

A REFERENCE GROUP THEORY
OF MARIJUANA USE

By

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TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
II. A THEORETICAL MODEL OF MARIJUANA USE	18
III. METHODOLOGY	28
The Questionnaire	28
The Sample	32
IV. TEST OF THE MODEL	36
V. FURTHER CONSIDERATIONS AND CONCLUSIONS . . .	45
BIBLIOGRAPHY	56
APPENDIX A - QUESTIONNAIRE	60
APPENDIX B - SEX BY MARIJUANA USE	70
APPENDIX C - YEAR OF STUDY BY MARIJUANA USE	72
APPENDIX D - PLACE OF RESIDENCE BY MARIJUANA USE	74

LIST OF TABLES

Table	Page
I. Theoretical Model Predicting Marijuana Use	26
II. Parental Attitudes on Marijuana's Effects	37
III. Perceived Affective Satisfaction-Dissatisfaction By Marijuana Use	37
IV. Perceived Ideological Similarity-Dissimilarity By Marijuana Use	39
V. Student-Parent Ideological-Affective Relationship By Marijuana Use	41
VI. Student-Parent Ideological-Affective Relationship by Attitudes of Students' Reference Groups Toward Marijuana	42
VII. Reference Group's Permissiveness by Marijuana Use . .	43

CHAPTER I

INTRODUCTION

The use of marijuana in American society is widely considered a serious deviant act. A rise in society's concern has accompanied the spread of the drug's use during the 1960's. Until quite recently, however, there has been relatively little factual information available on the drug or the nature of its current use. The first comprehensive clinical, well controlled experiment on the drug's effects was only published late in 1968.¹ Some of the best sociological research dates back to Howard Becker's classical studies of marijuana use among jazz musicians.² Unlike Becker's case, however, few attempts have been made to relate the empirical phenomena of marijuana use to any coherent body of sociological theory. It is the purpose of this thesis to rectify partially this lack in the literature. Specifically, a behavioral model utilizing reference group theory has been developed to predict marijuana use. As such, a review of both the literature on reference group theory and the sociological literature on marijuana use is in order.

Review of Reference Group Theory

Reference group theory attempts to explain an individual's attitudes, beliefs, values and behavior as a correlate of his or her differential identification with certain social groups. The term,

reference group, was originally coined by Herbert Hyman,³ He hypothesized that an individual's judgements and self assessments were more significantly related to psychological identification with a group than to group membership per se. Over the years reference group theory has expanded, involving attempted clarification and designation of the nature of the psychological identification and the development of associative concepts to the reference group.

Out of Hyman's original paper arose some of the major concepts current in reference group theory. The first is the distinction between the membership reference group and the non-membership reference group. This distinction refers to the situation where a person will psychologically identify with a group in which he has no direct membership. The conceptualization of the non-membership group can explain why a person deviates from what would be expected on the basis of his group membership. In such a case, he would be adhering to the norms, values, and behavioral patterns of a non-membership reference group. However, as Hyman pointed out in a later paper, there exists an alternative explanation for deviation from a membership group's normative behavioral patterns.⁴ Such deviation may be the result of the deviant conforming "... to a false norm that he has taken for the true norm of the group."⁵ Thus deviation may not only be the result of adherence to the normative system of a non-membership group but may also be the misperception of the "true norm of the group," whether it be a membership or non-membership group. In this case, the probability of conforming to a false norm would seem to be increased when a non-membership group is the reference group. Proximity alone would

seem to facilitate a more accurate perception of a group's normative system.

Another of Hyman's concepts which is directly related to the membership-non-membership distinction is the differentiation between the reference individual and the reference group. If a person's attitudes and behavior are deviating from his membership group's norms, he may not be necessarily orienting himself to another group as much as to some individual's norms. Such an individual is termed the reference individual by Hyman and the reference idol by Muzafer Sherif.⁶

Another point, which was implicit in Hyman's original paper but never made clear, is the distinction between the comparative and normative reference groups. In 1947, Harold Kelly coined the preceding two terms to refer to his definition of the two functions of reference groups.⁷ These functions were 1) for the groups to serve as a source for self-appraisal--the comparative reference group and 2) for the group to serve as a source for attitude formation--the normative reference group. Kelly hastened to point out in his paper that although these were two different functions, they were probably fulfilled by the same group. In other words, comparative and normative reference groups may not be empirically distinct.

It is quite clear a great deal of time and effort has been involved in the attempt to expand and clarify reference group concepts. However, it is not at all clear that this effort has yielded or aided in the development of a valuable and empirical understanding of man and his interaction. Indeed, very little progress has been made beyond

Merton's relatively vague conceptualization of reference group theory.

Reference group theory aims to systematize the determinants and consequences of those processes of evaluation and self-appraisal in which the individual takes the values or standards of other individuals and groups as a comparative frame of reference.⁸

A positive aspect of Merton's formulation is the non-ideological nature of his rationale explaining the individual's relationship to his reference group. The emphasis is upon the "... determinants and consequences of those processes of evaluation and self-appraisal ...". Unlike other theorists in the field, Merton's formulation does not specify whether the reference group influences the individual in a certain direction or whether the individual uses the group as his point of reference because of similar life orientations. For example, Krech argues that:

The membership groups of the individual shape the formation of his attitudes only in so far as the individual identifies with them, that is, uses them as reference groups. Non-membership groups may also function as reference groups for the individual and importantly influence his attitude development.⁹

It should be clear that the above rationale explaining the correlation between an individual's attitudes and a particular reference group involves the view that the reference group determines the individual's attitudes.

The polar rationale can be seen in the reference group formulation provided by Newcomb.

It should be clear that a group is a reference group for an individual with respect to a certain object when the group and its attitude toward the object are part of the same system as the individual's own attitudes toward the object.¹⁰

The above rationale explains the similar life orientations between the group and the individual by arguing that the individual seeks out groups

which resonate well with his own value systems. Newcomb's rationale is at least inconsistent with Krech's formulation that the group shapes "the formation of his attitudes." Another point to be considered is that the Krech rationale is oriented to designating the reference group as the source of value change. This is in contrast to the Newcomb rationale which does not deal with value change but with the resultant behavior between the group and the individual once both value orientations are known to be similar or dissimilar. For the purposes of the present research the source of any value change is not as important as the resultant behavior once the interpersonal ideological relationships are known. As such, for the purposes of this thesis the Newcomb rationale is employed. Both rationales are viewed as being legitimate systems of logic that may partially explain the similar life orientations of the individual and his reference group but they are orientated at different aspects of the same socio-cultural phenomena. As such, although this thesis utilizes the Newcomb rationale this should not be interpreted as an attempt to substantiate one rationale to the detriment of the other.

A problem with Merton's formulation is that under it sociologists would quite possibly be faced with individuals using a very large number of reference groups. Such an empirical situation would relegate the reference group to the level of any one or number of the multitudinous number of social groups with which individual's involve themselves either socially, psychologically, or both. According to Merton's definition of reference group, for example, a group toward which a person experiences profoundly hostile emotions may serve as a "comparative frame of reference". As such, this hostile group would be defined as a reference group. Theodore Newcomb recognized this when he coined

the terms negative and positive reference groups.¹¹ But the theorists did not recognize the open-endedness of their reference group formulations. Under Merton's formulation there is negligible difference between the reference group and any social group of which a person is cognizant. Sorokin was very aware of this problem for he has presented a devastating attack on the lack of clarity in the term, reference group:

Finally, a multitude of Merton's propositions, especially in his theory of reference groups (Chapters 8 and 9) represents a codification of trivialities dressed up as scientific generalizations.... This sort of triviality goes on and on throughout Chapters 8 and 9 which deal with the centuries old problems of social groups, called by Merton "reference groups."¹²

A conceptualization of the reference group will have to be developed which can distinguish it from any of the hundreds of social groups of which people are cognizant before reference group theory will yield any substantive understanding of man and his interaction.

Kuhn has recognized the unnecessary generality in the term as it has been employed.¹³ Kuhn felt the possibility of an individual having multiple reference groups which was inherent in most definitions of the reference group was a mistake. As most theorists have argued, the existence of multiple reference groups inevitably place the individual under a great many conflicting pressures. And yet, as Kuhn pointed out:

... one supposes the others on which his self-conception crucially rests are only rarely or occasionally such as to put him under such cross-pressures... It is only possibly--in my view probably--a quantitative overstatement of the likelihood of inconsistency and conflict among others.¹⁴

Kuhn's approach introduced the possibility of developing a concrete and precise formulation of the reference group based upon symbolic interactionists' "other". He proceeded to develop his concept the "orientational other". Its four defining characteristics are as follows:

- (1) The term refers to the others to whom the individual is most fully, broadly and basically committed, emotionally and psychologically;
- (2) it refers to the others who have provided him with his general vocabulary, including his most basic and crucial concepts and categories;
- (3) it refers to the others who have provided and continue to provide him with his categories of self and other and with the meaningful roles to which such assignments refer;
- (4) it refers to the others in communication with whom his self-conception is basically sustained and/or changed.¹⁵

The above formulation appears as an answer to the researchers need for a precise, empirically viable formulation of the reference group. More importantly, the orientational other is conceptualized such that very few if any other social groups could serve individuals as additional orientational others. When the term, reference group, was coined in 1942, twenty-two years were to pass before any theorist developed a reference group formulation that could distinguish this group from any other social group. And yet, the original factors of psychological identification and self-appraisal are still central concerns. Unfortunately, Kuhn stopped short of using his orientational other as a theoretical basis for the reference group concept. Indeed he even went on to posit that "The study of the orientational other would be one which would lie quite at the opposite end of the scale of significance from the study of the reference group."¹⁶ Kuhn felt the study of the orientational other would focus upon:

. . . the processes by which the self is formed and sustained and to discover if there are regularities in the relation between orientational other and the self which can account for the discrepancies between regularities

of social systems and the phenomena of individual behavior.¹⁷

It should be clear that the study of the orientational other as conceptualized by Kuhn involves little substantive difference from what many have felt to be the study of the reference group. Kuhn's refusal to lend his theoretical perspective to the reference group ignores the very real problem that present reference group formulations will net little of empirical value that could not have been netted before the reference group was conceptualized.

Like Kuhn, B. C. Rosen utilized some of the symbolic interactionists' basic premises in his conceptualization of the reference group. Rosen examined membership group's influence upon adolescent behavior as opposed to the influence of their "significant others;" i. e. their reference groups.¹⁸ Of specific interest was the question of Jewish adolescent behavior with respect to the eating of kosher meat. What would be the better predictor, the adolescent's membership groups or his reference groups? Rosen's formalized conceptualization of the reference group involved the following: 1) the group's perceived importance to the adolescent, 2) the group as a perceived model for self-evaluation, and 3) the perceived bond of understanding with the group.¹⁹ The adolescent's membership group often held conflicting expectations as to the use of kosher meat. Rosen found that in cases where norm conflicts existed, the adolescent's reference group was a better predictor of behavior.

In this research, the theoretical and operational constructs of both Kuhn and Rosen have been utilized. The reference group is seen as the group or individual which the student perceives as being the most

important to him for self-appraisal and which provides the most support for his own values and ideas. The perceived bond of understanding is greatest with the reference group. This formulation of the reference group avoids the openendedness of former conceptualizations and allows for relatively precise operational forms to be utilized.

Review of Literature on Marijuana Use

The literature on marijuana use is extensive and an unusually large number of publications have appeared quite recently. During the twenties, thirties and forties, newspapers and magazines often carried stories to the effect that the use of marijuana would stimulate the user to a variety of anti-social acts.²⁰ Indeed, it was the widespread belief in marijuana's criminogenic propensities that motivated Congress to pass the Marihuana Tax Act of 1937. The House Hearings on the act are replete with newspaper accounts and Federal Bureau of Narcotics case histories to support the marijuana crime link. The few scientific investigations that had been carried out failed to find any causal or statistical relationship between marijuana use and crime.²¹ As paradoxical as it may now seem, the American Medical Association representative to the House Hearings, Dr. Woodward, actually opposed the new law due to the lack of substantive evidence of marijuana's harmfulness and because the law would work hardships on physicians still prescribing cannabis as a medicant.²² Despite these obstacles the bill was easily passed and signed into law in 1937. The bill's passage and the controversy surrounding the use of marijuana served to stimulate the first major sociological study of the drug's use. The study was carried out by New York Mayor La Guardia's Committee on

Marihuana.²³ The report, which required several years of intensive work to complete, examined not only the sociological aspects of the drug's use, but the medical, psychiatric, and pharmacological aspects as well. The nature of the sociological study was primarily descriptive. Utilizing a participant-observer approach, a team of investigators gathered information which presented a picture of the drug's use which was remarkably similar to the way the drug is used today. The investigators found the drug to be used in a social context among a small number of people attending "tea parties".²⁴ This was in contrast to the often solitary nature of opiate drug use.

Howard Becker is probably responsible for one of the more thorough analyses of the social context of the drug's use. Becker focuses on the sequence of changes which occur to enable an individual to become a regular marijuana user. Becker saw four problems the individual had to deal with: 1) he needed to learn the techniques of smoking, 2) to perceive the drug's effects, 3) to enjoy the drug's effects and 4) to render the social controls over the drug's use ineffective. The solutions to these problems were facilitated by being a member of a marijuana using subcultural group. One of Becker's primary hypotheses was that people smoked because they had learned to enjoy the drug's effects. This position was in sharp contrast to that of most writers on the subject. With the exception of Becker's work and the La Guardia Report, most of the research was explaining marijuana use as an attempt by the psychologically disturbed user to escape everyday reality.²⁵ Recently, however, studies concerning marijuana use and personality disorders have forsaken the former rationale that disturbed

people smoke marijuana for an explanation that marijuana induces the personality disturbances.²⁶ As Becker has pointed out, studies explaining the drug's use on the basis of personality or psychological disturbances cannot account for the existence of "normal" people smoking marijuana.²⁷

In recent years the main thrust of the sociological literature has been in clarifying the nature of the marijuana subculture as specified by Becker's investigations and the La Guardia Report. For example, in 1967 E. A. Suchman, in surveying a sample of 600 students in a west coast university (unnamed), discovered that many of the marijuana users among the students adhered to a subcultural "hang-loose" ethic. Characteristics of the hang-loose ethic were found to be such things as irreverency, repudiation of Christianity, rejection of conventional definitions of right and wrong, rejection of monogamy, rejection of premarital chastity and the accumulation of wealth. Suchman viewed adherence to the hang-loose ethic as an independent variable leading to a favorable attitude toward marijuana which eventuates in actual use of the drug. Suchman concluded, that:

These findings have significance for both sociological theory and social action. From a theoretical point of view, they support the interpretation of drug use as part of a subcultural group way of life. Among students, this subculture is strongly characterized by a "hang-loose" ethic and to develop freedom from conformity and the search for new experiences.²⁸

Suchman found only 21 percent of his sample had used marijuana at least once.²⁹ He commented that such a use rate was quite similar to that found in many other schools at that time. "This figure of 21.1 per cent use is quite similar to the results of surveys at UCLA (33%) (Santa Barbara News-Press 1967), Harvard (25%), Yale (20.5%) and

Princeton (15%) (Time 1967)."³⁰ Since 1967, however, the appearance of recent surveys make it clear that the number of people using or experimenting with marijuana has increased dramatically. In a 1969 survey of the University of Michigan, 49 percent of the student body was found to have used marijuana at least once.³¹ In surveys carried out in California's San Mateo County in junior and senior high schools, a 10.6 percent increase in "any use" between 1968 and 1970 was recorded. The actual percentage of students reporting marijuana use in 1970 was 42 percent!³² The Becker Research Corporation in a 1970 survey of five colleges in Boston found 48 percent of the students had tried marijuana at least once while 60 percent of the users used it occasionally or frequently.³³

With such a large increase in the number of people using marijuana it is possible that marijuana use is no longer as strongly correlated with a subcultural life-style of "hang-loose ethic" as it was at one time. Indeed, a recent Department of Health, Education and Welfare report to Congress has recognized this possibility. In discussing the distinctiveness of marijuana users that has been found in past studies the report carefully notes that:

It is a distinct possibility that as more students try marijuana the differentiating characteristics noted in early studies will be less pronounced. This is a phenomenon that occurred with respect to drinking and smoking in past years. The more widespread the practice became the less deviant were the practitioners as a group.³⁴

Two recent studies have presented data which clearly support this possibility. Zinberg and Weil carried out intensive interviews in Boston with 62 individuals, 9 of whom were chronic users, 25 of whom had used at least once and 28 of whom were

marijuana naive.³⁵ They commented that;

Neither have we any evidence that marihuana users who began after 1966 form a self-delineated campus subculture with common backgrounds or characteristics (permissive parents, hippies, radicals, and so on). We found this lack of uniqueness of the ... [group which had used at least once] ... remarkable and would not have predicted it in advance.³⁶

This lack of distinctiveness among users was also found by Manheimer, Mellinger and Balter in their survey of marijuana users among the urban adult population (18 years and older) of San Francisco, concluding that:

The data generally confirm the view that marihuana use tends to be associated with an "anti-establishment" point of view and to some extent with a search for a new ethic. Nevertheless, the majority of men and women who have used marihuana appear to be reasonably conventional.³⁷

This phenomenon has important implications for any theoretical approach to marijuana use. As the drug escapes the confines of its original subculture it cannot be considered as strongly correlated with a specific ideological orientation as it once was. That is to say people of increasingly divergent ideological orientations are beginning to permit marijuana use. Whereas at one time very few politically moderate or conservative individuals may have smoked, now the possibility exists that significant numbers of them use marijuana.

It is important to note at this point that although marijuana use may have escaped from its original subcultural confines, a neophyte is usually introduced to the drug by a very close and often long-standing friend or group of friends.³⁸ Indeed, it would appear that introducing someone to the drug is no simple or easy feat but a matter which requires a great deal of care and caution. Schaps and Sanders, in their

study of users at Northwestern University have found that:

On the one hand, it was clear that turning someone on for the first time was something that was not done lightly. Rather, it was considered a responsibility and a favor that was extended only to others who deserved it and could handle it without trouble. On the other hand, the nonuser facing the opportunity to try marihuana for the first time often had to revise a set of strongly negative attitudes toward the drug. Usually this revision took place gradually and was somewhat facilitated by exposure to pro-drug literature and personally communicated information that others were using cannabis without harm. For many students, however, such information was not sufficiently persuasive. Many had to know that one or more close and respected friends had used the drug without harm and endorsed its use.³⁹

Important points to be remembered from the above findings are that: (1) marijuana is a social drug whose first use is among very close friends, (2) marijuana is used by people with a wide variety of life orientations, and (3) marijuana is used increasingly by what we might term "conventional" individuals. These points are important in the ultimate formulation of any model dealing with marijuana use.

FOOTNOTES

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CHAPTER II

A THEORETICAL MODEL OF MARIJUANA USE

The model is specifically designed for predicting marijuana use; however, the model is general in nature and could be applied to any behavior which conflicts with the conventional norms carried by the family (e.g.; shoplifting, premarital sexual relations, etc.).

Any model predicting human behavior and the corresponding logical system explaining that behavior are predicated upon certain assumptions held to be true concerning human behavior. For a more adequate and scientific understanding of the relationship between theory and the empirical phenomenon it is necessary to state the assumptions underlying the model.

The model, which utilizes the basic concepts underlying reference group theory, incorporates the parent-peer group cross pressures as an explanatory factor concerning marijuana use. It is based upon the following basic assumptions.

Assumptions

- A₁: Human beings require ideological and affective support from various social groups.
- A₂: The social groups most important for idea and affective support are reference groups.
- A₃: The student's parents constitute the initial reference group.

- A₄: Reference groups may diverge from the general society's normative system.
- A₅: The parents are the primary normative reference group in society. (In this particular case it means the parents are overwhelmingly against the use of marijuana.)

Definitions

- Marihuana user - any individual who has smoked or ingested marijuana or one of its derivatives at least once.
- Ideological relationship - This is the degree to which the students and their parents are similar or dissimilar in their value orientations which interpret social life.
- Affective relationship - This is the emotional or nonrational part of a student-parent relationship. It specifically involves what the student perceives to be his parents' pride, satisfaction or disappointment toward him as a person, the amount of recognition and respect received from the family, and the warmth or coldness of the student-parent relationship.
- Reference group - This is the group or individual which the student feels is the most important for self-appraisal, and which provides the most support for his own ideas. The perceived

bond of understanding is greatest with the reference group.

Normative system - This is society's conventional set of ideologies and their corresponding conventional behavioral patterns.

The affective relationship is based upon the amount of recognition, respect, approval, and appreciation the student feels he receives from his parent(s). If the parent(s) successfully provide the preceding it follows that the student will define the affective relationship as satisfying. Being affectively satisfied, the student will not feel impelled to look elsewhere for his primary source of affective support. Perceived affective satisfaction with the parent(s) will therefore reduce the probability of seeking significant affective support from a group or individual whose ideology permits or encourages marijuana use.¹ On the other hand, if the student-parent(s) affective relationship is dissatisfactory to the student, in seeking elsewhere for primary affective support, there exists the possibility he could find it in a marijuana permissive group as well as in a non-permissive group.² As such, the following hypothesis is in order.

H₁: Students who are affectively satisfied with their parent(s) have a low probability of using marijuana.

In American society there exists a wide range of ideological variation (e.g. conservative - liberal) inside vague outer limits designating the normative and non-normative ideologies. Past surveys have indicated that the vast majority of parents take a very negative view of marijuana use.³ This indicates that any ideology which either permits or encourages marijuana use should not be considered among the

normative variations for the purposes of this model. Students who are ideologically similar to their parent(s) are therefore considered highly unlikely to use marijuana. However, a perceived dissimilarity will leave the student freer to accept an ideology permitting marijuana use. Thus, the expectation of more users among the ideologically dissimilar. For these reasons, the following hypothesis has been formulated.

H₂: Students who perceive themselves as ideologically similar to their parents will have a lower probability of using marijuana than students who perceive themselves as ideologically dissimilar to their parent(s).

The model's third through seventh hypotheses involve four distinct types of student-parent relationships wherein the affective and ideological variables are combined. These four relationships are as follows: (Type I) ideological similarity, affective satisfaction, (Type II) ideological similarity, affective dissatisfaction, (Type III) ideological dissimilarity, affective satisfaction and (Type IV) ideological dissimilarity, affective dissatisfaction.

In the student-parent relationships where there exists both a perceived ideological similarity and affective satisfaction (Type I) the students' primary need for affective and ideological support is fulfilled by the parent(s). Being affectively satisfied and ideologically similar to their parent(s), the students are expected to agree with their parent(s) on their anti-marijuana stand. This again reduces the probability of the students having a marijuana permissive reference group. As such, the probability of marijuana use is expected to be minimal. Indeed, the only Type I situations in which marijuana use is expected to occur would be where the parent(s) ideology indirectly or inadvertently

encourages the possibility of marijuana use. Such would be the case where parental ideology strongly encouraged individual development and independent thinking. Due to the above considerations the following hypothesis has been formulated.

H₃: Students who have Type I relationships with their parent(s) are less likely to smoke marijuana than students who have Types II, III or IV relationships with their parent(s).

A greater number of marijuana users is anticipated among students with Type II (ideological similarity, affective dissatisfaction) relationships rather than Type I relationships. Such students, being ideologically similar to their parent(s), are expected to seek their primary affective support from a group whose ideology is similar to their parent(s). This would tend to preclude their finding affective support from a reference group whose ideology permits marijuana use. However, in their search for affective support outside the parent(s), they are more likely to associate with a marijuana permissive group than the students with Type I relationships who theoretically feel little need to search for primary affective support outside their parent(s). Thus the probability of marijuana use among students with Type II relationships is expected to be greater than among students with Type I relationships, as stated in the following hypothesis:

H₄: Students who have Type II relationships with their parent(s) are more likely to smoke marijuana than students in Type I relationships.

The students in the Type III (ideologically dissimilar, affectively satisfied) relationship will be seeking ideological support outside of

and dissimilar to their parent(s). By precluding the use of groups ideologically similar to the parent(s) the relative percentage of marijuana permissive groups available for ideological support is increased over the cases where students have Type I and Type II relationships with their parent(s). As such, the probability of marijuana use among these (Type III) students is expected to be greater than among the students with Type I and II relationships.

There exists the possibility that the student may not have found the primary ideological support and is still seeking it. In such a case marijuana use is unlikely. Likewise, a perceived affective satisfaction with the parents will serve as a slight inhibitor to the use of marijuana. As such, students with Type III relationships will not be as likely to smoke marijuana as students in Type IV relationships where the students perceive themselves as being both ideologically dissimilar and affective dissatisfied with their parent(s). Based upon the foregoing considerations the following hypothesis has been derived.

H₅: Students in Type III relationships with their parent(s) will be more likely to smoke marijuana than students in Type I or Type II relationships.

Based upon the logic of the model students who have Type IV relationships with their parent(s) will be seeking both ideological and affective support outside the parent(s). As in the Type III situation, being ideologically dissimilar to their parent(s) the students will want ideological support from a group ideologically different from their parent(s). This of course increases the probability the student will encounter a marijuana permissive group by reducing the relative number of groups available to him which view marijuana as harmful.

In not finding the affective relationship satisfactory these students will also be searching for a primary source of affective support outside the parent(s). In such a situation the model posits no inhibiting factors to the students accepting a marijuana permissive group as a primary source of ideological and affective support. The only criterion is that the group, whether marijuana permissive or not, be able to provide the student with what he subjectively determines to be adequate ideological and affective support. As such, the greatest extent of marijuana use will be among those students involved in Type IV relationships. However, it should be clear that not all students in this group are expected to be users. Students may not have found the primary ideological or affective support outside the parent(s) as yet and therefore would not be expected to use marijuana. Likewise the model expected a number of students to find affective and ideological support among non-permissive groups which were ideologically dissimilar to the student's parent(s). Therefore the following hypothesis is in order.

H_6 : Students with Type IV relationships will be more likely than students in any other relationship type to smoke marijuana.

The seventh hypothesis is a test of the rationale underlying the probability statements of the differential extents of marijuana use in the student populations with Type I, II, III or IV relationships. Students in Type I relationships are expected to have reference groups which mostly support the parental stand on marijuana. Relative to those in Type I relationships, students in Type IV relationships will be much more likely to have reference groups which mostly negate the parental marijuana stand. As such, the reference group attitudes on

marijuana should become increasingly favorable to marijuana as one moves from Type I to Type IV relationships. Therefore the following hypothesis has been formulated.

H₇: As the student-parent relationships progress from Type I to Type IV the student reference group will decreasingly designate marijuana as harmful.

The eighth hypothesis is another test of the rationale underlying the model. The rationale views the nature of the student-parent relationship as related to the probability of students associating with marijuana permissive reference groups. The probability of students utilizing marijuana permissive reference groups is seen as being directly related to the probability of marijuana use. Therefore a hypothesis is in order specifying the relationship between the students' use of permissive and non-permissive reference groups and marijuana use.

H₈: Students in marijuana permissive reference groups have a higher probability of using marijuana than students in non-permissive reference groups.

The model which has been presented in this chapter is summarized in Table I.

TABLE I
THEORETICAL MODEL PREDICTING
MARIJUANA USE

Nature of the Students' Affective-Ideological Relationship with Parent(s)	Nature of Reference Group Stand On Marijuana	Probability of Marijuana Use
I Affective satisfaction Ideological similarity	Reinforces family marijuana stand.	little
II Affective dissatisfaction Ideological similarity	Mostly reinforces family marijuana stand.	some
III Affective satisfaction Ideological dissimilarity	Mostly negates family marijuana stand.	more
IV Affective dissatisfaction Ideological dissimilarity	Negates family marijuana stand.	most

FOOTNOTES

¹For the purposes of this study a marijuana permissive reference group is defined as any reference group which is either uncertain about the effects of marijuana, considers them to be harmless or beneficial.

²For the purposes of this study a non-permissive reference group is any reference group which considers the effects of marijuana to be slightly harmful or very harmful.

³Nechama Tec, "Family and Differential Involvement with Marihuana: A Study of Suburban Teenagers," Journal of Marriage and the Family Vol. 32 (1970), pp. 656-664. Tec specifically cites a survey by the Philadelphia Inquirer in which 85 percent of the parents surveyed said they would apply severe negative sanctions if their children used marihuana. The remaining 15 percent said they would disapprove but in a less severe fashion.

CHAPTER III

METHODOLOGY

The methodology and statistical techniques of any research are dependent upon the nature of the research. There is no need for more sophisticated methodologies or statistics than what will satisfy the research. As such, a test of this particular theoretical model calls for a scope sample, a questionnaire which elicits nominal data, and statistical techniques appropriate for testing relationships using nominal data, namely Chi Square, Phi and percentages. Each of these will be discussed in turn.

The Questionnaire

The questionnaire was divided into five sections (See Appendix A). The first section pertained to demographic information. This involved information on year in college, age, sex, marital or dating status, place of residence, grade point average and home town size. Although much of this information was irrelevant to a test of the model per se it would provide data on the general parameters of the sample which was being used. Knowing the parameters would allow a comparison with other samples in order to ascertain that the sample used was not terribly biased regarding the important variables in the research.

The second section of the questionnaire was devoted to determining the nature of the ideological relationship between the student and the parent(s). The ideological relationship was operationalized by presenting the student with a list of 20 value statements concerning drugs, sex, religion, child care, rock festivals, communes, statements on the media etc. and having him designate not only his position but each parent's position on twenty items using a 4-point Likert Type Scale (Strongly Disagree, Disagree, Agree, Strongly Agree). The items were selected on the basis that a wide range of topics would provide a good general area over which individuals could disagree or agree. The twenty statements were modified versions of attitude scale statements developed in past research.¹ An important point is that the true position of the parent on any ideological statement is not considered to be as important as what the student perceives their position to be. At the end of the scale the student was asked which parent's ideas were the most important to him. A score of 0 to 20 was obtained by adding up the number of items where the student and his most important parent had identical positions on a statement. If the student listed both parents as being equally important then the total number of matches between the student and each parent were totaled then averaged to provide a numerical rating of the ideological relationship. The median of this summated rating distribution was used to define students who were ideologically similar to their parents (where ideological positions were convergent) and those who were ideologically dissimilar (where ideological positions were divergent). The median fell between 9.0 and 9.5 matched positions, leaving 49.2 percent of the students

ideologically similar and 50.8 percent of the students ideologically dissimilar.

The third section of the questionnaire was devoted to determining the nature of the students' reference group. The operational conception of the reference group relied upon two former publications-- Rosen's² and Kuhn's³. Kuhn's concept of the orientational other was particularly relied upon in the formulation of the reference group. As noted earlier, the concept of the reference group is defined as:

The reference group is the group or individual which the student feels is the most important to him for self-appraisal, and which provides the most support for his own ideas. The perceived bond of understanding is greatest with the reference group.

Rosen's operational form of the reference group was modified and used in the questionnaire. The following three questions were asked: (1) Who do you feel understands you the best? (2) Whose overall good opinion of you is the most important to you? (3) Who provides the most support for your ideas and values? The students were provided with three possible answers for each question; 1) either one or both of their parents, 2) their closest peer friends and 3) their closest adult friends (example - teacher, minister etc.) The students were instructed to provide only one answer for each of the three questions. Consequently the exact reference group is not identified but the nature of its composition could be all parents, all peers, all other adults, or some mixture of the listed possibilities--4.12 percent of the students chose reference groups in which the parents predominated, 41.0 percent of the students chose reference groups in which the peers predominated, 12.4 percent of the students chose reference groups in which other adults predominated and 3.5 percent of the students chose

reference groups composed of a parent, a peer and another adult. In analyses that involved hypotheses 7 and 8 the last fifteen students (3.5% of the sample) were not used because operationally there was no predominate influence from any single group or individual.

Also included in this section of the questionnaire were questions eliciting what the students perceived to be their parents', their closest peer friends' and their closest adult friends' attitudes on the effects of marijuana. With such information not only was the operational measure of the nature of the reference group identified but also the group's attitude toward the effects of marijuana.

The fourth part of the questionnaire dealt with the affective relationship. In developing an operational form to measure the affective relationship, Tec's earlier research was quite useful. Tec examined a number of pertinent elements in the student-parent relationship and how they related to marijuana use. Some of these were parental attitude toward the student as a person, the amount of recognition and respect received from the parent(s), how the student viewed the parents (e.g. easy going and warm, demanding but warm, demanding but cold) and whether or not the student enjoyed being with the parents. These were modified and five questions were presented concerning the nature of the student-parent affective relationship. The student responded to each question on a 4-point degree continuum. Again the student was asked which parent was perceived as the most important to him on the affective items. Each item's score was then summated for the student's evaluation of his most important parent. The possible range in scores was from 5, indicating a highly satisfactory affective

relationship, to a score of 20, indicating a highly dissatisfactory affective relationship. If the student perceived both parents as being equally important the average between the two scores was used. The median, 6.75 served as an arbitrary point to differentiate the affectively satisfied 44.0 percent from the affectively dissatisfied 56.0 percent. The median of the affective scale, a 6.75 was skewed toward the satisfaction end of the scale. Even though the students' relative positions appear to have been obtained, a distribution more closely approximating a normal curve would have elicited data wherein the finer gradations between students' positions would have been clearer.

The fifth and final section of the questionnaire elicited information on the student's possible use of and past experiences with marijuana. Specifically, the frequency of marijuana use, length of use, availability of the drug, use of hallucinogens, future intentions of use were investigated.

The Sample

A sample of 460 OSU undergraduates in introductory sociology courses was used to test the model. The study was not descriptive in nature but a study to make a test of the validity of a theoretical model concerning marijuana use. To test the model it is imperative that subjects be included which display the full range of variation on the model's variables.⁴ For example, a random sample of OSU students might not generate enough marijuana users to provide an adequate test of the model since OSU is situated in a section of the United States

where marijuana use is severely frowned upon. Since the propositions of the model are universal in nature, testing the model on a random sample of OSU students has no particular advantage over testing it on any other collection of persons. In terms of model theory a random sample is deemed unnecessary and possibly inadequate for a test of the model. It was necessary to obtain a sample in which there existed an adequate number of marijuana users. Although introductory sociology is a required course for many different majors such a sample would also include a large proportion of those who would eventually concentrate in the social sciences. Past research has indicated that marijuana use tends to be associated with interest in the humanities and social sciences.⁵ For these reasons (also for ease due to availability) students enrolled in introductory sociology sections were selected as the source of the sample.

Of the questionnaires given in introductory sociology classes 33 of the 460 had to be disregarded due to either failure to complete properly the questionnaire or failure to participate in the study. This left a data pool of 427 cases of which 30.3 percent of the sample had used marijuana at least once. This is a lower percentage of users than is usually reported by students in universities. However, it should be kept in mind that any behavior in which three of ten individuals engage should be viewed as anything but extremist in nature.

Over 78.3 percent of the users had smoked their first marijuana cigarette within the past year. Of all users 62.7 percent had begun using as undergraduates. Other studies have likewise reported that most users begin using marijuana while in college.⁶]*

Consistent with past research, the males of the sample were approximately twice as likely to have used marijuana.⁷ Since the sample came from an introductory college course, most of the subjects were in their first or second year of college study (see Appendix D). A slight majority of the sample lived in the dorms 62.7 percent (see Appendix E). There were no significant differences between the users and the nonusers in place of residence. In the past, marijuana use was predominately an off campus subcultural phenomenon.⁸ As such, the residence patterns found in the study can also be interpreted as support for the argument that marijuana use is by a wider diversity of students than once was the case.

FOOTNOTES

¹R. Christie, L. Friedman and A. Ross, "The New Left and Its Ideology," (unpub. paper, Department of Social Psychology, Columbia University, 1968).

Eugene Grooves, "Life Styles and Campus Communities," (unpub. Questionnaire Survey of fifty American Universities, The Johns Hopkins University, 1970).

D. Levinson and P. Huffman, "Traditional Family Ideology and Its Relation to Personality," Journal of Personality Vol. 23 (1955), pp. 251-273.

²Rosen, pp. 155-161.

³Kuhn, pp. 5-25.

⁴David Willer, Scientific Sociology (New York, 1968), pp. 114-119. Willer discusses the requirements of testing formal theoretical models and the use of scope sampling.

⁵Kenneth Keniston, "Heads and Seekers: Drugs on Campus, Counter-Cultures and American Society," The American Scholar Vol. 38 (Winter, 1968-1969), p. 98.

⁶Suchman reported that 78 percent of his sample began using while undergraduates. Kenneth Eells in his survey of Caltech found 85 percent of his sample had first used marijuana as undergraduates.

⁷Suchman, p. 149.

⁸Kenneth Eells, "Marijuana and LSD: A Survey of One College Campus," Journal of Counseling Psychology Vol. 15 (1968), p. 462.

CHAPTER IV

TEST OF THE MODEL

The eight hypotheses of the model will be examined in light of the available data. The data itself will be presented in the form of contingency tables and analyzed with the use of the Chi Square, Phi and percentage differences. Data will be first examined that is relevant to a major assumption underlying the model. Specifically, this assumption is that parents will be overwhelmingly against the use of marijuana and consider it harmful and dangerous. Table II indicates that a large majority of parents, 82.8 percent of the mothers and 83.9 percent of the fathers considered marijuana harmful. Although 15.3 percent of the mothers and 14.5 percent of the fathers were uncertain about marijuana's effects, only 1.9 percent of the mothers and 1.5 percent of the fathers felt the drug to be harmless; and none felt it was beneficial. Therefore the data do not support the assumption as strongly as would be desired; nevertheless 83.4 percent of the parents did view marijuana as harmful.

The first hypothesis of the model was concerned with the relationship between marijuana use and the nature of the student-parent affective relationship.

H_1 : Students who are affectively satisfied with their parent(s) have a low probability of using marijuana.

TABLE II
PARENTAL ATTITUDES ON MARIJUANA'S EFFECTS

Parent Feels That Marijuana's Effects Are	Mother	Father
Very harmful	275 (64.9)*	267 (64.8)
Harmful	76 (17.9)	79 (19.2)
Uncertain	65 (15.3)	60 (14.5)
Harmless	8 (1.9)	6 (1.5)
Beneficial	0	0
Totals	424 (99.3)**	412 (96.5)**

*The number in parentheses is the percentage

**The totals do not add up to 427 due to the absence of one of the parents in a number of homes. These absences were due to such factors as death, separation and divorce.

TABLE III
PERCEIVED AFFECTIVE SATISFACTION-DISSATISFACTION
BY MARIJUANA USE

Marijuana Use	Affective Satisfaction	Affective Dissatisfaction
Users	34 (18.0)*	95 (39.7)
Nonusers	154 (82.0)	144 (60.3)
	$\chi^2 = 23.49$	$p < .001$
	$\phi = .23$	$N = 427$

*The number of parentheses is the percentage

The hypothesis specifically anticipated a low probability for the affectively satisfied students to be marijuana users. Data pertinent to this hypothesis can be examined in Table III. Of the affectively satisfied students 18.0 percent had smoked marijuana. According to the model, however, being affectively dissatisfied would not necessarily lead students to seek affective support solely or predominately in groups whose ideology was open to the use of marijuana. Indeed, there are probably many groups available for affective support whose ideology is quite unfavorable to the use of marijuana. As such, being affectively dissatisfied would not necessarily be associated with marijuana use. It was found nevertheless, that of the affectively dissatisfied 39.7 percent had used marijuana at least once, which is higher than for the affectively satisfied but still not a majority of the affectively dissatisfied (See Table III, $X^2 = 23.49$, $p < .001$, and $\phi = .23$),

The second hypothesis involved an expected differential involvement with marijuana use being associated with the ideological similarity-dissimilarity between the students and their parents.

H_2 : Students who perceive themselves as ideologically similar to their parents will have a lower probability of using marijuana than students who perceive themselves as ideologically dissimilar to their parent(s).

The second hypothesis specifically anticipated a greater proportion of nonusers than users among the ideologically similar to the reference parent(s) but a greater proportion of ideologically dissimilar users than ideologically similar users. This hypothesis is supported by the data presented in Table IV (Chi Square = 44.54, $p < .001$, and $\phi = .32$). Of the ideologically similar only 15.2 percent are users

TABLE IV
PERCEIVED IDEOLOGICAL SIMILARITY-DISSIMILARITY
BY MARIJUANA USE

Marijuana Use	Ideological Similarity	Ideological Dissimilarity
Users	32 (15.2)*	97 (44.7)
Nonusers	178 (84.8)	120 (55.3)
	$X^2 = 44.54$	$p < .001$
	$\phi = .32$	$N = 427$

*The number in parentheses is the percentage

while 44.7 percent of the ideologically dissimilar have used the drug. It might be noted that all those among the ideologically dissimilar were not necessarily expected to be marijuana users. The model's rationale anticipated the possibility of students finding ideological support among reference groups which viewed marijuana as harmful yet whose ideologies were dissimilar to the students' parent(s). As such, even a majority of the ideologically dissimilar could be nonusers without negating any of the model's rationales or expectations (It might be noted that this is the case in Table IV.)

The third through sixth hypotheses involve the relationship between marijuana use and the nature of the ideological-affective relationship between the student and his parent(s).

H₃: Students who have Type I relationships with their parent(s) less likely to smoke marijuana than

students who have Types II, III or IV relationships with their parent(s).

H₄: Students who have Type II relationships with their parent(s) are more likely to smoke marijuana than students in Type I relationships.

H₅: Students in Type III relationships with their parent(s) will be more likely to smoke marijuana than students in Type I or Type II relationships.

H₆: Students with Type IV relationships will be more likely than students in any other relationship type to smoke marijuana.

Briefly stated hypotheses 3 through 4 predict a gradual rise in the probability of marijuana use as one moves from students involved in Type I through Type IV relationships. These hypotheses are substantiated by the data (Chi Square = 48.94, $p < .001$ and $\phi = .34$) in Table V. Only 10.5 percent of the students in Type I relationships are users while 20.5 percent use in Type II, 29.5 percent in Type III and 52.8 percent of Type IV are users.

Again the model does not necessarily anticipate even a majority of the students in Type IV relationships to use marijuana. Some were expected to find ideological and affective support in non-permissive reference groups. It is true that a slight majority of students in Type IV relationships are users but this is best interpreted in comparison with the prevalence of use among students in the Type I, II and III relationships. In this context of comparison it can be seen that hypotheses 3 through 6 have been substantiated by the data.

TABLE V
STUDENT-PARENT IDEOLOGICAL-AFFECTIVE
RELATIONSHIP BY MARIJUANA USE

Marijuana Use	I	II	III	IV
	Ideological Similarity Affective Satisfaction	Ideological Similarity Affective Dissatisfaction	Ideological Dissimilarity Affective Satisfaction	Ideological Dissimilarity Affective Dissatisfaction
User	12 (10.5)*	20 (20.5)	22 (29.5)	75 (52.8)
Nonuser	101 (89.5)	77 (79.5)	53 (70.5)	67 (47.2)
	$X^2 = 48.94$	$p < .001$	$\phi = .34$	$N = 427$

*The number in parentheses is the percentage

The seventh hypothesis of the model involves an analysis of the rationale underlying the model's general predictions. A test of the rationale in any research is quite important. Quite often however, upon finding one's hypotheses supported by the data, the rationales are assumed to be substantiated. This approach leaves much to be desired. It is not beyond the realm of possibility that a hypothesis could be found to test true without the corresponding rationale being empirically substantiated. The seventh hypothesis involves the relationships between the nature of the student-parent ideological-affective relationship and the attitude of the students' reference group toward marijuana.

H₇: As the student-parent relationships progress from Type I through Type IV the students reference groups will decreasingly designate marijuana as harmful.

TABLE VI
STUDENT-PARENT IDEOLOGICAL-AFFECTIVE RELATIONSHIP
BY ATTITUDES OF STUDENTS' REFERENCE
GROUPS TOWARD MARIJUANA

	I	II	III	IV
Reference Group Feels Marijuana's Effects Are	Ideological Similarity Affective Satisfaction	Ideological Similarity Affective Dissatisfaction	Ideological Dissimilarity Affective Satisfaction	Ideological Dissimilarity Affective Dissatisfaction
Harmless, Beneficial or Uncertain	25 (23.4)*	31 (34.4)	27 (39.1)	85 (63.9)
Harmful or Very Harmful	82 (76.6)	59 (60.9)	42 (60.9)	48 (36.1)
	$X^2 = 43.83$	$p < .001$	$\phi = .33$	$N = 399$

*The number in parentheses is the percentage

It must be remembered that it is because of the students' association with reference groups whose ideology permits or encourages the use of marijuana that differential probabilities of marijuana use were suggested for students in Type II, III or IV relationships. If students' reference groups become less open to marijuana as one moves from Type I through Type IV relationships an alternative rationale explaining their marijuana use would be needed. However, as Table VI indicates, the seventh hypothesis has been substantiated (Chi Square = 43.83, $p < .001$, and $\phi = .33$). And indeed, the students' reference groups become proportionately more permissive to marijuana use as one moves from Type I through Type IV relationships (23.4% for Type I,

34.4% for Type II, 39.13% for Type III and 60.7% for Type IV). As such, the seventh hypothesis is considered to be empirically substantiated.

The eighth and final hypothesis involves examining the relationship between whether the students' reference groups are marijuana permissive or non-permissive and the resultant probability of marijuana use.

H₈: Students in marijuana permissive reference groups have a higher probability of using marijuana than students in non-permissive reference groups.

The data in Table VII validates the eighth hypothesis (Chi Square = 40.98, $p < .001$ and $\phi = .32$). In the table the predicted trend appears with users composing 17.31 percent of those students whose reference groups are non-permissive to marijuana use and 47.0 percent of those with marijuana permissive reference groups.

TABLE VII
REFERENCE GROUP'S PERMISSIVENESS BY MARIJUANA USE

Marijuana Use	Not Permissive	Permissive
Users	40 (17.3)*	79 (47.0)
Nonusers	191 (82.7)	89 (53.0)
	$X^2 = 40.98$	$p < .001$
	$\phi = .32$	$N = 399$

*The number in parentheses is the percentage

A figure of 47.0 percent might be considered relatively low when the reference groups of such individuals are permissive to marijuana. It may be speculated that a number of factors are available which could contribute to lowering the percentage: (1) Included among the marijuana permissive reference groups are those groups which are uncertain about marijuana. Some students may be unwilling to try marijuana unless they feel it is harmless; (2) The drug may not be available to the students even though they may desire to use it for the first time; and (3) Fear of the possible legal consequences may prevent use among neophytes even though their reference groups permit marijuana use.

CHAPTER V
FURTHER CONSIDERATIONS AND
CONCLUSIONS

In Chapter IV the data which was presented statistically substantiated all hypotheses of the model. Thus it might seem that the conclusions to be derived would be straightforward and easily formulated. This is quite true in terms of the statistical significance of the findings. Drawing the appropriate substantive conclusions, however, is more difficult. The model is based upon probability theory and as such any conclusions will be statements of probable behavior for aggregates of people under specified conditions, i. e., no attempt is made to specify individual behavior. It is recognized that there are other variables involved in predisposing marijuana use and other rationales which explain it.

With respect to the first hypothesis it may be concluded that there is a low probability of marijuana use among students who are affectively satisfied with their parent(s). Of the affectively satisfied 18.0 percent are users while 82.0 percent of the affectively satisfied are nonusers. And in addition, there was a higher percentage of users (34%) among the affectively dissatisfied. It might be noted that the model did not specifically anticipate any users among the affectively satisfied students, i. e., there is no rationale in the model to explain why affectively satisfied students would use marijuana. However,

there were 34 students who fell into this category. Since 34 is such a small number the following analysis which deals with this group should be read as speculative in nature rather than as a presentation of concrete explanatory factors.

In the event that there exists common background factors among deviants from the model, these may be used to partially explain why these individuals do not follow the model's expectations. The questionnaire elicited data which may be of use in examining these "deviant" cases. For example, it is possible that some of the assumptions underlying the model do not hold true for these particular cases. In terms of the model, students' situations would be radically changed if their parents were either disproportionately uncertain about marijuana's effects or felt them to be harmless. Of the 34 students' parents, 26.5 percent were either uncertain about marijuana or felt it to be harmless. A norm of comparison for this figure would be the equivalent percentage of parents of the affectively dissatisfied nonusers; only 12.3 percent of these were uncertain about marijuana or felt it to be harmless. Affectively satisfied users whose parents do not view marijuana as harmful would not be expected to conform to the model's expectations. Indeed, should ones' parents be uncertain about marijuana or feel it is harmless it might be that the ideologically similar and affectively satisfied students of such parents have a high probability of smoking marijuana. The ideological barriers to marijuana use found in most student-parent relationships would not clearly exist in such situations.

A second possible explanation for some of the 34 deviant cases resides in the fact that although affectively satisfied with their parent(s) they may be ideologically dissimilar to them. Being ideologically

dissimilar to parent(s) who view marijuana as harmful would be a predisposing condition for the use of marijuana. Of the 34 affectively satisfied users, 64.7 percent are ideologically dissimilar to their parent(s). Again, a norm of comparison is necessary. Among the affectively satisfied nonusers 33.2 percent are ideologically dissimilar. The greater proportion of ideologically dissimilar students among the affectively satisfied users would be a partial explanation of these students' usage.

A third possible explanation for these affectively satisfied users resides in the influence of the reference group. It is possible that the affectively satisfied users may be disproportionately utilizing marijuana permissive reference groups. Of the affectively satisfied users 50,0 percent have reference groups which are uncertain about marijuana or view it as harmless or beneficial. However, a norm of comparison is required to substantiate this factor as a substantive explanation. The significance of the reference groups' pressure would change if an even greater percentage of the affectively satisfied nonusers had reference groups which were uncertain about marijuana or feel it to be harmless or beneficial. However, only 23.0 percent of the affectively satisfied nonusers have reference groups which are uncertain about marijuana or feel it to be harmless or beneficial. This is in contrast to the 50,0 percent of the affectively satisfied users whose reference groups are at least uncertain about marijuana. Therefore, out of a total of 34 deviant cases, 17 might be partially explained upon considering the nature of the reference group's orientation toward marijuana; i. e., these 17 affectively satisfied users have reference groups which are uncertain about marijuana or feel it to be harmless or beneficial.

Of course the above three substantive factors overlap in some cases but when this overlapping is taken into consideration a total of 85.3 percent of the affectively satisfied users have at least one or more substantive factors working to facilitate or predispose marijuana use. Again, these considerations should be viewed as speculative in nature. There are other variables which might predispose students to use marijuana. Examples of these variables would be use for purposes of pleasure, excitement, convenience, etc. Due to unavailable data these are not evaluated here.

As discussed in Chapter IV the second hypothesis was empirically confirmed. It may be concluded that the probability of marijuana use is significantly lower if a student is ideologically similar to his parent(s) than the probability of marijuana use among those ideologically dissimilar to their parent(s). This is true if the parents, as assumed feel marijuana to be harmful. It should be recognized that this does not imply that a majority of those students ideologically dissimilar to their parent(s) will be marijuana users--only that the probability of being marijuana users among the ideologically dissimilar is greater than the probability of marijuana use among the ideologically similar. Of the ideologically similar 15.2 percent were users. These cases are deviations in terms of the model's expectations. One factor that may be helpful in understanding these deviations is whether or not the assumptions made concerning parental attitudes toward marijuana hold true. An examination of these attitudes reveal that 40.6 percent of the ideologically similar users have parents that are either uncertain about marijuana or view it as harmless. An analysis of reference group attitudes among the ideologically similar users finds 16 whose

reference groups are either uncertain about marijuana or feel it to be harmless or beneficial. By taking into consideration cases where overlap occurs between these two factors, 62.5 percent of the ideologically similar users are found to have at least one or more substantive factors either predisposing or facilitating their marijuana use.

In the model it was posited that a relationship typology, combining the affective and ideological relationships into four different types, would be a more accurate predictor of marijuana use than one relationship without the other. These four relationship types were: Type I, ideological similarity-affective satisfaction; Type II, ideological similarity-affective dissatisfaction; Type III, ideological dissimilarity-affective satisfaction; and Type IV, ideological dissimilarity-affective dissatisfaction. The probability of marijuana use was expected and empirically observed to increase from Type I through to Type IV. It may be concluded that students in Type I relationships are the least probable to smoke marijuana (only 12 students in Type I situations were users, see Table IV). The probability of marijuana use is sequentially greater in Types II and III and students in Type IV relationships are the most likely of all students to smoke marijuana.

The seventh hypothesis was statistically supported by the data. The students in Type I relationships are the least likely to be utilizing a reference group which is at least uncertain about marijuana; students in Type II and Type III relationships are increasingly likely to be utilizing such reference groups and students in Type IV relationships are the most likely of all students to be using reference groups which are uncertain about marijuana or view it as harmless and/or beneficial.

As noted in Chapter IV the eighth and final hypothesis was statistically substantiated by the data. Students with marijuana permissive reference groups were more likely to use marijuana than students with reference groups not permissive to marijuana use.

There were some limitations in the study and these need to be discussed. The model has been substantiated on only one sample. The general applicability of the model will not be clear until other and different samples have been tested. No attempt has been made to generalize beyond the nature of the present sample.

This study, like Rosen's earlier reference group study, experienced the operational problems of having to drop from the reference groups analyses students who equally referred to parents, peers and other adults. Although this involved a loss of 3.5 percent of the sample in the testing of two hypotheses--this loss is considered unlikely to have drastically changed the nature of the apprehended relationships.

Another problem related to the reference group operational forms was that when students referred equally to their parents as their reference group there existed the possibility that parents could disagree on the effects of marijuana. For example, it was possible for the father to be uncertain about marijuana and the mother to consider it harmful. In such situations one parent was considered permissive to marijuana and the other non-permissive. There were 13 students dropped in the analysis of Table VII for these reasons. This left a total of 28 students (including those 15 who referred equally to a peer, a parent and another adult) or 6.6 percent of the sample not utilized to test hypotheses 6 and 7 (See Tables VI and VII). Although it would have been preferable

to have included these students their exclusion is not thought to have skewed the data in any particular direction.

The affective scale was modified from a scale developed and used successfully by earlier research.¹ The ideological scale, however, was created for the purposes of this study and its validity remains uncertain.

The operational forms which have upheld the model have been evaluated and discussed. Behind the operational forms, the rationale predicting marijuana use viewed the nature of the students' reference groups, its attitudes toward marijuana and marijuana use among students as being related to the nature of the student-parent relationship. In the student-parent relationships where there exists both ideological similarity and affective satisfaction (Type I) the students' need for affective and ideological support is assumed to be fulfilled by the parent(s). Being affectively satisfied and ideologically similar to their parent(s) the students are unlikely to become involved with an affectively supportive group whose ideology supports marijuana use. Also being ideologically similar to their parent(s) the students are expected to agree with their parent(s) on their marijuana stand. As such, the probability of marijuana use is expected to be minimal. Indeed, the only Type I situations in which marijuana use might be expected to occur would be where the parent(s) ideology indirectly or inadvertently encourages the possibility of marijuana use. Such could be the case where parental ideology strongly encouraged individual development and independent thinking. Therefore very few marijuana users were expected among those students in Type I relationships with their parents.

A greater number of marijuana users is anticipated among students with Type II (ideologically similar, affectively dissatisfied) relationships rather than Type I relationships. However, such students, being ideologically similar to their parent(s) are expected to seek affective support from a reference group whose ideology supported marijuana use. However, in their search for affective support outside the parent(s), they are more likely to associate with a marijuana permissive group than the students in Type I relationships who theoretically feel little need to search for a primary source of affective support outside the parent(s). Thus the probability of marijuana use among students with Type II relationships is greater than among students with Type I relationships.

The students in Type III (ideologically dissimilar, affectively satisfied) relationship will be seeking for primary ideological support outside of and dissimilar to the parent(s). By precluding the use of groups ideologically similar to the parent(s) the relative number of marijuana permissive groups available for ideological support is increased over the case where students have Type I and Type II relationships with their parent(s). As such, the probability of marijuana use among these (Type III) students is expected to be greater than among the students with Type I and II relationships.

There exists the possibility that the student may not have found the ideological support and is still seeking it. In such a case marijuana use is unlikely. Likewise, the affective satisfaction with the parents will not be as likely to smoke marijuana as students in Type IV relationships where the students are both ideologically dissimilar and affectively dissatisfied.

Based upon the logic of the model students who have a Type IV relationship with their parent(s) will be seeking both a primary source of ideological and affective support outside the parent(s). As in the Type III situation, being ideologically dissimilar to their parent(s) the students will want ideological support from a group ideologically different from their parent(s). This of course increases the probability that such students will encounter a marijuana permissive reference group by reducing the relative number of groups available to him which view marijuana as harmful.

In not finding the affective relationships satisfactory these students will also be searching for affective support outside the parent(s). In such a situation the model posits no inhibiting factors to the students accepting a marijuana permissive group as a source of ideological and affective support. The only criterion, is that the group, whether marijuana permissive or not, be able to provide students with what they subjectively determine to be adequate ideological and affective support. As such, the greatest extent of marijuana use will be among those students involved in Type IV relationships. However, it should be clear that not all students in this group are expected to be users. Students may not have found the ideological or affective support outside the parent(s) as yet and therefore would not be expected to use marijuana. Likewise the model expected at least some students to find affective and ideological support among non-permissive groups. The greatest extent of use, nevertheless, will be found among students in Type IV relationships. The predicted differential probability of marijuana use associated with Type I, II, III and IV relationships is quite clear in Table V (Chi Square = 48.94, $p < .001$ and $\phi = .34$).

Students in Type I relationships are expected to have reference groups which mostly support the parental stand on marijuana. Relative to those with Type I relationships, students with Type IV relationships will be much more likely to have reference groups which mostly negate the parental marijuana stand. As such, the reference group attitudes on marijuana should become increasingly permissive to marijuana as one moves from Type I to Type IV relationships. This relationship can be seen in Table VI (Chi Square = 43.83, $p < .001$, $\phi = .33$).

Briefly summarized, the major predictions from the rationale of the model were substantiated: (1) Students who are ideologically similar to their parent(s) have a low probability of using marijuana, (2) Students who are ideologically dissimilar to their parent(s) are much more likely to use marijuana than their ideologically similar counterparts, (3) Students who are affectively satisfied with their parent(s) are less likely to smoke marijuana, (4) Students who are ideologically similar to and affectively satisfied with their parent(s) are the least likely of all students to smoke marijuana, (5) Students who believe they are ideologically dissimilar and affectively dissatisfied (Type IV) have a higher probability than students in any other relationship type of using marijuana, (6) Students who have marijuana permissive reference groups are more likely to use marijuana than students who have reference groups which consider marijuana harmful, and (7) Students near the Type IV end of the relationship typology are more likely to select marijuana permissive reference groups than students near the Type I end of the typology.

FOOTNOTES

¹Tec, pp. 656-664.

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APPENDIX A
QUESTIONNAIRE

PART I

INSTRUCTIONS: Please place a check or an X near the most appropriate answer.

1. Where are you in college?
 - 1 Freshman _____
 - 2 Sophomore _____
 - 3 Junior _____
 - 4 Senior _____
2. How old were you at your last

1 18 or younger _____	
2 19 _____	
3 20 _____	7 24 _____
4 21 _____	8 25 _____
5 22 _____	9 26 or _____
6 23 _____	older _____
3. What is your sex?
 - 1 Male _____
 - 2 Female _____
4. What is your marital status?
 - 1 Single _____
 - 2 Married _____
 - 3 Divorced _____
 - 4 Widowed _____
 - 5 Separated _____
 - 6 Remarried _____
5. If single, are you:
 - 1 Engaged or more or less attached to one person _____
 - 2 Dating several people regularly _____
 - 3 Dating several people irregularly _____
 - 4 Not dating _____
 - 5 Question does not apply to me _____
6. Where do you live while attending college?
 - 1 With parents, relatives or guardian _____
 - 2 Fraternity or sorority _____
 - 3 Dormitory _____
 - 4 Apartment with roommates _____
 - 5 Apartment with wife or husband _____
 - 6 Apartment with off-campus room alone _____
7. What is your overall grade point average? ____ . ____
8. In what size community did you live when you graduated from high school?
 - 1 Farm or ranch _____
 - 2 Small town under 10,000 _____
 - 3 Small city of 10,001 to 50,000 _____
 - 4 City of 50,001 to 100,000 (or suburb of a city this size) _____
 - 5 City of 100,001 to 600,000 (or suburb of a city this size) _____
 - 6 City of 600,001 or larger (or suburb of a city this size) _____

PART II

INSTRUCTIONS: Please respond to the statements below according to your beliefs, what you perceive to be your mother's beliefs and your father's beliefs. Answer by circling either SD, D, A or SA, whichever most closely approximates your, your mother's and your father's position on each statement.

SD - strongly disagree
 D - disagree
 A - agree
 SA - strongly agree

	Yours	Mother's	Father's
1. A child should not be allowed to talk back to his parents or else he will lose respect for them.	SD D A SA	SD D A SA	SD D A SA
2. If children are told much about sex they are likely to go too far in experimenting with it.	SD D A SA	SD D A SA	SD D A SA
3. It is important for the family to teach the child the morals of his society.	SD D A SA	SD D A SA	SD D A SA
4. A man can scarcely maintain respect for his fiancée if they have sexual relations before they are married.	SD D A SA	SD D A SA	SD D A SA
5. Almost any woman is better off in the home than in a job or a profession.	SD D A SA	SD D A SA	SD D A SA
6. Faithlessness is the worse fault a husband or wife could have.	SD D A SA	SD D A SA	SD D A SA
7. Laws that are unjust should be obeyed until they are changed.	SD D A SA	SD D A SA	SD D A SA

SD - strongly disagree
 D - disagree
 A - agree
 SA - strongly agree

8. Student newspapers and magazines should not be allowed to print things that seriously violate prevailing decency standards.
9. Students should cooperate with authorities in apprehending those who USE marijuana.
10. Students should cooperate with authorities in apprehending those who SELL marijuana.
11. Grades do not accurately reflect a student's intellectual and academic ability.
12. Most education these days has little to do with what is important for people to learn.
13. "The Establishment" unfairly controls many aspects of our lives.
14. A problem with most adults is that they have learned to accept society as it is, not as it should be.
15. An individual can find his true identity only by detaching himself from formal ideology.
16. Abortion should be available upon demand.

	Yours				Mother's				Father's			
8.	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
9.	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
10.	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
11.	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
12.	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
13.	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
14.	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
15.	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
16.	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA

SD - strongly disagree
 D - disagree
 A - agree
 SA - strongly agree

17. Police tend to go out of their way to harass or intimidate people with long hair (hippy types).

18. In the last year or two, there have been several large rock festivals. There should be more of these.

19. Some groups of young people have been trying communal living to replace prevalent family arrangements. There should be more of these communes established.

20. The news media are distorting student radical's ideas to make radicalism appear ridiculous.

21. Which parent's ideas do you consider the most important to you?

1 Your mother's ideas _____

2 Your father's ideas _____

3 Mother's and father's ideas are of equal importance _____

	Yours				Mother's				Father's			
	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA
	SD	D	A	SA	SD	D	A	SA	SD	D	A	SA

PART III

INSTRUCTIONS: Please check only ONE answer (1, 2 or 3) for each question.

1. Whose overall GOOD OPINION of you is most important to you?
 - 1 Parents _____ Mother _____ or Father _____
 - 2 Your closest peer friends _____
 - 3 Your closest adult friends _____ teacher _____ minister _____
other _____

2. Who do you feel understands you the best?
 - 1 Parents _____ Mother _____ or Father _____
 - 2 Your closest peer friends _____
 - 3 Your closest adult friends _____ teacher _____ minister _____
other _____

3. Who provides the most support for your own ideas and values?
 - 1 Parents _____ Mother _____ or Father _____
 - 2 Your closest peer friends _____
 - 3 Your closest adult friends _____ teacher _____ minister _____
other _____

4. What do you think about the effects of marijuana? They are:
 - 1 Very harmful _____
 - 2 Slightly harmful _____
 - 3 Uncertain about it _____
 - 4 Harmless _____
 - 5 Beneficial _____

5. What do you feel your mother and father think about the effects of marijuana? They are:

MOTHER	FATHER
1 Very harmful _____	1 Very harmful _____
2 Slightly harmful _____	2 Slightly harmful _____
3 Uncertain about it _____	3 Uncertain about it _____
4 Harmless _____	4 Harmless _____
5 Beneficial _____	5 Beneficial _____

6. What do you feel your closest peer friends think about the effects of marijuana? They are:
 - 1 Very harmful _____
 - 2 Slightly harmful _____
 - 3 Uncertain about it _____
 - 4 Harmless _____
 - 5 Beneficial _____

7. What do you feel your closest adult friends think about the effects of marijuana? They are:

- 1 Very harmful _____
- 2 Slightly harmful _____
- 3 Uncertain about it _____
- 4 Harmless _____
- 5 Beneficial _____

PART IV

INSTRUCTIONS: For each question please check the single most appropriate answer which applies to your own personal situation.

1. What is your parent's attitude toward you as a person? Are they:

MOTHER

- 1 Proud and pleased _____
 2 Satisfied but not proud _____
 3 Disappointed and displeased _____
 4 Indifferent to you as a person _____

FATHER

- 1 Proud and pleased _____
 2 Satisfied but not proud _____
 3 Disappointed and displeased _____
 4 Indifferent to you as a person _____

2. How much recognition and respect do you receive from your family?

MOTHER

- 1 Definitely enough _____
 2 On the whole enough _____
 3 Some, but not enough _____
 4 No, not at all enough _____

FATHER

- 1 Definitely enough _____
 2 On the whole enough _____
 3 Some, but not enough _____
 4 No, not at all enough _____

3. Which of the following best describes your parents.

MOTHER

- 1 Easy going and warm _____
 2 Demanding but warm _____
 3 Demanding but cold _____
 4 Indifferent _____

FATHER

- 1 Easy going and warm _____
 2 Demanding but warm _____
 3 Demanding but cold _____
 4 Indifferent _____

4. Do you enjoy being with your parents?

MOTHER

- 1 Yes, definitely _____
 2 Sometimes _____
 3 No, hardly ever _____
 4 No, definitely not at all _____

FATHER

- 1 Yes, definitely _____
 2 Sometimes _____
 3 No, hardly ever _____
 4 No, definitely not at all _____

5. Remember the last time you had an extended talk with your parents. Was the nature of this talk:

MOTHER

- 1 Thoroughly enjoyable _____
 2 Somewhat enjoyable _____
 3 Somewhat unenjoyable _____
 4 Distinctly unenjoyable _____

FATHER

- 1 Thoroughly enjoyable _____
 2 Somewhat enjoyable _____
 3 Somewhat unenjoyable _____
 4 Distinctly unenjoyable _____

6. Overall, which parent do you consider to be the most important to you on the above items?

- 1 Mother _____
 2 Father _____
 3 Both are equally as important _____

PART V

INSTRUCTIONS: Please check the single most appropriate answer for EACH QUESTION. Even if you do not use marijuana, you should read each question carefully and select the most appropriate answer.

1. Have you ever smoked any marijuana (pot, grass, Cannabis sativa)?
 - 1 Yes _____
 - 2 No _____

2. How long ago did you smoke your first marijuana joint?
 - 1 One week ago _____
 - 2 Two weeks ago _____
 - 3 One month ago _____
 - 4 Three months ago _____
 - 5 Six months ago _____
 - 6 A year ago _____
 - 7 Two years ago or longer _____
 - 8 Question does not apply to me _____

3. How frequently do you smoke marijuana? Once every:
 - 1 Week or more often _____
 - 2 Two weeks _____
 - 3 Month _____
 - 4 Several months _____
 - 5 Year _____
 - 6 I do not smoke marijuana anymore _____
 - 7 Question does not apply to me _____

4. Do you know someone who smokes marijuana?
 - 1 Yes _____
 - 2 No _____

5. Is this person a close friend?
 - 1 Yes _____
 - 2 No _____
 - 3 Question does not apply to me _____

6. Can you obtain marijuana from this person who uses it or someone else?
 - 1 Yes _____
 - 2 No _____
 - 3 Question does not apply to me _____

7. How many of your closest friends smoked marijuana at the time when you first started using marijuana yourself?
 - 1 One _____
 - 2 Two or Three _____
 - 3 Several _____
 - 4 Many _____
 - 5 Most _____

7. Continued
6 None _____
7 Question does not apply to me _____
8. Did you get high the first time you smoked marijuana?
1 Yes _____
2 No _____
3 Question does not apply to me _____
9. If you have smoked marijuana more than once have the later reactions to the drug changed in nature from the first few times you smoked?
1 Yes _____
2 No _____
3 Question does not apply to me _____
10. Have you ever hallucinated while under the influence of marijuana?
1 Yes _____
2 No _____
3 Question does not apply to me _____
11. Describe in a few simple terms what you mean when you say you hallucinated.
1 _____
2 Question does not apply to me _____
12. Have you ever taken any hallucinogens (LSD-acid, mescaline, etc.)?
1 Yes _____
2 No _____
13. If you have taken hallucinogens, were the hallucinations you experienced any different from any marijuana hallucinations you have experienced?
1 Yes _____
2 No _____
3 Question does not apply to me _____
14. If given the opportunity do you think you would smoke marijuana?
1 Definitely _____
2 Most likely _____
3 Perhaps _____
4 Doubtful _____
5 Highly unlikely _____
6 Absolutely not _____
7 I already smoke marijuana _____

APPENDIX B
SEX BY MARIJUANA USE

SEX BY MARIJUANA USE

Marijuana Use	Male	Female
Users	90 (45.2)*	40 (17.5)
Nonusers	108 (54.8)	189 (82.5)

*The number in parentheses is the percentage.

APPENDIX C
YEAR OF STUDY BY MARIJUANA USE

YEAR OF STUDY BY MARIJUANA USE

Year in College	Freshman	Sophomore	Junior	Senior
Users	79 (30.5)*	36 (31.3)	10 (25.0)	4 (30.8)
Nonusers	180 (69.5)	79 (68.7)	30 (75.0)	9 (69.2)

*The number in parentheses is the percentage.

APPENDIX D
PLACE OF RESIDENCE BY MARIJUANA USE

PLACE OF RESIDENCE BY MARIJUANA USE

Living Arrangements While Attending College	Parents, Relatives or Guardians	Fraternity or Sorority	Dormitory	Apartment With Roommates	Apartment With Spouse	Apartment Alone
Users	4 (19.1)*	17 (37.0)	75 (28.1)	19 (43.2)	9 (23.1)	4 (44.5)
Nonusers	17 (80.9)	29 (63.0)	192 (72.9)	25 (56.8)	30 (76.9)	5 (55.5)

*The number in parentheses is the percentage.

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