THE SOCIAL ASPECTS OF MARIHUANA USE: ? S HOMOGENEITY, NORMATIVE STRUCTURE, AND BEHAVIORAL PATTERNS AMONG OCCASIONAL AND REGULAR USERS OF MARIHUANA

Ву

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CHAPTER I

NATURE OF THE PROBLEM

Introduction

The use of marihuana as an anesthetic and euphoriant can be traced back in history some 4,000 years. Although the plant cannabis sativa was originally indigenous to Central Asia, it is now found growing in almost every section of the world. However, it is mainly found in abundance in those countries experiencing a warm climate, enabling the plant to be easily cultivated.

The story of marihuana is quite old when one views its historical record in various sections of the world. In contrast, its history in the United States is relatively recent, chiefly dating back to the revolutionary days of the republic. The importance of the cannabis plant during this period in the United States was based upon its value as a "cash crop." That is, the value of cannabis was economically based; it was from the cannabis plant (popularly called the hemp plant) that rope was manufactured. 1

Today in the United States the cannabis plant goes by the more popular name of marihuana. However, it does go by many other terms in

Robert P. Walton, <u>Marihuana: America's New Drug Problem</u> (New York: J. B. Lippincott Company, 1938), p. 1.

certain sections of this country as well as in other nations.² "In all there are about one hundred and fifty terms in various languages for folk preparations of the drug."³

In the United States the most popular method of using marihuana is the oral process of smoking certain sections of the plant.

Cannabinoil, a red oily substance responsible for the potency of the plant is found within the flowering leaves located at the top of the female plant. These flowering leaves are detached from the main part of the plant, are cut and dried, and finally chopped into particles fine enough for incorporation in cigarettes.

During the decades of growth which characterized the United States following the American Revolution marihuana increased in importance although the reasons were not solely economic. First among the various reasons for its increased importance was the fact that marihuana could be used for purposes of intoxication. However, until the end of the 1920's the use of marihuana as a device for inducing intoxicating effects was to be found mainly within the lower socio-economic strata of this country.⁵

²A partial listing of the more common terms includes: grass, boo, hemp, Mary Jane, stuff, tea, weed, shit, smoke, pot, and hash.

Bernard Finch, Passport to Paradise (New York: The Philosophical Library, Inc., 1960), p. 53.

⁴Roger Adams, "Marihuana," <u>Science</u>, XCII, No. 2380 (August, 1940), p. 116.

⁵Mayor's Committee on Marihuana, <u>The Marihuana Problem in the City of New York</u> (Lancaster, Pennsylvania: The Jacque Cattell Press, 1944), p. 3.

During the 1930's the popularity of marihuana experienced a great upsurge within the lower socio-economic strata of the United States. However, the various uses of the cannabis plant had not yet penetrated into the middle classes of the United States.

It was not until the end of the Second World War that marihuana began to be extensively used in this country. The reasons for the increase in marihuana use was based upon three factors: 1) internal migration of Mexicans in the southwestern states; 2) immigration from foreign countries; and 3) the war itself, with American servicemen returning from all sections of the world.

The use of marihuana in the United States today is no longer predominantly found among migrant Mexican farm laborers, immigrants from foreign countries, or Negroes. No longer is the use of marihuana associated with only one or two socio-economic classes; rather its popularity has permeated every social grouping in American society. Most recently attention has been focused on the middle socio-economic strata in attempting to explain the phenomenon of marihuana's popularity. The "hippy," the political radical, the alienated young, the business executive, the clergy, the middle class college student, and the typical housewife are examples of users of marihuana in American society today. Thus, the use of marihuana is to some degree

Editorial, "Mary Jane Is A Big Girl Now," <u>Academia</u>, No. 3 (December, 1967), p. 7.

⁷ Mayor's Committee on Marihuana, The Marihuana Problem in the City of New York (Lancaster, Pennsylvania: The Jacque Cattell Press, 1944), p. 3.

⁸Editorial, "Mary Jane Is A Big Girl Now," <u>Academia</u>, No. 3 (December, 1967), p. 7.

now found in every element of American society.

The effects experienced during marihuana intoxication have been investigated by both laymen and scientists since the beginning of the 19th Century. In recent years, because of the increase in marihuana's popularity a concerned attitude has arisen focusing on the far reaching effects the use of marihuana will ultimately have on the individual. However, during the years of marihuana's greatest increase in popularity - 1950 to the present - there have been relatively few empirical investigations concerned with the use of marihuana. Therefore this study seeks to add to existing knowledge pertaining to the marihuana experience, and to determine the characteristics of the user in the United States today.

The Problem

For the most part material focusing on the use of marihuana may be found in journal articles and books which were published during the 19th Century. However, as has previously been mentioned, during the past twenty years there have been few empirical investigations which concern themselves with the use of marihuana. In view of these facts this author will present empirical evidence pertaining to the behavioral patterns of the user of marihuana in the United States.

⁹See: Robert P. Walton, <u>Marihuana: America's New Drug Problem</u> (New York: J. B. Lippincott Company, 1938), pp. 196-213.

¹⁰ Ibid.

In reviewing the major social science journals this fact is evident. However, there have been a few recent contributions on this subject, namely by Howard S. Becker and David Solomon. For more references pertaining to this question refer to the bibliography.

This study must rely however on information presented in various past studies. This study will supplement these previous studies, in particular those by Howard Becker and the Mayor's Committee on Marihuana. Specifically, this study will concentrate on the question of homogeneity and uniformity as it pertains to the occasional and regular user of marihuana. Attention will also be focused on the norm structure and behavioral patterns of the occasional and regular user of marihuana. This study will compare the activities of both types of users in order to evaluate differences in behavioral patterns, norm structure, and technological systems between these two groups. The findings of this investigation will also be evaluated in terms of the findings of previous studies to determine if homogeneity exists and if there have been changes of behavior and norm structure among users of marihuana today.

CHAPTER II

REVIEW OF THE LITERATURE

Previous Studies

For the most part, past and present literature dealing with the use of marihuana (both subjective and objective accounts) is descriptive. The investigations were carried out in an effort to explain or describe the marihuana experience. These investigations are extremely important in that they form the guidelines for the empirical study of marihuana use. That is, they have been able to describe in detail the physical and psychological effects, the social aspects, and the techniques involved in using marihuana.

However, many of the existing empirical investigations dealing with the phenomenon of marihuana use are found to investigate only the behavioral patterns of the regular user of marihuana. The occasional user of marihuana is rarely given equal attention. Any information which is pertinent to the patterns of interaction on behalf of the occasional user is therefore mainly found where there is information concerned with the regular user of marihuana. The occasional users behavioral patterns are therefore examined only in their relation to the transformative process or movement from occasional to regular use of marihuana.

Clausen notes in his investigation of marihuana use and the

enjoyment of the intoxicating effects of the marihuana experience that the individual must disengage himself from societal values and controls if he is to become a member of a marihuana using group. 1

As a transformative movement begins the individual learns and accepts a new set of values in connection with his new form of behavior. Becker states that, "... such a change is, as might be expected, a result of the individual's participation in groups in which marihuana is used." Thus, in becoming a user of marihuana the individual learns the ways in which he may disengage himself from societal controls. By disengaging oneself from dominant societal values and controls the individual finds it easier to become a member of a marihuana using group whose values become a substitute for the societal values. As a new member of this social group the individual adopts the proper behavioral patterns which will insure for him both acceptance from the group and pleasure from his experience with marihuana.

The user of marihuana by participating in groups in which marihuana is used thus strengthens his definition of his new behavior. The individual is usually introduced to the techniques of using marihuana in a group setting and for the most part will continue to operate in this fashion. This particular viewpoint has been proposed

John A. Clausen, "Drug Addiction," <u>Contemporary Social Problems</u>, Robert K. Merton and Robert A. Nisbet, eds. (New York: Harcourt, Brace and World, Inc., 1961), p. 198.

Howard S. Becker, <u>Outsiders</u> (New York: The Free Press of Glencoe, 1963), p. 47.

³John A. Clausen, "Drug Addiction," <u>Contemporary Social Problems</u>, Robert K. Merton and Robert A. Nisbet, eds. (New York: Harcourt, Brace and World, Inc., 1961), p. 198.

studies, in particular, the report published by the Mayor's Committee on Marihuana.

The group is important in that it is in this setting that the individual is introduced to the prescribed normative behavior which he must adhere to while using marihuana. Secondly, the group is able, and must, exert a certain amount of control (application of positive and negative sanctions) over the actions of the individual while he is using marihuana. Blake and Mouton have found that the adjustment of the individual during his transformative process (from "out-group" to "in-group" member) is made easier when he follows the prescribed rules of the group. As part of this social group the individual is able to rely on others in helping him to make his transition and to accept new values and attitudes. Thus, the neophyte, in conforming to the normative demands of the group tends to view the group as a stable element upon which he may base his behavior.

To continue this point one step further, Becker states that a norm structure is characterisite and considered to be one of the more important elements found among those using marihuana. Sherif, to be

⁴See: Mayor's Committee on Marihuana, <u>The Marihuana Problem in the City of New York</u> (Lancaster, Pennsylvania: The Jacque Cattell Press, 1944).

⁵Howard S. Becker, <u>Outsiders</u> (New York: The Free Press of Glencoe, 1963), pp. 41-78.

Robert R. Blake and Jane Srygley Mouton, "Conformity, Resistance, and Conversion," <u>Conformity and Deviation</u>, Irwin A. Berg and Bernard M. Bass, eds. (New York: Harper and Brothers, 1961), pp. 1-11.

Howard S. Becker, Outsiders (New York: The Free Press of Glencoe, 1963), p. 177.

more specific, reports that the normative structure of a given group determines whether or not the group is a homogeneous social unit or a mere aggregate of individuals. Thus, the importance of the norm structure of a given group is relative to the acceptance of these normative elements by the group members. That is, the group norms represent the shared acceptance of a rule, which is ultimately beneficial to all those in the group as it perpetuates the existence of the group. And, the beneficiality of the norms of the group in strengthening the group's existence is directly related to the final objective of the group. In the marihuana using group this final objective and/or goal is the attainment of the intoxicating effects induced by the marihuana experience.

Charen and Perelman have found that within this group setting the marihuana user's behavioral actions and psychological attitudes are affected by the norm structure, and in turn, affect the normative structure. For the most part, the user of marihuana prefers interacting within a society made up of people with similar attitudes and values, other users of marihuana. Within this group setting the marihuana user shares experiences, as well as the interest in marihuana. These attitudes serve as a unification factor in that they make the group extremely homogeneous; the user feels that he

Muzafer Sherif, "Conformity, Deviation, Norms, and Group Relations," <u>Conformity</u> and <u>Deviation</u>, Irwin A. Berg and Bernard M. Bass, eds. (New York: Harper and Brothers, 1961), p. 177.

⁹Tamotsu Shibutani, Society and Personality (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1961), p. 33.

lives in a world of his own, distinct from the world of non-users. 10 One of the prime forces uniting these individuals is that the user of marihuana finds it pleasant to be with other users and to share his experiences with them. "This is reflected in the fact that marihuana is ordinarily smoked at parties or in groups." 11

The group to which the marihuana user aspires to become a member may more appropriately be termed his reference group. The reference group may thus be defined as the group with which the individual identifies. An individual identifies with the group because he has adopted its values, attitudes, and modes of behavior. He has acquired a sincere feeling of belongingness and of shared concerns. And, by identifying, aspiring, and becoming a member of the "in-group" the individual shares the common values and norms of the group. 12

One of the identifying characteristics and one of the most important elements of the group (in this case, the "in-group" of marihuana users) is the language used for purposes of communication. The vocabulary of the group is important in that it perpetuates the existence of the group; the language permits the members to communicate in terms which are meaningful only to them. 13 There is a

¹⁰Sol Charen and Luis Perelman, "Personality Studies of Marihuana Addicts," <u>American Journal of Psychiatry</u>, CII (March, 1946), pp. 674-679.

¹¹ Walter Bromberg, "Marihuana: A Psychiatric Study," <u>Journal of</u> the <u>American Medical Association</u>, CXIII, No. 1 (July, 1939), p. 5.

¹² Manford H. Kuhn, "The Reference Group Reconsidered," Sociological Quarterly, V, No. 1 (Winter, 1964), p. 10.

¹³ Charles Kaiser, "Small Group Communication: The Basis of Consensus and Reciprocity," (Unpublished Term Paper: Oklahoma State University, 1967).

"slang-vocabulary" built around the use of marihuana which tends to unify the group and thus expose an "out-member" or "square," one who is not a user of marihuana. The language itself is composed of slang expressions which have very little meaning to the non-user. "With this . . . language,, the addict definitely feels that he lives in world of his own, seperate and outside the world of non-addicts." 15

The acceptance of new values and attitudes is one of the aspects inherent in the normative structure which must be accepted by the novice before he will be considered a member of the group. Other aspects of this normative structure may be classified as sub-elements of the over-all "acceptance-pattern." That is, if the individual accepts the basic values and attitude orientations and becomes an accepted member of the group his actions will be sanctioned positively. If he deviates too much from the basic norm structure he will be sanctioned negatively. However, before the individual is subjected to negative sanctions he will be encouraged to experiment with marihuana. Thus the individual will be warned about "over-use" of the drug, but he will be encouraged to experiment until he learns how much is needed to achieve his proper level of intoxication. 16

¹⁴ Various examples of these slang terms include: head, bust, fly, high, dig-it, pot-head, bring-down, downie, roaches, freak, etc. .

¹⁵ Sol Charen and Luis Perelman, "Personality Studies of Marihuana Addicts," <u>American Journal of Psychiatry</u>, CII (March, 1946), p. 679.

^{16&}lt;sub>Ibid</sub>.

The acceptance of the various norms of the group helps to maintain conformity within the group. Thus, ". . . . it follows that conformity of an individual will depend on the extent others in the group instruct, supervise, inform, or decide for him." In the marihuana using group there is a great deal of instruction and supervision, specifically related to the proper ways in which marihuana is to be used, how to become intoxicated, how to act when intoxicated. In addition, there is great flexibility in the learning of these rules and negative sanctions are applied only when deviation is extreme. Becker, in his study of the marihuana user found that the application of these sanctions takes one form; the members of the group will curtail their use of the drug in the presence of the deviate. 18

Thus, that individual who in his behavioral patterns adheres to the socially approved norms will be sanctioned positively. Positive sanctions will take the form of being accepted by the group, giving the individual both prestige and satisfaction. Conformity to group norms is the consequence of a sincere feeling of belongingness; being part of the group and working hard to make the values and norms of the group one's cwn. 19 Therefore, the rules of the group specify the

¹⁷Bernard M. Bass, "Conformity, Deviation, and a General Theory of Interpersonal Behavior," <u>Conformity and Deviation</u>, Irwin A. Berg and Bernard M. Bass, eds. (New York: Harper and Brothers, 1961), p. 62.

Howard S. Becker, <u>Outsiders</u> (New York: The Free Press of Glencoe, 1963), pp. 46-58.

¹⁹ Theodore M. Newcomb, Ralph H. Turner, and Philip E. Converse, Social Psychology (New York: Holt, Rinehart And Winston, Inc., 1965), p. 241.

rewards for conformity and the punishments for nonconformity.²⁰

An integral part of the normative structure is the attitude that in order to enjoy the effects of the marihuana experience one must be among others who are also using marihuana. According to Becker, this participation with other users helps the beginner to first experiment with marihuana, and thus furnishes him with the conclusion that the act itself will be safe and pleasureable only when indulged in among other users. Furthermore, the regular user, in that his use of the drug is routinized, accepts the attitude that his contacts with non-users should be minimal when he is intoxicated. However there is another alternative open to the regular user. He can learn to control the effects of the drug experience while interacting socially with nonusers. This however is not the most enjoyable choice as the user tends to find interaction with non-users as non-pleasureable. If the user is unable to control his behavior when "high" there are only two alternatives open to him, one of which he is forced to take if he is to continue using marihuana: reverting back to occasional use, or, isolating himself from the conventional society. 21

Another very important aspect of marihuana use is that the individual will be able to enjoy the marihuana experience only after

Muzafer Sherif and Carolyn W. Sherif, <u>Groups In Harmony and Tension</u> (New York: Harper and Brothers, 1953), p. 186.

²¹ Howard S. Becker, <u>Outsiders</u> (New York: The Free Press of Glencoe, 1963), pp. 48-72.

he has learned to perceive its effects.²² What is the implication of this statement?

It suggests that being high consists of two elements: the presence of symptoms caused by marihuana use and the recognition of these symptoms and their connection by the user with his use of the drug. It is not enough, that is, that the effects be present; alone, they do not automatically provide the experience of being high. The user must be able to point them out to himself and consciously connect them with having smoked marihuana before he can have this experience.²³

It is at this point that Mead's theoretical statements concerned with the self are applicable and relevant. In the first place, the experience of an individual is related to his perceptions of himself as the object of certain experiences. Through the process of interaction the individual acquires the attitudes others have toward himself and thus he is able to "get outside himself." When this occurs the individual views his attitudes, activities, and experiences indirectly. He sees himself from the standpoint of other individual members of the social group of which he is a member. External objects as well as the self have meaning in relation to interaction with others. Closely related to this interaction process in which external objects as well as the subjective self become associated with others through interaction is the assumption that the activity of the individual is in part determined by the actions of others. In line with these assumptions Mead states that the "generalized other" is

²²Howard S. Becker, "Becoming A Marihuana User," American Journal of Sociology, LIX, No. 3 (November, 1953), p. 235.

²³Howard S. Becker, Outsiders (New York: The Free Press of Gelncoe, 1963), p. 49.

an organization of subjective attitudes related to group attitudes which ultimately affects the behavior of the individual. The attitude of this "generalized other" is thus the attitude of all the other members of the social group and of the norms and values of that group. Thus, as the individual internalizes and organizes his objective and subjective self concepts he is in all actuality internalizing and organizing attitudes, ideas, values, rules, and activities of his social group. 24

Therefore, in our activities the meanings attributed to objects are based on consensus about these objects, acted upon by the group members.

Selves can only exist in definite relationships to other selves. No hard-and-fast lines can be drawn between our own selves and the selves of others, since our own selves exist and enter as such into our experiences only in so far as the selves of others exist and enter as such into our experience also. The individual possesses a self only in relation to the selves of the other members of his social group; and the structure of his self expresses or reflects the general behavior pattern of this social group to which he belongs, just as does the structure of the self of every other individual belonging to this social group.²⁵

As a member of a social group the marihuana user incorporates and accepts the effects of the marihuana experience through a process of education. One of the more important elements in this acceptance pattern is that the individual must learn to enjoy the effects of the drug is he is to remain an "in-group" participant. The effects

²⁴George H. Mead, <u>Mind</u>, <u>Self and Society</u> (Chicago, Illinois: The University of Chicago Press, 1934), pp. 135-164.

²⁵Ibid., p. 165.

produced by using marihuana when first experienced are not automatically pleasureable. Rather, the individual using marihuana for the first time experiences sensations which are totally unfamiliar and which are in many instances unpleasant. According to Becker, in becoming a group member the individual must re-define these effects as pleasureable. Once this is accomplished - the acquiring of a "taste" for the effects of the drug - his acceptance into the group is facilitated. Thus,

. . . users of the drug must share a set of understandings - a culture - which includes, in addition to material on how to obtain and ingest the drug, definitions of the typical effects, the typical course of the experience, the permanence of the effects, and a description of methods for dealing with someone who suffers an anxiety attack because of drug use or attempts to act on the basis of distorted perceptions. ²⁷

In viewing the importance of the norm structure and of group interaction it is important now to consider very carefully the behavioral patterns of the marihuana user. A study by Bromberg emphasizes that the actions of individuals experiencing the effects of marihuana intoxication fall into two categories: overt and covert behavioral patterns. The behavior of the individual while intoxicated is due to a mental reaction on the part of the individual in relation to his perceptions of the effects of the drug. The various

Howard S. Becker, Outsiders (New York: The Free Press of Glencoe, 1963), p. 53.

²⁷Howard S. Becker, "History, Culture and Subjective Experience: An Exploration of the Social Bases of Drug-Induced Experiences,"

<u>Journal of Health and Social Behavior</u>, VIII (September, 1967), p. 169.

Walter Bromberg, "Marihuana: A Psychiatric Study," <u>Journal of</u> the <u>American Medical Association</u>, CXIII, No. 1 (July, 1939), pp. 4-12.

psychological effects which are experienced while using marihuana have also been discussed by Lindesmith. In his analysis attention is focused specifically upon the psychological attitudes of the individual, rather than the physical effects of the drug upon behavioral patterns.²⁹

In relation to the psychological and physical effects produced by marihuana intoxication the most vivid examples are the numerous subjective accounts of the self-imposed experience. These subjective accounts of the euphoric effects produced by marihuana intoxication are of two types: 1) literary descriptions; and 2) scientific subjective descriptions:

The first symptom which told me that the drug was beginning to take effect was a feeling of extreme lightness. I seemed to be hollowing out inside, in some magical manner, until I became a mere shell, ready to float away into space. This was soon succeeded, in one of the breathless intervals of my prodigeous laughter, by a diametrically opposite sensation of extreme solidity and leaden weight. It seemed to me that I had changed into metal of some sort. There was a metallic taste in my mouth; in some inexplicable way the surfaces of my body seemed to communicate to my consciousness a metalliferous feeling; and I imagined that if I struck I would give forth a metallic ring. This heavy and metallic feeling traveled rapidly upwards from the feet to the chest, where it stopped, leaving my head free for the issuance of the storms of laughter. Most of the time my arms and legs seemed so leaden that it required Herculean effort to move them, but under any special stimulus, such as the entrance

²⁹Alfred A. Lindesmith, "The Marihuana Problem: Myth or Reality?," The Marihuana Papers, David Solomon, ed. (New York: The Bobbs-Merrill Company, 1966), p. 19.

³⁰ See: David Ebin, The Drug Experience (New York: The Orion Press, 1961), pp. 1-113.

³¹ For a bibliographical listing of the major works in this area see: Robert P. Walton, <u>Marihuana</u>: <u>America's New Drug Problem</u> (New York: J. B. Lippincott Company, 1938), pp. 201-203.

of a third person, the vagrant conception of a new idea, or an unusually heavy fit of laughing, this feeling of unliftable heaviness in the limbs and torso would be forgotten and I would move freely, waving my arms with great vigor and enthusiasm.

Throughout the experiment I experienced a peculiar double consciousness. I was perfectly aware that my laughter, etc., was the result of having taken the drug, yet I was powerless to stop it, nor did I care to do so, for I so thoroughly enjoyed it as if it had arisen from natural causes. In the same way the extension of the sense of time induced by the drug was in itself indubitable and as cogent as any normal evidence of the senses, yet I remained able to convince myself any moment by reflection that my sense of time was fallacious.³²

In discussing the psychological effects of marihuana intoxication it is pertinent to also present the experienced physical effects. The two aspects are interrelated in that the physical activity of an individual when intoxicated is an integral part of the psychological conditioning of the individual. That is, by learning to perceive and enjoy the effects of the marihuana experience the individual coordinates his physical activity in accordance with other users' interpretations of behavioral patterns.

The general effects of marihuana intoxication depend upon the individuals own conception of his experience. However, the most often cited effects include: contentment, gaiety, talkativeness, daydreaming, drowsiness, joking and/or horsing around, a floating sensation, dryness of the mouth, a desire for sweets, and a heaviness

³² Victor Robinson, "Experiments With Hashish," The Marihuana Papers, David Solomon, ed. (New York: The Bobbs-Merrill Company, 1966), p. 209.

in the extremities. Bromberg states that there is an increase in motor activity, disorientation, mental confusion, illusions, a feeling of excitement, hunger, an attitude of intellectual brilliance, dizziness, lightness of the extremeties, a change in time perception, and confusion in the ability to recall what ocurred during intoxication. In many instances intoxication tends to produce a condition in which the individual feels extremely happy and becomes indifferent to many of the cares and troubles experienced when he is not intoxicated. 34

As the drug first begins to take effect the subject feels strong, elegant, and agile. He experiences a desire to, and tends to, move about. He is overcome with absurd laughter, and he needs to be part of the interaction which is characteristic of the marihuana using group. During the mid-point of the drug experience the individual reaches a stage of lassitude. That is, he wants complete silence, he no longer can move about freely, and he becomes apathetic and calm. Finally, during the last stage of the experience he becomes very sleepy. However, upon awakening the subject tends to remember everything experienced while intoxicated.³⁵

It is important to emphasize that the available literature

³³Walter Bromberg, "Marihuana: A Psychiatric Study," <u>Journal of</u> the <u>American Medical Association</u>, CXIII, No. 1 (July, 1939), p. 5.

³⁴J. D. Reichard, "Some Myths About Marihuana," <u>Federal Probation</u>, X, No. 4 (October-December, 1946), p. 17.

³⁵Roger Adams, "Marihuana," <u>Science</u>, XCII, No. 2380 (August, 1940), p. 117.

contains many discrepancies and contradictions concerned with the psychological and physical effects produced by marihuana intoxication. For the most part this is due to the fact that many past studies were not based on systematic research. The most often cited empirical investigation — the Mayor's Committee on Marihuana — offers what may be considered to be the most definitive conclusions on marihuana intoxication.

The Mayor's Committee on Marihuana focused medical, psychological, sociological, and pharmacological attention on the use of marihuana in New York City. That aspect of the investigation which is of interest at this point is the clinical study. The subjects used in this part of the study consisted of 5 individuals who had no previous experience with marihuana and 72 subjects, 48 of whom had had some experience with marihuana, ranging from occasional to regular use. The remaining 14 individuals had some experience with one type of drug or another, but not necessarily marihuana. 36

Information presented in this investigation was directly related to norm structure, group influence, psychological and physical reactions, and techniques of ingestion. It was found that the user derives greater pleasure when using marihuana in the presence of other users. According to the Mayor's Committee, this satisfaction was enhanced through the process of communication whereby each individual discussed his reactions freely and openly with the other users. In addition to communication, one important aspect of the interaction

³⁶ Mayor's Committee on Marihuana, The Marihuana Problem in the City of New York (Lancaster, Pennsylvania: The Jacque Cattell Press, 1944), pp. 26-31.

process consisted of sharing cigarettes, thus enabling the members to form a tightly knit social group. And, as the marihuana is consumed each user is conscious of the quantity required to attain his level of intoxication. The individual knows when he has had enough, and prevents himself from becoming too intoxicated. However, if the individual should accidently become too intoxicated certain measures are instituted (a cold shower, beer, soda, etc.) which are directed towards making the individual sober. 37

The individuals who used marihuana in this investigation experienced a definite euphoric effect. While intoxicated the subjects found it difficult to focus attention or to maintain concentration. The intoxicated individuals seemed to experience an impairment of intellectual functioning, characterized by a loss of both efficiency and speed, however they appeared to be extremely satisfied with themselves. This self-satisfaction apparently enables the subject to feel more self-confident, although this is expressed orally rather than physically. Although there was a difference in intellectual functioning when intoxicated the subjects did not suffer any mental disorientation.³⁸

According to Gaskill, the effects of smoking marihuana may be experienced both physiologically and psychologically. "The physiologic symptoms are: palpitation, nausea and vomiting, vertigo with ataxia, headache and tremor." The major psychological effects

^{37&}lt;sub>Ibid., pp. 10-13</sub>.

³⁸ Ibid., pp. 37-132.

³⁹H. S. Gaskill, "Marihuana, An Intoxicant," American Journal of Psychiatry, CII (September, 1945), p. 202.

include a euphoric sensation, distortion of time perception, and a sense of well-being on the part of the individual. Also in evidence is the impairment of judgment and boisterous and impulsive activity. 40

One of the first physical sensations experienced is a general feeling of unreality, which begins rather abruptly. The body begins to feel as if it is floating on air, and some of the senses are deadened. There is a distortion of time and space, combined with a feeling of euphoria and/or extreme apprehension. In addition, the effects of marihuana intoxication are continuously in a state of flux. That is, the effects of the drug experience change character. Due to this there appears a state of double-consciousness.⁴¹ That is,

. . . subjects often speak of watching themselves undergo the hashish delirium, of being thoroughly conscious of the condition of their intoxication yet being unable or unwilling to return to a state of normalcy.⁴²

In considering these physical and psychological experiences attention has been focused on the deterioration of mental faculties. According to the conclusions reached in various investigations the use of marihuana often results in some form of mental confusion. Thus, the user when intoxicated will be unable to remember those things that seemed so logical when he was not intoxicated.⁴³ And, according to

⁴⁰Ibid., p. 203.

⁴¹Robert P. Walton, <u>Marihuana: America's New Drug Problem</u> (New York: J. B. Lippincott Company, 1938), pp. 115-117.

⁴²Ibid., p. 117.

⁴³ John B. Williams, <u>Narcotics</u> (Dubuque, Iowa: Wm. C. Brown Company, 1963), pp. 12-31.

Marshall, the effects of the drug experience are related to the release of inhibitions, a weakening of the moral will, and an exaggerated sense of gaiety, coupled with the effects of intoxication on the senses. 44

Other studies emphasize that the will of the individual degenerates, resulting in the abnormal release of inhibitions. In regard to this assumption much attention has been focused on the relationship between marihuana intoxication and sexual stimulation.

What actually appears to be the case is that marihuana will cause sexual stimulation if the individual expects and desires such activity. Marihuana, in and of itself, is not an aphrodisiac. The Mayor's Committee on Marihuana also came to the conclusion that the use of marihuana was not linked to sexuality. And Reichard came to the conclusion that, ". . . . it is doubtful if marihuana is as efficient in the production of sex phantasies as is the 'pin-up-girl.'"

The behavior of the intoxicated individual is closely related to learning the correct techniques of administering the drug, as well as learning to identify and verify the drug experience. Walton found

⁴⁴ Maud A. Marshall, "Marihuana," The American Scholar, VIII, No. 1 (Winter, 1938-1939), p. 97.

⁴⁵ See: Roger Adams, "Marihuana," Science, XCII, No. 2380 (August, 1940), p. 118; and, H. L. Freedman and M. J. Rockmore, "Marihuana: A Factor in Personality Evaluation and Army Maladjustment, Part II," <u>Journal of Clinical Psychopathology and Psychotherapy</u>, VIII, No. 2 (October, 1946), p. 228.

⁴⁶ Mayor's Committee on Marihuana, The Marihuana Problem in the City of New York (Lancaster, Pennsylvania: The Jacque Cattell Press, 1944), p. 14.

⁴ J. D. Reichard, "Some Myths About Marihuana," <u>Federal Probation</u>, X, No. 4 (October-December, 1946), p. 20.

that there are various important techniques which are imbedded in the norm structure and which are a prerequisite to enjoying a successful drug experience.⁴⁸ Of equal importance is the ability of the individual to tackle the problem of retrospection so that he may be able to define and communicate to others the overall effects of the drug experience.

Of the various methods of ingestion the most popular technique in the United States is the oral process of smoking the dried leaves of the cannabis plant. Correlated with this method of ingestion the individual must learn the proper technique of smoking. This entails learning to smoke a marihuana cigarette ("joint") quite differently than an ordinary cigarette. The smoke is inhaled by sucking on the cigarette while simultaneously allowing a small amount of air to combine with the smoke. Once this is accomplished and the smoke has been inhaled the user holds the smoke in his lungs as long as possible. Thus, in learning the proper methods of smoking marihuana the user can be reasonably insured of producing real symptoms of marihuana intoxication. The user in learning how to smoke marihuana also must learn to distinguish between the amount of use which will result in pleasant and/or unpleasant effects. Thus, the user learns to regulate his dosage.

⁴⁸ Robert P. Walton, <u>Marihuana: America's New Drug Problem</u>, (New York: J. B. Lippincott Company, 1938), pp. 47-59.

⁴⁹Howard S. Becker, Outsiders (New York: The Free Press of Glencoe, 1963), pp. 46-47.

⁵⁰ Mayor's Committee on Marihuana, The Marihuana Problem in the City of New York (Lancaster, Pennsylvania: The Jacque Cattell Press, 1944), p. 41.

Implications of the Review of the Literature

From the review of the literature, it can be seen that differences exist among various studies in regard to the normative structure, the behavioral patterns, and the employed technological systems of the user of marihuana. In addition, very little attention has been focused on the question of homogeneity among users of marihuana.

In view of these facts this study will focus attention on both the occasional and regular user of marihuana. And, this study will have as its aim the presentation of information concerned with the often neglected occasional user, the question of homogeneity among users of marihuana, and the changed behavioral patterns of the marihuana user.

CHAPTER III

METHODOLOGY

Hypotheses

From the information gained through the review of the literature the following hypotheses were formulated and tested in the present study.

- H₁: Preferring and/or enjoying the company of other users when smoking marihuana does not differ between occasional and regular users of marihuana.
- H₂: The same psychological effects are experienced by the occasional and regular user when smoking marihuana.
- H₃: The same physical effects are experienced by the occasional and regular user when smoking marihuana.
 - ${\rm H}_{3A}$: Sexual stimulation when smoking marihuana does not differ between the occasional and regular user of marihuana.
- H₄: The presence of a normative structure does not differ between the occasional and regular user of marihuana.
- H₅: The presence and employment of a technological system does not differ between the occasional and regular user of marihuana.

Definition of Concepts

Regular user — as defined in the literature, those individuals whose use of the drug marihuana is a systematic daily routine. 1

Howard S. Becker, <u>Outsiders</u> (New York: The Free Press of Glencoe, 1963), p. 61.

Occasional user — as defined in the literature, " those who smoked when opportunity was offered but not daily,"²

In addition, for the purpose of this study the occasional user will be defined according to the following criteria:

- 1) daily use over a three week period each questionnaire will have a number of empty spaces, each corresponding to the past twenty-one days, in which the respondent will place an X if he used marihuana on a particular day.
 - 2) actual frequency of use as stated by the respondent.

The Sample

The sample used in this study consisted of thirty-two occasional and twenty-four regular users of marihuana residing in the metropolitan area of New York City. The classification of these individuals is based on their actual frequency of use. Each respondent selected for this study had used marihuana for a period of at least six months prior to their being considered as subjects for this study. This represented an attempt to use subjects who were part of a marihuana using culture and who would closely approximate the typical user of marihuana. Another criterion which the subject was required to possess was that he had recently used marihuana (at least once a week for the past three weeks). Thus, the subject would be considered to be an active user of marihuana which would enable him to recall the experiences of marihuana intoxication.

²Mayor's Committee on Marihuana, "The Marihuana Problem in the City of New York," <u>The Marihuana Papers</u>, David Solomon, ed. (New York: The Bobbs-Merrill Company, 1966), p. 265.

Racial, ethnic, religious affiliations, and various socio-economic factors of the subjects have not been used as variables in this study. The main reason for the exclusion of these elements is that this investigator was unable to procur a representative number of individuals displaying these characteristics.

The subjects ranged from age seventeen past the age of twentyfive, with the largest concentration falling in the nineteen through
twenty-two year old age bracket. Further general characteristics of
the respondents includes their sex, marital status, place of residence,
and employment status. Forty-seven subjects were males and nine were
females. Thirty-one were attending school, seventeen were employed,
and eight were unemployed (no occasional users were unemployed).
Concerning the subjects' marital status and place of residence, fifty
were single while five were married and one was divorced; twentythree subjects lived with their parents all of the time, seventeen
lived with their parents part of the time, ans sixteen did not live
with their parents any of the time.

Methodological Procedure

In planning this research this author was unable to find a scheduale which was applicable to the predominant interests of this study. Therefore, upon completing a review of the literature this author developed his own measuring instrument which was employed in this study (reproduced in Appendix A).

Two major problems were encountered during the planning stages of this study. First, due to the nature of the subject under investigation a method of insuring the anonymity of the respondents was necessary. Second, because this author was attending school in Oklahoma the problem of administering the questionnaires in New York City was encountered. With these two problems in mind the procedure used in this study was as follows.

As a native New Yorker this author has come into contact with various individuals who use and/or know individuals who use marihuana. When planning this research five such individuals were contacted and were told of the nature of this study. At this time they were also asked if they would be willing to assist this investigator by distributing questionnaires. When the questionnaires were ready to be mailed each of these five individuals (henceforth referred to as, administrants) was contacted by mail and given instructions concerned with the administration of the scheduales.

This procedure was felt to be justified and applicable in alleviating the problems of distance and anonymity. This is due to the fact that this author has no knowledge of those individuals considered to be subjects in this study, as he never communicated with them directly.

Three administrants were each to contact fifteen subjects to whom questionnaires and self-addressed envelopes were to be delivered. The subjects were then instructed to completely fill out the questionnaire, not to sign their names on either the questionnaire or the envelope, and to then seal and mail the completed questionnaires. The three administrants were further instructed to contact each of their subjects two weeks after the questionnaires had been delivered in order to see if the subject had completed and mailed back the questionnaire. This follow-up procedure was employed in the hope of

insuring a high return rate of completed questionnaires.

The remaining two administrants were given the same basic instructions: to gurantee anonymity and to deliver the questionnaires. However, these two administrants were not to deliver self-addressed envelopes to the subjects. Rather, they were to personally contact each subject (one administrant was assigned fifteen subjects and the other was assigned ten) two weeks after the questionnaires had been delivered. At this time the administrant was to collect the completed questionnaires and mail them all back to this author at the same time.

The total number of questionnaires which were delivered was seventy. Of this total, sixty-three were returned (90%). However, one returned questionnaire was only partially completed and has therefore not been included in the final sample size. Thirty-eight out of a total forty-five questionnaires were returned by those subjects who had been instructed to mail back the questionnaire when completed (84.4%). On the other hand, the subjects who were personally contacted by the administrant returned twenty-five questionnaires out of a total twenty-five (100%). It is important to note here that the one incomplete questionnaire was included among those that were mailed by the subjects.

After the questionnaires were received by this author the items were dichotomized and coded, observed responses were punched on IBM cards, and a number of runs were made on the computer in order to test the formulated hypotheses.

Statistical Procedure

Due to the nature of the selected sample and the employed

measuring instrument the collected data may best be termed nominal. In addition, the sample used in this study was not randomly selected and can not be assumed to have been drawn from a normally distributed population. With these limitations in mind, a non-parametric statistical device (Chi Square) has been employed in testing the various hypotheses.

The chi square method is applicable only when each cell in a 2 x 2 table, or 20% of the cells in a larger table do not have expected frequencies less than five (5.0000). As will soon become apparent, most of the tables presented in this study do not meet these requirements. Instead of employing a different statistical device when these requirements were not met the data was adapted in order to make the use of chi square valid. In each 2 x 2 table where one of the cells contained an expected frequency less than five (5.0000), or in larger tables where 20% of the cells contained expected frequencies less than five (5.0000), the Yates Correction Factor for Continuity has been employed. This statistical device adapts the data in the table by correcting (reducing) the value of chi square appropriate to the low expected frequency of the cell or cells. 4

John H. Mueller and Karl F. Schuessler, <u>Statistical Reasoning</u>
<u>In Sociology</u> (Beston, Massachusetts: Houghton Mifflin Company, 1961),
pp. 402-407; and, Philip J. McCarthy, <u>Introduction To Statistical</u>
<u>Reasoning</u> (New York: McGraw-Hill Book Company, Inc., 1957), pp. 307-327.

⁴Donald J. Veldman, Fortran Programming for the Behavioral Sciences (New York: Holt, Rinehart And Winston, 1967), pp. 332-335.

CHAPTER IV

RESULTS OF THE STUDY

The following is an evaluation of the findings of this study.

No summary or conclusions will be presented at this time. A complete discussion of the results will be presented in Chapter Five, where this author will attempt to summarize the results of each hypothesis and qualify his concluding remarks. This chapter will therefore focus attention on each question (as presented in tabular form) as it pertains to a particular hypothesis.

For the purpose of this study the occasional user has been defined as one who uses marihuana not less than once a week. The regular user has been defined as one who uses marihuana not less than once a day. Therefore, as stated previously, the focus of attention will be on actual frequency of use in classifying the respondents.

Two of the subjects used marihuana daily but classified themselves as occasional users. In light of the aformentioned definitions these individuals have been transferred into the regular user category. Six of the respondents classified themselves as regular users, however their frequency of use (one used marihuana every three days, the remaining five used marihuana once a week) places them in the occasional user category. In addition, six respondents who viewed themselves as occasional users actually use marihuana less than once a week. These "part-time" users have been excluded from the

present investigation.

For the purposes of clarification the questions which apply to each hypothesis will now be listed in the order of their use (App. A):

 H_1 : Questions - 12, 34, 33, 13, 35, 36, 37.

H₂: Questions - 16, 17, 18, 27, 28, 21, 22, 26, 29, 30, 31.

H₃: Questions - 15, 20, 14, 25, 19, 24, 23, 32.

 H_{Λ} : Questions - 42, 48, 43, 44, 45, 54, 46, 47, 51, 50, 53, 58.

 H_5 : Questions - 52, 56, 57, 58, 59, 60, 61, 62, 63.

The first hypothesis in this study was formulated in an attempt to determine the difference between the two groups of users in regard to smoking marihuana in the company of other users. As the data in Table I indicate, the null hypothesis of no difference is tenable. It is also apparent that a majority of both types of users prefer to smoke marihuana in the company of several friends (three or four).

TABLE I (N=56)

TYPE OF COMPANY PREFERRED BY FREQUENCY OF USE

Frequency		T. T.	ype of Company	
of Use	Alone	One Friend	Several Friends	Many Friends
Occasional	0	2	29	1
Règular	1	3	16	4
x ²	5. 7296	df =	3 P = 0.12	47

The first hypothesis is also tenable in terms of the findings presented in Table II, since the respondents prefer to smoke marihuana after they have joined their friends. It is also apparent that homogeneity is found to exist between the two groups in regard to this question. It is important to note that two of the occasional users did not respond to this question; no explanation for this is to be presented at this time.

TABLE II
(N=54)

USE OF MARIHUANA IN COMPANY OF OTHERS
BY FREQUENCY OF USE

Frequency	Marihu	ana Used	In Company	y of Others	
of Use	Before Joining	Others		After Joining	Others
Occasional	0			30	
Regular	2			22	
x ² .	- 0.8542	df = 1	Р:	= 0.6412	

Tables III, IV, V, VI, and VII are concerned with the perceived ability of the marihuana user to get along well with others and his preference in regard to smoking marihuana when in the presence of these other users.

Due to the fact that the use of marihuana appears to take place in a group setting in which the marihuana experience may be shared

with others, it is important to focus attention on the attitudes of the group members during this interaction process. In referring to Table III, it is evident that the null statement is tenable. Both the occasional and regular user feels that he is easier to get along with, hence more friendly, when he is smoking marihuana. The data in Table III also shows that homogeneity exists between occasional and regular users.

TABLE III
(N=56)

ABILITY TO GET ALONG WELL WITH OTHERS
BY FREQUENCY OF USE

Frequency		Friendline	ss
of Use	Friendlier	Unable To Tell	Less Friendly
Occasional	26	3	3
Regular	17	5	2
x ² =	1.4709	df = 2	P = 0.5160

Table IV focuses attention on the enjoyment of the marihuana experience. Again there is no difference between occasional and regular users. In viewing the observed responses of both the occasional and regular user it is quite evident that they enjoy the marihuana experience more if they are in the company of others who are also smoking marihuana.

To shed further light on this subject, Table V is presented. In this case the null hypothesis is not accepted as there is a significant difference between the occasional and regular users. In regard to this table, the occasional user prefers to smoke marihuana in the company of others who are also smoking marihuana. On the other hand, the regular users are divided in their responses with almost half feeling that it does not matter if others are smoking marihuana.

TABLE IV
(N=56)

ENJOYMENT OF MARIHUANA EXPERIENCE IN PRESENCE
OF OTHERS WHO ARE SMOKING MARIHUANA
BY FREQUENCY OF USE

Frequency		Others Al	so Smoking	
of Use	Yes			Does Not Matter
Occasional	28		÷	4
Regular	18			6
x ² =	. 1.1192	df = 1	P = 0.	2903

Since it is apparent that the user of marihuana enjoys smoking marihuana more if he is with others who are also smoking marihuana (in order to share the experience) it is now important to focus attention on the question of social interaction. The results of the data pertaining to this question are presented in Table VI.

TABLE V (N=56)

PREFERRING COMPANY OF OTHER USERS BY FREQUENCY OF USE

Frequency		Prefer	Company
of Use	Yes		Does Not Matter
Occasional	29		3
Regular	13		11
x ² =	10.1230	df = 1	P = 0.0068

TABLE VI (N=56)

SOCIALIZATION WITH USERS AND NON-USERS BY FREQUENCY OF USE

Frequency		Inte	raction	With Oth	ners	
of Use	Others Are	Smoking		Others	Are N	ot Smoking
Occasional	29				3	
Regular	21				3	
$x^2 =$	0.0185	df =	1	P =	0.887	0

The null hypothesis is tenable since there is virtually no difference between occasional and regular users. It is apparent that the user of marihuana finds it easier and more enjoyable to interact with others who are using marihuana. In order to shed further light

on this relationship Table VII is presented. The focus of attention in this instance is on the question of whether the user of marihuana needs to be with other users when he is smoking marihuana. As the data in Table VII indicate, the null hypothesis is tenable since the occasional and regular users do not differ in regard to their need to be with other users when smoking marihuana. That is, neither the occasional nor the regular user feels a compulsive need to be with other users. Thus, although the user does not feel that he must be with other users, he does find the experience more enjoyable.

TABLE VII
(N=56)

NEED TO BE WITH OTHER USERS WHEN SMOKING MARIHUANA
BY FREQUENCY OF USE

Frequency		Need To Be	With Others	
of Use	Yes			No
Occasional	5			27
Regular	4			20
x ² =	: 0.0388	df = 1	P = 0.8382	

Although the null statements of Tables I, II, III, IV, VI, and VII are tenable the first hypothesis of this study, which focuses on whether or not the marihuana user prefers to smoke in the company of other users, is rejected. This is due to the fact that the data in

Table V was significantly different between the occasional and regular users. We are therefore forced to reject the first hypothesis on the grounds that homogeneity does not exist between these two groups in regard to preference of smoking in a group setting made up of other users.

TABLE VIII (N=55)

PERCEIVED ABILITY TO CONCENTRATE BY FREQUENCY OF USE

Frequency		Conc	entration
of Use	Mind Wanders		Mind Focuses On One Thing
Occasional	21		10
Regular	19		5
x ² =	0.8902	df = 1	P = 0.6522

TABLE IX (N=56)

PERCEPTION OF MENTAL ATTITUDE BY FREQUENCY OF USE

Frequency		Mental	Attitude	
of Use	Confused			Relaxed
Occasional	1			31
Regular	1			23
x ² =	0.2620	df = 1	P = 0.6153	

TABLE X (N=56)

PERCEPTION OF EXPERIENCED PSYCHOLOGICAL ATTITUDE BY FREQUENCY OF USE

Frequency		Psychologic	al Attitude
of Use	Cheerful		No Difference
Occasional	25		7.
Regular	12		12
$x^2 =$	4. 8393	df = 1	P = 0.0263

TABLE XI (N=56)

PSYCHOLOGICAL FEELING OF ELATION BY FREQUENCY OF USE

requency		Feeling o	of Elation	
f Use	Happy		Less	s Happy
Occasional	29			3
Regular	21			3
x ² =	0.0185	df = 1	P = 0.8870	·

TABLE XII (N=56)

PSYCHOLOGICAL FEELING OF ALERTNESS BY FREQUENCY OF USE

Frequency		Feeling of	Alertness	
of Use	No	No Differ	ent	Yes
Occasional	29	0		3
Regular	18 ,	1		5
x ² =	2.9927	df = 2	P = 0.2228	

TABLE XIII (N=56)

PERCEIVED ABILITY TO SOLVE PROBLEMS BY FREQUENCY OF USE

Frequency		Ability To S	olve Problems	
of Use	More			Less
Occasional	16			16
Regular	14			. 10
$x^2 =$	0.3829	df = 1	P = 0.5435	

TABLE XIV (N=56)

PERCEIVED ABILITY TO THINK DEEPLY BY FREQUENCY OF USE

Frequency		Ability To	Think Deeply	
of Use	Yes	No Di:	fference	No
Occasional	26	•	4	2
Regular	21		1	2
x ² =	0.4482	df = 2	P = 0.8019	

TABLE XV (N=44)

PERCEIVED ABILITY TO COMPREHEND BY FREQUENCY OF USE

Frequency	Ability To Comprehend			
of Use	More	No Di	fference	Less
Occasional	12		5	8
Regular	10		0	9
x ² =	4. 5063	df = 2	P = 0.1034	

TABLE XVI (N=56)

PERCEIVED POWER OF CONCENTRATION BY FREQUENCY OF USE

Frequency	Ability To Concentrate		·	
of Use	More	No Dif	ference	Less
Occasional	27		3	2
Regular	15		4	5
x ² :	= 3.7917	df = 2	P = 0.1485	

TABLE XVII (N=56)

PERCEIVED RECALL ABILITY BY FREQUENCY OF USE

Frequency	· · ·	Recal	l Ability	
of Use	Remember Ev	erything	Remember	Some Things
Occasional	26			6
Regular	21			3
x ² =	0.2398	df = 1	P = 0.6304	1

TABLE XVIII (N=56)

PERCEIVED SELF-CONFIDENCE LEVEL BY FREQUENCY OF USE

Frequency	Self-Confidence			
of Use	Increases	No (Change	Decreases
Occasional	8		24	0
Regular	- 15 ⁻		8	1
x ² =	8.8832	df = 2	P = 0.0	0120

No significant differences were found to exist in Tables VIII,

IX, XI, XIII, XIII, XIV, XV, XVI, and XVIII. However, a significant difference does exist in Tables X, and XVIII. Due to these discrepancies the third hypothesis must be rejected on the grounds that homogeneity does not exist between occasional and regular users of marihuana in regard to perceived psychological effects when intoxicated. For purposes of evaluation the data may be summarized as follows:

Table VIII - No significant differences were found between occasional and regular users in regard to their ability to concentrate when intoxicated.

Table IX - No significant differences were found to exist between occasional and regular users in regard to perceived mental attitudes when intoxicated.

Table X — A significant difference was found to exist between occasional and regular users in regard to experienced psychological attitudes when intoxicated. Occasional users appear to become more cheerful than do regular users when smoking marihuana.

 $\underline{\text{Table XI}}$ - No significant difference exists between occasional and regular users when attention is focused on perceived feeling of elation when intoxicated.

Table XII - No significant difference exists between occasional and regular users in regard to perceived feeling of alertness. That is, a majority of the subjects do not feel very alert when they are smoking marihuana. Rather, they experience a drowsy sensation.

<u>Table XIII</u> - No significant difference was found to exist between occasional and regular users in regard to perceived ability

to solve problems when intoxicated. It is important to state at this time that both groups contain an equal number of individuals who state they have both more and less ability to solve problems when intoxicated.

Table XIV - No significant difference exists between occasional and regular users in regard to perceived ability to think deeply when intoxicated.

Table XV - No significant difference exists between occasional and regular users when attention is focused on perceived ability to comprehend, although there is a dispersion of responses for both types of users.

Table XVI - No significant difference exists between occasional and regular users in regard to the users perceived ability to concentrate when intoxicated. Both types of users feel they are able to concentrate better when they are intoxicated.

Table XVII - No significant difference was found to exist between occasional and regular users with attention focused on recall ability. Both types of users feel that they are able to recall those things which took place during the time that they were intoxicated.

Table XVIII - A significant difference exists between occasional and regular users in regard to perceived self-confidence level. More regular users feel that their self-confidence increases when smoking marihuana than do the occasional users. It is quite possible that the regular user smokes marihuana due to a feeling of insecurity. On the other hand, most of the occasional users do not experience a change in their self-confidence level when they smoke marihuana. That is, the occasional user perceives his self-confidence

as remaining the same whether he is smoking marihuana or not.

The third hypothesis in this study focuses attention on the physical effects which are experienced by the occasional and regular user when smoking marihuana. The results of the data pertaining to this hypothesis will be presented in Tables XIX, XX, XXI, XXII, XXIII, XXIV, and XV, which will then be followed by a summarization of the tabulated data.

TABLE XIX
(N=56)

PERCEIVED CONVERSATION LEVEL
BY FREQUENCY OF USE

Frequency		Talkativeness		
of Use	More	No Difference	Unable To Tell	Less
Occasional	24	. 1	3	4
Regular	11	5	4	4
	4,5464	df = 3	P = 0.0839	

TABLE XX (N=56)

PERCEIVED LEVEL OF ATTENTIVENESS BY FREQUENCY OF USE

Frequency of Use	Listen More		ttentiveness fference	Listen Less
01 000	2201011 11010	110 221	10101100	DID VOIL HODD
Occasional	26		1	5
Regular	16		4	4
x ² =	3.2148	df = 2	P = 0.	1990

TABLE XXI (N=56)

PERCEIVED LEVEL OF PHYSICAL ACTIVITY BY FREQUENCY OF USE

Frequency		Activity Level	
of Use	More Active	No Difference	Less Active
Occasional	21	0	11
Regular	8	4	12
x ² =	8.9100	df = 2 P = 0.	0118

TABLE XXII (N=48)

PERCEIVED ACTIVITY LEVEL AT WORK BY FREQUENCY OF USE

Frequency	****	Activity Level At	
of Use	Work Harder	No Difference	Work Less Hard
Occasional	3	7	16
Regular	. 8	3	11
x ² =	4. 4965	df = 2 P	= 0.1039

TABLE XXIII (N=55)

EXPERIENCED BODY SENSATION BY FREQUENCY OF USE

Frequency			ensation	
of Use	Light	No Di	fference	Heavy
Occasional	20		0	12
Regular	12		1	10
\mathbf{x}^2	: 1.7561	df = 2	P = 0.5812	

TABLE XXIV (N=56)

EXPERIENCED PHYSICAL SENSATION BY FREQUENCY OF USE

Frequency		Sensation
of Use	Mouth and Throat Dry	No Change
Occasional	31	1
Regular	23	1
-	= 0.2620 df = 1	P = 0.6153

TABLE XXV (N=56)

APPETITE LEVEL WHEN SMOKING MARIHUANA BY FREQUENCY OF USE

Frequency		Appetit	e Level	
of Use	Hungrier			Less Hungry
Occasional	32			0
Regular	22		• .	2
x ² =	0.9425	df = 1	P = 0.6	668

Although the responses of the occasional and regular users as

recorded in Tables XIX, XX, XXII, XXIII, XXIV, and XXV represent homogeneity, the third hypothesis in this study must be rejected in view of the findings as presented in Table XXI. The data may be summarized as follows:

Table XIX - No significant difference was found to exist between occasional and regular users in regard to the amount of conversation which takes place when the user is smoking marihuana.

<u>Table XX</u> - No significant difference was found to exist between occasional and regular users in regard to level of attentiveness.

Table XXI - A significant difference exists between occasional and regular users in regard to perceived activity level. Both the occasional and regular users are divided in their attitudes towards this question or increased or decreased physical activity. The regular users however feel less active as a group than do the occasional users.

Table XXII - There is no significant difference between occasional and regular users in regard to physical activity during hours of employment. The concensus of opinion shows that the user feels less physically active during employment hours.

Table XXIII - There is no significant difference between occasional and regular users in regard to experienced body sensation while smoking marihuana.

Table XXIV - No significant difference exists between occasional and regular users in regard to the experienced physical sensation of dryness of the mouth and throat when smoking marihuana.

<u>Table XXV</u> - No significant difference exists between

occasional and regular users in regard to the experienced appetite level when smoking marihuana. Both types of users are almost unanimous in feeling that their appetite increases when they are smoking marihuana.

The third hypothesis, dealing with the experienced physical effects, has been subdivided in order to form a sub-hypothesis dealing with another aspect of physical activity. This sub-hypothesis has been tested separately in order to focus attention on sexual stimulation as the literature pertaining to this question is quite vague. It is important to mention at this time that all conclusions in this study are based upon the perceived experiences of the marihuana user. This is to say that although the user may claim to feel or act in a certain manner this does not necessarily mean that he actually does act in such a manner. In order to qualify this aspect of marihuana use (is perceived action and attitude the actual action and attitude?) a more comprehensive investigation is needed.

Table XXVI contains the results of sub-hypothesis three. In viewing the results it is apparent that the null hypothesis is tenable since there is no difference between the occasional and regular user in regard to experienced sexual stimulation when smoking marihuana. In both cases the marihuana user feels that he is more easily sexually aroused and/or stimulated when he is smoking marihuana.

The fourth hypothesis in this study focuses attention on normative behavior (including positive and negative sanctions) and group influence. The data which is relevant to this hypothesis may be found in Tables XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII,

XXXIV, XXXVI, XXXVII, and XXXVIII. Following the presentation of these table is a brief summary of the results.

TABLE XXVI
(N=54)

PERCEIVED SEXUAL ATTITUDE WHEN SMOKING MARIHUANA
BY FREQUENCY OF USE

requency		Sexual Attitude	
of Use	Stimulated More	No Difference	Stimulated Less
Occasional	25	6	1
Regular	14	6	2
x ² =	3.8380 df	= 2 P =	0.1451

TABLE XXVII (N=56)

WILLINGNESS OF USER TO VERBALLY ASSIST THE NON-USER SMOKE MARIHUANA BY FREQUENCY OF USE

Frequency		Verbal As	sistance	
of Use	Yes		· .	Nο
Occasional	8			24
Regular	9			15
$x^2 =$	1.0136	df = 1	P = 0.3153	

TABLE XXVIII (N=56)

WILLINGNESS OF USER TO VERBALLY ASSIST THE NOVICE SMOKE MARIHUANA BY FREQUENCY OF USE

Frequency	Verbal Assistance				
of Use	Yes			No	
Occasional	. 9	•		23	
Regular	14			10	
x ² =	5.1708	df = 1	P = 0.0218		

TABLE XXIX (N=56)

ABILITY TO PERCEIVE INTOXICATION IN OTHER USERS BY FREQUENCY OF USE

Frequency		Ability To Perc	ceive Intoxication	
of Use	Yes	·		No
Occasional	30	•		2
Regular	24			0
x ² =	0.3160	df = 1	P = 0.5812	· · · · · · · · · · · · · · · · · · ·

TABLE XXX (N=56)

ABILITY TO PERCEIVE FALSE INTOXICATION IN OTHER USERS BY FREQUENCY OF USE

Yes	11011110,9	10 LetGetAe	raise	Intoxication	No
27		s			5
21					3
	27	Yes 27	Yes 27	Yes 27	Y es 27

TABLE XXXI (N=56)

ENJOYMENT OF MARIHUANA EXPERIENCE BASED UPON OTHERS ATTEMPT AT INTOXICATION BY FREQUENCY OF USE

Frequency of Use	Ot Tries To Ge		Attempt 1	At Intoxica Fakes	tion Their High
Occasional	31			·	1
Regular	24				0
x ² =	0.0345	df = '	1	P = 0.8470)

TABLE XXXII (N=56)

ENJOYMENT OF MARIHUANA EXPERIENCE BASED UPON OTHER USERS STAGE OF INTOXICATION BY FREQUENCY OF USE

Frequency		•	Other	Users	Stage	of	Intoxication		
of Use	All of	the	Time				Some of	the T	ime
Occasional		26						6	
Regular		20						4	
$x^2 =$	0.0322	····	(if = 1			P = 0.8518		

TABLE XXXIII (N=56)

FRIENDLINESS BASED UPON OTHER USERS STAGE OF INTOXICATION BY FREQUENCY OF USE

x ² =	0.0345	df = 1			P = 0.8470
Regular	24				0
Occasional	31				1
Frequency of Use	Othe: Intoxicated	r Users	Stage	Of	Intoxication Not Intoxicated
					:

TABLE XXXIV (N=56)

STAGE OF INTOXICATION AND LEVEL OF ACCEPTANCE BY FREQUENCY OF USE

Frequency		Level	of Acceptance
of Use	Very Accepted		A Little Accepted
Occasional	30		2
Regular	22		2
x ² =	0. 0533	df = 1	P = 0.8125

TABLE XXXV (N=56)

WILLINGNESS OF USER TO ASSIST INTOXICATED INDIVIDUAL BY FREQUENCY OF USE

Frequency		Assistance	
of Use	More	Some	None
Occasional	0	2	30
Regular	3	2	19
x ² =	: 4.4167	df = 2 P	= 0.1082

TABLE XXXVI (N=52)

USERS KNOWLEDGE OF INTAKE CAPACITY BY FREQUENCY OF USE

Frequency		Knowledge of	Intake Capacity	
of Use	Yes			No
Occasional	30			2
Regular	13			7
x ² =	6.1580	df = 1	P = 0.0127	

TABLE XXXVII (N=55)

USERS ACTUAL LEVEL OF INTOXICATION BY FREQUENCY OF USE

Frequency	Level Of Intoxication					
of Use	Very Intoxicated	Fairly Intoxicated	Slightly Intoxicated			
Occasional	10	21	1			
Regular	14	9	0			
x ² ,	4.4401	df = 2	P = 0.1069			

TABLE XXXVIII (N=56)

EXTREME INTOXICATION AND ACCEPTANCE IN GROUP BY FREQUENCY OF USE

Frequency		Acceptance	In Group	When Intoxicated	
of Use	Yes				No
Occasional	31	•			1
Regular	23				1
$x^2 =$	0.2346	df =	1	P = 0.6340	

By focusing attention on the aforementioned tables it is apparent that the fourth hypothesis in this study (the presence of a normative system) is not accepted. Although there is consensus on all other points, a discrepancy does exist between the occasional and regular users in regard to intake capacity and willingness to assist the novice smoke marihuana. It is for these reasons that the null hypothesis is rejected. The data may be summarized as follows:

Table XXVII - No significant difference was found to exist between occasional and regular users in regard to their willingness to verbally assist the non-user smoke marihuana. In both cases the user does not tend to offer much assistance, rather he feels that the non-user should discover what the marihuana experience is like without assistance.

<u>Table XXVIII</u> - A significant difference was found to exist between occasional and regular users in regard to their willingness to verbally assist the novice smoke marihuana. The regular users are

divided in their attitudes concerning this question, with almost one-half not wishing to give verbal assistance. On the other hand, the occasional users (in line with the recorded responses of Table XXVII) clearly feel that even the novice should receive no assistance from the more experienced user.

Table XIX - No significant difference was found to exist between occasional and regular users in regard to their ability to perceive intoxication in another individual. A majority of the respondents feel that they are able to tell if a person is really intoxicated.

Table XXX - No significant difference was found to exist between occasional and regular users in regard to their ability to perceive false intoxication in another individual. A majority of the respondents feel that they are able to tell if a person is "faking" intoxication.

Table XXXI - No significant difference was found to exist between occasional and regular users in regard to the enjoyment of the marihuana experience when other users have attempted to become intoxicated.

<u>Table XXXII</u> - No significant difference was found to exist between occasional and regular users in regard to the enjoyment of smoking marihuana in the company of other users who are intoxicated.

Table XXXIII - No significant difference was found to exist between occasional and regular users in regard to their friendliness towards other users who are intoxicated. In both cases the user likes his associates better if they are intoxicated.

Table XXXIV - No significant difference was found to exist

between occasional and regular users when attention is focused on their acceptance in a marihuana using group. Both the occasional and regular user feels that when he is intoxicated he is accepted by his friends. This is evidence of a positive sanction reflecting prestige and satisfaction among group members.

Table XXXV - No significant difference was found to exist between occasional and regular users in regard to their willingness to assist an intoxicated individual sober-up; neither group will try very hard to assist the intoxicated individual.

Table XXXVI — A significant difference exists between occasional and regular users in regard to their knowledge of intake capacity (how much they should smoke). It should be noted here that four regular users did not respond to this question. The only explanation for this action is the response of one of the subjects as he clarified his non-response: "I never thought about this before." It is therefore possible that the other three respondents did not respond to this question for the same reason. The occasional users are almost unanimous in stating that they realize when they have smoked enough marihuana; that is, they evidently realize how much is needed to attain a pleasant level of intoxication. The regular users are much more dispersed in responding to this question.

<u>Table XXXVII</u> - No significant difference was found to exist between occasional and regular users in regard to their actual stage of intoxication when smoking marihuana.

<u>Table XXXVIII</u> - No significant difference was found to exist between occasional and regular users in regard to their acceptance in a group when they are extremely intoxicated. This leads us to

conclude that the presence of negative sanctions is virtually nonexistent.

The fifth hypothesis in this study focuses attention on the technological system which is employed by those using marihuana. The results will be presented in Tables XXXIX, XL, XLI, XLII, XLIII, XLIV, XLV, XLVI, and XLVII, followed by a brief summary.

TABLE XXXIX (N=56)

PROCEDURES EMPLOYED IN ATTEMPTING TO SOBER-UP AN INTOXICATED INDIVIDUAL BY FREQUENCY OF USE

Frequency		Procedure Employed				
of Use	Cold Shower	Increase In Food	Intake	Pep Pill	Other	
Occasional	3	18		1	10	
Regular	1	8		0	15	
x^2	= 4.6190	df = 3	P = 0.	2011	· · · · · · · · · · · · · · · · · · ·	

TABLE XL (N=56)

ABILITY TO LEARN CORRECT PROCEDURE TO SMOKE MARIHUANA BY FREQUENCY OF USE

Frequency		Correct Proc	edure Learned	
of Use	Yes			No
Occasional	30			2
Regular	16			8
x ² =	6.0496	df = 1	P = 0.0135	

TABLE XLI (N=56)

PROCEDURE EMPLOYED IN AIR AND SMOKE INTAKE BY FREQUENCY OF USE

More Air Less Smoke	Less Air More Smoke	Equal Amount- Air and Smoke	Only Smoke
0	25	3	4
1	8	7	8
	· ·	Less Smoke More Smoke 0 25	Less Smoke More Smoke Air and Smoke 0 25 3

TABLE XLII (N=56)

PROCEDURE EMPLOYED IN SMOKE RETENTION BY FREQUENCY OF USE

requency	Smoke Retention				
f Use	Retain All			Retain	Some
Occasional	32			0	
Regular	16			8.	
x ² =	10.2387	df = 1	P = 0.0	0018	

TABLE XLIII (N=56)

SMOKE RETENTION ABILITY BY FREQUENCY OS USE

Frequency			Retention	Ability	
of Use	As Long As	Possible		One Or	Two Seconds
Occasional	29				3
Regular	21				3
x ² =	0.0185	df =	1 ;	P = 0.88	70

TABLE XLIV (N=56)

ABILITY TO MAKE CIGARETTES BY FREQUENCY OF USE

requency		Ability To N	Make Cigarettes	
of Use	Yes			No
Occasional	27			5
Regular	21			3
$x^2 =$	0.0182	df = 1	P = 0.8878	

TABLE XLV (N=56)

PROCEDURE EMPLOYED IN PURCHASING MARIHUANA BY FREQUENCY OF USE

Frequency		Purchase	of Marihuana	
of Use	From Friend			From Anyone
Occasional	32		•	0
Regular	23			1
x ² =	0.0451	df = 1	P = 0.8	265

TABLE XLVI (N=56)

SHARING OF MARIHUANA WITH FRIENDS BY FREQUENCY OF USE

Frequency				
of Use	Always	Someti	mes	Never
Occasional	10	21		1
Regular	20	4		0
x ² :	= 14.3286	df = 2	P = 0.0012	

TABLE XLVII (N=56)

USE OF CIGARETTE BUTTS BY FREQUENCY OF USE

requency	Use of Cigarette Butts					
of Use	Save	Give Away	Throw Away			
Occasional	25	2	5			
Regular	12	3	9			
x ² =	4.8669	df = 2 P	= 0.0862			

In view of the findings presented in the aformentioned tables

the fifth hypothesis in this study has been rejected. The occasional and regular user employ different technological systems when smoking marihuana. The data from these tables may be summarized as follows:

Table XXXIX - No significant difference was found to exist between occasional and regular users in regard to the procedures employed in attempting to sober-up an intoxicated individual. Those that responded in the column marked "other" specified that they do not give any assistance.

Table XL - A significant difference was found to exist between occasional and regular users in regard to their ability to learn the correct procedure in smoking marihuana. A majority of the occasional users feel that one must learn the correct way in which marihuana is to be smoked, while the regular users were divided in their responses. Two-thirds of the regular users feel that one must learn the correct method of smoking marihuana; one-third feel that the learning of a specific technique is not necessary.

Table XLI - A significant difference was found to exist between occasional and regular users in regard to their feelings as to the best ways in which the marihuana cigarette is to be smoked in order to become intoxicated.

<u>Table XLII</u> - A significant difference was found to exist between occasional and regular users in regard to the procedure followed in smoke retention.

Table XLIII - No significant difference was found to exist between occasional and regular users in regard to smoke retention ability. Both parties attempt to hold the smoke in their lungs as long as is physically possible.

Table XLIV - No significant difference was found to exist between occasional and regular users in regard to ability to make cigarettes. That is, both types of users not only acquire the ability to make their own cigarettes, but they actually do so when using marihuana. Very few of the users get assistance from their friends and none buy cigarettes that have already been "rolled."

Table XLV - No significant difference was found to exist between occasional and regular users in regard to the procedure followed in purchasing marihuana. Both the occasional and regular user purchases marihuana from someone who is known to them; they do not purchase marihuana from strangers.

Table XLVI - A significant difference was found to exist between occasional and regular users in regard to the sharing of marihuana when in the company of other users. It appears that the regular user feels closer to his friends when smoking marihuana than does the occasional user, since the regular user is more apt to share marihuana.

Table XLVII - No significant difference was found to exist between occasional and regular users in regard to the use of the "butt" of the marihuana cigarette.

The findings of this study have shown that many of the assumptions concerned with the use of marihuana are questionable and contradictory. Furthermore, the results of this study present a number of questions which may readily be utilized for further research. The following chapter presents a summary of the aformentioned results and the final conclusions that this author has made in view of these findings.

CHAPTER V

INTERPRETATION OF RESULTS

Summary and Conclusions

The primary purpose of this study was to present empirical evidence pertaining to the question of homogeneity between the occasional and regular user of marihuana. In addition, this study was undertaken in order to determine if the normative structure, behavioral patterns, and employed technological systems of the marihuana user have experienced change during the past fifteen years. With these aims in mind a questionnaire was administered to a sample of seventy occasional and regular users of marihuana residing in the metropolitan area of New York City. The following is an interpretation of the results of the study.

The first, second, third, fourth, and fifth hypotheses of this study have been rejected. That is, significant differences exist between occasional and regular users in regard to various aspects of marihuana use. However, it is apparent that some degree of homogeneity does exist between these two groups. But, taken in its totality the conclusion has been reached that due to the appearance of certain differences the user of marihuana is not part of a homogeneous social group which is representative of all users.

In focusing on the first hypothesis it is evident that both types of users do enjoy smoking marihuana in the presence of other users.

The findings also bring out the fact that there is a difference of opinion between the occasional and regular users. According to the literature pertaining to the use of marihuana the regular user will not only enjoy the company of other users but he will also prefer to smoke marihuana in the company of other users. The results of this study contradict these earlier findings. The regular users in this study were evenly divided between preferring the company of other users and feeling indifferent to being part of a larger social group. On the other hand, the occasional user has shown that he definitely prefers to smoke marihuana in the company of other users. It is at this point that the discrepancy between the two groups becomes evident.

This study has also focused attention on the question of whether or not the user of marihuana needs to be in the company of other users when he is smoking marihuana. Both the occasional and the regular user, although enjoying the company of other users, does not feel that he needs to be with other users in order to enjoy the marihuana experience. These results may be interpreted in the following manner:

- 1) The occasional user prefers to smoke marihuana in a group setting as the interaction which takes place is an enjoyable experience. However, he does not need to be in the company of other users in order to enjoy the marihuana experience. Rather, he is able to enjoy the marihuana experience when not part of the social group, although interaction makes the experience more enjoyable.
- 2) Some regular users prefer to smoke marihuana in a group setting, while others feel that it does not matter to them. Although he does not necessarily prefer the company of other users the regular

user does find the group setting more enjoyable. As is the case with the occasional user, the regular user does not necessarily need to be with other users when he is smoking marihuana.

The second hypothesis in this study relates the experienced psychological effects of marihuana intoxication to frequency of use. The occasional and regular users do not differ in regard to their perceived mental attitudes, ability to concentrate, feeling of drowsiness, feeling of elation, ability to think deeply, comprehension, and recall ability. When these factors are taken into consideration homogeneity exists between the two groups. There is a difference between these two groups in regard to perceived psychological attitudes and perceived ability to solve problems. The occasional users as a whole experience a definite change in attitude. regular users are evenly divided in their responses, with one-half feeling more cheerful when smoking marihuana. The remaining one-half of the regular users feel no change in their psychological attitude when smoking marihuana. In regard to perceived ability to solve problems both the occasional and regular users are divided. Half of each group feels that they are more able to solve problems while the other half of each group feels as though they have less ability to solve problems when smoking marihuana. In view of these findings the following conclusions were reached:

- 1) Occasional and regular users do not represent a homogeneous cultural grouping when psychological experiences of the intoxicants are viewed collectively.
- 2) In reference to the psychological effects of marihuana intoxication it is apparent that greater homogeneity is found among

occasional users.

3) The findings of this study are in opposition to the results of earlier studies in regard to the following psychological factors. First, the user of marihuana feels that while smoking marihuana he encounters no difficulty in his ability to concentrate. Second, the user of marihuana when intoxicated does not experience mental confusion. Rather, he feels that while smoking marihuana he is able to concentrate, comprehend, and think deeply. Third, the regular user experiences an increase in his self-confidence level, whereas the occasional user does not experience any change in his self-confidence level. Fourth, the user of marihuana does not suffer from an inability to recall what occured during the time that he was intoxicated. Fifth, mental confusion and/or total disorientation is not a result of marihuana intoxication. Finally, the occasional user experiences a definite change in his psychological attitude; this is not the case among the majority of regular users.

The third hypothesis in this study relates the experienced physical effects induced by marihuana intoxication to frequency of use. The occasional and regular user do not differ in regard to their perceived degree of talkativeness and conversation level, the experienced body sensation, level of appetite, and sexual stimulation. As was the case with various psychological effects, homogeneity exists when only these elements are viewed collectively. One finding requires clarification at this time. One—half of the total number of respondents in each category experienced a different body sensation when intoxicated. That is, one—half of the occasional and regular users experienced a feeling of lightness of the extremities, while the

other half experienced a feeling of heaviness of the extremities.

A significant difference between the two groups exists in regard to perceived level of motor activity. The occasional user (represented by a two to one ratio) for the most part feels that he becomes more active when intoxicated. On the other hand, the regular user tends to feel less active when intoxicated, with a minority of these individuals experiencing an increase in activity level and no change in activity level. When motor activity is viewed in regard to work activity the findings become somewhat blurred. Although the occasional user experiences an increase in motor activity he tends to become rather docile when he goes to work intoxicated. The only explanation for this reaction is that the user of marihuana does not enjoy working when intoxicated, thus the decrease in motor activity at the place of employment. In view of these findings the following conclusions were reached:

- 1) The occasional and regular users do not represent a homogeneous cultural grouping when the physical experiences of the intoxicants are viewed collectively.
- 2) In reference to the physical effects of marihuana intoxication it is apparent that greater homogeneity is found amoung regular users.
- 3) The findings of this study agree with those earlier studies which state that the user of marihuana becomes more talkative, listens to the conversations of others, experiences a dryness of the mouth an throat, and becomes hungrier when smoking marihuana. However, it is felt that a discrepancy exists in regard to motor activity level and experienced body sensations (lightness and/or heaviness of the extremities) when intoxicated. Neither earlier

studies nor this study have been able to state with any degree of certainty that the user of marihuana experiences an increase in motor activity or experiences a specific type of body sensation when intoxicated.

The fourth hypothesis in this study relates the presence of a normative structure to frequency of use. The occasional and regular users do not differ in regard to their willingness to assist the non-user, to recognize actual intexication in another individual, enjoyment of the marihuana experience based upon group intoxication, friendliness, acceptance by the group, willingness to assist intoxicated individuals, perceived intake capacity, and level of intoxication. As was the case with various psychological and physical reactions, homogeneity between the two groups exists when these factors are viewed collectively. In view of these findings the following conclusions were reached:

- 1) The occasional and regular users do not represent a homogeneous cultural grouping when the normative structures of the two groups are viewed collectively.
- 2) The regular user of marihuana is more homogeneous than is the occasional user when the normative structure of the marihuana using group is focused upon.
- 3) The findings of this study are in agreement with earlier studies in regard to the adoption of proper behavioral patterns, interaction within groups, the regular users sharing of marihuana with other users, positive sanctions, language, and the encouragement to experiment with marihuana.
 - 4) The findings of this study are in opposition to the findings

of earlier studies in regard to certain elements of the normative structure. First, the user of marihuana does not prefer to instruct a non-user or a novice in the proper techniques of becoming intoxicated. Rather, both groups prefer to let the individual discover for himself how it feels to be high and how to become high. Second, the user of marihuana does not prefer to assist the intoxicated individual become sober. Third, the user of marihuana is not sanctioned negatively if he becomes too intoxicated while smoking marihuana in the presence of other users. Finally, the occasional user does not prefer to share marihuana with other users when smoking marihuana in a group setting.

The fifth hypothesis in this study relates the employment of a technological system to actual frequency of use. It was found that different technological systems were employed by both types of users. However, the occasional and regular users do not differ in regard to the techniques employed in assisting an intoxicated individual (if they do desire to give assistance), smoke retention ability, ability to make cigarettes, and the use of the ends of the cigarettes.

Significant differences were found to exist in regard to the learning of the proper way in which marihuana is to be smoked, air and smoke intake, and the procedure employed in smoke retention. In view of these findings the following conclusions have been reached:

- 1) The occasional and regular users do not represent a homogeneous cultural grouping when employed technological systems are viewed collectively.
- 2) The regular user does not feel that an individual must employ a specific procedure when smoking marihuana. He is also less

concerned about smoke intake and retention than is the occasional user.

3) The occasional user appears to view the use of a specific technological system as very important among those wishing to use marihuana. Thus, the occasional user is representative of a more homogeneous social grouping in regard to the use of a technological system than is the regular user.

In conclusion, the aforementioned findings of this study point out that the user of marihuana is not part of a uniformly distributed homogeneous social group. Differences have been found to exist between the two most common types of users in regard to group preference, experienced psychological and physical effects, normative behavior, and employed technological systems. Although there is some degree of uniformity in regard to many aspects of marihuana use the differenced which do exist show that homogeneity does not prevail. The point to be stressed at this time is that the occasional and regular user should be considered to be part of an inclusive marihuana using culture. Each type of user should therefore be viewed as belonging to a separate and uniform culture which is based upon actual frequency of use. Thus, the occasional and regular user of marihuana is a member of a specific marihuana using culture which is distinctively different from the other.

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APPENDIX A

Dear Respondent:

I, as a graduate student in the Department of Sociology at Oklahoma State University, have become interested in the use of marihuana.

I would greatly appreciate your cooperation in filling out the questionnaire which has been delivered to you. Although you may be tempted to confer with others about many of the questions, please fill out the questionnaire by yourself. It is very important for this survey that your views be the ones represented.

Your responses to all items in this questionnaire will be kept anonymous. The completed questionnaire will be analyzed by the Department of Sociology and will become the property of that department. In order to gurantee that your responses will remain anonymous, please seal the questionnaire in the self-addressed envelope which has been provided and do not sign your name on either the envelope or the questionnairs.

Thank you for your time and cooperation.

Sincerely yours,

Stuart H. Traub

SURVEY OF PRACTICES ASSOCIATED WITH THE USE OF MARIHUANA

General Info	ormation:	Place ar	X in the	space i	next to the mo	ost appro	priate choi	ce.
1) Sex:				3)	am currently	7:		
Male					Attending	school		
Fema	Te				Employed Attending	school a	nd working	
				-		beneez a	na aorazino	
2) Age:			٠.	4.				
17				4) 1	live with my	parents	:	
$\frac{17}{18}$					Yes			
19		*		-	No			
20					Part of the	ne time		
18 19 20 21 22 23 24 25 as					·			
23				5) 1	Marital status	3:		
24				ξ.		•		
25 a	nd over			-	Single			
					Single Married Divorced			
					DIVOICEG			
						· .	^	
Directions:	represe three we Mark an	nts a partecks. X in the	icular da space nex	y of the	l) empty space week, correctly the day of the last Sunday.	sponding	to the past	
6) Last wee	k:							
•					•	+		
Sund	ay Sa	turday	_ Friday _	Thur	sday Wedn	esday	Tuesday	_ Monday
7) The week	before 1	ast:				:		
	_	â						•
Sund	ay Sa	turday	. Friday _	Thur	day Wedne	esday	Tuesday	_ Monday
•			;					
8) Three we	eks ago:							
Cd	au Ca	turday	Eridan	There	day Wedne	aeday	Tuesday	Monday
- June	ay 3a	curuay			Acon	auay		- minay

Directions:

Underneath each question you will find a choice of answers. Place an X in the space next to that choice which best fits your feelings.

If you have difficulty in answering any of the questions because you feel that none of the answers apply to you, place an X in the space next to the answer which most closely fits your feelings.

Do not leave any questions unanswered.

9)	I generally smoke marihuana:	15)	When I smoke marihuana:
-	Daily Every three days Every week Every two weeks Every month		I am much more talkative. I am a little more talkativa. There is no difference in the amount of talking that I do. I am too stoned to be able to tell if I talk more.
10)	I usually smoke marihuana:		I talk less I talk a little less.
	Once a day. Two or three times a day. Four or five times a day. More than five times a day.	16)	When I smoke marihuana my mind seems to:
11)	I consider myself to be a (an):		Wander. Stay focused on one thing.
	Regular user of marihuana. Occasional user of marihuana.	17)	When I smoke marihuana I become:
12)	I usually smoke marihuana when I am:		Very tense. Very confused. Very relaxed.
	Alone. With one friend. With several friends. With many friends.	18)	When I smoke marihuana: I feel cheerful and gay I feel contented.
13)	When I smoke marihuana in the company of other people I enjoy it more if: They are also smoking marihuana.		I do not feel any different than when I don't smoke marihuana. I feel depressed. I feel sad.
	They are not smoking marihuana. It does not matter to me if they are smoking marihuana.	19)	When I smoke marihuana:
168	When I smake mark have		My body seems to be floating on air.
14)	When I smoke marihuana: I become much more active I become a little more active There is no difference in my activity I become a little less active.		My body does not feel any different than when I don't smoke marihuana. My body feels very heavy.
	I become much less active.	1	

£0)	When I smoke marihuana I listen to what other people have to say:	25) When I go to work high:
	All of the time. Some of the time. As much of the time as I do when I am not smoking marihuana. A little less of the time. None of the time.	I work much harder. I work a little harder. I do not notice any difference than when I don't go to work high. I work a little less hard. I do not work hard at all.
21)	If I were trying to solve a difficult problem, smoking marihuana would: Make me much sharper. Make me a little sharper. Make no difference. Slow me down. Stop me completely.	26) When I go to school 'high': I comprehend much more I comprehend a little more I do not comprehend any more than when I don't go to school 'high' I comprehend a little less I do not comprehend anything,
22)	When I smoke marihuana:	27) When I smoke marihuana I:
	I am able to think very deeply. I am able to think a little deeper. I am able to think as deep as I do when I don't smoke marihuana. I am not able to think deeply at all.	Feel very happy. Feel a little happier. Do not feel any happier than when I don't smoke marihuana. Feel a little unhappy. Feel very unhappy.
23)	The effect that smoking marihuana has on my appetite is that it: Makes me very hungry Makes me a little hungry Has no effect on my appetite Makes me a little less hungry Does not make me hungry at all.	I feel very drowsy. I feel a little drowsy. I do not feel any different than when I don't smoke marihuana. I feel a little alert. I feel very alert.
24)	Smoking marihuana makes my mouth and throat: Very dry A little dry Feel no different than when I don't smoke marihuana A little moist Very moist.	29) When I smoke marihuana I: Concentrate much better. Concentrate a little better. Do not notice any change in my ability to concentrate. Can't concentrate too much. Can't concentrate at all.

		85
30)	When I 'come-down' from my 'high' I:	36) Smoking marihuana helps me to socialize with people who:
	Remember everything. Remember some things.	Are smoking marihuana.
	Do not remember too much.	Are not smoking marihuana.
	Do not remember anything.	
31)	When I smoke marihuana my self-	37) When I smoke marihuana:
	confidence:	I need to be with people who
	Increases greatly.	smoking marihuana.
	Increases a little.	I do not need to be with people who are smoking marihuana.
	Remains the same as it is when	And are phones instantial
	I am not smoking marihuana. Decreases a little.	20) Who firms him I ample i manihum I
	Decreases a lot.	38) The first time I smoked marihuana I:
		Got 'high'.
32)	When I smoke marihuana I:	Felt just a little funny. Did not feel any change coming
	Am more easily sexually aroused.	over me. Did not feel even a little funny.
	Do not notice any change in my	Did not get 'high' at all.
	sexual attitude. Am less easily sexually aroused.	
		39) Before I finally got 'high' I had
33)	When I smoke marihuana I:	smoked marihuana:
,	· · · · · · · · · · · · · · · · · · ·	
	Am very easy to get along with. Am a little easier to get along	Once.
	with.	Two or three times. Four or five times.
	Don't know whether I am easier to get along with.	More than five times.
	Am a little harder to get along	
	with.	40) Before I ever smoked marihuana I:
	Am very hard to get along with.	Had a pretty good idea how one
•••		should feel when they got 'high'.
34)	I usually smoke marihuana:	Had no idea how one should feel
	Before joining my friends.	when they got 'high'.
	After joining my friends. When I join my friends.	
	when I join by Ittends.	41) The very first time I smoked smoked marihuana I was:
35)	When I am smoking marihuana:	Alone.
	I like to be with people who are	With one friend.
	also smoking marihuana.	With several friends. With many friends.
	It does not matter to me if	**************************************
	other people are also smoking marihuana.	
	I do not like to be with other	
	people who are not smoking marihuana.	
	MARIA MALO MALO O	

42)	When I smoke marihuana with someone who is trying it for the first time I:	49)	When I first started smoking marihuana I:
	Tell him how he should feel. Do not tell him how he should feel.		Had to learn to enjoy the effects. Did not have to learn to enjoy the effects.
	Let him find out for himself how it feels.	50)	When I smoke marihuana I:
43)	If someone is really 'high' I: Can tell Can not tell.		Realize when I have smoked too much. Do not know when I have smoked too much.
44)	If someone is faking their 'high' I:	51)	When I am smoking marihuana with someone and they get 'too high', I:
٠	Can tell. Can not tell.		Try very hard to 'bring them down' Try only a little hard to 'bring them down'.
45)	I enjoy smoking marihuana with someone that:		Do not try very hard to 'bring them down'. Do not try at all to 'bring them down'.
	Really tries to get 'high'. Fakes their 'high'.	52)	If someone gets 'too high' and I try
46)	I like my friends when they:		to 'bring them down', I:
	Get very 'high'. Get pretty 'high'. Do not get 'too high'. Do not get 'high' at all.		Give them a cold shower. Make them eat a lot. Make them drink warm soda. Give them a 'downie'. Other.
47)	When I get 'high' I feel that I am:	53)	I usually smoke marihuana until I:
ı	Very accepted by my friends Just a little accepted by my friends Not accepted by my friends.		Get very 'high'. Reach the right level. Just barely get 'high'.
48)	When I smoke marihuana with someone who has tried marihuana only a few	54)	I enjoy smoking marihuana with someone who:
	Try very hard to help them get		Gets 'high' all of the time. Gets 'high' only part of the time.
	'high'. Do not try too hard to help them get 'high'.		Does not get 'high' any of the time.
	Do not try at all to help them get 'high'.	1	

55)	If I got 'too high' everytime I smoked marihuana;	60)	When I smoke marihuana I usually:
	My friends would still smoke with me. My friends would smoke with me only once in a while.		Roll my own joints. Have my friends roll my joints. Buy joints that have already been rolled.
	It would make no difference to my friends. My friends would smoke with me less often. My friends would stop smoking	61)	When I buy marihuans I usually buy it from:Someone I know.
	with me.		Anyone.
56)	I feel that someone who wants to smoke marihuana:	62)	When I smoke marihuana with my friends we pass the joints around:
	Must learn the correct way to smoke. Does not have to learn the correct way to smoke.		All of the time. Some of the time. Hardly ever. None of the time.
57)	The best way to get 'high' is to:	63)	When I smoke marihuana I usually:
	Inhale alot of air and less smoke. Inhale a little air and more smoke. Inhale an equal amount of air		Save the 'roaches'. Give the 'roaches' away. Throw the 'roaches' away.
	and smoke. Inhale only the smoke.	64)	When I filled out this questionnaire I:
58)	When I smoke marihuana I:		Was 'high'. Was 'straight'.
	Try not to let any of the smoke escape.		
	Try not to let too much of the smoke escape. Do not care if some of the smoke		
	escapes. Do not care if all the smoke escapes.		
59)	When I smoke marihuana I:		
	Hold the smoke in my lungs as long as possible. Hold the smoke in my lungs for only a second or two.		
	Do not hold the smoke in my lung at all.	5	

ATIV

Stuart Harmon Traub

Candidate for the degree of

Master of Science

Thesis: THE SOCIAL ASPECTS OF MARIHUANA USE: HOMOGENEITY, NORMATIVE STRUCTURE, AND BEHAVIORAL PATTERNS AMONG OCCASIONAL AND REGULAR USERS OF MARIHUANA

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