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Social Determinants of the Use of Drugs in a Suburban High School

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SOCIAL DETERMINANTS OF THE USE OF DRUGS
IN A SUBURBAN HIGH SCHOOL

by
Yvon Yangyuru

A Thesis Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
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Life

Rev. Yvon Yangyuoru was born on July 1, 1939, in Nandom, Ghana. From 1956 to 1960 he attended St. Charles Secondary School, Tamale, Ghana. An outstanding performance in the West African School Certificate Examination in June, 1960, earned him admission into the Sixth Form of the Government Secondary School, Tamale, Ghana. There, he pursued higher studies in Latin, French, and History. Upon the successful completion of his Sixth Form studies in June, 1962, he proceeded to St. Victor's Major Seminary, Tamale. There, he read philosophy, theology, and other subjects pertinent to the overall priestly training.

Upon his ordination in August, 1968, he proceeded to the Pontifical Gregorian University, Rome, Italy. There, he pursued postgraduate courses in philosophy. In June, 1970 he obtained, cum laude, his licentiate in philosophy (Ph.L.) from the Gregorian University. In September of the same year he was admitted as a full time graduate student in the department of sociology, Loyola University of Chicago, where he is currently pursuing a doctorate degree in sociology.

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CHAPTER ONE

The Problem

Question: Commissioner Goddard, isn't the current crisis over student use and abuse of drugs basically a college students' problem?

Goddard: This has never been just a college problem. It has always been a problem for all schools. ...When do you think so many college students learn to play with drugs - in summer, after they've graduated from high school?...Too many students begin to abuse drugs when they are in high school and junior high school (Goddard and Barnard, in Goode, E., 1966:96).

The task of the sociologist is to attempt an understanding of drug-seeking behaviour in order thereby to see the social factors that underlie it. The sociologist has to ask certain searching questions: why do certain individuals resort to this form of behaviour? What role does the social structure play in one's seeking chemical solutions to life's difficulties?

The task of this thesis is to make a searching analysis of specific social factors in order to discover whether or not, and to what extent they are explanatory variables of the use of drugs by a population of suburban high school students.

Types of Explanation.

1. The Psychological Orientation

The etiology of this behaviour has been the

object matter of various disciplines.

The psychological approach views drug taking as an adjustive response to an inner world of unbearable tensions. Ausubel, arguing for this adjustive value of drug use, observed (1961:12):

Differential susceptibility to drug addiction is primarily a reflection of the relative adjustive value which narcotics possess for different individuals. At any given moment, a person exposed to narcotics will only become an addict if the drug is able to do something significant for him psychologically, that is, to satisfy certain of his currently important needs.

Similarly, others have equated the use of drugs with an inability to face up to the challenge of playing adult roles. Parsons (1957), Erik Erikson (1963), and Chein (1961) represent important subscribers to this view. Their argument is that the first drug use often appears at the age of sixteen when the youth begins to face the challenges of sex, and begins to take a serious look at his future roles within society. Recourse to the use of drugs is seen by these authors as an avoidance mechanism and an evidence of protracted childhood.

In his study of heroin addiction among adolescents in New York, Chein (1964:14) attributed drug addiction to three factors: (1) a psychological predisposing inadequacy; (2) a crisis; (3) the timely offer of the drugs. The crisis may be nothing in objective terms - perhaps only the problem of asking a girl to dance at a Saturday hop. But this frustration or anxiety becomes intolerable.

Winick (1957:9) observed that the drug addict is a person with certain personality characteristics who happens to have selected this way of coping with his problems for a variety of reasons of which he is usually unaware. Not the least of these reasons is his access to a social group in which drug use was both practiced and valued.

This general theoretical orientation leans heavily on the basic assumption that drug use is a function of favourable psychological predisposition to drug use. Chein's discussion revolves around such terms as "weak ego functioning", "defective ego", and inadequate masculine identification, predispositions which can be traced back to overwhelming or overprotective experience of parental acceptance. Basically, then, within this psychological approach, drug use is explainable within the context of personality need satisfaction: people who use drugs do so as an adjustive response to deep-seated psychological needs which, in their turn, are a function of crises encountered in the process of adolescence, and the failure to identify with the father figure.

Sociological Explanation

A sociological explanation of drug use addresses itself to the social variables that favour drug-seeking behaviour. Central concern is not with the

individual psyche and characteristics but with the direct or indirect influence which the social environment has on particular individuals for the use of drugs. Sociologically it can be reasoned, from the very offset, that utilization of drugs is not a random occurrence. Like all other forms of behaviour drug use is shaped by the social context in which it occurs. However there are questions that cannot be answered by the purely sociological approach. For instance, the differential positive or negative attitude towards drugs by subjects within the same social context is a fact which defies simple explanation. However, it can be submitted that drug related behaviour is capable of theoretical explanation.

Becker (1955), in his attempt to handle theoretically drug related behaviour, discusses how one must learn a rationale as a pre-condition for the use and enjoyment of marijuana. In taking this view Becker, in effect, is using the differential association theory formulated by Sutherland to explain deviant behaviour. Put simply Sutherland (1947:7) observed that if one has sufficient reason for behaving in a certain way, reasons which he receives from and has reinforced by people with whom he interacts and identifies, then he will probably move in that direction. This approach obviously leans heavily on the Meadean symbolic interaction and reference group theory.

However, the phenomenon of social organization and class stratification are considered by many theoreticians as crucial variables for the explanation of "deviant behaviour", that is, behaviour that departs from the socially defined conforming behaviour patterns. The theory affirms (Merton, 1957) the existence in every society of socially defined success-symbols and institutionalized means for realizing these success-goals. Where the social structure provides access to legitimate means for the achievement of goals then behaviour meets normative prescriptions. But given a set of defined success-goals and the lack of legitimate means for realizing these success-symbols there ensues an anomic adaptation and adjustment which takes various deviant forms. Merton asserts (1957:181):

It is when a system of cultural values extols, virtually above all else, certain common success-goals for the population at large while the social structure rigorously restricts or completely closes access to approved modes or reaching these goals for a considerable part of the same population, that deviant behaviour ensues on a large scale.

Taking their stand on this theoretical framework many sociologists offer a logical - but inadequate - explanation of drug use. The contention is that lower class ethnic and minority groups, because they have been denied the essential resources, are blocked from achieving the prized goals. Goals-means imbalance, a result of the structured social system, serves to frustrate such dis-

advantaged persons. The results, contends Merton, could be a change or rejection of society's accepted and valued goals or means or both.

In the light of this theory, drug-seeking behaviour is often defined as a retreat reaction to the experience of strain and frustration. The drug user is retreating or withdrawing from the means as well as from the goals. This retreating behaviour implies (McGrath and Scarpitti, 1970:7) "unlike more conventional deviates the drug user has successfully internalized societal prohibitions against such illegal behaviour as stealing, robbing, or cheating and must cast about for other methods of resolving intense feeling of deprivation, frustration and blockage."

Our preliminary considerations thus far deal with two conventional bases of explanation of the use of drugs: the psychological pre-disposition to drugs as an adjustive response, and the retreatist and withdrawal response. Both the one and the other explanation seems to be limited and restricted; there is the need for explanatory supplementation. This is the more so as public awareness continues to recognize the reality of the phenomenon of youthful users of hard or addictive drugs. This type of drug users seems to possess a distinctive character. Coming from "good" homes with "good" parents, and possessing all the means and opportunities

denied to disadvantaged youth, it is clear that this sort of contemporary drug user apparently does not fit any of the explanations heretofore offered. Obviously an imperative exists to raise new questions.

Specifically, then, this thesis is an enquiry into, and a theoretical explanation of specific social factors which, within three suburban high schools in Illinois, increase the likelihood of students to experiment with drugs.

Drugs: Descriptive Definitions

For the purpose of this thesis a drug is "any kind of chemical substance that alters mood, perception or consciousness and is misused, to the apparent detriment of society" (Laurie, 1957), and whose use is controlled by society.

Our general interest makes it pertinent to classify the various drugs according to the effects their use produces.

Cannabis

Cannabis drugs are prepared (Chein et al., 1964) from the flowering tops, leaves, seeds and stems of hemp plant "cannabis sativa." This type of drug embraces a wide variety of drugs some of the most common of which are marijuana, hashich, kif, pot, tea, ganga, grass, and dozens of others.

In terms of the physiological and psychological effects of marijuana, the immediate effects are by nature subjective. In a report by the Secretary of Health, Education and Welfare (1971) these effects were described as:

alteration of time and space perception; a sense of euphoria, relaxation, well-being, and disinhibition; dulling of attention; fragmentation of thought; impaired immediate memory; an altered sense of identity; exaggerated laughter; and increased suggestibility....

Laurie (1952), Lieberman and Lieberman (1971) and, more recently, the Report of the National Commission on Marijuana and Drug Abuse (1972) also found this to be so.

Stimulants

A variety of drugs are classified within this group. These include amphetamines, bezedrine, dexedrine, and methedrine. Amphetamines are (Bates and Crowther, 1973) "stimulants which act on the central nervous system and are prescribed for the treatment of depression, weight control, narcolepsy, as well as to promote wakefulness, to combat fatigue and to increase energy." Typical effects include euphoria, wakefulness and the ability to concentrate. This group of drugs is also known as "peppills" or jolly beans (Cohen, 1969).

Barbiturates

Barbiturates (Bates and Crowther) "are depressants popularly used to produce sleep or relaxation." The barbiturate intoxicated person shows (Sharpless, 1965) a general sluggishness, difficulty in thinking, slowness of speech and comprehension, poor memory, faulty judgment, narrowed range of attention, emotional lability and exaggeration of basic personality traits."

Hallucinogenic Drugs

Hallucinogens, report Bates and Crowther (1973)

are a "family of drugs producing marked changes in mood and sensory perception." Often referred to as psychedelic or psychotomimetic drugs hallucinogenic drugs have been defined by Metzner as

substances that produce changes in thought, perception, mood and, sometimes, in posture, occurring alone or in concert, without causing either major disturbances or the autonomic system or addictive craving and although, with overdosage, disorientation, memory disturbance, stupor and even narcosis may occur, these reactions are not characteristic (in Barrigar, 1964:394).

This group of drugs includes LSD, mescaline, psilocybin, morning glory seeds, DET (diethyl tryptamine), DMT (dimethyl tryptamine), and DPT (diphenal tryptamine). Of these psychedelic substances LSD seems to be the most widely used.

Opiates

To the category of opiates belong opium, morphine, meperidine, methadone, heroin, and a host of others. The opiates, asserts Cohen (1969:72) "are derivatives from the resin of the pod of the opium poppy (*papaver somniferum*)." This class of drugs produces an effect described by Chein (1964:362):

There is a transitory nausea which may particularly in the novice be followed by effortless and emotionally nondistressing vomiting. There is a period of maximal appreciation of the subtle effects of the drug. Some of these are body sensations, e.g., a feeling of impact in the stomach, bodily warmth, and eroticised nature, a feeling of lethargy, somnolence, relaxation and relief

from tension and anxiety; and the experience of the 'high'...which is one of the comfortable detachment from and lack of involvement in current experiences. The person feels 'out of this world', all his demands have been fulfilled, everything is taken care of...Following the period of maximal appreciation of the effects of the drug there is a gradual return to the 'normal' state.

Rathod's observations (1967:412) lend support to Chein's report. The outward symptoms of a patient two or three hours after injection, while he is still "high" are:

"small pupils, looks dreamy and detached, fresh injection mark, doesn't want a proper meal, rubbing of eyes, chin and nasal area, slow and slurred speech, scratching of arms and legs and areas where clothes rub, resents being disturbed and spoken to, avoids noise and other strong stimuli, wakefulness interrupted by drowsiness."

Review of Relevant Literature

A number of studies has been conducted in California at the high school level. Marijuana use incidence varies from school to school. But the studies indicate that (Blum,1969:13) thirty per cent of California's high school students have used marijuana at least once.

In 1966 a drug study was made of high schools in San Mateo County. Evidence showed that about 18 per cent of the boys and 8.8 per cent of the girls admitted ever using marijuana. Drug use was found to be differentially distributed among the grades: the higher the grade the higher the percentage of drug users (in Blum,1969:14). Kaplan (1970) remarked that a similar study two years later showed remarkable increase in drug use among both boys and girls. A follow up study (1972) showed this trend to be consistent. The 1972 preliminary report indicates that "the over-all pattern of drug use - that males have higher use than females, that the rates of use increase by class - held true as in the previous...studies."

Price (1967) cited by Blum (1969) observed that in a Castro Valley of San Francisco Bay Area high school settings for the use of drugs were said to be "either when out with the 'gang' or at home; the average age of first use was fifteen to sixteen years; and the use of most drugs was initiated by classmates who were also the source of supply."

Miller (1967) investigated the incidence of drug use among 2,600 high school students in a Great Neck, New York, high school. Results indicated that (in Blum, 1969:13) eight per cent had tried marijuana, six per cent had experimented with barbiturates, two per cent had experimented with hallucinogens, and six per cent had tried glue sniffing. Settings for illicit use were most often the home, parks, and parties in that order. Students participating in school organizations reported illicit use less often, as did students with better grades.

A report of drug use among minority group students (Blumer, 1967) indicated that a great majority of Negro and Mexican-American students of Oakland "flats" used marijuana. In fact, those who did not use it were referred to by their contemporaries as "lames:"

A series of comprehensive studies had been done by Blum and associates in four San Francisco Bay Area high schools. The studies involved 5,480 students. Blum (1969) reports that in an upper-middle-class high school 25 per cent of the girls and 33 per cent of the boys report that most of their friends smoke marijuana. Twenty-five per cent of all students say that they themselves smoke the substance.

Alcohol

Responses to taking alcoholic drinks revealed

that more boys (43 per cent) than girls (35 per cent) admit that the majority of their friends drink. However slightly more girls (88 per cent) than boys (84 per cent) say that they themselves have tried alcoholic drinks (Blum,1969:324). Almost ten per cent of the girls said that their first drink was on a date.

Marijuana

One item of the instrument tried to measure students' knowledge of the use of drugs by other people. In the case of marijuana slightly more than half the students (57 per cent) know someone who smokes, and at least 25 per cent have tried it personally. Asked to describe the people they know who smoke marijuana, students (23 per cent) most frequently refer to casual acquaintances; one-third have good friends who smoke. Almost ten per cent say that they have relatives who use marijuana. Many have older friends using it as well (Blum,1969:525).

Hallucinogens

Barron and associates (1964) remarked that use of hallucinogenic substances tends to be linked with the young intellectuals interested in deepening their psychic experience. The effects, however, appear to be a function of the nature and amount of the drug taken,

the personality and current mood of the subject, and by the context in which the drug is used and the expectations held.

Blum reports that the extent of awareness of the use of hallucinogens was considerable among the students. Forty-four per cent of all students report knowing people using psychotomimetic substances: LSD, mescaline, morning glory seeds, and other hallucinogenic substances. However, only seventeen per cent of the students had tried any of these substances. Furthermore, ten per cent of the boys and five per cent of the girls indicated personal experience with hallucinogenic substances. Personal use of other psychotomimetic drugs such as pep pills, goof balls, glue, gasoline, sleeping pills, tranquilizers and heroin was shown to be very minimal (Blum, 1969:526).

Students tend to classify and differentiate users and non-users with regard to this drug. In practice (Blum, 1969:327), "the marijuana and LSD users are grouped together by non-users and described as comprising the brightest and the dumbest students, also the richest and the poorest, and are further characterized as 'loners' and 'eccentrics'... Users, on the other hand, less often emphasize the difference between themselves and other students.

This particular study by Blum shows the use of other substances to be minimal. For instance, only

four per cent of students reported using pep pills and goof balls; at most seven per cent said they sniffed glue, gasoline and other intoxicants; use of sleeping pills and tranquilizers was reported by four per cent of girls and six per cent of boys. Reported heroin use was the lowest: 0.3 per cent.

One item of the instrument was intended to measure the influence of peer group towards the use of drugs. Responses show that relatively few (16 per cent) complain of being under pressure, but instead, many propose that "one ought to know what his associates are like or what situations are going to become before getting involved" (Blum, 1969:329). These replies give the impression, remarks Blum, that students are aware of their role "in choosing groups or getting into situations where drug pressures are generated" (1969:329).

An independent study reported by Aron and Tutko (in Blum, 1969:332-244) concerned the use of drugs in two high schools of different socioeconomic status: the one a middle-class high school, the other a lower-middle-class high school. These high schools were both situated in the Santa Clara County, California.

Tobacco

At both schools a statistically greater percentage of boys smoke than do girls. In the middle-class

school 52 per cent of boys smoke as against 42 per cent of girls. The respective figures for the lower-middle-class high school are 47 per cent and 35 per cent. However, comparison of reported smoking behaviour of students show that the middle-class high school has significantly greater percentage of smokers than the lower-middle-class school. In each case friendship ties play an important role in student smoking behaviour; this accounts for much of the smoking incidence. Parental smoking is also an important source of influence; but here, too, there are differentials, with students in the lower-middle-class high school reporting greater percentage of smoking habit.

Alcohol

The same pattern prevails with regard to drinking habits in both schools. Sex differentials is significant within the schools. In both schools more boys drink than girls.

Marijuana

The awareness of actual use of marijuana by others differs between the two schools. Of the middle-class high school 77 per cent of the boys and 85 per cent of the girls know someone using marijuana, as do 45 per cent of boys and 57 per cent of girls in the lower-middle-class high school. These acquaintances are often

mentioned as intimate or casual friends; four per cent of all boys and girls mention older relatives or siblings.

Personal use of marijuana by students of both schools also differs with a bit less than one-third of students in the middle-class school (31 per cent) and a bit more than one-fourth (28 per cent) of students in the lower-middle-class school reporting actual personal experience of marijuana.

Hallucinogens

It is, however, in the case of the use of LSD that definite differences between the two schools showed. Since, as Aron and Tutko maintain, LSD is apparently a "higher-class" drug it is at this level that class difference between the two schools might be seen as relevant. Awareness and use differentials are significant. In the case of the middle-class high school 81 per cent of the boys and 65 per cent of the girls know someone who uses or has used LSD; 14 per cent of the boys and 13 per of the girls have actually experimented with it. By contrast, of the lower-middle-class school, 37 per of boys and 50 per cent of girls are aware of LSD use by someone, and nine per cent of both boys and girls has experimented with it. LSD behaviour reinforcers are, in the main, casual friends (Blum, 1969: 339).

The study shows little evidence to the wide use of other drugs like amphetamines, barbiturates, tranquilizers, volatiles, inhalants, etc. "Pep pills", conclude Aron and Tutko, "and tranquilizers belong to the apparent descending order of drugs used."

An independent study reported by Feinglass and Fort (in Blum, 1969:344-348) within the same county shows remarkable increase in drug use within a period of one and one-half years. A modified form of the original instrument was administered to a group of 1,645 suburban high school students. Results show that almost all students know marijuana users and three quarters have themselves had opportunities to obtain that drug. About 55 per cent of the whole student body admitted having experimented with marijuana. The greatest amount of marijuana use, observed Feinglass and Fort, is reported in the twelfth grade (49 per cent) and, by age group, among eighteen-year-olds, 63 per cent of whom had experimented with marijuana.

Use of other drugs is also comparatively extensive. Eighteen per cent reported experimenting with amphetamines, while two per cent of boys and girls report regular use.

Use of hallucinogenic substances is also comparatively heavier, with 20 per cent of students reporting to this fact, and 12 per cent of the boys and 10 per

cent of the girls reporting repeated use. Most students know of others using hallucinogens. Least use is among freshmen; the highest use is among higher grades and older students.

Glue and gasoline sniffing is reported by nine per cent of the students, goof balls and pep pills by thirteen per cent. Nonmedical employment of sleeping pills and tranquilizers is admitted by eleven per cent. Twenty-nine per cent say that they have had the chance to take heroin, 25 per cent using it, and two per cent say they have themselves tried it regularly (Blum, 1969:346).

More recently Crowther and Baumer (1971) did a study of patterns of drug use among high school students in Greater Egypt area. Fifty-eight per cent of students know someone who smokes marijuana, and thirty per cent are aware of the use of stimulants by some other people. However, thirteen per cent of students report actual use of marijuana, six per cent had used stimulants, and an equal percentage experimented with depressants. Use of special substances and hallucinogenic substances had been reported by four per cent. Narcotics was the drug of lowest reported use; only two per cent of students admitted having used this drug.

The Scene in Canada

A series of studies has been done in Canada

with regard to the epidemiology of stimulants and speed. Studies in Halifax, Toronto, and Montreal found that 6.2 per cent, 7.3 per cent, and 5.8 per cent respectively of secondary school students had ingested stimulants at least once (Smart, 1971:391).

In an independent study Smart and Cox (1972) explored speed use patterns of secondary school students in Toronto. The study showed that in terms of backgrounds, speed users do not differ from LSD users; both tend to come from middle class homes. They maintain that speed users tend to come from homes in which drugs, especially tranquilizers and sleeping pills, have been used by one or both parents.

In another study in Lincoln and Welland counties Smart, Fejer and Alexander (1970) found that 46 per cent of secondary school students using speeds had mothers who were taking tranquilizers, while 42 per cent had mothers taking barbiturates. Cox (1972) found similar patterns among their sample; 50-60 per cent of their sample had both parents taking tranquilizers and barbiturates.

Smart and Cox also found that with the exception of one casual user the entire sample were multidrug users; all having used marijuana, hashish, and LSD, before starting speed and continuing with them after speed. It was also noticeable that alcohol was used very rarely by speed users.

Chapter Three: Hypotheses, and their
Theoretical Background

That human behaviour has multidimensional factors is axiomatic. The taking of drugs is no exception. As such this behaviour cannot be satisfactorily explained by any one single factor. The fact that drug-taking is multidetermined phenomenon has been recognized by several theorists:

Scher (1966:540): My own guess would be that a combination of availability, peer group enticement, the palling of socially acceptable directions and often an intensive urge for discovering and extending the limits of individual sensitivity and possibilities initiates many youngsters into early drug-taking experience.

Fort (1967:134): Drugs can be used...as food...as a means of relieving tension, boredom and subsistence problems, for celebrating or socialising, as a means of obtaining temporary euphoria or escape, absence of alternative leisure time pursuits, sexual attitudes and beliefs, impaired social integration...the influence of outside cultures or conformity to the mores of subcultures.

Davies (1967): Drug-taking among these young people is apt to spread in the same way in which an infectious epidemic disease may spread, that is, by contact with individuals. It may also spread as a consequence of the social and cultural attitudes of groups of young persons. It has already been observed that there must be deeper causes within the fabric of society leading to this phenomenon, for such centres of 'illicit' drug-taking arise among the youthful and teenage population...without discernible contact with known centres of sources of supply...Broadly, therefore, it may be said that those who find life too hard...may resort to drugs without benefit of medical advice. To this group of people must be added the curious and adventuresome...finally there are those who take drugs in protest against society.

Hilton (1968): (on cannabis use among university students): The user is made to feel part of an ingroup in that he is sharing with others a forbidden pleasure and gains security from this...Many highly intelligent students find their courses uninteresting and disappointing and lectures dull and uninspiring and therefore revert to the drug as a result of their frustration...In some cases the impersonal atmosphere of a university, in which many people are superficially known, but very few really close relationships are formed, may breed intense insecurity and so lead the individual to become a member of a group taking drugs merely for the social satisfaction it offers. In some cases the drug is taken out of interest and curiosity as to its effects, or alternatively because it provides a pleasant experience, which the individual enjoys, and sees no reason to discontinue...

Other reasons why marijuana is used include boredom, curiosity, bravado, relief from fatigue, worry and strain, the search for a new experience, as an escape from the problems of everyday life, insecurity, ignorance, the seeking of false courage, glamour and social pressure. Often the drug is taken only for a short time to get over a difficult period in one's life. The individual may need to turn to fantasy to escape from problems which he cannot face ...it may be used as a reaction to an underlying psychosis, or other psychological disorders.

As these quotations show, there are a diversity of reasons suggested as to why young people take drugs. Some commentators go as far as to suggest that there are no common threads at all. Wilson-Kay (1967:210) for instance, observes: "They do not necessarily come from broken homes in which there is undue tension, or from poor or rich homes. Some are intelligent, some are not, and so on. Each individual case is essentially an individual's case, and there are no linking threads or common factors." However, our basic assumption is that young drug-takers share certain factors; that these factors determine their willingness and tendency to take drugs; and, furthermore, that these factors

make it possible to handle this behaviour theoretically.

Peer Group Relations and Drug-Seeking Behaviour.

It is obvious, observes Clausen (1960) that narcotics must be available before there can be narcotic users; it is perhaps less obvious that an individual must learn the techniques of drug use and to some degree the proper way to perceive and enjoy drug effects before he can become a regular drug user. He further observes that the process of becoming a user is closely related to patterns of association and access to drugs."

The use of [^]drugs is a function of the process of social interaction whereby the individual learns to make positive definitions of drugs within the framework of shared group values (Becker, 1963). Basically, then, drug use becomes determined by the nature of interaction, and the social sanctions and rewards which the individual perceives from the group. In this context, shared symbols, values and meanings play an important reinforcement role.

Dai (1937:173), writing about opiate addiction in Chicago, suggests the determining role of group association. The use of heroin and other opiates, in most instances, is learned through association with peers in the subculture of the street corner society. The norms of this subculture are generally inconsistent with and often hostile to those of conventional society.

However, Chein (1964:102) observes that in general the prevailing sentiment towards drug use, even on the part of residents of slum areas, is decidedly negative. Most children learn that heroin and marijuana are considered "bad" by most adults. However, in areas of highest drug use rejection of the standards of conventional society, distrust of policemen, and relatively favourable attitudes towards drugs tend to be much more prevalent, even among a cross section of school children than in other areas of the city. He suggests that a substantial proportion of young people are likely to have friends or associates who use marijuana or heroin.

The theoretical implication of these suggestions tends to affirm an operation of reference group norms and values. If association with specific types of persons leads to similarity of expressive behaviour it could be argued and inferred that such association has an important identification formation function. And this calls attention to the process of interaction. In this process ingroup members are an important behaviour reinforcement contingency.

On the basis of this preliminary consideration it can logically be deduced that drug behaviour is, at least in part, a function of overt or covert group pressure exerted on group members. Group pressure can be exerted in various ways: through specific positive or sanctions of the individual's specific behaviour; through

selective use of communication symbols, and through group acceptance.

This reinforcement function of the group is also emphasized by Laurie (1967). The character of the society in which marijuana used, he observes, is vitally important in predicting its effects. Like any social behaviour it has to be learned through association and interaction with other people. If there were no society of marijuana users, there would be no new users. This is the more so with reference to marijuana effects (1967:93):

Unlike opiates or amphetamines marijuana produces no physical dependence nor immediately pleasant effects. Often, the first half dozen experiments are frightening when they are not disappointing. There is no reason in the drug itself why one should persevere with it. To make an expert, who enjoys smoking there must be an active society of smokers who will welcome the novice and persuade him that the unpleasant sensations he first gets from smoking are in fact delightful and worth repeating.

Becker's approach (1953) to the explanation of the use of drugs takes substantially this interactionist point of view. Association with peers underlies the phenomenon of drug use. For instance Becker (1953:235) relates of a musician who was introduced to the drug by his colleagues; they got up on the stand and played the same tune for two hours:

'Anyway, when I saw that, it was too much. I knew I must be really high if anything like could happen. See, and then they explained to me that it's what it did to you, you had a different sense of time and everything.

...In every case in which use continued the user had acquired the necessary concepts with which to express to himself the fact that he was experiencing new sensations caused by the drug...In this way marijuana acquires meaning for the user as an object which

can be used for pleasure.

Becker, furthermore, maintains (1963) that many young people have their initial drug experience with marijuana reefers provided by older companions. The neophyte who likes the experience and wishes to move towards regular use must have a more stable source of supply than can be provided by chance encounters with other users. He is likely to have a selective and differential association with people: spending more time with persons who use marijuana, and avoiding those who strongly disapprove.

In the light of this frame of reference he formulates his central thesis with reference to association and learning (1963:43): "Marijuana use is a function of the individual's conception of marijuana and of the uses to which it can be put, and this conception develops as the individual's experience with the drug increases."

It becomes apparent that the new user must learn a series of positive beliefs about the drug: he must learn to smoke it in a way that it will produce real effects and connect them with drug use; and he must learn to enjoy the sensations he perceives (1963:41-58). The new user learns a series of positive beliefs about the beneficial effects of marijuana, beliefs constantly reinforced by their verbalizations within the group.

Selective learning, then, constitutes the pre-condition for the pleasurable experience of marijuana.

The novice has to learn to answer (1963:58):

- . "Yes" to the question: "Is it fun?" The direction his further use of the drug takes depends on his being able to continue to answer "Yes" to other questions which arise as he becomes aware of the implications of the fact that society disapproves of the practice: "Is it expedient?" "Is it moral?" Once he has acquired the ability to get enjoyment by using the drug, use will continue to be possible for him. Considerations of morality and expediency, occasioned by the reactions of society, may interfere with, and inhibit use, but use continues to be a possibility in terms of his conception of the drug. The act becomes impossible only when the ability to enjoy the experience of being high is lost, through a change in the user's conception of the drug occasioned by certain kinds of experience with it.

The drug, then, assumes a new meaning for the novice, meaning which is different from conceptions of the outsiders. This implies a process of definition of the meaning of this stimulus. Becker concludes that (1963:41): "A person will feel free to use marijuana to the degree that he comes to regard conventional conceptions of it as the uninformed views of outsiders and replaces those conceptions with the "inside" view he has acquired through his experience with the drug in the company of others."

Peer Group Relations: A Further Consideration.

Search for sociological explanations of drug use necessitates deeper probing into the social structural and environmental factors conducive to its use. Goode (1970) views the use of drugs, especially marijuana, as basically a function of the operation of definite social variables. Marijuana, according to him, is highly "sociogenic" or "cultogenic" (1970:21). It is "characteristically participated in a group setting" by intimate friends who participate in a common subculture and, therefore, commonly shared values within this subculture. Users, (1970:22) "are more likely to interact with other users than with someone who does not smoke marijuana."

Goode, basically, formulates his theory with reference to the concept of the process of interaction. In this sense he and Becker share the same theoretical perspective. Where Goode supplements Becker is his explicitness on the intimacy and recreational aspect of marijuana use, which is an expression of subcultural values and definitions (1970:22):

Group processes operate at the inception of the individual's marijuana-using experience. The neophyte marijuana smoker, at first exposure to the drug, is subject to group definitions of the desirability of the experience, as well as the nature of its reality. Marijuana use, even at its inception, is simultaneously participation in a specific social group. This generalization holds

equally strong for the continued use of marijuana. Marijuana is characteristically smoked in groups, not in isolation...Marijuana cannot be understood outside the web of social relations in which it is implicated.

Goode then moves a step further to define the nature of the group environment within which marijuana is smoked. It is smoked not just in any group at all but in "intimate groups" in which the other participating members are "overwhelmingly significant others" (1970:23). This is particularly crucial for the experience of turning on. The group structure, in this case, is of significant importance (1970:124):

Not only is the initiate turned on by experienced marijuana users rich in the collective wisdom of their group, but these proselytizers are also intimate...Friends were involved in every stage of the process - supplying information about marijuana, or supplying the opportunity, or the drug. But equally as important is that a friend or group of friends supplied a kind of legitimation. They were an "example."

The matter is given a clearer definition by a young black student, president of his sophomore class: "No matter what parents instill in their sons, they lose a lot of it here. Everybody wants to be identified with the 'in' crowd, and the 'in' crowd is now on the left" (Goode, 1970:125).

This statement, in effect, amounts to a formulation of reference group theory of marijuana use. Its users are seen as models, as reference group for slightly younger nonusers. The fact is that its users and endorsers, observes Coode, are seen by their peers as socially acceptable and even desirable human beings. As Allan Sutter,

one of the researchers on the Blumer study of drug use in Oakland area (1967) wrote: "Drug use, especially marijuana use, is a function of a socializing movement into a major stream of adolescent life."

Goode affirms differing social setting for the use of different drugs (1970:21):

The heavy use of barbiturates, tranquilizers, and amphetamines by housewives does not form the basis for drug-related activities or group; meperidine (demerol) addiction among physicians does not lend itself to friendships, interaction and sentiments on the basis of being addicted. There is no bond of identity, no preference for interaction with other physician-addicts, no increment of prestige as a result of sharing the characteristics of drug taking. There is no subculture of physician-addicts.

Marijuana smoking, by contrast, is characteristically linked to "group influences" and makes "those who participate in it highly susceptible to the group's definition of reality - right or wrong, good and bad, true and false ... A kind of brotherhood is established...Refusal of a presented marijuana joint is felt as a rebuff, as is refusal of a gift in many societies. A refusal means some embarrassment, usually with both parties. It is not only refusal of sharing a treasured activity, as well as possible condemnation of one's activities, which are a part of one's life.

In contradistinction to other drugs marijuana smoking is basically a recreational activity. Goode asserts (1970:24):

Marijuana ...use itself is a form of recreation, an enjoyable recreation like watching a film, going to

the beach, or eating in a fine restaurant. It is both in and of itself, a complete recreational experience, as well as an adjunct and catalyst to other recreational experiences. The recreational character of potsmoking is possibly its most outstanding feature.

Hypotheses

The foregoing theoretical considerations render it possible to formulate a set of definite hypotheses dealing with student drug-seeking behaviour.

The most obvious hypothesis is that drug use among students will be differentially distributed with respect to differential exposure to it. Stated differently, the more drug-takers a student knows, the more likely it is that he will himself try the substance.

If this position is tenable, we would further expect to find a wide range of percentage difference among the user and non-user friends. Users are more likely to be exposed to friends who make a positive definition of drugs. Moving within this drug-favouring friendship group the user will more likely perceive a high degree of use among his friends; the exact contrary would be true of non-users.

Moving a step further in this analytic reasoning, the contention can be made that if drug users are the reference group of certain students who associate with them, then these students are likely to take drugs than other students having different patterns of association.

Studies of Blum (1967) tend to give supportive evidence to this hypothesis. So do Becker (1963) and Goode (1970). Preliminary exposure to drugs, according to these authors, is normally made through friends who are, at the same time, the source of supply and behaviour legitimation contingencies. With regard to the problem of heroin addiction, Fort reports (1966:78) that most addicts are introduced to the experience by those already in the habit, as does Finestone (1957).

The role of peers as behaviour reinforcers and legitimizers has consistently been emphasized by sociologists. Self concept and identity are a function of group definition; so are acceptable patterns of behaviour. There is, then, a motivation for a person to "do right" in the eyes of his peers, who can exercise behaviour modification in various ways. "If the individual wants to keep going with the group," write Leech and Jordan (1967:24), "and the group takes pills or smokes 'pct', the individual usually gives in to the majority even though it is against his personal scruples."

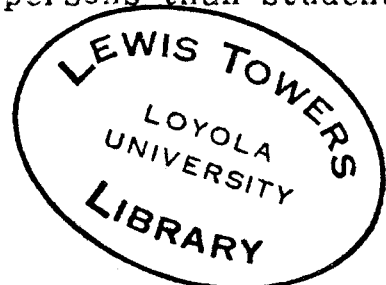
Connel (1964:24) likewise reports: "teenagers take drugs to be with it." And Blum (1969) gives the following as reasons why young people take drugs: give it a try; because others did it; to be a good sport in the eyes of peers; desire to be a hero; and part of group membership. Similarly, Winick (1965:27) observes that drug taking sometimes serves as an entry to a group.

It can be said then, that if one's peer group serves at the same time as a reference group, one's attitude to taking drugs will have to be influenced, if not determined, by the group's positive or negative attitude towards drugs.

On the other extreme of the peer group continuum is the loner. Student organizations tend to be responsive to some of the basic felt needs of students. Organizational belongingness could be seen as constituting a crucial variable for drug related behaviour. It can be maintained that a student who fails to form group relations in the form of involving himself with student organizations is likely to take drugs. Finestone (1966:150) had noticed that amphetamine addicts were isolated individuals.

To summarize then: it has been frequently observed that drug use is a function of peer group behaviour. If this assumption is tenable then we could argue that one's peers constitute one's significant others. Logically, then, we would expect drug use to be differentially distributed among students according to whether or not they associate with drug related persons. Therefore, it can be hypothesized that:

1. Students who take drugs are more likely to be exposed to other drug using persons than students who do not use drugs.



2. We could, within this context, posit a positive relationship between perceived extent of drug use among one's closest friends, and one's personal use of it. That is, the higher the perceived percentage of marijuana smokers among one's closest friends, the more likely it is that one will use it oneself. Users, then, are more likely to indicate a higher percentage of drug use among their closest friends, and nonusers a lower percentage.
3. If this position is tenable we would expect to find, with regard to the very first trip, the crucial role of friends as behaviour legitimizers and reinforcers. A significantly greater percentage of users would respond that:
 - 3.1 their first marijuana experience was in the company of some friends;
 - 3.2 that it is these friends who gave them the first joint;
 - 3.3 that they legitimized the behaviour by smoking first or together with the novice and, that, therefore,
 - 3.4 smokers of marijuana are more likely to frequent marijuana parties than non-smokers.
4. Assuming that one's membership group obtains a positive valence one would expect the students who claim to take any of the drugs would assess themselves more positively than non-users would assess them.

5. Logically, then, if drug seeking behaviour is a function of peer group pressure, one would expect to find that a higher percentage of all users than non-users would repond that the underlying motive for drug-taking is for group acceptance.

The main task of this thesis is to subject these hypotheses to a formal test.

Chapter Four: Methodology

Sampling and Data Collection Procedures

The population of this study consists of 4,000 students from three suburban high schools. The collaboration and permission of the appropriate authorities had to be obtained. This done, a random sample of 1,000 students was chosen. These students were given questionnaires to be filled and returned at school. The form and content of the questionnaires were, except for a few modifications, the same as used by Crowther and Baumer (1971) for their study of Greater Egypt Region high schools.

An accompanying letter was attached to each questionnaire. This letter explained the purpose of the study, assured students of their security with regard to the outcome of the study, emphasized the need for anonymity, and encouraged free but responsible cooperation of students.

Students, by pre-arrangement of the drug research team of Loyola University, were to return their completed questionnaires on specific dates and at specific places. On such days students from Loyola University were stationed at the chosen localities within the school to receive the completed questionnaires. Upon presentation of his questionnaire, the overseeing student immediately destroyed, in his presence, the envelop bearing the name and address of the respondent.

The responses were subsequently transferred to Hollerith cards for analysis.

Related Problems.

A study of this nature necessarily faces serious problems. Much depends on students' willingness to cooperate and the quality of that cooperation. This is because of the general feeling by students of potential threats resulting from the study. This was expressed by several students; they wanted to know whether, in any circumstances, the study could be used against them. Apparently, for them, anonymity is no absolute guarantee for security. This fear may be a partial explanation as to why cooperation is hard to achieve. In our sample 332 students out of the original random number of 1,000 returned their completed questionnaires. This represents a 33 per cent response rate.

This raises several issues. It can be suspected that the majority of those who refused to cooperate with the study were precisely the students deeply involved with the use of drugs. Therefore, the feeling of being threatened is more acute in their case. But this is a mere speculation; there is just no way of proving it except by replicating the study and achieving, in this case, the cooperation of these previously uncooperative students.

Alternatively, it could well have been that these uncooperative students were not interested precisely because they were not at all involved with the use of drugs.

We would assume, then, that students who did cooperate did so responsibly and that, therefore, the reported incidence of drug use is, if anything, more likely to be an underreporting than an overreporting.

Nature of the Instrument

The instrument covers a wide range of variables, from exposure to drugs to the solution of the drug problem in the school. One question dealing with student's opinion about drug programmes is the only instance of an open-ended question; all the rest are fixed-alternative questions.

The parameters of our current problem, however, have been defined so as to focus on specific social factors that enter into the determination of drug-seeking behaviour. Our intention is to focus on peer group relations and patterns of friendship.

Chapter Five: Results

General Characteristics of the Sample.

Our sample reflects the following broad properties: 29 per cent is from the ninth grade; 28 per cent from the tenth grade; 28 per cent from the eleventh grade; and 14 per cent from the twelfth grade.

In terms of age, 13 per cent of the sample are aged fourteen years or less; 30 per cent are fifteen-year-olds; 29 per cent sixteen-year-olds; 21 per cent seventeen-year-olds; those aged 18 and over represent seven per cent of the sample.

With regard to sex distribution: fifty-five per cent of the sample are girls; 44 per cent boys; one per cent of the respondents failed to indicate their sex.

The racial background of the population of our study consists of 95 per cent whites, 0.3 per cent blacks; 1.6 per cent belong to other racial groups, and 3.1 per cent of the respondents did not indicate their racial background.

In terms of religious affiliation: 65 per cent of the respondents are Jewish; 15.5 per cent Catholic; 8.1 per cent Protestant; 3.4 per cent belong to other religious sects; and 7.5 per cent did not answer this item.

The socioeconomic status of their parents is generally high. Educationally, 21.7 per cent of the fathers of sampled students have gone through graduate school or its equivalent; 45.9 per cent are college graduates; 28.2 per cent are high school graduates; and only 1.5 per cent are grammar school graduates.

The occupational patterns of the parents of these students reflect the social class category of the researched population. Fifty-four per cent have a middle-class occupational status; 24.8 per cent are professionals and big business owners; 15.9 per cent are blue collar skilled and unskilled workers; 4.9 per cent of the respondents did not indicate the occupation of their parents.

These findings suggest that the population of our research belongs to a white, middle-class, predominantly Jewish community.

Test of Hypotheses

1. Perceived drug use by friends as determinant of personal use of drugs

Our preliminary argument is that student drug use is related to association with drug-using persons. The extent of this exposure should vary di-

rectly with the likelihood that any given student will try the substance himself. Within this context, it can be hypothesized that students who use drugs are more exposed to drug-using persons than students who do not take drugs. In operational terms, we expect, among users and nonusers, a differential perception of general student drug use.

Table 5.1: Exposure and use differentials: Perceived drug use by students, and personal drug use (in percentages rounded to the nearest whole number).

Perceived student use	Personal Use					
	Marijuana		Narcotics		Stimulants	
	Nonusers	Users	Non-users	Users	Non-users	Users
0-30%	12	1	9	19	9	3
31-75	73	29	73	81	74	81
76-100	13	62	16	0	15	9
D.K.	2	8	2	0	2	6
Total	100	100	100	100	100	100
	N=226	N=96	N=306	N=16	N=289	N=33
	Depressants		Special Substances		Hallucinogens	
	Non-users	Users	Non-users	Users	Non-users	Users
0-30%	9	4	9	11	9	3
31-75	73	75	64	66	73	78
76-100	16	18	16	22	16	10
D.K.	2	2	1	1	2	9
Total	100	100	100	100	100	100
	N=294	N=28	N=313	N=9	N=291	N=31

Perceived student drug use was measured by one question of the instrument which asked: "which per cent of the students in your school would you estimate have tried marijuana?"

There follows a series of percentages which students are asked to check to indicate their perceived extent of student drug use.

A new variable, drug use, was computed by collapsing any indicated use of marijuana, narcotics, stimulants, depressants, special substances and hallucinogens.

It is our basic argument that if actual drug use is a function of exposure to drugs, then we would expect to find actual drug use related to differential perception of general student drug use. Users and nonusers should reflect significant differences in their rating of general student use of drugs. Users and nonusers should demonstrate different levels of awareness of the incidence and prevalence of drugs among the general student body. In other words, users would more likely say that a high percentage of all students take drugs, and nonusers, a low percentage. The rationale behind this hypothesis is that perceived drug use is not just a random occurrence. It is likely to be a function of association with actual drug using situations or environment.

It is obvious that the pre-condition for learning the fact and value of any given phenomenon depends on the degree of exposure to it. We could expect variety of exposure to vary with variety of any given behaviour pattern. Table 5.1 shows that this seems to be the case.

For almost in every case a higher percentage of users indicate that between 61 and 75 per cent of students use drugs. Marijuana is the only exception. In this case 62 per cent of all smokers say that 76 to 100 per cent of all students use drugs. By comparison only three per cent of nonusers express the same view.. This leads us to tentatively hold the position that perceived drug use does constitute an important factor for the decision of any given student also to try drugs. This being so, the necessity arises for a deeper probing into more intimate forms of relationships and associations to see whether or not, and to what extent they are determinants in any meaningful sense of actual drug use by students. Patterns of friendship seem to be a possible and obvious venue for such an analysis.

Hypothesis 2.

Moving a step deeper in this analytic process, we would consider the extent to which personal association constitutes a determining variable for the use of drugs by students. Association with persons who are favourably prone to using drugs could have the great potential of inducing students to experimenting with it.

Within a high school environment patterns of friendship constitute the most common type of association. These patterns of association will tend to determine the attitude of any given student to any given type of behaviour.

We could, within this context, posit a positive relation between the perceived use of marijuana by one's closest friends, on the one hand, and one's personal use of it on the other. That is, the higher the perceived use of marijuana among one's closest friends, the more likely it is that one will smoke it oneself.

In operational terms, users are more likely to ascribe a higher percentage of marijuana use to their intimate friends, and non-users, a lower percentage.

The theoretical justification of this hypothesis is that one's intimate friends generally constitute one's significant others. There exists a deeper level of identification with one's intimate friends; they constitute an in-group, and behaviour reinforcement contingency. Glaser (1956:442) argued in substance that a person pursues a specific type of behaviour "to the extent that he identifies himself with real or imaginary persons from whose perspective his...behaviour seems acceptable."

Perceived extent of marijuana use by one's closest friends and one's personal use of the substance are measured by two items of the questionnaire. The first variable - perceived extent of marijuana use by closest friends - is measured by a fixed-alternative question which asked: what per cent of your closest friends do you believe have tried marijuana? Then followed a series of percentages. The percentage checked by the respondent was taken to measure his perceived use of marijuana by his closest friends.

Our interest is to see whether there exist significant differences between smokers and non-smokers with regard to marijuana use by their intimate friends.

Tables 5.21 and 5.22: Is personal use of drugs a function of perceived use of the substance by one's intimate friends?

Table 5.21: perceived use of marijuana by intimate friends, and personal use of it.

Perceived use by friends	Personal Use	
	Non-users	Users
0 - 40%	80.9%	20.9%
41 - 80	16.8	78.1
81 -100	2.2	1.0
Total	99.9	100.0
	N=226	N=96

Chi square = 137
 df = 2
 $p < .001$

This hypothesis can be tested against the null-hypothesis: that there is no difference between smokers and non-smokers with regard to perceived marijuana smoking by their intimate friends. Therefore, the decision of any given student to try the substance is not contingent on whether or not his student friends smoke marijuana.

Our hypothesis is supported by the findings. Two extreme evidences support this view. Of the persons who say that 0 - 40 per cent of their intimate friends smoke marijuana, almost 81 per cent are themselves non-smokers,

whereas 20.9 per cent are smokers. On the other hand of the persons who said that 41-80 per cent of their intimate friends are smokers, 78.1 per cent are themselves marijuana smokers; by contrast 16.8 per cent are non-smokers. Apparently, then, personal experience with marijuana varies directly with perceived smoking of the substance by one's intimate friends. Differential perception of use by friends is reflected by differential use of the drugs by students. This would seem to suggest that the greater the perceived use of the drug by one's intimate friends, the greater the likelihood that one will use it oneself.

If this position is tenable we shall further expect to find some correspondence between differential perception of drug use by friends and differential personal use of the substance. Table 5.22 shows this to be the case.

Table 5.22: perceived use of marijuana by one's closest friends and extent of personal use of it.

Perceived Use	Extent of Personal Use				
	Abstainers	Experi-menters	Casual Users	Regular Users	Habitual Users
0-40%	83.2%	41.7%	11.4%	6.7%	0.0%
41-60%	10.5	13.9	19.2	20.0	0.0
61-100	6.4	44.5	69.2	73.3	100.0
Total	100.0 N=220	100.1 N=36	99.8 N=26	100.0 N=26	100.0 N=18

Chi square = 272, df=8, $p < .001$

Extent of personal drug use is measured by the question: how often do you smoke marijuana? The provided categories were: (1) I never have tried it; (2) I've only tried it once or twice; (3) once or twice a month; (4) about once a week; (5) several times a week.

Those who have never tried it we term abstainer; those who have tried it once or twice we call experimenters; casual users are those who use the substance once or twice a month; regular users those who use it about once a week; and habitual users those who use the substance several times a week.

Two interesting patterns emerge; one pattern focuses on two extreme student categories: abstainers and habitual users. The ones, abstainers, say that almost all (83.2 per cent) of their intimate friends do not use drugs. The other, habitual users, indicate that all of their friends are also marijuana smokers.

The other pattern seem to be indicative of differential function of perceived drug use and actual use. The extent of involved drug seeking behaviour as measured by the various drug using categories varies with the extent of its perceived use by one's intimate friends. Expressed in quantitative terms, the less extensive the the perceived use of marijuana by one's closest friends, the less intensive one's actual use of the drug; the more extensive the perceived drug use by one's closest friends, the more intensive one's own personal use of drugs.

This evidence suggests some direct association between identification with drug-taking friends and personal drug-taking. All other things being equal, any given student who associates with drug-taking friends has a greater probability than others of experimenting with drugs.

Our hypothesis is supported by the evidence. This is the more so as the chi-square test of independence realized a value of 272. At the .001 level of significance a value of only 39.252 is required for significance. This argues for retaining our hypothesis, and affirming that differential personal use of marijuana varies with differential perception of its use by intimate friends.

5.3 Social Circumstances of the First "Trip."

There has been, hitherto, a progressively clear unfolding pattern of drug use among the students under study. Friends, if anything, seem to manifest some definite influence on the personal smoking habits of fellow students. Given that patterns of drug use vary with patterns of perceived use of the substance by one's intimate friends; and, further, that differential drug use corresponds to differential perception of the use of the substance by one's intimate friends; we may logically probe the "actual" function of friends in this process of drug experience. And since social scientists are interested in ultimate causes as are their counterparts in the other related disciplines, it is with the initial explanatory social variables that should be probed. The question we are trying to answer is: what are the social circumstances surrounding the very first marijuana experience?

It is our basic assumption, consequent on the previous findings, that patterns of friendship constitute important variables in the smoking experience of students. If this assumption is tenable we would expect to find evidence of this at the very initial experience with the drug. Therefore, we would hypothesize, with regard to the first trip, that: a significantly greater percentage of users would respond that:

- 3.1 their first marijuana experience was in the company of at least someone else;

3.2 that this company was predominantly that of friends;

3.3 that it was these friends who gave them the first joint;

3.4 that these friends legitimized the behaviour by smoking first or together with the novice and that, therefore,

3.5 smokers of marijuana are more likely to frequent marijuana related parties than non-smokers.

Table 5.31 shows the social circumstances of the very first experience with marijuana. As had been

Table 5.31: Social context of the first experiment with marijuana.

Who were with you when you first smoked marijuana?	
Responses	Corresponding Percentages
I was alone	2.1%
I was with one other person	35.4
I was with several other persons	53.1
I was at a party with many persons present	7.3
No answer	2.1
Total	(N =96) 100.0

Chi-square =290

df =5

$p < .001$

hypothesized, a little more than one-third (35.4 per cent) of all smokers had their first trip in the company of at least one other person; more than one-half (53.1 per cent)

did their smoking in the company of several other persons. Big parties do not seem to provide the appropriate milieu for the initiation into the marijuana subculture. This gives room for the speculation that companies within which the substance is smoked are more likely to be selective, and association likely to be on intimate basis. That this speculation is empirically substantiated is evident from tables 5.32 and 5.33 which deal with the nature and source of the first supply of marijuana. The source of

Table 5.32: First joint: nature of its acquisition.

Was your first marijuana given to you or did you buy it?

<u>Responses</u>	<u>Corresponding percentages</u>
It was given to me	92.7%
I bought it	5.2
No answer	2.1
Total	100.0, N=96

Chi-square =277, df=3, $p < .001$

the initial supply is measured by the question: was your first marijuana given to you or did you buy it? Responses displayed on table 5.32 indicate that only 5.2 per cent of all smokers bought their first joint. On the other hand, as many as 92.7 per cent were given their first joint. This large percentage suggests the possible existence of some special relations between donor and recipient. The nature of the donors is measured by an item of the instrument which asked: who gave you your first marijuana. Table 5.33 displays responses to this question. The data indicate

Table 5.33: donor-recipient relationship

Who first gave you marijuana?

<u>Responses</u>	<u>Percentages</u>
A close friend (boy)	29.2%
A close friend (girl)	25.0
An acquaintance	25.0
An adult (not in family)	10.6
Other	4.2
No answer	6.2
Total	100.0, N=96

Chi-square =264, df=6, $p < .001$

that there is significantly more ($p < .001$) users who say that their first joint was given by an intimate friend, boy or girl. One-fourth of all users indicate that their first joint was given by an acquaintance. One would suspect that these are not just casual acquaintances, but people with whom the beneficiaries are likely to have had some amicable relationships. Our hypothesis seems to have supportive evidence in the light of these data.

It would be relevant to see the actual legitimizing role friends had in the first marijuana experience. It would be assumed that the neophyte did not generally take the initiative. That, secondly, he needed an example and a model for his own experience. This moral boost could be expressed variously, but in the given circumstances legitimation would consist in actual smoking in the presence of the novice. To test the hypothesis of morale boost stu-

dents were asked the following question: did your friends smoke marijuana before you did? Results are displayed on table 5.34.

Table 5.34: Initial drug behaviour legitimizers and reinforcers.

Did your close friends smoke marijuana before you did?		
Responses	Nonusers	Users
Neither I nor my close friends smoke marijuana	55.5%	1.2%*
Yes, they smoked marijuana before I did	2.7*	22.9
No, I smoked marijuana before they did	0.4*	14.6
We all started at the same time	0.0	12.5
Some of them started before me, and some started after me	0.9*	45.8
Some of my closest friends have smoked marijuana, but I have not	38.9	0.0
No answer	1.6	0.0
Total	100.0 N=226	100.0 N=96

Chi-square =276
df=6
p<.001

*Inconsistency arises where nonusers respond to user items, and vice versa.

The data support the hypothesis that friends by their actual smoking constituted the drug behaviour initiation legitimizers. This evidence flows from the fact that 22.9 per cent of all users say that their friends pre-smoked before them, and 45.8 per cent also indicate that as the source of behaviour support. One interesting fact is that of the abstainers 38.9 per cent admit that

their intimate friends have tried the drug while they themselves have not; the exact contrary is true of users.

What all this seems to suggest is that smokers of marijuana are more likely to frequent marijuana related parties than nonusers. That is, the more parties a student frequents at which drug is always present, the more likely it is that he himself will experiment with it, and vice versa. In other words users, in comparison with nonusers, are likely to say that marijuana is always present at parties they frequent.

To measure the extent of marijuana-related parties they attend, students were asked: is marijuana usually present at the parties you attend? Table 5.35 displays the incidence of drug use in terms of frequenting drug related parties. The data indicate that there

Table 5.35: Nature of parties students frequent.

Is marijuana usually present at the party you attend?

<u>Responses</u>	<u>Nonusers</u>	<u>Users</u>
Yes, all of them	1.6%	6.3%
Yes, most of them	2.2	22.9
Yes, some of them	16.8	46.9
I think so, but I am not sure	3.1	2.1
I do not think so	11.1	7.3
No	62.4	12.5
No answer	3.1	2.1
Total	100.0	100.0
	N=226	N=96

Chi-square =101, df=6, $p < .001$

are significantly more ($p < .001$) drug users saying that marijuana is present at parties they frequent than non-users. Of course, this finding could easily be dismissed as a function of selective association. Whatever the underlying factors, evidence does show that this finding is significant. And this argues for some positive relationship between frequenting drug parties and personal use of drugs.

5.4 The operation of group reward: positive
self-evaluation

We would postulate, as a logical sequence, that since students who use drugs do so ^{at} the instance of their friends, they should assess themselves positively. We would hypothesize that abstainers and users alike will ascribe to themselves a positive assessment.

One item of the instrument was meant to measure peer assessment of marijuana users. Students were given a limited number of categories to respond to the question of who smokes marijuana in their school. These categories were: students who are popular (leaders), loners or students who not so popular, both, neither. It is assumed that the second category is a negative evaluation while the first is definitely positive.

Table 5.41 and table 5.42: "Insiders'" view versus "outsiders'".

Table 5.41: Self evaluation

Who smokes marijuana in your school?		
<u>Responses</u>	<u>Nonusers</u>	<u>Users</u>
Students who are very popular (student leaders)	6.2%	2.1%
"Loners" or students who are not so popular	12.4	2.1
Both	65.7	89.6
Neither	14.6	4.2
No answer	3.1	2.1
Total	100.0	100.0
	N=226	N=96

Chi-square =22.92, df=4, $p < .05$

As expected (cf. table 5.42) 12.4 per cent of non-users checked the second category, as compared with 2.1 per cent of users. Interestingly, 89 per cent of users said that both groups use marijuana, while 63.7 per cent of non-users checked this category. These results would suggest that users attribute more status to marijuana smoking than do non-users.

Moving a step further, one item examined the status awarded by marijuana users by users themselves.

Table 5.42: status awarded to users by users

Are students who refuse to smoke marijuana considered to be "square" by those who have tried it?

<u>Responses</u>	<u>Non-Users</u>	<u>Users</u>
Yes	14.2%	7.3%
NO	49.5	69.8
I don't think so, but I'm not sure	33.2	22.9
No answer	3.1	2.1
Total	100.0	100.0
	N=226	N=96

The question asked was: are students who refuse to try marijuana considered to be "square" by those who have tried it? Results displayed on table 5.42 show that twice as many non-users as users answer "yes" to this question. Many more users answer "no" than do non-users. This seems to suggest that a large number of non-users view marijuana users as rejecting others who do not share their behaviour pattern.

5.5 Basic Reasons for Taking Drugs

The foregoing findings anticipate our next hypothesis which deals with the motives for drug taking. We had hypothesized that if drug use is a function of the operation of group values and pressure, then we would expect to find that, in comparison with abstainers, the underlying motives of users would be for group acceptance.

To measure the role of this variable (group acceptance), students were asked the question: why do you think that most high school students who do use drugs use them?

Almost one-quarter (21.4 per cent) of all students mention group acceptance. Other reasons mentioned include curiosity (10.5 per cent), fun (15.6 per cent), escape (13 per cent), boredom (11.2 per cent). Farnsworth and Weiss (1969) and Goldstein (1969) found this to be so among their subjects. Interestingly, students downplay the rebel motive; only 4 per cent maintain that students who smoke do so for the purpose of rebellion.

However, comparison of users and non-users with regard to the motives for drug use shows interesting insights. Significant difference between the two groups is remarkable with regard to two items: group acceptance, and fun. Only 6.3 per cent of the users admit that they

use drugs in order to be part of the in-group. But more than one-quarter (27.9 per cent) of non-users indicate that students who use drugs do so to be accepted by the in-group. This may suggest that non-users view users as loners whose efforts to become integrated into the group necessitates participation in drug-related activities.

In order to explore more deeply this variable of group acceptance it was necessary to see what reasons various types of students ascribe to drug-taking. Table 5.5 displays distribution of drug-taking motives according to ideal self-concept of students. Ideal self is measured

Table 5.5: Ideal self and reasons for taking drugs.

Reasons for drug-taking	Ideal Self				
	<u>Athletes</u>	<u>Hippies</u>	<u>Scholars</u>	<u>Straights</u>	<u>Student Leaders</u>
Escape	13.2%	10.0%	11.9%	15.7%	13.0%
Rebel	3.9	2.5	11.9	3.6	2.2
Group-acceptance	32.9	5.0	31.4	27.7	17.4
Boredom	10.5	25.0	16.7	1.2	13.0
To be different	5.3	2.5	4.8	8.4	4.5
Fun	7.9	37.5	4.8	7.2	23.9
Curiosity	14.4	12.5	19.0	14.5	17.4
Crutch	6.6	0.0	9.5	15.7	4.3
No Answer	1.3	5.0	0.0	6.0	4.3
Total	100.0	100.0	100.0	100.0	100.0
	N=76	N=40	N=42	N=85	N=46

Chi-square =105
df=40
p < .001

by students describing themselves as athletes, hippies, scholars, straights, and student leaders. Analysis of table

5.5 shows that students describing themselves as athletes, scholars, straights and, to a lesser extent, student leaders view group acceptance as the basic motive for drug-taking. Interestingly, students who would define themselves as hippies strongly downplay this variable. On the contrary they overwhelmingly (37.5 per cent) concede that students who take drugs do so simply because it is fun. A good percentage of student leaders (23.9 per cent) maintain this to be the case.

Our group-acceptance hypothesis is supported by the evidence. For at the .001 level of significance a value of 59 is necessary for significance; our observed chi-square value is however 105. This argues for acceptance of the hypothesis.

Chapter Six: Summary and Conclusion

Our initial position, elaborated and developed throughout the various sections of this thesis, is that student drug-seeking behaviour, like any other social behaviour, is not a random occurrence. As such it can be subjected to critical and empirical analysis just like any other social behaviour. The task of the sociologist is to see and interpret the social and environmental factors that have a direct or indirect influence on human behaviour and to analyze the extent to which this behaviour is the function of any given factor or a combination of factors. Since drug use is a specific type of human behaviour, there is the need for it to be analyzed so as to see its underlying social determinants. In other words, our interest is not a concern for individual characteristics; rather, our interest is determined by this central problem: all other things being equal what factors have a high probability of leading any given student within a high school environment to experiment with and/or use drugs?

The Function of Selective Identification.

A variable of seeming central import is selective identification. By selective identification is meant an exclusive type of association whereby one's specific

group members constitute one's significant others.

Any given student could be presumed to have the choice of either associating or not associating with certain types of students. But the choice having been made there ensues the process of frequent face-to-face interaction among specific group members. Frequent association with persons within a face-to-face situation has the high potentiality of creating similarity of values and behaviour patterns. Homans (1950) formulates this fact thus: "If the frequency of interaction between two or more persons increases, the degree of their liking for one another will increase, and vice-versa." He further hypothesizes that "the more frequently persons interact with one another, the more alike in some respects both their activities and their sentiments tend to become." Glaser's differential identification theory is substantially similar to this orientation.

Our analyses give substantive support to this theoretical position. Selective identification functions as a crucial variable for drug using behaviour. The most likely drug-taking student tends to be one who associates with drug-taking friends. What is more, the more intensive the association with drug-taking friends, the more intensive one's personal involvement with drugs. Abstainers, on the other hand, tend to associate with non-drug-taking friends.

The argument can perhaps be made that the income of student's father has significant effect on the drug-using tendency of the student. It was therefore found necessary to control for the effects of father's occupation on student's drug seeking behaviour. If student's effective access to drugs is contingent on whether or not he can afford to pay the price; and if, furthermore, this buying power is contingent on his father's income which, in turn, depends on his education and occupation; then controlling for the effects of father's occupation should remarkably affect the drug taking behaviour of students. Table 6.1

Table 6.1: Strength of association between perceived friends' smoking and personal use of marijuana, with father's occupation held constant.

<u>Father's occupation controlled</u>	<u>r</u>
Unskilled Labourer	.71
Machine operator	.71
Craftsman, foreman	.66
Clerical and sales	.53
Business manager	.57
Professional or large business executive	.50
No father living	.71

indicates that occupation of father apparently has no effect on marijuana using behaviour of students. In each case the strength of association between the various levels of marijuana use by students remains strong after the effects of father's occupation have been accounted for.

The second and third factors have a close inter-relationship. The one can be termed behaviour legitimation, and the other, frequenting marijuana related parties.

Selective identification seems to have a pervasive influence on students' attitude towards drugs. A marijuana-smoking student is likely to frequent parties where the substance is likely to be present. This, perhaps, reinforces the position held by Goode and Becker that marijuana is recreational in nature, and that a group situation is conducive both for the smoking of this substance and perceiving its pleasurable effects. We would observe, further, that since association with marijuana-smoking friends tends to determine a student's behaviour in the same direction, parties which such a student attends are likely to be attended also by his friends. However, this observation is, at best, a speculation.

Group Subculture.

The unique conclusion to be drawn from all these observations is that the basic reason for student drug-taking is for group acceptance or fun. Admittedly, one should be hesitant in rejecting other motives, such as curiosity, as having an important place in one's decision to try psychotomimetic substances; but group acceptance seems to be dominant as the underlying reason for drug seeking behaviour.

To further substantiate this point, it is necessary to view students' drug taking motives against the background of their various popularity levels. Table 6.2

Table 6.2: Popularity level and reasons for taking drugs

Reasons	Degree of acceptance by classmates				
	Very high	High	Average	Low	Very Low
Escape	13.5%	14.6%	9.4%	15.3%	0.0%
Rebel	2.1	5.3	5.7	0.0	0.0
Group acceptance	19.1	23.8	18.9	23.1	50.0
Boredom	16.8	9.3	9.4	7.7	0.0
To be different	4.2	5.3	9.4	7.7	0.0
Fun	14.7	14.6	17.0	30.8	0.0
Curiosity	15.8	17.2	18.4	7.7	0.0
Crutch	9.5	5.3	7.5	7.7	50.0
No answer	4.2	4.6	3.8	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
	N=95	N=151	N=53	N=13	N=4

Chi-square=76, df=40, $p < .05$

demonstrates this.

The data suggest that significantly ($p < .05$) more students say that students who take drugs do so in order to be accepted by the in-group. Viewed thus, drug taking would tend to have an integrative and cohesive function.

Conclusion

We would state, by way of conclusion, that the variables under discussion - patterns of association, frien-

ship patterns - lay no claim to be the ultimate explanatory variables of drug-seeking behaviour among the high school students under study. We have expressly limited ourselves to definite social factors that seem to be explanatory of student drug use. As such, our conclusions are tentative in nature and inferentially limited. One fact, however, seems to emerge: that given the desire of any given high school student to function as a viable in-group member; and given the fact of, and need for positive and/or negative reward by in-group members of certain behaviour forms defined explicitly or implicitly as conforming or deviating from in-group's normative system; the probability of any given student not to use or to use drugs will depend, all other things being equal, on whether or not he associates and identifies himself with non-drug-taking or drug-taking friends.

Appendix

General distribution of the awareness of drugs being used by other students and personal use of them.

Table 6.3: Awareness of drug use: which of the following drugs do you know have been used in your school by other students.

Variable	Number	Drugs			
		Marijuana	Narcotics	Stimulants	Depressants
All Students	322	91%	46%	64%	54%
<u>Sex</u>					
Male	142	89	39	58	51
Female	176	94	52	70	57
<u>Age</u>					
14 and less	41	85	25	48	38
15 years	97	93	39	65	58
16 years	93	94	57	67	57
17 years	69	96	52	73	59
18 and over	19	83	50	61	44
<u>Grade</u>					
9th	93	87	36	57	46
10th	89	93	44	64	60
11th	90	96	53	70	57
12th	45	91	56	69	56
		<u>Special</u>	<u>Hallucinogens</u>	<u>Tobacco</u>	<u>Alcohol</u>
		<u>Substances</u>			
All Students	322	23%	53%	90%	91%
<u>Sex</u>					
Male	142	21	49	92	94
Female	176	25	57	89	97

Table 6.3 continued

Variable No.	Drugs				
	Special Substances	Hallucino- gens	Tobacco	Alcohol	
<u>Age</u>					
14 or less	41	30%	35%	88%	88%
15	97	23	50	81	97
16	93	23	62	96	98
17	69	22	59	93	97
18+	22	50	83	83	89
<u>Grade</u>					
9th	93	24	42	84	91
10th	89	25	57	97	99
11th	90	19	59	90	98
12th	45	27	58	93	93

Table 6.4: General distribution of actual personal drug use: which of the following drugs have you personally used?

Variable No.	Drugs				
	Marijuana	Narcotics	Stimulants	Depressants	
All Students	322	30%	5%	10%	9%
<u>Sex</u>					
Male	142	23	3	6	7
Female	176	36	7	14	10
<u>Age</u>					
14 or less	41	15	3	3	3
15	97	30	6	12	11
16	93	33	5	9	8
17	69	38	3	13	9
18+	19	29	11	17	17

Table 6.4 continued

		Drugs			
Variable	No.	Marijuana	Narcotics	Stimulants	Depressants
<u>Grade</u>					
9th	93	19%	4%	7%	2%
10th	89	36	5	10	10
11th	90	32	4	11	8
12th	45	38	9	18	16
		<u>Special</u>	<u>Halluci-</u>	<u>Tobacco</u>	<u>Alcohol</u>
		<u>Substances</u>	<u>nogens</u>		
All					
Students	322	3%	10%	42%	72%
<u>Sex</u>					
Male	142	3	6	41	75
Female	176	3	13	43	71
<u>Age</u>					
14 or less	41	3	5	48	65
15	97	3	9	46	72
16	93	3	11	46	77
17	69	1	10	38	77
18+	19	6	17	28	47
<u>Grade</u>					
9th	93	2	4	40	68
10th	89	2	11	47	79
11th	90	4	10	41	74
12th	45	2	18	40	64

Bibliography

- Ausubel, D.P.
1958 Drug Addiction. New York: Random House.
- Barrigar, R.H.
1964 "The Regulation of Psychedelic Drugs." *Psychedelic Review*, 1:394-441.
- Barron, F., Jarvick, M.E., and Bunnell, S.
1964 "The Hallucinogenic Drugs." *Scientific American*, 210:29-37.
- Bates, W.M., and Crowther, B.
1973 *Drugs: Causes, Circumstances, and Effects of their Use*. Morristown, N.J.: General Learning Press.
- Becker, H.S.
1963 *The Outsiders*. New York: The Free Press.
- Blum, R.H., and Associates
1969 *Society and Drugs*. Jossey-Bass.
- Blum, R.H. and Associates
1969 *Students and Drugs*. Jossey-Bass.
- Blum, R.H.
1971 "To Wear a Nostradamus Hat: Drugs in America." *J. of Social Issues*, 27(3):89-106.
- Blumer, H.
1967 "The World of Youthful Drug Use." Berkeley: School of Criminology, University of California. In Blum, op.cit.
- Brandon, S., and Smith, D.
1962 "Amphetamines in General Practice." *J. Col. Gen. Pract.*, 5:603-606.
- Brotman, R., Silverman, I., and Suffet, F.
1970 "Drug Use among Affluent High School Youth." In Goode, E., ed. *Marijuana*. New York: Atherton.
- Chambers, C.D., Taylor, W.J.R., and Moffett, A.D.
1972 "The Incidence of Cocaine Abuse among Methadone Maintenance Patients." *Int. J. Addict.*, 7(3):427-441.
- Chein, I.
1956 "Narcotics Use among Juveniles." *Social Work*, 1.

- Chein, I., Gerard, D.L., Lee, R.S., and Rosenfeld, E.
1964 Narcotics, Delinquency, and Social Policy: The Road to H. Tavistock.
- Clausen, J.A.
1957 "Social and Psychological Factors in Narcotics Addiction." Law and Contemporary Social Problems, 22:34.
- Cohen, S.
1962 "Prolonged adverse Reactions to Lysergic Acid Diethylamide." Arch.Gen.Psychiat., 8:475-480.
1965 Drugs of Hallucination. Secker and Warbuck.
1971 "The Psychotomimetic Agents." Drug Research, 15:68-99.
- Connell, P.H.
1964 "Amphetamine Misuse." Br.J.Addict., 60(1):9-27.
1964 "What to do about Pep Pills." New Society, 20 (Feb.).
- Crowther, B.
1972 "Patterns of Drug Use among Mexican Americans." Int.J.Addict., 7(6):637-647.
- Crowther, B., and Baumer, T.
1973 "The Use of Drugs by Secondary School Students of Greater Egypt Region." In Hupert et al. Drug Abuse in Middle America. Report Submitted to Illinois Law Enforcement Commission.
- Dai, B.
1970 Opium Addiction in Chicago. Montclair, N.J: Patterson Smith.
- Davies, E.V.
1967 "Memorandum on the Problem of Illicit Drug-taking and Dependence particularly among Young People." In Wiener, R.S.V. Drugstand School Children. London: Longmans.
- Dornbush, R.L., Fink, M., and Freedman, A.M.
1970 "Marijuana, Memory, and Perception." Am.J.Psychiat., 128(2):194-197.
- Eisenstadt, S.N.
1962 "Archytypal Patterns of Youth." Daedolus, 91:28-34.

- Farnsworth, D.L., and Weiss, S.T.
 1969 "Marijuana: The Conditions and Consequences of Use and Treatment of Users." In Wittenborn et al. Drugs and Youth. C.C.Thomas, Springfield, Ill.
- Finestone, H.
 1957 "Cats, Kicks, and Color." Social Problems, 5:3-13.
- Fort, J.
 1967 "Recommended Future International Action against abuses of Alcohol and other Drugs. Br.J.Addict., 62:129-146.
- Goldstein, R.
 1966 1 in 7: Drugs on Campus. New York:Walker.
- Goddard, J.L., and Barnard, A.
 1966 "The High School Drug Problem." School Management, June:97-99. In Goode, E., ed. Marijuana. New York:Atherton Press.
- Goode, E.
 1970 Marijuana. New York: Macmillan.
- Hawks, D.V.
 1971 "The Dimensions of Drug Dependence in the U.K." Int.J.Addict., 6(1):135-160.
- Hawks, D.V., Mitcheson, M., Ogborne, A., and Edwards, G.
 1969 "Abuse of Methylamphetamine." Brit. Med.J., 2:715-721.
- Hilton, M.
 1968 "Marijuana: a Summary of the Literature. Dissertation submitted in part Fulfillment of the Degree of B.A. Sheffield University." In Wiener, Drugs and School Children. Longmans, London.
- Isbell, H.
 1968 "Perspective Research on Opiate Addiction." Br.J.Addict., 57:17-30.
- Isbell, H.
 1969 "Comparison of LSD-25 with (-)⁹Transtetrahydrocannabinol (THC) and attempted Cross Tolerance between LSD and THC." Psychopharmacologia, 14:115-123.
- Isbell, H.
 1959 "Comparison of the Reactions induced by Psilocybin and LSD-25 in Man." Psychopharmacologia, 1:29-38.

- Isbell, H., Wolback, A.E., Wickler, A. and Miner, E.J.
 1961 "Cross Tolerance between LSD and Psilocybin."
 Psychopharmacologia, 2:147-159.
- Kaplan, J.
 1970 Marijuana - The New Prohibition. World.
- Kato, M.
 1969 "An Epidemiological Analysis of the Fluctuations
 of Drug Dependence in Japan." Int.J.Addict.,
 4(4):591-621.
- Katz, M.M., Irene, E.W. and James, G.
 1968 "Characterizing the Psychological State produced
 by LSD." J.Abn.Psychiat., 73:1-14.
- Keeler, M.H., Ewing, J.A. and Rouse, B.A.
 1971 "Hallucinogenic Effects of Marijuana as currently
 used." Amer.J.Psychiat., 128(2):213-218.
- Kennitson, K.
 1962 "Social Change and Youth." Daedalus, 91:145-171.
- Klee, G.D.
 1963 "LSD₂₅ and Ego Function." Arch.Gen.Psychiat,
 8(5):461-474.
- Kramer,
 1967 "Amphetamine Abuse." JAMA, 201:305-309.
- Krippner, S., Geraldine, L., Martin, G., and Brian, W.
 1971 "Alterations in Consciousness among High School
 Students produced by Ingestion of Illegal Drugs."
 Int.J.Addict., 6(3):419-442.
- Laurie, P.
 1957 Drugs. Penguin Books.
- Leech, K., and Jordan, B.
 1967 "Drugs for Young People: their Use and Misuse."
 Oxford. In Wiener, op.cit.
- Lieberman, C.M. and Lieberman, B.W.
 1971 "Marijuana - a Medical Review." The New England
 J.of Medicine, 284(2):88-91.
- Maters, R.E.L., and Houston, J.
 1968 Varieties of Psychedelic Experience. New York: Holt,
 Rinehart, and Winston.

- McGrath, J.H. and Scarpitti, F.R.
1970 Youth and Drugs: Perspectives on a Social Problem.
Glenview, Ill: Foreman and Co.
- Merton, R.K.
1938 "Social Structure and Anomie." ASR, 3:672-682.
- Miller, J.L.
1967 "United Press Report." In Blum et al., op.cit.
- Murphy, H.B.M.
1963 United Nations Bulletin of Narcotics. January-March.
- Nachshen, D.S.
1965 "Amphetamine." Lancet, 2:289.
- O'Donnell, J.C. and Ball, J.C., eds.
1966 Narcotics Addiction. New York: Harper and Row.
- Parsons, T.
1962 "Youth in the Context of American Society." Daedalus,
91:97-123.
- Price, C.
1967 "Letter to Parents." Castro Valley, California,
United School District. In Blum et al., op.cit.
- Rathod, N.H., Alarcon, R.De, and Thompson, I.G.
1967 "Signs of Heroin Usage detected by Drug Users and
their Parents." Lancet, 30:1411-1414.
- "Report by Secretary of Health, Education and Welfare."
Amer.J.Psychiat., 123(2):189-193, 1971.
- Report of the National Commission on Marijuana and Drug
Abuse: Marijuana: a Signal of Misunderstanding. New American
Library, New York, 1972.
- Sandison, R.A.
"The Hallucinogenic Drugs." Practitioner, 200:244-250.
- Scher, J.
1966 "Patterns and Profiles of Addiction and Drug Abuse."
Arch.Gen.Psychiat., 15:539-551.
- Sharpless, S.K.
1965 "Hypnotics and Sedatives: 1, the Barbiturates." In
Goodman and Gilman, eds., The Pharmacological Basis
of Therapeutics. New York: Macmillan.
- Smart, R.G.
1971 "Illicit Drug Use in Canada: a Review of Current
Epidemiology with Clues to Prevention." Int.J.Addict.,
6(3):383-405.

Smart, R.G., and Cox, C.

1972 "Social and Psychological Aspects of Speed Use:
a Study of Types of Speed Users in Toronto."
Int.J.Addict., 7(2):200-217.

Smart, R.G., Fejer, D. and Alexander, E.

1970 Drug Use among High School Students and their
Parents in Lincoln and Welland Counties. Toronto:
Addiction Research Foundation.

Winick, C.

1957 "Narcotics Addiction and its Treatment." Law
and Contemporary Problems, 22:21-22.

Wiener, R.S.P.

1970 Drugs and School Children. London: Longmans.

APPROVAL SHEET

The thesis submitted by Yvon Yangyuoru has been read and approved by the director of the thesis. Furthermore, the final copies have been examined by the director and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

Wm Bates

Signature of Adviser

Jan. 4/1974

Date