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TEEN-AGE DRUG USE IN AN URBAN GHETTO:
PRELIMINARY FINDINGS

July 1975

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Research

carried out at: Center for Socio-Cultural Studies on Drug Use
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The research on which this paper is based was supported by grant nos. NI-71-046-G, NI-72-008-G and 73-NI-99-002-G from the United States Department of Justice, Law Enforcement Assistance Administration, to the Addiction Research and Treatment Corporation Evaluation Team through the Vera Institute of Justice. Additional funds came from the National Institute on Drug Abuse (Grant No. DA01103-01). Their support is gratefully acknowledged.

The fact that the National Institute of Law Enforcement and Criminal Justice furnished financial support to the activity described in this publication does not necessarily indicate the concurrence of the Institute in the statements or conclusions contained therein.

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I. INTRODUCTION

For the last decade concern with adolescents has centered on their drug taking behavior, but within the last few years drug use has been seen as a critical social problem. Although the aggregate individual and social costs resulting from excessive alcohol consumption are clearly much larger than that for other drugs, alcohol use will not be considered here, but will be presented in a later paper. While adolescent marijuana use seems to have stabilized (Josephson, 1974) there still remains a large number of youngsters using marijuana (National Commission on Marijuana Use, 1973). With respect to drugs such as cocaine, heroin, amphetamines, barbiturates, L.S.D. and glue, the percentage of adolescents using these drugs is dramatically lower (National Commission on Marijuana Use, 1973). While the percentages are low, there is still a substantial number of youths using these illegal drugs. Among junior high school students 11% reported ever using glue, 6% hallucinogens, 9% stimulants, 15% barbiturates and almost 5% opiates. Cocaine has recently reappeared on the illicit drug market. To date little data on incidence and prevalence of cocaine exist. Nevertheless the 1972 U.S. Drug Commission survey reported that 1.5% of youth had used cocaine. Among high school students in 1972, the percentages for all drug use were higher than among J.H.S. students, with the exception of glue (National Commission on Marijuana Use, 1973).

The present report is part of a larger study of the socialization of adolescent illicit use of drugs. The general network of demographic factors, personality attributes, parental and peer factors employed in the present study have been described elsewhere. The present paper will focus only on demographic factors

(age, sex, ethnicity, social class, generational status, marital status) and interpersonal influences (immediate family or peers) and illicit drug taking behavior.

Several investigators have reported that with increasing age there is an increase in the use of marijuana, L.S.D., cocaine, barbiturates, amphetamines, and heroin (Lavenhar, 1972; Josephson, 1972, 1974; Johnson, 1971; Wolfson, 1972). The notable exception is glue sniffing, which seems to taper off with age.

A number of published studies have found that marijuana use is higher among males than among females (Preston, 1971; Johnson, 1971; Suchman, 1968; Smart, 1972), however with the exception of Josephson (1974) there appears to be a trend toward the equalization of these differences (Kandel, 1974; Lavenhar, 1972; Jessor, 1973; Nisbet, 1971). With respect to the use of cocaine, barbiturates, and amphetamines among adolescents, several investigators have reported no sex differences (Lavenhar, 1972) or higher usage among males (Gosset et al., 1971; Greene, 1974; Le Dain report, 1973). Socioeconomic status has also been found to be related to marijuana usage, with youngsters in the higher social classes reporting more usage than those in the lower classes (Suchman, 1968; Josephson, 1972, 1974; Blum, 1969). Nevertheless, Kandel's findings suggest that family income of students has "...relatively little effect on any type of drug use, especially when the confounding effect of other variables is controlled." In a recent study (Lukoff and Brook, 1974) it was found that social class standing was positively related to contact with heroin users. However, with control on generational status, social class differences vanished.

Whereas Gosset (1971) found a positive relationship between SES and use of cocaine, barbiturates and amphetamines, Lavenhar (1972) reported that parental educational level was not related to use of these drugs by their offspring. Findings regarding the relationship between heroin use and social class are inconsistent. (Gosset, 1971; Greene, 1974)

While many dimensions of adolescents' illicit drug use have been investigated, research on the relationship between ethnicity and illicit drug use is scarce. Johnson (1971) reported that ethnicity was not related to marijuana usage. Contrary to these findings, several investigators (McLeod, 1972; Preston, 1971; Bloom, 1974) have found whites report more marijuana usage than blacks. In the above studies, control on variables related to marijuana use were not included in the analysis of ethnicity and marijuana usage. Whereas Gossett (1971) reported a higher percentage of cocaine, barbiturate and amphetamine use among whites, Johnston (1973) reported a higher percentage of barbiturate and amphetamine use among blacks. With respect to opiate addiction, there is ample documentation of the shift from a predominantly white, middle-class, small-town, and largely female population of opiate users in the early 1900s to a concentration of opiate addiction (mainly heroin) among urbanized minority group members - black, Puerto Rican, and Chicano - substantially male and generally addicted at an earlier age than previous cohorts of addicts after World War II (Ball & Bates, 1970; Lukoff et al., 1972). In a recent study, Robins (1973) describes the military Vietnam opiate users as follows, "The man most likely to be detected positive in Vietnam was a young, single, black, low-ranking member of the Regular

Army who had little education, came from a broken home, had an arrest history before service, and had used drugs before service."

With the exception of a few studies, the present investigators could find no studies dealing with the relationship between generational status and use of illicit drugs. A previous study (Lukoff and Brook, 1974) found that generational status was related to contact with heroin users. Within each ethnic group (white, black, British West Indian and Puerto Rican) family and/or friend use of heroin was heavily concentrated among natives for subjects under 30 years of age. It is interesting to note that social class differences in contact with heroin users vanished with control on migrant-native status. The results therefore provided strong support for the hypothesis that generational differences, not social class is a salient antecedent of contact with drug users. Vaillant (1966) observes that the members of the poorest and most deprived segments of ghetto communities, the recent migrants into the urban north, are least likely to be found among the addict population. Vaillant documents the marked underrepresentation of migrants in the addict population of Lexington, significantly less than the native-born. Ball also notes the preponderance of native-born in the Lexington population at levels that surpass their proportion in the community whence they came. (Ball and Chambers, 1970)

In a study of addicts in Chicago, 68% were natives whereas only 35% of the black population as a whole were natives. (Abrams, Gagnon, and Levine, 1968). The findings of Lukoff, Ball and Vaillant lend support to one of the primary guiding hypotheses of

this study: the greatest amount of contact with drug use occurs not among migrants but among natives.

Several studies have dealt with the relationship between one-parent families and drug use, concluding that those involved with marijuana are more likely to come from non-intact homes (Johnston, 1973). With respect to other illicit drugs, users are more likely to come from broken homes (Blum, 1969; Smart and Fejer, 1971) or to describe their parents' relationship as poor (Anker, et al., 1971).

Parent, Immediate Family Influence on Adolescent Drug Taking Behavior

The present brief review of parental versus peer influence on the adolescents' drug taking behavior is necessarily highly selective, both in terms of the areas covered and the literature cited within specific areas. Some areas have been arbitrarily excluded because the literature will be most pertinent when we examine under what conditions peer group pressures are most likely to be effective in a later paper.

Because of the heightened importance of the peer group during adolescence, motivation for conformity to the customs, values and fads of the peer culture increases during this period, although there are wide individual differences. (Brittain, 1966)

Both parental and peer use of illicit drugs have been shown to influence the adolescents' own drug use. The role peer-group processes have on induction into drug use and on the acquisition of appropriate behaviors has been well documented. Indeed the peer group usually introduces the adolescent to drugs, assists the adolescent in obtaining drugs (Suchman, 1968; Wolfson, 1972 - in the case of marijuana), assists him in interpreting the drug

experiences, and assists him in evaluating the consequences of the drugs (Blum, 1972). According to Becker (1955) and Goode (1969) the peer group is the main agent in the socialization of marijuana use.

In a study of college students, Blum et al. (1969) reported that illicit drug use increased as nonusing students were exposed to drug using students. Indeed Lavenhar (1972), using step-wise regression procedures, reported that use of illicit drugs by "many close friends was the most significant factor contributing to the explanation of each drug use criterion." Similarly Kandel (1974) reported that the adolescent's use of marijuana is strongly related to his perception of marijuana use by his close friend.

The nonmedical use of drugs by both parents and siblings has been found to be related to the adolescents' own use of drugs. Use of each of the drugs studied (marijuana, hallucinogens, speed or heroin) by siblings increased the probability of the adolescents' own use of each of the drugs (Lavenhar, 1972). Several investigators have also found that use of psychoactive drugs by parents is related to use of illicit drugs by their children (Blum and Associates, 1972; Lavenhar, 1972; Smart and Fejer, 1971). Using data obtained from triads - parents, adolescent, and best school friend, Kandel (1974) reported that "...there is a synergistic influence of parents and peers: the highest rates of adolescent illegal drug use appear in situations in which members of both generations use drugs." (Kandel, 1974, p. 126)

The purpose of the present paper is therefore twofold. The first aim is to study illicit drug use among adolescents, their

peers, and immediate family, with reference to the demographic variables of SES (socioeconomic status), ethnicity, generational status, intactness of home, sex, and age of the adolescent. The second aim is to study the impact of peer and/or immediate family and drug use on the adolescents' own illicit drug use.

II. DESIGN

The Sample

The original design called for 300 subjects divided into the following groups: low contact with drug users, low SES; high contact with drug users, low SES; low contact with drug users, high SES; high contact with drug users, high SES, in each of three ethnic groups (whites, blacks, British West Indians). Subjects were included in the high contact group if they or their friends or family drank excessively, or if any of the preceding used drugs. The sample area for the whites was the Greenpoint section of Brooklyn, in which 33 blocks were selected. Because of insufficient whites in Bedford-Stuyvesant, Greenpoint was selected as it is a white area contiguous to Bedford-Stuyvesant and characterized by high levels of drug use. The interviewers then proceeded to interview every white mother with at least one teenage child between the ages of 13 and 17 in these blocks. (The interviewer was instructed to begin canvassing at a specified corner and continue around the block clockwise.) A snowball technique was also used. The adolescent was asked to list the names of five friends who lived in the area. Some of these adolescents and their mothers were then interviewed. Since we did not have a sufficient number of lower-income whites, we selected the remainder of subjects from a low-income housing project adjacent to the Bedford-Stuyvesant section of Brooklyn.

The sample area for the blacks was the Bedford-Stuyvesant/Fort Greene section of Brooklyn. The area is characterized by high rates of addiction (Lukoff & Brook, 1974). Sixty-five of the black subjects in phase I of the study had teenagers between 13 and 17 years of age and agreed to be interviewed. The remainder of the sample was then selected by using the snowball technique.

The sample area for the British West Indians was the Crown Heights section of Brooklyn, which is adjacent to Bedford-Stuyvesant. One hundred and fifty blocks heavily concentrated with British West Indians were selected. The snowball technique was also used with the British West Indians. British West Indians include persons who were born in the Caribbean Islands formerly under British suzerainty, or are offspring of West Indian parents. There are important differences in culture between the islands in the West Indies; however, they form a cultural complex with similar patterns of slavery and post-slavery social structure and economy (Lowenthal, 1967, 1972; Rubin, 1957). Most come from Barbados, Jamaica, Bermuda and Trinidad, with smaller numbers coming from Grenada, the British Virgin Islands, Guyana and other islands. They were included because British West Indians, while they are black and many are recent immigrants, have as a group made a very different accommodation to the United States. They tend to pursue home ownership, stress education, and are disproportionately found in the professional, business and political leadership of the black community. British West Indians share a common racial identity with American blacks, but the very different cultures and histories of these groups provide a measure of control for the identification of socio-cultural processes on drug use as distinct from the accommodations blacks made to racism.

The final mother sample consisted of 97 whites, 93 blacks and 94 BWI, a total of 284. The teen-age sample comprised 124 British West Indians (97 oldest, 27 second oldest), 141 blacks (93 oldest, 48 second oldest) and 138 whites (94 oldest, 44 second oldest). Nine of the adolescents were step children. Approximately sixty-seven percent of the respondents contacted agreed to be interviewed.

Interview Schedule

A series of questions was developed which would be used in a face-to-face interviewing situation. One set of questions was given to the mothers and a different set of questions was given to their oldest adolescent child between the ages of 13 and 17, and the second oldest where there was one.

The final interview schedules were developed from two preliminary tryouts. The first schedule was prepared in light of the suggestions obtained from the review of the theoretical and research literature. Twenty mothers of teen-age children and 24 teen-age children were individually interviewed for approximately one hour each. The primary purpose of this try-out was (a) to see how mothers and teen-agers responded to the different questions of the schedule; (b) to investigate the kinds of probes necessary to elicit more precise responses; and (c) to discover the additional areas, of any, which should be covered to make it as comprehensive as possible. On the basis of this, further revisions were made, and the interview schedule was once more rewritten. The interview schedules were then administered to 25 mothers and 25 teen-age children (13-17 years of age). The interview schedules were once more rewritten and put in final form.

Both the mother and adolescent interview schedules were highly structured with most questions having response categories available from which the respondent chose his answers. General probes were introduced only when necessary to clarify a respondent's answer. Factual questions were introduced at the beginning of the interview schedule. The items dealing with drugs and other forms of deviant behavior were presented at the end of the interview, presumably after rapport had been established.

A description of the items in the interview schedule on which this paper is based includes the following:

Drug Use

Toward the end of the questionnaire, each respondent was asked whether his friends, immediate family, other relatives or he himself had used any of the following drugs: marijuana; glue barbiturates, amphetamines, cocaine or L.S.D.; heroin. In the following analysis there are several ways in which this information is used: (1) Self Use of any of the drugs; (2) Reported Immediate Family Drug Use, which is composed of respondents who indicated their immediate family used drugs; (3) Reported Distant Family Drug Use, which is composed of respondents who answered "yes" to the questions on use of drugs by distant relatives; and (4) Friend Reported Drug Use, which is simply the proportion who reported that friends had used drugs.

A Marijuana Index was then constructed for self, peer, immediate, and other family use of drugs. For instance, if the respondent reported no drug use he was classified as a nonuser; if he reported use of marijuana alone he was categorized in the marijuana only category; and if he reported use of one of the other drugs delineated above alone or in conjunction with marijuana he was classified in the marijuana plus category. A Polydrug Index was also constructed.

Generational Status

Mothers and their two oldest children between 13 and 17 were classified into migrants and natives. The blacks were

grouped according to birthplace, 1) northern United States, 2) border and southern states. The whites and British West Indians were grouped according to birthplace, 1) United States, 2) abroad. The natives were further subdivided into first and second generation natives.

Social Class

The Social Class Index is a relative ranking composed of two dichotomous items: Occupation (blue versus white collar), and Education (High School Graduate and above versus all others). Respondents classified in the high category were either High School graduates, white collar workers or both. All other respondents were classified in the low category. The social class index was based on the husband's occupational and educational level. If the respondent was not presently married, the social class index was based on her own educational and occupational level.

Intact Versus Broken Homes

An intact home is one in which there is currently a mother and father (or stepfather). Anything else is considered "broken."

Administration of the Interview

Eight white, 20 black and 2 British West Indian interviewers trained by N.O.R.C. conducted the interviews. For the whites and blacks, interviewing was done by members of the same ethnic background. Two British West Indians and four blacks interviewed the British West Indians.

Intensive training in interviewing involving lectures and supervised try-outs was provided. The interviewer's completed schedules were checked before new assignments were made. Mothers were contacted at home by a NORC interviewer who asked that she

and her teen-age children between 13 and 17 collaborate in a study concerning mothers' and teenagers' opinions and experiences. The interviews with the mothers and their children were conducted in their homes and every attempt to secure privacy was made. In all cases, the mother was interviewed first followed by her oldest and second oldest teenager between 13 and 17 years of age. Both mother and teenagers were assured of anonymity and were paid \$5.00 each upon completion of the interview.

For the teen-age children the interviewers read the questions orally and the teen-ager was instructed to circle the appropriate answer on his booklet to insure privacy. A different procedure was used for the mothers. They were asked to respond orally to the questions posed.

All respondents were interviewed in their home in privacy wherever possible. The respondents were also assured that their responses were confidential.

III. RESULTS

The presentation of results is organized in two sections, the first dealing with demographic variables (SES, age, sex, generational status, ethnicity) and drug taking behavior; and the second comparing drug users and non drug users in terms of self, immediate relatives (parent and/or sibling), peer, and other relatives' drug use.

For each of the analyses presented below there were no significant sex differences. We are therefore presenting the findings for the sexes combined. One might speculate that the recent general trend toward sexual equality among youngsters and the acceptance of similar standards for males and females has already had a significant impact on the drug scene in Bedford Stuyvesant, Greenpoint, and the Crown Heights section of Brooklyn.

In the present study, social class was not found to be related to drug taking behavior by self, friends, immediate relatives (parent and/or sibling) or other relatives. These results may be due to the way in which the sample was selected. In selecting the sample, we attempted to choose adolescents whose mothers reported friend or family use of drugs or family use of alcohol. This procedure was employed in order to ensure that we had an equal number of mothers who reported contact with alcohol or drugs in each social class group. The procedure used for selecting the sample may have washed out social class differences in adolescent use of illicit drugs. Since social class was not found to be related to drug usage, we will not introduce social class in the subsequent analyses.

For purposes of providing context and for comparison with

other studies it is useful at this point to describe the prevalence of drug use among the adolescents. The proportions of adolescents reporting drug use for self, friends, immediate relatives (parent and/or sibling) and other relatives are presented in Table 1.

Insert Table 1 about here

The rate of marijuana use among the adolescents was far greater than the rate of any other drug. Marijuana is probably more available than cocaine, barbiturates, L.S.D., heroin and amphetamines.

Examination of Table 1 indicates that more than half the adolescents reported having some friends who used marijuana. The adolescents reported that their immediate relatives used marijuana more often than the other drugs. Use of heroin by self, friends, and immediate relatives was reported least often by the adolescent.

In a national study conducted by the Drug Abuse Council the percent of subjects reporting marijauan use was similar to that found in the present study. The proportion of adolescents reporting self use of the other drugs was found to be lower than that obtained in other national surveys.

Ethnic Group Variations in Drug Use

In the following analysis, a comparison between nonusers, marijuana only users and marijuana plus other drugs (heroin, ups, downs, cocaine, L.S.D., glue) or other drugs alone was made

TABLE 1

REPORTED DRUG USE BY SELF AND
SIGNIFICANT OTHERS

(N=403)

	<u>Marijuana</u>		<u>Glue^a</u>		<u>Cocaine Amphetamines L.S.D. Barbiturates</u>		<u>Heroin</u>	
	N	%	N	%	N	%	N	%
Self	76	18.9	6	1.5	11	2.7	1	.3
Friends	229	56.8	76	18.9	88	21.8	65	16.1
Immediate relatives (parent and/or sibling)	72	17.9	—	—	22	5.5	16	4.0
Other relatives	106	26.3	—	—	107	26.6	28	6.9

^aImmediate and Other Relatives were not asked about glue.

in terms of ethnic patterns. Ethnic patterns in use of drugs as measured by the Marijuana Index for self, friend, immediate and other relatives appear in Table 2.

Insert Table 2 about here

As shown in Table 2, ethnic differences on the Marijuana Index were not significant for self use or other relatives. For friend use, a higher proportion of West Indians than blacks and whites reported no drug use. A higher percentage of blacks than West Indians or whites reported that at least one of their friends had used marijuana only. Whereas 46% of the whites reported their friends used other drugs alone or in combination with marijuana, the percentages for the blacks and West Indians were 33 and 26% respectively. Thus, while the blacks reported the most marijuana only usage by friends, the whites most often reported marijuana in conjunction with other drugs or other drugs alone by friends. A different ethnic pattern in immediate relative drug use emerged from the data. Drug use by immediate relatives was higher among the blacks than among the West Indians or whites. A larger proportion of blacks than West Indians or whites reported immediate family used only marijuana. There was little difference among the ethnic groups in immediate family use of other drugs.

Patterns in Drug Use

A finding that was reported previously, and which serves as a crucial anchor in the theory being investigated to explain some of the sociological antecedents of drug use, is that contact

TABLE 2

ETHNIC PATTERNS IN USE OF DRUGS
(Marijuana Index)

Drug Use	Ethnic Patterns					
	Black		White		West Indian	
	N	%	N	%	N	%
<u>Self*</u>						
None	110	78	98	79	117	85
Other drugs only ^a	0	0	0	0	2	1
Marijuana only	29	21	17	14	18	13
Marijuana + other drugs ^a	2	2	9	7	1	1
	<u>141</u>	<u>100</u>	<u>124</u>	<u>100</u>	<u>138</u>	<u>100</u>
<u>Friend***</u>						
None	45	32	37	30	68	49
Other drugs only ^a	6	4	10	8	8	6
Marijuana only	49	35	30	24	35	25
Marijuana + other drugs ^a	41	29	47	38	27	20
	<u>141</u>	<u>100</u>	<u>124</u>	<u>100</u>	<u>138</u>	<u>100</u>
<u>Immediate Relatives**</u>						
None	101	72	107	86	119	86
Other drugs only ^a	2	1	0	0	2	1
Marijuana only	27	19	7	6	14	10
Marijuana + other drugs ^a	11	8	10	8	3	2
	<u>141</u>	<u>100</u>	<u>124</u>	<u>100</u>	<u>138</u>	<u>99</u>
<u>Other Relatives</u>						
None	93	66	92	74	107	77
Other drugs only ^a	3	2	0	0	2	1
Marijuana only	28	20	18	14	24	17
Marijuana + other drugs ^a	17	12	14	11	5	4
	<u>141</u>	<u>100</u>	<u>124</u>	<u>99</u>	<u>138</u>	<u>99</u>

Note: Other drugs only were combined with marijuana plus other drugs in the X² analysis

^aThe category "other drugs" includes barbiturates, amphetamines, L.S.D., cocaine, heroin, and glue (for self and friend only).

*Chi square not computed because of low expected values.

** P < .01

*** P < .001

with drug use is primarily concentrated in native-born populations (Lukoff and Brook, 1974). Although the communities where drug use is endemic are also recipients of large groups of migrants, contact with drug users is not among the migrants who are at the bottom of the social ladder, and often appear to be among the most disorganized segments of ghetto communities, but is more common among the native-born. This fact has previously explained social class differences. In the analysis following we find that these previous results are not confined to heroin for adults under 30 but to other drugs.

The subjects were classified into migrants, first, second, and third generation natives and compared with respect to reported use of drugs on the Marijuana Index for self, friends, immediate family and other relatives for all ethnic groups combined (see Table 3). Generational differences for use by self and immediate family use of drugs did not appear in the present study.

Insert Table 3 about here

The finding in Table 3 provides consistent support for the hypothesized relationship between generational status and friend drug use. As shown in Table 3, the migrants report significantly less friend use of drugs than the natives (first, second, and

TABLE 3

GENERATIONAL PATTERNS IN USE OF DRUGS
(Marijuana Index)

	<u>Generational Patterns</u>							
	<u>M</u>		<u>1st</u>		<u>2nd</u>		<u>3rd</u>	
	N	%	N	%	N	%	N	%
<u>Self</u>								
None	112	85	108	78	72	77	33	83
Other drugs only ^a	2	1	0	0	0	0	0	0
Marijuana only	17	13	26	19	14	15	7	17
Marijuana + other drugs ^a	1	1	4	3	7	7	0	0
	<u>132</u>	<u>100</u>	<u>138</u>	<u>100</u>	<u>93</u>	<u>99</u>	<u>40</u>	<u>100</u>
<u>Friends***</u>								
None	63	48	47	34	28	30	12	30
Other drugs only ^a	3	2	10	7	7	7	4	10
Marijuana only	41	31	39	28	22	24	12	30
Marijuana + other drugs ^a	25	19	42	30	36	39	12	30
	<u>132</u>	<u>100</u>	<u>138</u>	<u>99</u>	<u>93</u>	<u>100</u>	<u>40</u>	<u>100</u>
<u>Immediate Relatives</u>								
None	112	85	104	75	75	81	36	90
Other drugs only ^a	2	1	1	1	1	1	0	0
Marijuana only	12	9	26	19	9	10	1	2
Marijuana + other drugs ^a	6	4	7	5	8	9	3	7
	<u>132</u>	<u>99</u>	<u>138</u>	<u>100</u>	<u>93</u>	<u>101</u>	<u>40</u>	<u>99</u>
<u>Other Relatives**</u>								
None	99	75	94	68	68	73	31	77
Other drugs only ^a	2	1	3	2	0	0	0	0
Marijuana only	28	21	22	16	16	17	4	10
Marijuana + other drugs ^a	3	2	19	14	9	10	5	13
	<u>132</u>	<u>99</u>	<u>138</u>	<u>100</u>	<u>93</u>	<u>100</u>	<u>40</u>	<u>100</u>

Note: Other drugs only were combined with marijuana plus other drugs in the X² analysis.

^aThe category "other drugs" includes barbiturates, amphetamines, L.S.D., cocaine, and glue (for self and friend only).

*Chi square not computed because of low expected values.

** p < .05

*** p < .01

third generation). A greater proportion of natives than migrants report friend use of marijuana in combination with at least one of the following drugs: barbiturates, amphetamines, cocaine, L.S.D., heroin or glue.

Since use of drugs by one's peers is highly related to the adolescent's own drug use (findings presented later in this paper), it is important to examine those background factors which are related to selecting friends who use drugs. Our findings strongly suggest that coming from a migrant home decreases the likelihood of the adolescent's being involved in a drug subculture. In contrast, coming from a native home increases the likelihood that the adolescent will be involved in a drug subculture.

In a previous study, Lukoff and Brook (1974) found that for subjects under 30 years of age, migrants had less contact with heroin users than natives, even with control on social class. Perhaps one of the explanations for the lower reported drug use among migrants had to do with their greater emphasis on traditional attitudes, controls and values. In the same study, Lukoff and Brook (1974) found that there was a significant increase in the number of respondents under 30 years of age with nativity status who gave a cognitive (less control oriented) response to questions on child-rearing practices. In all four

ethnic groups (white, Puerto Rican, black and British West Indian), those subjects who favored an imperative mode (focused on control and obedience) had less contact with heroin users than those with a cognitive orientation. In our work next year, we shall examine those variables such as cognitive vs. imperative orientations which may intervene between generational status and reported drug use by friends.

Ethnic Group, Migrant-Native Status and Friend Use of Drugs

Since generational mobility was significantly related to friend use of drugs, ethnic differences in friend use of drugs were examined with control on generational status in order to determine whether ethnic differences were merely a function of different periods of immigration associated with each group. For the whites, migrants were omitted from the analysis as only two of the subjects were migrants. For the blacks and British West Indians, first, second, and third generation natives were combined as there were too few second and third generation natives.

Insert Table 4 about here

As shown in Table 4, an overwhelming proportion of West Indians is migrant. Within the West Indians, a higher proportion of migrants than natives reported no friend use of drugs. Within both the West Indians and blacks, more natives than migrants reported friends who used other drugs alone or in conjunction with marijuana. Differences in ethnicity are maintained in the migrant group; however, within the natives, ethnic differences disappear. These findings should be regarded with extreme caution since selecting a stratified sample (a sample in which there was approximately an equal number of mothers who reported contact with alcohol or drugs in each ethnic group) may have washed out differences in ethnicity among the native adolescents with control on generational status.

Polydrug Index

The data were examined for the relationship of each of the drugs by every other drug surveyed by computing phi coefficients between each pair of drug questions. The coefficients are shown in Table 5. As can be seen from Table 5, the drugs (glue, [amphetamines, barbiturates, L.S.D., cocaine], and heroin) correlated higher with each other than with alcohol. For this reason it was decided not to include alcohol in the drug groupings.

Insert Table 5 about here

TABLE 4

ETHNIC GROUP, GENERATIONAL STATUS, AND FRIENDS' USE OF DRUGS
(Marijuana Index)

Marijuana Index	White						Black*				British West Indian*			
	1st		2nd		3rd		Migrant		Native		Migrant		Native	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
None	4	36	23	30	10	29	6	26	39	33	57	53	11	35
Other drugs only ^a	1	9	5	7	4	11	0	0	6	5	3	3	5	16
Marijuana only	3	27	15	20	11	31	13	57	36	31	27	25	8	26
Marijuana + other drugs ^a	3	27	33	43	10	29	4	17	37	31	20	19	7	23
	11	99	76	100	35	100	23	100	118	100	107	100	31	100

Note: Other drugs only were combined with marijuana + other drugs in the χ^2 analysis

^aThe category "other drugs" includes glue, amphetamines, barbiturates, I.S.D., cocaine or heroin.

*For blacks and British West Indians: combined $\chi^2 = 10.49$, $df = 4$, $p < .05$

TABLE 5

CORRELATION (PHI COEFFICIENTS) BETWEEN ANSWERS
OF ADOLESCENTS TO QUESTIONS
PERTAINING TO EACH DRUG
(N = 403)

	<u>Drug Questions</u>			
	<u>Glue</u> ^a	<u>Ups, Downs, etc.</u>	<u>Heroin</u> ^b	<u>Alcohol</u>
<u>Self</u>				
Marijuana	.15**	.36***	—	.06
Glue	—	.36***	—	.05
Ups, downs, etc.	—	—	—	.08
Heroin	—	—	—	—
Alcohol	—	—	—	—
<u>Friends</u>				
Marijuana	.23**	.41***	.25***	—
Glue	—	.39***	.43***	—
Ups, downs, etc.	—	—	.45***	—
Heroin	—	—	—	—
<u>Immediate Relatives</u>				
Marijuana	—	.45***	.37***	.19
Ups, downs, etc.	—	—	.52***	.09
Heroin	—	—	—	—
Alcohol	—	—	.13*	—
<u>Other Relatives</u>				
Marijuana	—	.38***	.42***	.21***
Ups, ows, etc.	—	—	.50***	.15**
Heroin	—	—	—	—
Alcohol	—	—	.17***	—

^aImmediate and other relatives were not asked about glue.

^bOnly 1 case of heroin use by self.

* p < .05

** p < .01

*** p < .001

Based on the chi-square test.

It was impossible to compute the phi coefficients for heroin and the other drugs for self use as only one adolescent reported heroin use. Moreover it was not possible to compute the phi coefficients for glue and the other drugs for immediate family and other relatives as the question was not asked since glue sniffing occurs mainly among youngsters.

In general, whenever use is acknowledged for any single drug by the adolescent, or significant others in his environment, there is a vastly enhanced probability of some other drug being used by the adolescent as well as significant others in his environment.

The positive correlations obtained in the self by self, friend by friend, immediate relative by immediate relative and other relative by other relative tables are similar to correlations of self use of drugs reported by McKillip et al. (1973). The positive correlations lend support for use of the polydrug index in the following analysis. The polydrug index was also used in an effort to determine whether the patterns of relationships between the background factors and use of one drug were similar to or different from those for multiple drug use.

Table 6 presents the number and percentages of adolescents who reported multiple drug use for self, friend, immediate and other relatives. Some 81% of all adolescents report no drug use for self or immediate relatives. Nearly one third of the adolescents report multiple drug use by friends.

Insert Table 6 about here

TABLE 6

FREQUENCY OF MULTIPLE DRUG USE EXCLUDING
ALCOHOL FOR ADOLESCENTS, SELF,
FRIENDS, IMMEDIATE OR OTHER RELATIVES

	<u>Number of Different Drugs Used</u>						<u>Total</u>	
	<u>None</u>		<u>One</u>		<u>2 or More</u>		<u>N</u>	<u>%</u>
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>		
Self	325	81	66	16	12	3	403	100
Friend	150	37	133	33	120	30	403	100
Immediate Relative	327	81	52	13	24	6	403	100
Other Relative	292	72	75	19	36	9	403	100

We next turn our attention to the relationship between ethnicity, generational status, and polydrug use. Students who reported drug use for self, friends or relatives were classified into four categories: (0) no drug use, (1) only one drug reported, (2) any two drugs reported, (3) any three drugs, (4) all four drugs. (A score of 4 was possible only for self and friend since immediate and other relatives were not asked about glue.) The relationship between ethnicity, generational status, as well as ethnicity by generational status by drug use as obtained on the Marijuana Index parallel those findings derived from an analysis of the Polydrug Index since many of the subjects in the marijuana + category also appear high on the Polydrug Index. (See Tables 1, 2, 3 Appendix II.)

Contact with Heroin Users

We next turn our attention to contact with heroin users. The overrepresentation of particular ethnic groups in the heroin-using population is a widely observed phenomenon (Lukoff and Brook, 1974). Indeed with control on social class, rankings of the ethnic groups remained consistent (Lukoff and Brook, 1974). However, in the present study, using subjects younger than in the previous study, ethnic differences in contact with heroin users did not emerge. Native-migrant differences in contact with heroin users were found in the present study, with natives reporting more contact with heroin users than migrants.

Insert Table 7 about here

The findings confirm our previous results (Lukoff and Brook,

TABLE 7

MIGRANT-NATIVE PATTERNS IN CONTIGUITY
WITH HEROIN USERS*

	<u>Migrant</u>		<u>Native</u>	
	N	%	N	%
No contact	116	88	205	76
Relative	3	2	14	5
Self/friend ^a	13	10	52	19
	<u>132</u>	<u>100</u>	<u>271</u>	<u>100</u>

^aSelf and friend category were combined as only 1 subject reported self use of heroin.

*p < .05.

1974); namely, native-migrant status was significantly related to contiguity with drug users for persons under 30 years of age.

Intact versus Non-Intact Homes and Drug Use

The subjects within intact and broken homes (no father in the home) were compared in terms of their use of illicit drugs. This variable was not found to be related to the teenager's own drug use, despite control on length of time the father had been away from the adolescent's home, as well as generational status and ethnicity.

From our earlier studies, migrant dwellers were found to be more traditional in orientation. It is also clear from the literature that single-headed families are less likely to conform to traditional values in a number of significant areas of behavior. In a preliminary analysis we are using intact households and migrant status as indicators of traditional environments.

Subjects were then classified into one of three categories in terms of generational status and parental intactness: (1) Traditional Environment: the adolescents in this category were migrants who came from intact homes; (2) Semi-Traditional Environment: the adolescents classified within this category came either from intact-native homes or broken-migrant homes; and (3) Non-Traditional Environment: the adolescents in this category came from broken homes and were natives.

Insert Table 8 about here

Examination of Table 8 indicates that adolescents exposed to a non-traditional environment (native-not intact) report a significantly higher percentage of own drug use than do adolescents from traditional environments (migrant-intact). Intermediate between these two groups are the adolescents from semi-traditional environments (migrant-not intact or native-intact). Thus, the adolescents from the most traditional or structured homes show the least amount of drug use while those from the least traditional or structured homes show the most drug use.

The particular strains that the adolescent is exposed to by virtue of his native status (being exposed to cultural attitudes which are more permissive as compared with migrants) or parental disparity or both increase the probability of his being a drug user. In contrast those adolescents raised in a less permissive environment (as reflected in their migratory status) and not exposed to parental disparity are less likely to use drugs. These findings highlight the importance of considering both familial and generational structure in examining the antecedent conditions of illicit drug use.

TABLE 8

ADOLESCENT DRUG USE AS AFFECTED
BY DIFFERENT ENVIRONMENTS*

<u>Self Drug Use</u>	<u>Traditional Environment^a</u>		<u>Semi-Traditional Environment^b</u>		<u>Non-Traditional Environment^c</u>	
	N	%	N	%	N	%
Nonusers	58	91	190	80	77	75
Users	6	9	47	20	25	25

^aMigrants from intact homes.

^bNatives from intact homes or migrants from not intact homes.

^cNatives from not intact homes.

*p < .05.

Age and Marijuana Use

Since only two of the respondents were twelve and a half, they were lumped with the thirteen year olds in the present analysis.

In a national survey conducted by the Drug Abuse Council in 1974 in which 505 teenagers were asked about their marijuana usage, the proportion of marijuana usage reported by teenagers was found to be similar to the proportion of teenagers reporting marijuana usage in the present study (see Table 9).

Insert Table 9 about here

Since marijuana usage is high in the Northeast and in cities containing over 1 million people, one might have expected to obtain higher proportions of marijuana reportage in the present study than those obtained by the DAC commission. However, the DAC's study also reported that children of professionals rank high among adult occupational categories in marijuana usage. In the present study, the proportion of teenagers having parents in professional categories was indeed low. The data on age and the Marijuana Index are presented in Figure 1.

Insert Figure 1 about here

Age is closely related to drug use. Marijuana usage among teenagers increases sharply with age, with only 4% reporting having ever used only marijuana at age 13 compared with 29%

TABLE 9

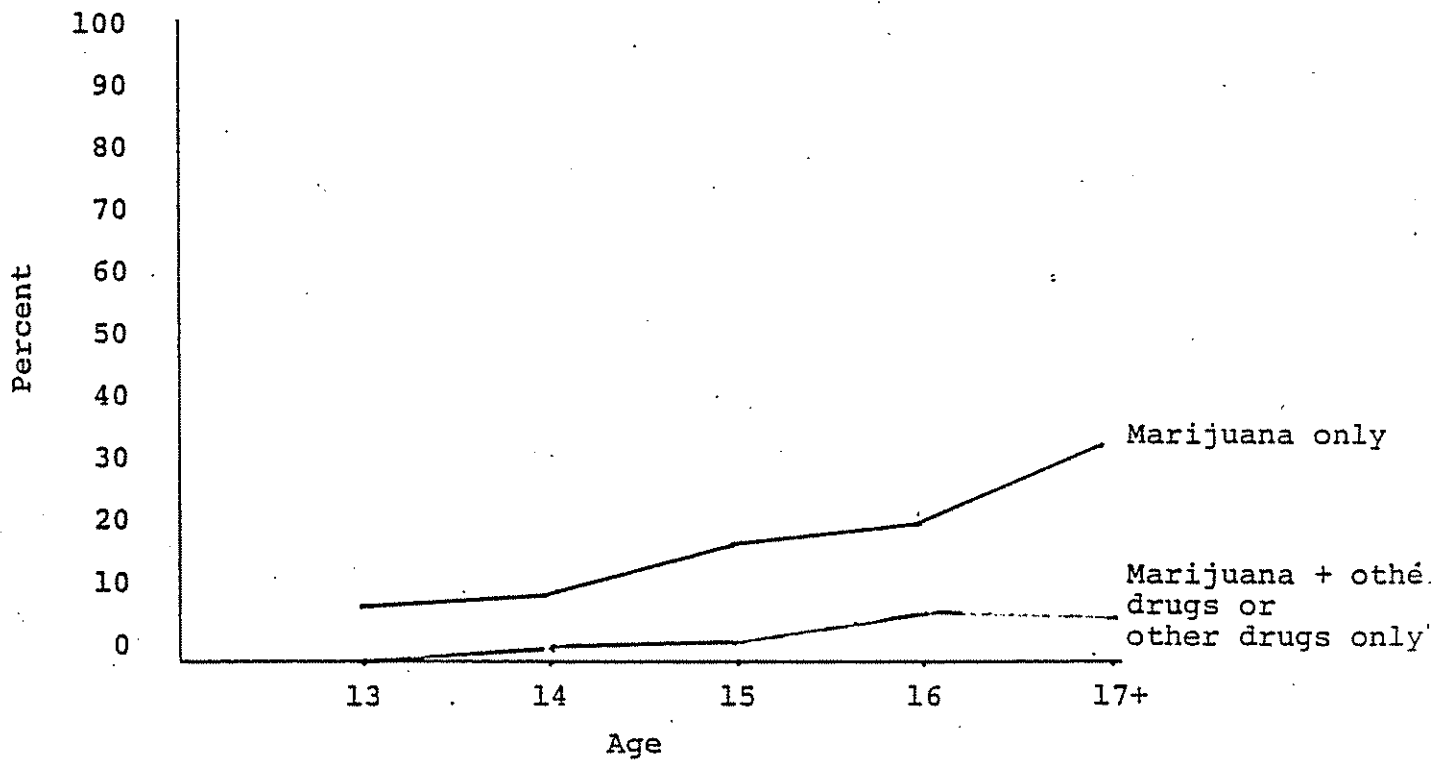
COMPARISON OF TEENAGE MARIJUANA USE OBTAINED IN
PRESENT STUDY AND TEENAGE MARIJUANA USE (SELF)
OBTAINED BY DAC

	<u>% Who Have Used Marijuana</u>	
	DAC ^a (N = 505)	Lukoff (N = 403)
	%	%
Total Teenagers	14	19
<u>By Age</u>		
12 - 13	5	4
14 - 15	14	10
16 - 17	23	29

^aDrug Abuse Council, News Release, Washington, D.C., 1974.

FIGURE 1

AGE AND MARIJUANA USE BY SELF
(MARIJUANA INDEX) .



^a other drugs include glue, amphetamines, barbiturates, L.S.D., cocaine, or heroin.

of 17 year olds saying they have ever used only marijuana.

Age by Friend Use of Drugs (Marijuana Index)

The proportion of youngsters who report having some friends who use drugs is presented in Figure 2.

Insert Figure 2 about here

Examination of Figure 2 indicates that there is an increase in use of both only marijuana and other drugs alone or in conjunction with marijuana with age. For marijuana only, whereas only 22% of the 13 year olds report friends' usage, the proportion of adolescents reporting friend usage jumps to 36% at the age of 17. A similar trend occurs among the youngsters who report the use of other drugs alone or in conjunction with marijuana.

Thus as youngsters increase in age a greater proportion are surrounded by peers who use only marijuana or other drugs or both. In terms of marijuana usage, whether combined with other drugs or not, 78% of the oldest group report being exposed to peers who use marijuana. It is also striking that even among the younger adolescents (13 years of age), 40 percent report having friends who use marijuana. Since involvement with peers is related to adolescent's own drug use, increased drug use among these adolescents should occur with age.

The results obtained on the relationship between age and drug use as assessed by the Marijuana Index parallel those obtained on the Polydrug Index.

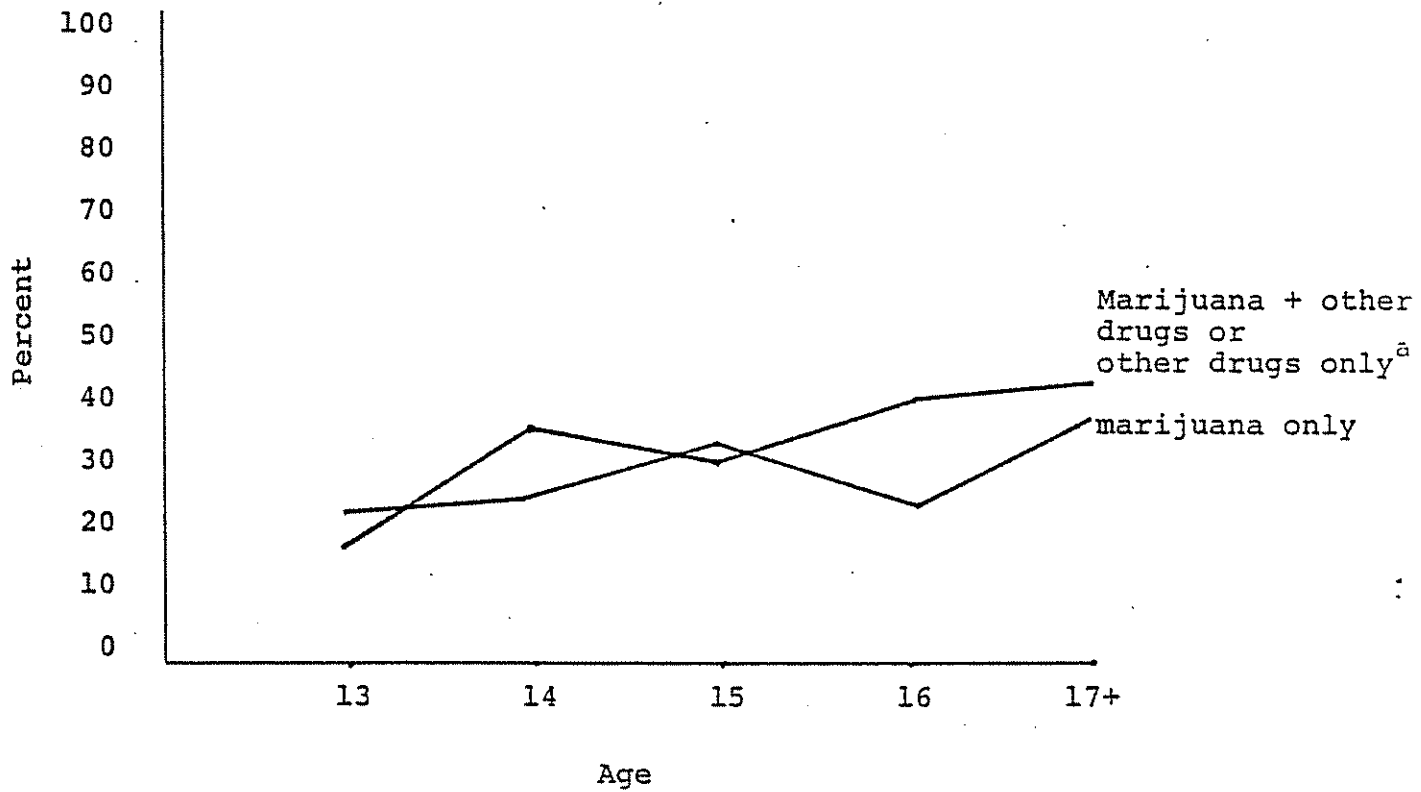
Age by Heroin Index - Friends

Age was related to peer use of heroin. (See Figure 3.)

Insert Figure 3 about here

FIGURE 2

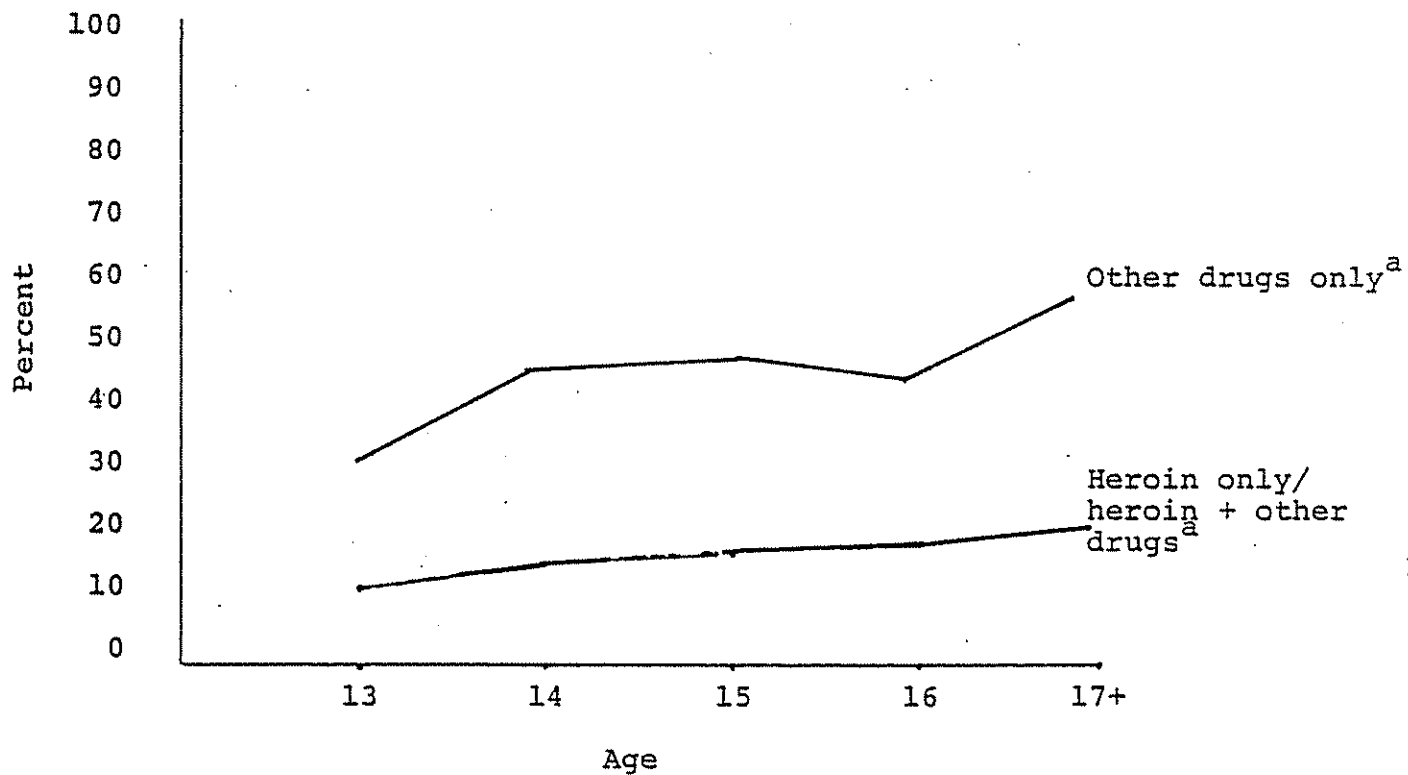
AGE AND MARIJUANA USE BY FRIENDS
(MARIJUANA INDEX)



^a other drugs include glue, amphetamines, barbiturates, L.S.D., cocaine, or heroin.

FIGURE 3

AGE AND HEROIN USE BY FRIENDS
(HEROIN INDEX)



^aother drugs include glue, amphetamines, barbiturates, L.S.D., cocaine, or marijuana.

Roughly twice as many 17 year olds report some friend use of heroin as compared with 13 year olds. At the 17 year old level one-fifth of the adolescents report having at least one friend who is a heroin user.

Self Use of Marijuana by Other Drug Use

We turn next to the relationship between self marijuana use and use of other drugs by self and friends.

Insert Table 10 about here

Whereas 15% of marijuana users reported using ups, downs, barbiturates or L.S.D., none of the non-marijuana users reported having used any of these drugs. Most striking is the relationship between self marijuana use and friends' use of other drugs. For the nonusers, no more than 16% reported having friends who used any of the other drugs. However, for marijuana users 21% had friends who tried heroin, 32% reported having friends who had tried glue, and 47% reported having friends who had tried one of the following drugs: barbiturates, amphetamines, L.S.D., or cocaine. There can be no question about the close association between own marijuana use and use of drugs other than marijuana by friends. It is interesting to note that 50% of the nonusers have reported their friends had used marijuana whereas 100% of the marijuana users reported having friends who had at least tried marijuana. Our findings suggest that marijuana users tend to gravitate toward each other and perhaps gain support for

TABLE 10

USE OF OTHER DRUGS BY SELF AND FRIENDS
AMONG MARIJUANA USERS AND NONUSERS

% Who Have Tried Other Drugs	Nonusers of Marijuana (N = 327)		Marijuana Users (N = 76)	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>Self</u>				
Heroin	0	0	1	1
Glue	2	1	4	5
Amphetamines,* Barbiturates, Cocaine or L.S.D.	0	0	11	15
<u>Friends</u>				
Heroin	49	15	16	21
Glue*	51	16	25	33
Amphetamines,* Barbiturates, Cocaine or L.S.D	52	16	36	47

*p < .001.

NOTE: χ^2 for self use of marijuana by self use of heroin and glue could not be calculated because of insufficient N's.

their marijuana usage. Moreover, they tend to gravitate toward friends who use drugs other than marijuana.

Marijuana users vs. non-marijuana users were compared with respect to use of polydrugs by parents and/or siblings (see Table 11).

Insert Table 11 about here

As shown in Table 11, 59% of the marijuana users had friends who used 2 or more drugs compared with 23% of nonusers. Thus a close association exists between marijuana use by self and multiple drug use by friends. Although adolescents reported less polydrug use for parents and/or siblings than peers, a similar trend prevailed. There were significant differences ($p < .001$) between users and nonusers of marijuana when compared with immediate family use of polydrugs.

Family and Adolescent Drug Use

Table 12 presents a comparison of perceived drug use of immediate family and the adolescent's own drug use.

Insert Table 12 about here

The present findings suggest that adolescents' illicit drug use is associated with drug use by immediate family. Among

TABLE 11

USE OF POLYDRUGS BY SELF, FRIEND, AND
IMMEDIATE FAMILY AMONG MARIJUANA
USERS AND NONUSERS

	<u>Non Marijuana Users</u>		<u>Marijuana Users</u>	
	N	%	N	%
I. <u>Polydrug - self*</u>				
0 drugs	325	99	0	0
1 drug	2	1	64	84
2+ drugs	0	0	12	16
	<hr/>	<hr/>	<hr/>	<hr/>
	327	100	76	100
II. <u>Polydrug - friend*</u>				
0 drugs	150	46	0	0
1 drug	102	31	31	41
2+ drugs	75	23	45	59
	<hr/>	<hr/>	<hr/>	<hr/>
	327	100	76	100
III. <u>Immediate family (parent and/or siblings)*</u>				
0 drugs	292	89	35	46
1 drug	25	8	27	36
2+ drugs	10	3	14	18
	<hr/>	<hr/>	<hr/>	<hr/>
	327	100	76	100

* p < .001

TABLE 12

PERCEIVED DRUG USE BY IMMEDIATE FAMILY
AND SELF DRUG USE
(Marijuana Index)*

	<u>Immediate Relative</u>					
	No Drug Use (N = 328)		Marijuana Only (N = 48)		Other Drugs Only/ Marijuana + Other Drugs ^a (N = 27)	
	N	%	N	%	N	%
<u>Self</u>						
No drug use	290	89	21	44	14	50
Marijuana only	31	9	25	52	8	29
Other drugs only/ Marijuana + other drugs ^a	6	2	2	4	6	21
	<u>327</u>	<u>100</u>	<u>48</u>	<u>100</u>	<u>28</u>	<u>100</u>

Note: Because of insufficient N's, chi-square analysis was computed on no drug use vs. any drug use.

^aOther drugs include heroin, L.S.D., barbiturates, amphetamines, cocaine, glue (for self only)

* p < .001

adolescents who perceive their family to use only marijuana, 52% use only marijuana as compared with 9% who do not perceive their family to use marijuana.

Lavenhar (1972) also found that adolescents' illicit drug use is related to sibling use. Among adolescents who report use of other drugs alone or in conjunction with marijuana among their immediate family, 22% report use of the drugs. In contrast, among adolescents who report use of only marijuana or nondrug use among their family, the proportion of adolescents who report use of illicit drugs alone or in conjunction with marijuana was only 4 and 2% respectively. It thus appears that intra-familial factors do have an important influence on the use or nonuse of marijuana alone, other drugs alone, or a combination of both.

Adolescent and Friend Drug Use

Adolescent drug users were also compared with respect to their friends' use of illicit drugs.

Insert Table 13 about here

Among adolescents who perceive their peers as using only

TABLE 13

PERCEIVED DRUG USE BY FRIENDS
AND SELF DRUG USE
(Marijuana Index)*

	<u>Friends</u>					
	No Drug Use		Marijuana Only		Other Drugs Only Marijuana + Other Drugs ^a	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>Self</u>						
No drug use	150	100	83	73	92	66
Marijuana only	0	0	31	27	32	23
Other drugs only/ Marijuana + Other drugs ^a	0	0	0	0	15	11
	<u>150</u>	<u>100</u>	<u>114</u>	<u>100</u>	<u>139</u>	<u>100</u>

Note: Because of insufficient N's, chi-square was computed on no drug use vs. any drug use.

^aOther drugs include heroin, L.S.D., barbiturates, amphetamines, cocaine, glue.

* p < .001

marijuana, 27% report marijuana usage compared with no self drug reportage among adolescents who report their friends are nonusers. Whereas none of the only marijuana users and non-users reported friends who used other illicit drugs, the percentage for the other drug only or in conjunction with marijuana group was 10%. The association between the adolescent's use of polydrugs and friends' use of polydrugs was .366, as assessed by tau beta. The data suggest that peer use of drugs including the particular type of drug is related to the adolescent's own drug use. Thus both peer involvement with drug using adolescents as well as use by immediate family are highly related to the adolescent's own drug use.

In partial summary, strong patterns of association between one's own drug behavior and that of friends confirm the significance of peer groups upon drug behavior. Nevertheless, substantial associations between the adolescent's own drug behavior and other segments of the role set (including parents and/or siblings as well as distant relatives) occur.

Adolescent Drug Use and Peer Use of Marijuana

The amount of involvement with drug using friends is directly related to the student's own drug use.

Insert Table 14 about here

TABLE 14

PERCEIVED NUMBER OF FRIENDS WHO USE
MARIJUANA AND SELF DRUG USE
(Marijuana Index)*

	<u>Number of Friends</u>							
	<u>None</u>		<u>Only a Few</u>		<u>Some</u>		<u>Most</u>	
	N	%	N	%	N	%	N	%
<u>Self</u>								
No drug	173	99	79	84	40	69	33	43
Marijuana only	0	0	12	13	17	29	35	45
Other drugs only/ marijuana + other drugs ^a	1	1	3	3	1	2	9	12
	<u>174</u>	<u>100</u>	<u>94</u>	<u>100</u>	<u>58</u>	<u>100</u>	<u>77</u>	<u>100</u>

Note: Because of insufficient N's, chi square was computed on no drug vs. any drug for self.

^aOther drugs include heroin, L.S.D., barbiturates, amphetamines, cocaine, or glue.

* p < .001

Of those adolescents who report that most of their friends have used marijuana, 57% are users. Of those who report that some of their friends have used it, 31% are users, and of those who say that only a few have used marijuana, 16% use it themselves. Strikingly, all adolescents who report no friends' use do not use it themselves. Nearly four times as many adolescents who perceive most of their friends as using other illicit drugs alone or in conjunction with marijuana report they themselves use these drugs compared to adolescents who report only a few of their friends use these drugs. These findings highlight the importance of differentiating the amount of involvement with drug using adolescents.

Relative Impact of Family and Peers

In the subsequent analysis attention will be focused on the relative impact of these different segments of the social space on teenage drug use.

Insert Table 15 about here

As shown in Table 15, the greatest amount of marijuana taking among adolescents occurs when the adolescent perceives that both his family and peers use marijuana. When adolescents perceive that their peers use marijuana but their parents do not, almost one-quarter report using it. It is significant that when adolescents perceive a conflict between parental and peer behavior almost three quarters of the adolescents report their behavior is similar to their parents rather than their peers with respect to marijuana use. Strikingly, no adolescents use marijuana when both their peers and family do not use it. Unfortunately, the number of adolescents who reported

TABLE 15

IMMEDIATE FAMILY, NUMBER OF PEERS,
AND ADOLESCENT MARIJUANA USE*

<u>Family Marijuana Use</u>	<u>Peer Marijuana Use</u>		
	<u>None</u>	<u>Few</u>	<u>Some - Most</u>
	<u>% of Adolescents Who Used Marijuana</u>		
Never Used	0 (168)	11 (79)	31 (84)
		21 (163)	
Used	0 (6)	33 (15)	71 (51)
		62 (66)	

Note: Numbers in parentheses are the bases for the respective percentages.

*p < .001

family use but no peer use of marijuana was too small to make comparisons meaningful.

Examination of Table 15 indicates that the largest percentage of adolescents who report marijuana usage occurs among those who report their immediate family and more than a few of their friends use it. It is interesting to note that the synergistic effect of peer and family is maintained when the number of friends is varied. However, it should be noted that the percentage of adolescents who take marijuana when their family and only a few peers use it is similar to the number of adolescents who take marijuana when some or most of their peers use it.

IV. DISCUSSION

I. Demographic variables and illicit drug taking by adolescents, peers, and immediate family

In the present study, social class was not found to be related to illicit drug use by self, peers, or immediate family. It may be that the manner in which the sample was selected contributed to these findings. These results are not consistent with those of Suchman (1968), Josephson (1974), Blum (1969), and Gosset (1971). It should also be noted, however, that the percentage of adolescents in this study with parents in the professions is indeed small and it has been found that children of parents who are professionals are more likely to be involved in marijuana use (Drug Abuse Council, 1974). In a recent study Kandel (1974) did report that family income of students has "relatively little effect on any type of drug use, especially when the confounding effect of other variables is controlled." Moreover, Lavenhar (1972) found that parental educational level was not related to use of illicit drugs by their offspring. In a recent study, Lukoff and Brook (1974) found that social class standing was positively related to contact with heroin users. However, with control on generational status, social class differences vanished.

Ethnicity was not found to be related to self use of drugs. These findings are not consistent with reports of other investigators (McLeod, 1972; Preston, 1971; Bloom, 1974; Johnston 1973; Lukoff & Brook, 1974). Ethnic differences also emerged among the adults in the community sample (see forthcoming paper).

However Johnson (1973) did not find differences between blacks and whites in marijuana use. It should be pointed out that the amount of other drug self use in this study is small indeed compared with use by peers.

As with social class, the manner in which the sample was selected in the present study may have contributed to these findings. In the present study an effort was made to select an equal number of families in each ethnic group who had contact with either drug or alcohol users. In this study, we have selected cases to obtain the required combination of variable values - that is, we have employed a purposive sampling technique (Camilleri, 1962). This was done so that inferences could be made about the postulated relationships between the conceptual variables (ie. parental socialization variables and adolescent drug use) in accord with the theory we are developing. In future analyses, we shall attempt to account for adolescent illicit drug use and involvement with drug users in each of the three ethnic groups (whites, blacks and British West Indians).

Generational status was found to be a salient antecedent of friend drug use. The number of friendships with adolescents who use other drugs alone or in conjunction with marijuana is substantially greater for natives than for migrants. Interestingly enough no migrant-native differences emerged for friend use of only marijuana. Similarly, on the polydrug index, differences between natives and migrants appeared only in the use of two or more drugs by friends. Since marijuana is not considered to be very deviant by adolescents, the native-migrant distinction may not be an important one. However, with drugs that are considered to be more deviant by adolescents, generational status becomes an important variable to consider. This interpretation receives

support from our previous results which indicate that contact with heroin users is substantially greater among natives than migrants (Lukoff and Brook, 1974). These findings have also been replicated in the new community study with adults (see forthcoming paper). It may be that migrant status, which reflects a more traditional orientation and where the focus is on obedience and self-control, insulates the adolescents from friendships with users of hard drugs alone or in conjunction with marijuana. In contrast, native status, which is characterized by flexibility and permissiveness, does not insulate the child from friendships with drug users. These findings provide little understanding of the processes which mediate between native-migrant status and friendships with illicit drug users. In our work next year our attention will be focused on the intervening steps between coming from a migrant or native origin and the use of illicit drugs. The findings in the present study do not provide information about individual differences that obtain between the association of generational status and friendship with illicit drug users. In our work next year, we will also carry out a deviant case analysis in order to understand why some native youngsters do not become involved with illicit drug users and correspondingly why some migrant youngsters do.

A persistent image of the drug user is one of an adolescent from an unhappy or broken home (Chein, 1965). The findings of the present study suggest that father absence is not related to adolescent drug use or involvement with drug taking peers. Future research on this issue will be conducted next year. An examination of the quality of the adolescent's relationship with his parents is essential in determining the impact of family structure on adolescent drug taking behavior. The findings of the present study indicate that the most frequent drug use occurs

among natives. The particular strains the adolescent is exposed to by virtue of his native status (being exposed to cultural attitudes which are more permissive as compared with migrants) or parental disparity or both increase the probability of his being a drug user. In contrast, those adolescents raised in a less permissive environment (as reflected in their migratory status) and not exposed to parental disparity are less likely to use drugs. These findings highlight the importance of considering both familial and generational structure in illicit use of drugs by adolescents. In our work next year, we shall attempt to provide additional empirical data in support of these findings. A direct examination of the mediational process (ie. the system of socialization within the family) between the traditional, semi-traditional and non-traditional environment and the adolescents' deviant behavior will be made. This should provide more analytic understanding of the relations between these two variables. In examining the socialization practices, consideration will be given to parental beliefs, attitudes and practices as well as models for behavior present within the family. Jessor (1968) has presented compelling evidence which indicates that socialization provides "...a bridge between society and the person in the time-extended process leading to deviance or conformity" (p. 401).

An important factor involved in selection of the sample was a consideration of age. There is evidence that adolescents form attitudes toward illicit drugs and become involved with drug using peers quite early. In the present study, while the amount of marijuana self use among 13 and 14 year olds was minimal, use by peers even at the 13 year old level was quite substantial

(about 40%). Moreover, our findings indicate that with increasing age, there was an increase in the adolescent's own use of marijuana. These findings are consistent with those of other investigators (National Marijuana Commission, 1973). In addition, the percent of adolescents using marijuana at each of the age levels parallels those reported by the Drug Abuse Council (1974). With increased age, there was also an increase in the number of adolescents reporting peers who used marijuana as well as other illicit drugs (barbiturates, amphetamines, cocaine, L.S.D., and heroin). Whereas 18% of the thirteen year olds had friends who used illicit drugs other than marijuana, the percentage of seventeen year olds was 42. Thus, adolescents are exposed to considerable drug use by their peers.

In the present study, sex was not related to own or peer drug use. One might speculate that the recent general trend toward sexual equality among youngsters and the acceptance of similar standards for males and females has already had a significant impact on the drug scene in Bedford Stuyvesant, Greenpoint, and Crown Heights section of Brooklyn. While earlier studies of drug use among students have reported drug use to be more widespread among males (Blum et al., 1969; Gosset et al. 1971; Pollock, 1969; and Hinckley, 1968), a more recent study, conducted by Lavenhar (1972) has reported that sex is independent of drug use.

II. Impact of Family and Peers on Adolescent Drug Use

The recent literature provides pervasive evidence that differing family structures, conditions, and processes have an impact on adolescent illicit drug use. In the present study,

reported drug use by immediate family was related to the adolescent's drug use.

Among adolescents who report family use of illicit drugs, a much higher percent of adolescents use illicit drugs than among adolescents who report their families are nonusers. These findings confirm those of Smart and Fejer (1971), Lavenhar (1972), Lawrence and Vellerman (1970) and Kandel (1974), who reported that parental use of psychoactive drugs was related to the use of psychoactive and illicit hallucinogenics by their adolescent children. Not only in the area of drugs, but in other areas as well, there is overwhelming evidence of congruity between parent and child. For example congruity has been found between the social class of those whom adolescents date and their parents' social class, between educational and occupational aspirations of adolescents and their parents, between political party preferences and voting behavior of adolescents and their parents, and between the racial views of adolescents and their parents.

The analyses of immediate family drug use by the adolescent's own drug use were based on the student's perception of drug use by their family rather than the reports of the family members themselves. It may be that the positive association between reported drug use of self and immediate family reflects a type of response set. In our work next year, we will examine the relationship between the mother's report of family drug use with the adolescent's report of illicit drug use by his family.

Based on the data of the present study a causal connection between the adolescent's drug use and that of his immediate family cannot be made. Nevertheless, there appears to be some

data which suggest that the adolescent is modeling his behavior after his family (parents as well as siblings).

The analysis will be organized, then, in an effort to develop a more coherent model of drug-taking behavior than is described in the initial grant proposal. Briefly, the model identifies disjunctive social processes that contribute to increased problems in socialization. These include migration, where youngsters are torn between two cultures, the parental and, for those not already integrated into the culture of their parents (those who are native-born, or who arrive at an early age), the local community. This decreased parental legitimacy, we hypothesize, will be reflected in greater discrepancies between parent and child and a consequent increased susceptibility to peer group influences. Therefore, the analyses next year will also be devoted to measuring aspects of the family socialization process which increase the likelihood of the adolescent's using illicit drugs. Consideration will be given to parental practices, attitudes, beliefs, and expectations as well as the models for behavior present within the family.

The literature on peer influence on the adolescent's behavior portrays youth as a culture maintaining only "threads of connection with adult society" (Coleman, 1961; Schwartz and Merton, 1967) or as an age cohort that becomes increasingly peer oriented with age (Coleman, 1961; Musgrove, 1965; Bowerman and Kinch, 1959; Rosen, 1965).

In the present study adolescent use of illicit drugs was

found to be positively associated with illicit drug use by his peers. These findings confirm those of Lavenhar (1972) who using step-wise regression procedures found that "...nonmedical use by many close friends was the most significant factor contributing to the explanation of each drug use criterion." (p. 51) These findings are also consistent with those of Johnson (1973); Tec (1972); McKillip et al. (1973); and Kandel (1974), who obtained independent reports from the student's best friends. Moreover, in the present study as the number of peers using drugs increased, there was an increased likelihood of the adolescent using drugs. The data of the present study suggest that peer group pressure or involvement are important factors in the adolescent's use of illicit drugs.

The findings of the present study are consistent with Sutherland, who maintains that differential exposure to pro-delinquent individuals accounts for the learning of delinquent behavior (DeFleur and Quinney, 1966). The presence of illicit drug users in one's environment provides opportunities for learning attitudes and rationalizations supportive of illicit drug use with the support of the group.

While there is an increased probability of the adolescent's using drugs if his peers do, there are still a number of youths who are nonusers even though they know varying numbers of peers who use illicit drugs. It is possible that contact with illicit drug users might have little effect on youths who are neither committed to peers nor dependent upon them for social approval. Moreover, adolescents with certain family backgrounds may be less responsive to peer pressure. These themes will be explored in

future analyses.

The relative influence of family and peer illicit drug use was examined in the present study. The highest amount of illicit drug use occurred among adolescents who reported that both their family and friends used illicit drugs. The number of illicit drug users in this group was considerably higher than among those who reported that only their peers used drugs. These findings are consistent with those of Kandel, who reported that "...there is a synergistic influence of parents and peers: The highest rates of adolescent illegal drug use appear in situations in which members of both generations use drugs" (Kandel, 1974).

An analysis of the family versus peer impact on the adolescent's drug taking behavior was done varying the number of peers who reported drug taking behavior. The synergistic effect of peer and immediate family was maintained whether the adolescent reported just a few of his peers took drugs or more than a few of his peers took drugs. However, the percentage of adolescents who used drugs when some or most of their peers only took drugs was similar to that of adolescents who reported just a few of their peers but also their family used drugs. Unfortunately the number of adolescents reporting familial use of drugs was too small to make meaningful comparisons. Research next year will be directed to examining the peer and family impact of drug taking when commitment to both peers and family vary in strength.

V. SUMMARY OF THE FINDINGS

1. The use of a particular drug was related to the use of every other drug. Drug use was not consistently related to reported alcohol usage.

In general, whenever use was acknowledged for any single drug by the adolescent or significant others (immediate family, peers, other relatives), there is a vastly enhanced probability of some other drug being used by the adolescent as well as significant others in his environment.

2. Social class standing of the parent was not related to the adolescents' own drug taking behavior or to that of his immediate family, or peers.

3. Sex of the respondent was not related to his own drug taking behavior or that of his immediate family, or peers.

4. Ethnicity was significantly related to the Marijuana Index and Polydrug Index for immediate family and peers.

a) The West Indian adolescents reported less drug use by peers than the blacks or whites. The blacks reported the most use of only marijuana and the whites reported the most use of other drugs alone or in conjunction with marijuana by peers.

b) The blacks reported the most drug use by immediate family and the West Indians and whites the least. However, with control on generation status, ethnic differences in family use vanished.

5. Generational status was significantly related to peer drug use on the Marijuana and Polydrug Indices.

a) Migrants reported less peer drug use than 1st, 2nd or 3rd generation natives. Generational differences in only marijuana did not appear. However the natives (1st, 2nd or 3rd

generation) reported more use of other drugs alone or in conjunction with marijuana.

b) The above findings were maintained even with control on ethnicity. However with control on generational status ethnic differences in friend use of drugs emerged only for the migrants.

c) Native-migrant status was related to contact with heroin users. These findings confirm our previous work (Lukoff and Brook, 1974).

6. Family composition was not related to the adolescents' own drug use.

7. Highly significant relations obtained between the adolescent's environment (Traditional; Semi-Traditional; and Non-Traditional) and his own use of illicit drugs.

Adolescents from a traditional environment reported the least amount of drug taking behavior. Adolescents from a semi-traditional environment occupied an intermediate position, and adolescents from a non-traditional environment reported the most drug taking behavior.

8. Age was significantly related to drug use on the Marijuana Index, Polydrug Index and Heroin Index.

a) With increased age there was an increase in adolescent drug use.

b) With increased age there was an increase in peer use of only marijuana as well as other drugs alone or in conjunction with marijuana.

c) With increased age there was an increase in contact with heroin users.

9. Marijuana users more often reported polydrug use by self,

peers and immediate family than did non-users.

10. Adolescent drug use was significantly related to drug use by immediate family.

a) Adolescents who perceived their family to be only marijuana users more often reported only marijuana use than nonusers.

b) Adolescents who perceived their family to be users of other drugs (amphetamines, barbiturates, L.S.D., cocaine, glue, heroin) alone or in conjunction with marijuana more often reported use of these drugs than adolescents who reported their families were nonusers or users of marijuana only.

11. Adolescent drug use was significantly related to drug use by peers.

a) Adolescents who reported their peers used only marijuana more often reported only marijuana usage than nonusers.

b) Adolescents who reported their peers used other drugs alone or in conjunction with marijuana more often reported use of these drugs than adolescents who reported their peers were either nonusers or marijuana only users.

c) The number of adolescents who reported peer use of drugs was significantly related to their own drug use. Among adolescents who reported no peer use only 1% reported drug use; among adolescents who reported only a few, some or most of their peers used drugs, the percentage of adolescents using drugs was 13, 29, and 45 respectively.

12. Comparisons were made of adolescents who reported both their family and peers used marijuana with those who reported only their family or peers used marijuana with those who reported neither their family or peers used it. Adolescents who reported

both their family and peers used marijuana more often reported they used it than the other groups. Adolescents who reported only peer use more often reported marijuana use than either adolescents who reported only family use or nonuse by both family and peers.

APPENDIX I

national opinion research center

UNIVERSITY OF CHICAGO

New York Office
817 Broadway
New York, New York 10003
(212) 677-4740

Pearl Zinner
Director of New York Operations

Dear Parent:

We are conducting a study about people's opinions and experiences in everyday living. Part of the study includes talking with mothers and some teenagers between the ages of 13 and 17. In this way we hope to find ways of helping all parents and children in handling problems with which everyone is concerned.

We know from the people we've talked to already that the interview is enjoyable and interesting and feel sure you will enjoy it, too. We would like to interview you and possibly your children. Of course, all replies will be treated confidentially. There will be no names connected with any answers to any questions.

For your cooperation, we would like to give you \$5.00. If interviewed, your child will also receive \$5.00.

Thank you for your help. If you have any questions about the study, please feel free to call Rose Burke at our office. The telephone number is 677-4740.

Sincerely yours,

James A. Davis
James A. Davis
Director

JAD/cb

DIRECTOR: James A. Davis • Main Office: 6030 So Ellis Avenue • Chicago, Illinois 60637 • Telephone 684-5600 • Area Code 312

TRUSTEES: D Gale Johnson, President • Robert McC. Adams • Harold E. Bell • Benjamin Bloom • Marvin Chandler
Walter D. Fackler • Harry Kalven, Jr • Nathan Keyfitz • William H. Kreskal • William H. Sewell • Don R. Swanson

APPENDIX II

TABLE 1

ETHNICITY AND POLYDRUG USE
BY SIGNIFICANT OTHERS

	Ethnicity					
	Black		White		British West Indians	
	N	%	N	%	N	%
<u>Adolescent Self Report*</u>						
None	110	78	98	79	117	85
1 drug	29	21	17	14	20	14
2 or more drugs	2	1	9	7	1	1
	<u>141</u>	<u>100</u>	<u>124</u>	<u>100</u>	<u>138</u>	<u>100</u>
<u>Friends***</u>						
None	45	32	37	30	68	49
1 drug	54	38	38	31	41	30
2 or more drugs	42	30	49	39	29	21
	<u>141</u>	<u>100</u>	<u>124</u>	<u>100</u>	<u>138</u>	<u>100</u>
<u>Immediate Relatives****</u>						
None	101	72	107	86	119	86
1 drug	29	21	7	6	16	12
2 or more drugs	11	8	10	8	3	2
	<u>141</u>	<u>100</u>	<u>124</u>	<u>100</u>	<u>138</u>	<u>100</u>
<u>Other Relatives**</u>						
None	93	66	92	74	107	78
1 drug	31	22	18	14	26	18
2 or more drugs	17	12	14	11	5	4
	<u>141</u>	<u>100</u>	<u>124</u>	<u>99</u>	<u>138</u>	<u>100</u>

*X² not computed because of low expected values

**p < .05

***p < .01

****p < .001

APPENDIX II
TABLE 2

GENERATION AND POLYDRUG USE BY SIGNIFICANT OTHERS

	<u>M</u>		<u>1st</u>		<u>2nd</u>		<u>3rd</u>	
	N	%	N	%	N	%	N	%
<u>Adolescent Self Report*</u>								
None	112	85	108	78	72	77	33	83
1 drug	19	14	26	19	14	15	7	17
2 or more drugs	1	1	4	3	7	2	0	0
	<u>132</u>	<u>100</u>	<u>138</u>	<u>100</u>	<u>93</u>	<u>99</u>	<u>40</u>	<u>100</u>
<u>Friends***</u>								
None	63	48	47	34	28	30	12	30
1 drug	44	33	47	34	26	28	16	40
2 or more drugs	25	19	44	32	39	42	12	30
	<u>132</u>	<u>100</u>	<u>138</u>	<u>100</u>	<u>93</u>	<u>100</u>	<u>40</u>	<u>100</u>
<u>Immediate Relative</u>								
None	112	85	104	75	75	81	36	90
1 drug	14	11	27	20	10	11	1	2
2 or more drugs	6	4	7	5	8	9	3	8
	<u>132</u>	<u>100</u>	<u>138</u>	<u>100</u>	<u>93</u>	<u>101</u>	<u>40</u>	<u>100</u>
<u>Other Relatives**</u>								
None	99	75	94	68	68	73	31	77
1 drug	30	23	25	18	16	17	4	10
2 or more drugs	3	2	19	14	9	10	5	13
	<u>132</u>	<u>100</u>	<u>138</u>	<u>100</u>	<u>93</u>	<u>100</u>	<u>40</u>	<u>100</u>

*X² not computed because of low expected values

**p < .05

***p < .01

APPENDIX II

TABLE 3

ETHNIC GROUP, GENERATIONAL STATUS AND
POLYDRUG USE BY FRIENDS

Polydrug Index	White* (N=122) ^a						Ethnic Group							
	1st		2nd		3rd		Black** (N=141)		British west Indians** (N=138)					
	N	%	N	%	N	%	M	N	%	N	%	M	N	%
<u>Friends</u>														
None	4	36	23	30	10	29	6	26	39	33	57	53	11	35
1 drug	4	36	18	24	15	43	13	56	41	35	30	28	11	35
2 or more drugs	3	27	35	46	10	28	4	18	38	32	20	19	9	29
	<u>3</u>	<u>27</u>	<u>35</u>	<u>46</u>	<u>10</u>	<u>28</u>	<u>4</u>	<u>18</u>	<u>38</u>	<u>32</u>	<u>20</u>	<u>19</u>	<u>9</u>	<u>29</u>
	11	99	76	100	35	100	23	100	118	100	107	100	31	99

^a χ^2 white migrants omitted from analysis.

* χ^2 not computed because of low expected values.

** For Blacks and British West Indians: combined $\chi^2 = 7.31$, $df = 4$, not significant.

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