.

Beginning in 1966, however, the proportion of defendants ultimately convicted declined gradually, as did the percentage of defendants who were incarcerated, and the average length of their sentences. This response reflected an attempt to -mitigate the harshness of the law as applied to this new user population. By 1968, the trend toward leniency seemed to have temporarily leveled off, before it accelerated again in 1969 (Table 7).

Paralleling the vigorous law enforcement effort between 1965 and 1968 was a punitive reaction in the schools and large numbers of students using marihuana were suspended, expelled or referred to the police. Similarly, the military's first reaction to the surge of marihuana use took the form of court-martial, administrative punishment, or discharge from the service.

Table 7.-DISPOSITION OF FEDERAL MARIHUANA ARRESTS

Year  
Total defendants  
Percent convicted  
Percent incarcerated  
Average length of sentence (in months)

1964

85  
49

1965  
523  
90  
52  
58.2

1966  
746  
87  
45  
53.7

1967  
941  
80  
38.5  
51.0

1968  
1,433  
79  
39.4  
51.2

1969  
2,189  
76  
34.3  
52.6

1970  
2,082  
73  
27.4  
46.7

1971  
3,323  
60  
28.5  
39.9

The family, however, suffered the most from the sudden conflict between accepted norms and this expression of youthful independence. The use of drugs, particularly marihuana, became a significant barrier between parent and child. Many young people adopted marihuana as a symbol of their uneasiness with society's prevailing norms.

As noted in Chapter I, the sudden increase in marihuana use precipitated extensive research by the medical and scientific communities. By 1969, a consensus emerged holding that many of the earlier beliefs about the effects of marihuana were erroneous. Available U.S. data seemed to indicate that dependence on the drug was rare, as was the incidence of psychosis among marihuana users. Particularly important was the recognition that there was little, if any, convincing proof that marihuana caused aggressive behavior or crime. As such findings accumulated, public attention was drawn increasingly to the consequences of existing policy: soaring arrests, convictions and in some states, lengthy sentences.

Policy-makers, in social institutions and government, as well as the public began to believe that the harshness of the criminal penalties was far out of proportion to the dangers posed by the drug. As users were incarcerated, newspapers and television stations often brought the matter to public attention, particularly when the arrested youngster came from a

prominent family.

Official response to this development was twofold: a trend toward leniency in marihuana cases within the legal system, and a recognition by policy-makers of widespread uncertainty regarding the effects of marihuana.

Reflecting the first response, the courts, prosecutors and police applied existing law more leniently, and the law-makers in most states and at the federal level changed the letter of the law, reducing the penalties for possession of marihuana, generally to a misdemeanor (up to a year in jail). In the process, they repealed the mandatory minimums which had been of major concern to the judiciary.

By June 1970, 24 states and the District of Columbia had reduced the penalties, although 34 states and the District still classified marihuana as a narcotic. Meanwhile, on the federal level, Congress had been considering the Nixon Administration's comprehensive proposal to overhaul the national government's patchwork of drug legislation.

Since the passage of the Harrison Narcotics Act in 1914, federal drug laws had taken the form of tax measures, an approach compelled for constitutional reasons. The Marihuana Tax Act of 1937 followed the same format. The result, however, was a complex set of offenses involving order forms and registrations. When the Supreme Court declared certain aspects of the Tax Act unconstitutional in 1969, revision of the law became essential. Taking up the challenge, the Administration proposed a major piece of legislation which tightened control over pharmaceutical distributions and also reappraised the penalty structure for narcotics and dangerous drug offenses.

Possession of all drugs, including marihuana, was reduced to a misdemeanor. Special treatment for first offenders was provided, allowing expungement of the record upon satisfactory completion of a probationary period. Casual transfers of marihuana were treated in the same manner as possession. After a series of wide-ranging hearings, Congress passed the Comprehensive Drug Abuse Prevention and Control Act, and on October 27, 1970, the President signed it into law.

After passage of the new federal drug law, the Conference of Commissioners on Uniform State Laws adopted a Uniform Controlled Substances Act, conforming in structure and emphasis to the federal law. Although the Uniform Act specifies no penalties, the Commissioners recommended that possession of all drugs be a misdemeanor.

At this writing, 42 of the states and the District of Columbia classify possession as a misdemeanor or have adopted special provisions so classifying possession of small amounts of marihuana. In half of the remaining eight jurisdictions, the courts have discretion to sentence possessors as misdemeanants.

In 11 jurisdictions, casual transfers are treated in the same manner as possession, and in 27 jurisdictions, conditional discharge is available to certain classes of offenders.

The second characteristic of the 1969-70 official response was its acknowledgment of uncertainty. No longer perceived as a major threat to public safety, marihuana use had now become primarily an issue of private and public health. Scientific researchers were asked to define the nature and scope of the health concern. In a sense, lawmakers took the minimum official action dictated by social and scientific realities, but were uncertain where to go from there. The need to know more about the effects of the drug, particularly its chronic, long-term effects, became the core of official response.

Many states appointed special task forces and commissions to report on marihuana and drug abuse in general. Congress directed the Department of Health, Education and Welfare to file annual Reports on Marihuana and Health and, in the Comprehensive Drug Abuse Prevention and Control Act of 1970, established this Commission.

### **The Current Response**

In addition to an objective appraisal of the effects of marihuana use, this Commission was directed to evaluate the efficacy of existing law. The marihuana laws were and still are the focus of much public debate. We have recognized from the outset that a meaningful evaluation of the law is dependent upon an understanding of objectives and the social context in which the law operates. Particularly important in this connection are the attitudes and practices of society's non-legal institutions and the general direction of public opinion.

In order to comprehend the entire range of contemporary social response, the Commission launched a threefold inquiry. First, we designed a series of projects designed to ascertain opinion and behavior within the criminal justice system. Included were an analysis of all marihuana arrests during the last six months of 1970 in six metropolitan jurisdictions, a similar study of all federal marihuana arrests during 1970, an opinion survey of all local prosecuting attorneys, and a similar survey of attitudes among a representative sample of Judges, probation officers, and court clinicians.

We next focused on the practice and opinion of the medical, clerical, educational, and business communities. To this end, we solicited written responses from representative groups, invited various spokesmen to testify before us, made numerous field visits to secondary schools, colleges and universities and surveyed opinion in free clinics and university health services. We also launched a study of drug use and abuse in industry which will be covered in our second Report on drug abuse.

Finally, we commissioned the National Survey of public opinion about marihuana to which we have previously referred.

### **THE CRIMINAL JUSTICE SYSTEM**

How does the criminal justice system respond when an enormous increase in an illegal conduct, of a primarily private nature, makes full enforcement of the law impossible, and when there is widespread doubt about the rationale for making the conduct illegal? This question guided our analysis of the responses and opinions from members of the criminal justice system.

#### **Law Enforcement Behavior**

On the basis of a detailed study of all federal marihuana arrests during 1970 and of a sample of state arrests during the last half of 1970 in Cook County, Illinois; Dallas, Texas; Omaha, Nebraska; Tucson, Arizona; San Mateo County, California; and the Washington, DC Metropolitan Area, we present the following findings.

**FEDERAL** The federal authorities make little or no effort to seek out violators of laws proscribing possession of marihuana. The Federal Government ceded responsibility for enforcement of possession laws to the states several years ago. However, in the course of general enforcement activity, the Federal authorities do make possession arrests. If a person is arrested at the Federal level for possession or casual transfer of small or moderate

amounts of marihuana, the case generally is either dropped or turned over to the states for prosecution.

The Bureau of Narcotics and Dangerous Drugs does not concentrate much of its energy on marihuana. By its own estimate, approximately 6% of its investigative efforts are directed at marihuana offenses. Most BNDD marihuana arrests occur as a result of the agency's general investigation into the commercial distribution of all drugs.

The overwhelming majority of all federal marihuana arrests occur at or near the borders, as the Bureau of Customs, sometimes in cooperation with the Border Patrol of the Immigration and Naturalization Service, attempts to interdict the importation of the drug.

### State

At the state level, where enforcement of the possession laws is focused, about 93% of the arrests in our sample were for this offense. Yet, there was little formal investigative effort to seek out violators of the possession laws. Instead, 69% of all marihuana arrests arose from spontaneous or accidental situations where there had been no investigation at all. Well over half of these spontaneous arrests occurred when police stopped an automobile and saw or smelled marihuana. The remaining spontaneous arrests occurred when police stopped persons on the street or in a park and discovered marihuana.

In an additional 16% of the cases, the marihuana arrest resulted from police follow-up of a phoned tip or similar lead. In less than 11% of all the cases was there any significant police involvement. (Scope of investigation was unknown in about 4% of the cases).

Because of this enforcement pattern, arrests were concentrated among the young. Typically the arrestee was a white male, in school or employed in a blue collar job, without a prior record. Of those arrested at the state level:

- \* 58% were under 21; 30% were between 21 and 26; 10% were over 26 (2% unknown)
- \* 85% were male; 15% were female
- \* 77% were white; 21% were black; 2% were Spanish speaking
- \* 27% were students, 2% were military; 28% were employed in blue collar jobs; 15% were employed in white collar jobs; 11% were unemployed (16% unknown)
- \* 44% had not been arrested previously; 31% had been arrested previously (in 25% of the cases, the extent of prior contact was unknown); only 6% of the arrestees had been previously incarcerated

Such arrestees generally possessed only small amounts of marihuana. Of our entire sample of 3,071 arrests:

- 67% were for possession of less than one ounce (18% were for less than one gram; 23% were for between one and 5 grams; 26% were for between 5 and 30 grams)
- 7% were for possession of between one ounce and 4 ounces
- 8% were for possession of over 4 ounces
- 13% were for possession of unknown quantities
- 3% were for transfer of less than one ounce
- 3% were for transfer of over one ounce.\*

Offenders at the state level were generally arrested in groups.

\* 29 % were arrested alone

\* 24% were arrested with one other person

\* 43% were arrested with two or more other persons (4% unknown) Faced with this population of offenders, the criminal justice System responded often by dismissing or diverting to a noncriminal institution the young first-offense possessor of small amounts.

### **Adult Cases**

At least 48% of the cases were terminated in the defendant's favor:

The police themselves disposed of 10% of the cases, refraining from filing charges, or diverting the case, to some other institution.

The prosecution declined to file complaints in an additional 7% of the cases.

An additional 28% of the cases were dismissed in the course of pretrial judicial proceedings.

In 3% of the cases, the defendant was acquitted at trial.

\*Because the figures have been rounded off, the total is not always 100%.

### **Juvenile Cases**

At least 70% of the cases were terminated in the youth's favor:

The police themselves disposed of 21% of the cases, refraining from referring the youth to juvenile authorities or diverting the case to some other agency.

An additional 48% of the cases were dismissed either because the juvenile officer responsible for filing a delinquency petition refused to do so, or because the judge dismissed the case prior to trial.

in 1% of the cases, the juvenile was found innocent.

Of the entire sample of arrests, both adult and juvenile, 33% of those apprehended were ultimately sentenced, after pleading guilty or being found guilty. (Since 11% of the 3,071 cases were still pending at the time of our study, and disposition was unknown in 2% of the cases, the figure may be as high as 40% of all arrests).

Of those convicted for possession of marihuana, 24% were incarcerated, usually for a year or less. Most of the remaining persons were put on probation, although some were fined only. By comparison, of those convicted of sale (5% of the convicted individuals), 65% were incarcerated, usually for over a year.

In short, in the 2,610 cases where disposition was final and was available to 6% of those apprehended were ultimately incarcerated.

From this analysis of enforcement behavior, it appears that the law enforcement community

has adopted a policy of containment. Although effort is sometimes expended to seek out private marihuana use, the trend is undoubtedly to invoke the marihuana possession laws only when the behavior (possession) comes out in the open. We were told by police officials in some cities, for example, that arrests are made only when marihuana use is flaunted in public.

The salient feature of the present law has become the threat of arrest for indiscretion. The high percentage of cases which, after arrest, are disposed of by dismissal or informal diversion attests to the ambivalence of police officials, prosecutors and judges about the appropriateness of existing law. Anyone processed through the entire system does run a risk of incarceration, especially when the individual had a prior record and the offense was sale or possession of a significant amount.

### **Law Enforcement Opinion**

Prosecutorial opinion toward the existing system suggests both a containment objective and a flexible response. As to prosecution policy:

31% of the prosecutors state that they would not prosecute anyone one arrested at a private, social gathering of marihuana users who are passing a cigarette.

Large numbers of prosecutors admit that they consider factors other than strength of the evidence in deciding whether or not to prosecute a possession case; 41% cite age, 38% cite lack of prior record, 36% consider the amount of marihuana seized and 26% take into account the family situation of the accused; 31% thought one or another of these non-legal factors was most important in his decision

29% of the prosecutors acknowledge that they use informal probation in lieu of prosecution in some cases.

As to the efficacy of existing law, a majority of the prosecutors agree that the marihuana laws do not deter, or deter only minimally:

Persons under 30 from initiating use (53%)

Users from using regularly (56%)

Users from transferring small amounts for little or no remuneration (55%)

From the studies made by the Commission of enforcement practices, we consider this to be a realistic assessment.

Conversely, however, the prosecutors agree that the laws have a significant effect in deterring users from smoking marihuana openly (62%) and persons over 30 from initiating use (44%).

We also asked the district attorneys for their views on an appropriate legal policy concerning marihuana use. Their opinions tend to fall in three groups. One group, representing about 25% of the prosecutors, favors the status quo, and does not want any further reduction in penalties. A fifth of the prosecutors conclude, on the basis of their experience, that possession of marihuana, and perhaps sale of the drug, should be removed entirely from the criminal justice system.

The remaining prosecutors, a majority, is willing to consider mitigation of the harshness of

the law either by legislation or by benign exercise of discretion, but is reluctant to relinquish formal, criminal control. These prosecutors doubt the deterrent value of the law and are willing to be lenient in appropriate cases, but they believe some use of the legal system is necessary to prevent all increase in marihuana use.

Underlying these opinions are diverse attitudes about marihuana use and the efficacy of existing law. For example, prosecutors who doubt the efficacy of existing law and reject the "escalation" and "aggressive behavior" hypotheses, are generally willing to modify the laws by their enforcement policies and by legislative reform (Table 8).

The same general pattern of practice and opinion emerges at the judicial and dispositional level. Only 13% of the responding judges would jail an adult for possession of marihuana and only 4% said they would incarcerate a minor. Lesser proportions of probation officers and clinicians would imprison adults (8% and 1%) and minors (2% and %). Conversely, 11% of the Judges, 15.5% of the probation officers and 63.5% of the clinicians noted that they would assess no penalty for possession by adults. For minors, the proportions are 3%, 5%, and 35% respectively.

Table 8.-DISTRICT ATTORNEYS, OPINIONS

Percent who	Percent who believe the	Percent who believe marihuana	Percent
Change favored marihuana	marihuana laws do not	who utilize	
leads to leads to deter persons informal	hard drug aggressive under 30 probation	use behavior from initi-	
ating use	None	87.1	47 51.3 28.5
Reduction of possession	penalties	68.8	35.1 63.2 34.3
Preclusion of incarceration.		64.7	33 59 33.2
Decriminalization of	possession of small	amounts	41.5 21.9 67.2 37.4
Legalization of marihuana.		32.2	11.1 69 37.8

How to read table: 87.1%, of the prosecutors who favor no change in existing law believe

that marihuana leads to the use of hard drugs; in contrast, 32.2% of the prosecutors who favor legalization believe that marihuana leads to the use of hard drugs.

With regard to appropriate legal policy, the judges exhibit the same inclination as the prosecutors to look for alternatives within a formal control system which would avoid the use of criminal penalties. We asked essentially the same question in two ways and received similar responses (Table 9).

The judges, as a group, are less enthusiastic about criminal control than the prosecutors, but are equally unwilling to relinquish formal control. By contrast, the probation officers and clinicians, who have more personal contact with these offenders and are perhaps more intensively aware of the control potential of the criminal justice system, are highly skeptical about formal control (Tables 10, -and 11).

In conclusion, as one proceeds through the criminal justice system, from district attorneys to court clinicians, the people responsible for the functioning of that system seem to be decreasingly enthusiastic about the appropriateness of criminal control and decreasingly insistent on any technique for formal control.

Table 9.\*-JUDGES, OPINIONS

Types of control	Percent	Statutory schemes	Percent
control for adult users who favored		control for possession who favored	
Informal Personal choice	11	Control outside criminal justice system	24.3
Informal social control	22	Required treatment	21
Non-criminal formal control		Expungement of criminal record	57.9
Other formal control	11	Control within criminal justice system	11.5

\*Because of a small percentage of non-responses, figures do not always total 100%.

How to read table: When asked to identify the appropriate means of control for adult users, 33% of the judges opted for informal control (11% would rely on personal choice and 22%, would rely on informal social control). Similarly, when asked about the appropriate statutory scheme for possession, 24.3% of the judges preferred control outside the criminal justice system, a functional equivalent of "informal control."

Table 10.\*-PROBATION OFFICERS' OPINIONS

Types of Means of control Percent Statutory schemes Percent

control for adult users who for possession who

avored favored

Informal Personal choice 21 Control outside 35.5

control Informal social 32.7 criminal justice

control system

Non-criminal Required treatment 11.8 Expungement of 54.5

formal Other 10 criminal record

control

Criminal Criminal law 15.5 Control within 9

control criminal justice

system

\*Because of a small number of non-responses, the figures do not always total 100%.

To supplement our survey of behavior and opinion within the criminal justice system, we also solicited the views of the American Bar Association. The President of the ABA in turn urged the respective Committees of the Association to submit their views to us. The two Committees directly concerned with the drug area, the Committee on Alcoholism and Drug Reform of the Section on Individual Rights

#### Table II. \*-CLINICIANS, OPINIONS

Types of Means of control Percent Statutory schemes Percent

control for adult users who for possession who

avored favored

Informal Personal choice 61.7 Control outside 74

control Informal social 21 criminal justice

control system

Non-criminal Required treatment 1 Expungement of 22.6

formal Other 10 criminal record

control

## Criminal Criminal law 3.5 Control within 0

control criminal justice

system

'Because of a small number of non-responses, the figures do not always total 100%.

and Responsibilities, and the Committee on Drug Abuse of the Section on Criminal Law, were in essential agreement regarding the appropriate course of action.

Both Committees expressed doubt about the wisdom and legitimacy of existing policy and about the capacity of the criminal justice system to deal with marihuana use. They both urged the Commission to recommend the removal of criminal penalties from possession of the drug for personal use and casual non-profit transfers. Both Committees suggested that a regulatory approach to distribution of the drug be given serious consideration.

### THE NON-LEGAL INSTITUTIONS

Law enforcement authorities, given available and prospective resources, cannot possibly enforce the existing marihuana laws fully. The best they can do is keep marihuana use contained and out of sight. In addition, many officials within the criminal justice system are reluctant to enforce the marihuana laws, being either uncommitted to the usefulness of this particular law or opposed to the law itself. The net result is for the legal system to leave much of the responsibility for social control to other social institutions such as family, schools, churches, and the medical profession. Since these other institutions themselves have relied heavily on the legal system for control, caution and confusion now dominate the social response to marihuana use.

The diminishing severity of the law enforcement response may not have occurred if the other institutions of society had continued to regard the marihuana user as a criminal. However, many of these institutions have come to view the marihuana user primarily in social or medical terms, and to recommend a form of social control in accord with their respective self-interests or orientations. In many cases, the attitudes of these other institutions mirror that of the criminal justice system: uncertainty about the proper role of formal legal control.

#### The Family

The most important institution for instilling social norms is the family. Parental attitudes generally parallel public opinion, and specific responses in our National Survey suggest an inclination among parents and non-parents to deal with youthful marihuana users through discussion and persuasion rather than harsh or punitive measures. When asked what action they would take upon discovering that one of their teenage children was smoking marihuana with friends, 47% of the adults responded that they would use persuasion and reason. Twenty-three percent favored a punitive approach. Interestingly, 9% of the latter group felt so strongly about the matter that they were willing to report their own child to the police. A considerable number, 35% indicated that they were uncertain about what to do, or failed to respond to this multiple response question.

The non-punitive trend was also apparent when the adults were asked what they would do if their teenage child was arrested for a marihuana offense. A substantial number (58%)

indicated they would attempt to extricate their child from the situation, many not wishing their child to have a police record, while 34% expressed the sentiment that the child's arrest would help him learn a lesson.

### **The Schools**

Marihuana use continues to increase among high school and college students. The National Survey reveals that 30% of the high school juniors and seniors have used marihuana. The National Survey also reveals that 44% of those currently attending college at the graduate or undergraduate levels have used it, while other surveys indicate this figure is significantly higher in some major universities.

Not surprisingly, there has been, during the last two years, ail appreciable change in the attitudes of school administrators, faculty and even of the boards of education and trustees toward marihuana use. Administrators at the secondary and college levels are generally more relaxed and tolerant toward marihuana use than they were during the mid-1960's, when support for a punitive response was common. After the initial shock of widespread use dissipated, many school officials came to believe that strong disciplinary action, including suspension and arrest, was counterproductive. In addition, as the evidence accumulated that marihuana was not as dangerous as had once been thought, parental and community pressures were sometimes brought to bear on school administrators to be less punitive and more understanding of marihuana use.

At the secondary level, the policies vary somewhat from state to state and even within states. Nevertheless, school boards generally seem to have become less enthusiastic about suspension and arrest as an appropriate response to marihuana use. One school administrator in Philadelphia noted sarcastically that if all users were suspended or arrested, the high schools would become empty cells, with their entire clientele turned out onto the streets.

A West Coast official emphasized that student alcohol use was a much more serious problem than marihuana use; he even suggested that legalization of marihuana might reduce alcohol use among the young. The Commission ascertained that no suspensions for marihuana use had occurred during 1971 in the entire school system of a southern metropolitan area. Although security officers in that system did make 20 arrests, they were all for selling marihuana and other drugs.

At the secondary level, then, increased reliance is being placed on persuasion rather than discipline, as a means of discouraging marihuana use. Drug education programs, now being instituted in almost every school system, often include information about alcohol and tobacco. We will explore the various pedagogical techniques employed in such programs and will attempt to evaluate them in our next Report.

At the college level, the response is even more lenient. In many cases official neutrality or even protection against police intervention substitutes for the restraint common at the secondary level. Under formal or informal arrangements with local law enforcement officials, many schools bar on-campus arrests for marihuana use. Apparently they have concluded that enforcement of the marihuana laws causes more harm than does use of the drug. In some cases, college authorities have substituted their own policy for society's official policy. The Commission learned at one of its hearings in Chicago, for example, that a major Midwestern university explicitly declared that students would be subject to university disciplinary action if they were found in possession of more than one week's supply of marihuana.

Control at the college level is usually considered a medical concern and is handled either through the university health centers or free clinics. The trend toward leniency is also apparent in the policy responses of the representative sample of university health service and free clinic physicians, whose profession presumably brings them into contact with the population most at risk from marijuana. Among personnel of the free clinics, 62% of the respondents favor legalization; 5% would continue the present policy, and the remainder would either reduce penalties (11%) or await further research (22%).

Even among the "establishment-oriented" health service personnel, similar attitudes prevail. Nineteen percent would continue the present policy, and 16% would legalize. Of the remaining 55% (10% did not respond), 38% would reduce penalties and 17% would await further research. This pattern of views bears a striking resemblance to that of the prosecuting attorneys, and indeed of the public at large. The large majority indicates uneasiness with the present system and opposition to legalization, but is uncertain about exactly what to do.

### **The Churches**

The nation's churches play a major role in the process by which society's norms and values are transmitted to the young. Moral education, through individual and family counseling by church personnel, is influential in the process of social control, particularly for adolescents. Consequently, the Commission sought to learn the attitudes, responses and recommendations of the clergy.

The larger societal uncertainty about the social and moral implications of marijuana use is also reflected in the attitudes of religious institutions. For example, Dr. Thomas E. Price, speaking for the National Council of Churches of Christ in the U.S.A. before the Commission, referred to marijuana as a "tightly drawn moral knot." This uncertainty has led many religious groups to minimize a punitive and repressive response to marijuana use in their official statements and formal programs. Instead, they have concentrated on educational and rehabilitative programs.

Many church spokesmen have urged a reconsideration of social and legal policy. The range of their suggestions for change reflects, once again, widespread uncertainty. Some ask for some form of "adequate" punishment or supervision so as to discourage marijuana use. Others say "reform or elimination" of penalties for possession would be appropriate. And there are those who suggest legalization with some government regulation. Some church spokesmen have defended existing policy, recommending only that the law be more strictly and uniformly enforced.

### **The Medical Community**

In contrast to the mixed opinions of other segments of society, the medical profession has a rather broad consensus at the present time. In a series of responses from various medical societies, associations and committees, we found certain recurrent themes. Every medical group emphasized the need for more research into the effects of marijuana. There was uniform emphasis on how marijuana, as a "drug," affects heart, head, blood, brain and so on, but not on how it affects society as a behavior. The consensus was that marijuana, the drug, poses some danger for the individual, physically or psychologically. The only major disagreement is about the degree of such danger.

The second recurrent theme was that marijuana should definitely not be legalized. Legalization would imply sanction, medical groups said, with a probable increase in use as a result. One doctor compared legalization with the failure of Prohibition: "The fact [that]

Prohibition was a failure doesn't make alcoholism a good thing and the six million or so (alcoholics) we have are no bargain. Therefore, since there is no legitimate use for marihuana it seems rather silly to legalize its use to initiate a second headache." Another reason commonly given by physicians for opposing legalization is that such a step should be taken if and when it is proven that marihuana is not dangerous.

The third common theme of medical opinion was a call for a more lenient approach toward users, again a position reflected in almost every quarter of society. One officer of a public health association told a convention: " (Our committee) deplors the strong punitive measures suggested by some because we feel that a jail sentence for the offense of smoking marihuana is not likely to solve the problem of eliminating marihuana use. On the contrary, a prison sentence is likely to do great damage to a young person's personality as well as to his future career." Another group called for prosecutors to use discretionary powers in handling youthful first offenders.

When discussing penalties, the medical community begins to take a look at marihuana use as a form of social behavior rather than simply a drug which produces certain physical and psychological effects. One doctor wrote: "Because marihuana in present patterns of use is, by and large, a relatively innocuous drug and because its use has many motivations from simple curiosity to symbolism of hostility to the 'establishment', the legal penalties in many jurisdictions throughout the United States are excessively punitive."

### Summary

Social institutional spokesmen now commonly recognize that control of marihuana is only partially a law enforcement problem. Opinions cluster around the propositions that society should not be punitive on the one hand, but should not make the drug available, at least for now. Beyond these points, however, uncertainty prevails. There is no common vision of an appropriate social control policy.

Each institution is going about the business of control in its own way. Parents emphasize mutual communication. The secondary schools emphasize health education. The colleges recognize personal freedom so long as it does not jeopardize the educational enterprise. Churches emphasize uncertainty about the moral implications of marihuana use. The medical fraternity stresses the need for further research into the health consequences of marihuana use. Uncertainty is the common denominator.

### THE PUBLIC RESPONSE

For most Americans marihuana use is not an abstract phenomenon. Fifteen percent of the adult population, the National Survey revealed, has tried the drug and 44% of the non-trying adults personally know someone who has used the drug. Fourteen percent of the youth have tried the drug and 58% of the non-tryers personally know someone who has used the drug. Indeed, six percent of the non-trying youth indicated that half or more of their friends used marihuana.

The public is also aware of the consequences of the existing system and concerned about its impact. Ninety-seven percent of the adults know that selling marihuana is against the law. Only a few less, 94%, know that possession is against the law. In fact, one fourth of the adults know someone who has been arrested on a possession charge. Ninety-two percent of the youth know that sale is prohibited, and four out of five know that possession is against the law. Fifty-three percent of the 16- and 17-year-olds actually know someone who has been arrested for possession.

Acutely aware of the legal consequences of use, the public is also cognizant of the difficulties encountered by the criminal justice system in its attempt to enforce a widely-violated law. Adults were asked whether they mostly agreed or mostly disagreed with a series of 12 selected propositions regarding the desirability of maintaining or altering the present system of marihuana control. The two propositions which received the most support relate to problems inherent in the existing laws.

Eighty-three percent of the adults mostly agreed with the statement that "because of marihuana a lot of young people who are not criminals are getting police records and being put in jail." And 76% agreed that "laws against marihuana are very hard to enforce because most people use it in private."

Marihuana use is more personal than most public issues, but it is also more confusing. Bombarded in recent years with contradictory "findings" and statistics about the effects of marihuana, and with conflicting arguments about public policy, the public tends to believe everything, whether pro or con. Particularly important in this regard is the widespread acceptance of beliefs which have little basis in fact.

Approximately half of the adult public believes that "many crimes are committed by persons who are under the influence of marihuana," and that "some people have died from using it." Seven of every 10 adults believe that "marihuana makes people want to try stronger things like heroin." Although the probability that a person believes these statements increases with age, a significant percentage of all groups are represented.

The underlying confusion is strongly indicated in the contradictory attitudes toward various reasons for maintaining or changing the law. For example, 43% of the adults thought, in the context of an argument for making marihuana legal, that "it should be up to each person to decide for himself, like with alcohol or tobacco." Yet 75% of the adults agreed, in the context of an argument for keeping the laws the way they are, that "there are already too many ways for people to escape their responsibilities. We don't need another one."

Youth tend to be less convinced than adults that marihuana use may be fatal to the user, or cause him to commit crime or lead him to use other drugs; but young people as a group also are noticeably more uncertain about these matters. One of every four young people indicated that they were unsure whether marihuana caused death or crime, and one of every six expressed uncertainty regarding the progression to other drugs. Similarly, young people were more than twice as likely as adults to have "no opinion" about the various propositions regarding the need for legal change.

Public attitudes toward marihuana exhibit both doubt and tension. On the one hand, we note an acute awareness of the legal consequences of marihuana use and an appreciation of the adverse impact of processing users through the criminal justice system. On the other hand, we note some misconceptions about the dangers of marihuana and confusion about the consequences of changing or maintaining the present system.

Public responses on the basic questions of social and legal policy reflect the underlying ambivalence. The overwhelming majority of the public does not want to treat the marihuana user harshly. This attitude appeared repeatedly through the entire Survey. When asked "For the good of the country, which of the following courses of action would be the best thing to do about [marihuana use]?" the public responded in the following manner:

Percentage Youth Adults\* 12-17

Handle the problem mostly through the police and courts:

the process of arrest, conviction, punishment ----- 37 90

Handle the problem mostly through medical clinics:

the process of diagnosis, treatment, care ----- 51 48

Don't worry about the use of marihuana, but spend time and money on preventing and solving other crimes

No opinion ----- 5 20

\*Some adults gave more than one answer.

Adults and youth were also asked to look at marihuana use from the perspective of the system, and to identify the appropriate penalty for possession of marihuana. Both groups were reluctant to put users in jail, especially for a first offense. Eighty-three percent of the adults and 64% of the youth would not incarcerate a youthful first offender; 54% of the adults and 41 % of the youth would not even give the young offender a police record (Table 12).

#### Table 12.-ADULTS' VIEWS ON POSSESSION PENALTIES

If defendant is teenager If defendant is adult

Penalty

First Previous First Previous

offense conviction offense conviction

(percent) (percent) (percent) (percent)

No penalty 20 Total 6 Total 13 Total 7 Total

Fine (no police record).. 34 83 11 37 28 64 6 24

Probation 29 20 23 11

Jail sentence

Up to a week 8 Total 20 Total 11 Total 14 Total

Up to a year 3 13 24 56 12 32 24 70

More than a year 2 12 9 32

No opinion 4 7 4 6

## YOUNG PEOPLES, (age 12-17) VIEWS ON POSSESSION PENALTIES

If defendant is teenager If defendant is adult

Penalty

First Previous First Previous

offense conviction offense conviction

(percent) (percent) (percent) (percent)

No penalty 13 Total 6 Total 11 Total 17 Total

Fine (no police record).. 28 64 9 35 21 50 7 27

Probation 23 20 18 13

Jail sentence

Up to a week 8 Total 13 Total 16 Total 12 Total 1

Up to a year 6 19 21 51 11 36 18 59

More than a year 5 17 9 29

No opinion 17 14 14 14

Interestingly, the youth population as a whole was less lenient than the adult population as a whole. Within each group, however, the older teenagers and young adults were the most tolerant in all respects.

These statistics suggest that the public generally prefers leniency when responding to questions specifically directed to marijuana use. But when asked about "control" or "the law" in general, the response often appears quite harsh. For example, when asked to consider a range of five alternative control schemes, most adults tended to resist change.

Thirty-one percent of the adults thought that making marijuana legally available through regulated channels (like alcohol) was acceptable but 67% thought it was unacceptable. Although 23% thought the removal of criminal sanctions from possession was acceptable, 74% thought this approach was unacceptable. On the other hand, 56% of the adults thought that the existing laws were acceptable; yet 41% found the present law unacceptable. Finally, 72% thought "stricter laws" would be acceptable, while only 26% thought such a change would be unacceptable. Indeed 43% thought stricter laws were the "ideal solution" and 62% thought this was the best of the alternatives.

These responses seem to be contradictory. We are puzzled about what the respondents thought they meant when they expressed a preference for stricter laws.

They probably did not mean stricter penalties for possession. Such an interpretation would be entirely inconsistent with responses to questions aimed directly at appropriate policy toward users. Under existing law some states still treat first offenders as felons and most states treat multiple offenders as felons. But, only a third of the adult respondents would put an adult multiple offender in jail for more than a year.

The preference for stricter laws might be interpreted to mean heavier penalties for sale, or better enforcement of existing proscriptions against trafficking. Two-thirds of the adults did indicate that they preferred heavier penalties for sale than for possession. But penalties for selling for profit are already quite heavy in every jurisdiction.

We suspect that a majority of the public, including many of those favoring "stricter laws," is actually disturbed about the increase in marihuana use and would like a system which would work better than the existing system to discourage use. A majority of the adult public seeks a better system of control, albeit one which is not punitive toward the user. Apparently uneasy about the individual and social consequences of the present system, the large center of public opinion is nonetheless reluctant to relinquish formal control.

This insistence on maintenance of formal controls over the user rests upon two interrelated factors: respect for law and faith in the efficacy of legal control. First, the public does not believe the legal order should wither away simply because many people choose to violate the laws against marihuana use. Obedience, of the law is highly valued in our society.

This factor is illustrated clearly by the widespread public disagreement with the following arguments for changing the law: 76% of the adults disagreed with the statement that "young people would have more respect for the law if marihuana were made legal;" and four out of five adults disagreed with the statement that "so many people are using marihuana that it should be made legal."

Second, most adults believe that legal remedies, even though not punitive, are necessary to discourage use of the drug. This belief is tied largely to their understanding of the effects of the drug and is reflected in the response to the question about "the best way" to handle the use of marihuana. As we noted earlier, 51% of the public thought that marihuana use ought to be handled as a medical problem.

Also, the substantial majority of people who are reluctant to incarcerate possessors do prefer the imposition of fines without a police record or probation. Both of these alternatives retain formal control over the user and indicate faith in the deterrent value of the law. The public responses in this respect bear a striking resemblance to those of the judges and probation officers, who repeatedly indicated a preference for non-punitive formal control.

This interpretation of dominant opinion was drawn from ostensibly inconsistent responses to a long series of questions on appropriate social and legal policy. A substantial minority of the public, however, exhibited a consistent pattern of response to all questions. About a quarter of the public is convinced that the criminal sanction should be withdrawn entirely from marihuana use. Another quarter of the public prefers the criminal approach, even for the user.

In sum, the existing system is not supported by the consensus of public opinion that once existed. There is a consensus that punitive measures are generally inappropriate. There is also a predominant opinion that the legal system should not abandon formal control.

## **Marihuana, A Signal of Misunderstanding**

**The Report of the National Commission on Marihuana and Drug Abuse**

# **Chapter V**

## **marihuana and social policy**

"The difficulty in life is the choice."

George Moore (1900)

A constant tension exists in our society between individual liberties and the need for reasonable societal restraints. It is easy to go too far in either direction, and this tendency is particularly evident where drugs are concerned.

We have guided our decision-making by the belief that the state is obliged to justify restraints on individual behavior. Too often individual freedoms are submerged in the passions of the moment, and when that happens, the public policy may be determined more by rhetoric than by reason. Our effort has been to minimize the emotional and emphasize the rational in this Report.

### **Drugs In a Free Society**

A free society seeks to provide conditions in which each of its members may develop his or her potentialities to the fullest extent. A premium is placed on individual choice in seeking self-fulfillment. This priority depends upon the capacity of free citizens not to abuse their freedom, and upon their willingness to act responsibly toward others and toward the society as a whole. Responsible behavior, through individual choice, is both the guarantor and the objective of a free society.

### **DRUGS AND SOCIAL RESPONSIBILITY**

The use of drugs is not in itself an irresponsible act. Medical and scientific uses serve important individual and social needs and are often essential to our physical and mental well-being. Further, the use of drugs for pleasure or other non-medical purposes is not inherently irresponsible: alcohol is widely used as an acceptable part of social activities.

We do think the use of drugs is clearly irresponsible when it impedes the individual's integration into the economic and social system. A preference for individual productivity and contribution to social progress in a general sense still undergirds the American value structure, and we emphasize the policy-maker's duty to support this preference in a public policy judgment.

At the same time, in light of the emerging leisure ethic and the search for individual meaning and fulfillment noted in Chapter 1, we cannot divorce social policy from the questions raised by the recreational use of drugs. Productivity and recreation both have a place in the American ethical system. They are not inconsistent unless the individual's use of leisure time inhibits his productive role in society.

Drugs should be servants, not masters. They become masters when they dominate an individual's existence or impair his faculties. To the extent that any drug, including alcohol, carries with it risks to the well-being of the user and seriously undermines his effectiveness in the society, that drug becomes a matter of concern for public policy.

An essential step in the process of policy-formation is a determination of the circumstances under which use of any given drug' poses such risks. For some drugs, the risks may be so great that all permissible measures should be taken to eliminate use. For other drugs, such risks may be present only under certain specific circumstances, in which case society may defer to responsible individual choice on the matter of recreational use but take appropriate steps to minimize the incidence and consequences of dysfunctional use. In our Report next year, for which studies are already underway, we will consider from this perspective the whole range of drugs now used for non-medical purposes.

#### A Social Control Policy for Marihuana

In formulating a Marihuana policy, our strongest concern is with irresponsible use, whether it be too often, too much, indiscriminate, or under improper circumstances. The excessive or indiscriminate use of any drug is a serious social concern; and this is particularly true of marihuana since we still know very little about the effects of long term, heavy use. We have little doubt that the substantial majority of users, under any social control policy, including the existing system, do not and would not engage in irresponsible behavior.

In identifying the appropriate social control policy for marihuana, we have found it helpful to consider the following policy options:

- I Approval of Use.
- II Elimination of Use.
- III Discouragement of Use.
- IV Neutrality Toward Use.

#### APPROVAL OF USE

Society should not approve or encourage the recreational use of any drug, in public or private. Any semblance of encouragement enhances the possibility of abuse and removes, from a psychological standpoint, an effective support of individual restraint.

For example, so long as this society (not only the government, but other institutions and mass advertising as well) in effect approved of the use of tobacco, the growing medical consensus about the dangers of excessive use did not make a significant impression on individual judgment. With the Surgeon General's Report on Tobacco in 1964, Smoking and Health, a very real change has occurred in the way society now thinks about cigarettes.

The institutions of society definitely add their influences to the variety of social pressures