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ABSTRACT

The current prevalence of drug use among American high school seniors, and trends in drug use since 1975, were investigated as part of the program entitled "Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth," funded by the National Institute on Drug Abuse. The basic research design involved data collection from high school seniors in approximately 125 public and private high schools across the United States, beginning with the class of 1975. Subjects were asked to respond to questionnaire items about current drug use, use at earlier grade levels, degree and duration of "highs," attitudes and beliefs, and their social milieu. Results indicated that: (1) 65% had used illegal drugs at some point in their lives with a substantial proportion having used only marihuana; (2) cigarettes were used daily by more of the students than any other drug; (3) more students used marihuana daily as compared to alcohol; and (4) higher proportions of males than females were involved in drug use, especially heavy drug use. (Author/HLM)

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1979 HIGHLIGHTS

DRUGS
AND
THE NATION'S
HIGH SCHOOL STUDENTS

FIVE YEAR NATIONAL TRENDS

by

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INTRODUCTION

This report presents findings from a national research and reporting program being conducted by The University of Michigan's Institute for Social Research. That program, entitled Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth, is funded through a research grant from the National Institute on Drug Abuse.

The present document is the third in a series reporting the drug use and related attitudes of high school seniors in the United States. This report covers the high school classes of 1975 through 1979, and supercedes the previous report—Highlights from Drugs and the Class of '78. The reader familiar with the earlier "highlights" report will, of course, find much material that is largely unchanged, particularly in this introductory section. On the other hand, the present report contains a number of new features in addition to the material from the class of 1979. The present document does not, however, supercede the considerably longer 1978 volume on which the last Highlights were based: Drugs and the Class of '78: Behaviors, Attitudes, and Recent National Trends. That volume, which will be updated again next year, contains considerably more detail in both findings and documentation than do the Highlights. For example, a full chapter is devoted to each of the eleven classes of drugs under investigation; and appendices on validity, sampling error estimation, and instrumentation are also included.*

Two of the major topics treated here are the current prevalence of drug use among American high school seniors, and trends in use since 1975. Also reported are data on grade of first use, intensity of drug use, attitudes and beliefs among seniors concerning various types of drug use, and their perceptions of certain relevant aspects of the social environment.

The eleven separate classes of drugs distinguished are marijuana (including hashish), inhalants, hallucinogens, cocaine, heroin, natural and synthetic opiates other than heroin, stimulants, sedatives, tranquilizers,

*Those interested in obtaining a copy of Drugs and the Class of '78 free of charge may write to the National Clearinghouse for Drug Abuse Information, National Institute on Drug Abuse, 5600 Fishers Lane, Rockville, Maryland 20857.

alcohol, and cigarettes. (This particular organization of drug use classes was chosen to heighten comparability with a parallel publication based on a national household survey on drug abuse.) Two additional classes of drugs are being reported here for the first time: PCP and the amyl and butyl nitrites. Although these constitute subclasses of two of the drug categories under continuing investigation—hallucinogens and inhalants, respectively—they have been singled out for separate measurement this year because of increasing concern over their rising popularity and possibly deleterious effects. Because this is the first year they are included, trend data are not yet available for them.

Except for the findings on alcohol and cigarettes, practically all of the information reported here deals with illicit drug use.* Respondents were asked to exclude any occasions on which they had used any of the psychotherapeutic drugs under medical supervision. (Some data on the medically supervised use of such drugs are contained in the full 1978 volume.)

We have chosen to focus considerable attention on drug use at the higher frequency levels rather than simply reporting proportions who have ever used various drugs. This is done to help differentiate levels of seriousness, or extent, of drug involvement. While we may yet lack any public consensus of what levels of use constitute "abuse," there is surely a consensus that heavier levels of use are more likely to have detrimental effects for the user and society than are lighter levels. We have also introduced indirect measures of dosage per occasion, by asking respondents the duration and intensity of the highs they usually experience with each type of drug.

Purposes and Rationale for this Research

The movement toward social reporting continues to gain momentum in this country. Perhaps no area is more clearly appropriate for the application of systematic research and reporting than the drug field, given its rapid rate of change, its importance for the well-being of the nation, and the amount of legislative and administrative intervention addressed to it.

Young people are often at the leading edge of social change. This has been particularly true in the case of drug use. The surge in illicit drug use during the last decade has proven to be primarily a youth phenomenon, with onset of use most likely to occur during adolescence. From one year to the next particular drugs rise or fall in popularity, and related problems occur for youth, for their families, for governmental agencies, and for society as a whole.

One of the major purposes of the Monitoring the Future series is to develop an accurate picture of the current situation and of current

*Actually, purchase and use of the amyl and butyl nitrites remains legal and unregulated at the present time.

trends. A reasonably accurate assessment of the basic size and contours of the problem of illicit drug use among young Americans is an important starting place for rational public debate and policymaking. In the absence of reliable prevalence data, substantial misconceptions can develop and resources can be misallocated. In the absence of reliable data on trends, early detection and localization of emerging problems are more difficult, and assessments of the impact of major historical and policy-induced events are much more conjectural.

The Monitoring the Future study has a number of purposes other than prevalence and trend estimation—purposes which are not addressed in this volume. Among them are: gaining a better understanding of the lifestyles and value orientations associated with various patterns of drug use and monitoring how those orientations are shifting over time; determining the immediate and more general aspects of the social environment which are associated with drug use and abuse; determining how drug use is affected by major transitions in social environment (such as entry into military service, civilian employment, college, unemployment) or in social roles (marriage, parenthood); distinguishing age effects from cohort and period effects in determining drug use; determining the effects of social legislation on all types of drug use; and determining the changing connotations of drug use and changing patterns of multiple drug use among youth. Currently nearing completion is an investigation of the effects of marijuana decriminalization on drug use and related factors in this age group. Readers interested in publications dealing with any of these other areas should write the authors at the Institute for Social Research, Rm. 2030, Box 1248, The University of Michigan, Ann Arbor, Michigan, 48106.

Research Design and Procedures

The basic research design involves data collections from high school seniors during the spring of each year, beginning with the class of 1975. Each data collection takes place in approximately 125 to 130 public and private high schools selected to provide an accurate cross section of high school seniors throughout the United States.

Reasons for Focusing on High School Seniors. There are several reasons for choosing the senior year of high school as an optimal point for monitoring the drug use and related attitudes of youth. First, the completion of high school represents the end of an important developmental stage in this society, since it demarcates both the end of universal public education and, for many, the end of living in the parental home. Therefore, it is a logical point at which to take stock of the cumulated influences of these two environments on American youth. Further, the completion of high school represents the jumping-off point from which young people diverge into widely differing social environments and experiences. Finally, there are some important practical advantages to building a system of data collections around samples of high school seniors. The last year of high school constitutes the final

point at which a reasonably good national sample of an age-specific cohort can be drawn and studied economically. The need for systematically repeated, large-scale samples from which to make reliable estimates of change requires that considerable stress be laid on efficiency and feasibility; the present design meets those requirements.

One limitation in the design is that it does not include in the target population those young men and women who drop out of high school before graduation—between 15 and 20 percent of each age cohort. The omission of high school dropouts does introduce biases in the estimation of certain characteristics of the entire age group; however, for most purposes, the small proportion of dropouts sets outer limits on the bias. Further, since the bias from missing dropouts should remain just about constant from year to year, their omission should introduce little or no bias into the various types of change being estimated for the majority of the population. In fact, we suspect that the changes observed over time for those who are high school graduates are likely to parallel the changes for dropouts in most instances.

Sampling Procedures. The procedure for securing a nationwide sample of high school seniors is a multi-stage one. Stage 1 is the selection of particular geographic areas, Stage 2 is the selection of one or more high schools in each area, and Stage 3 is the selection of seniors within each high school.

This three-stage sampling procedure yielded the following numbers of participating schools and students:

| | Class of <u>1975</u> | Class of <u>1976</u> | Class of <u>1977</u> | Class of <u>1978</u> | Class of <u>1979</u> |
|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Number of public schools | 111 | 108 | 108 | 111 | 111 |
| Number of private schools | 14 | 15 | 16 | 20 | 20 |
| Total number of schools | 125 | 123 | 124 | 131 | 131 |
| Total number of students | 15,791 | 16,678 | 18,436 | 18,924 | 16,662 |
| Student response rate | 78% | 77% | 79% | 83% | 82% |

Questionnaire Administration. About ten days before the administration students are given flyers explaining the study. The actual questionnaire administrations are conducted by the local Institute for Social Research representatives and their assistants, following standardized procedures detailed in a project instruction manual. The questionnaires are administered in classrooms during a normal class period whenever possible; however, circumstances in some schools require the use of larger group administrations.

Questionnaire Format. Because many questions are needed to cover all of the topic areas in the study, much of the questionnaire content is divided into five different questionnaire forms (which are distributed to participants in an ordered sequence that insures five virtually identical subsamples). About one-third of each questionnaire form consists of key or "core" variables which are common to all forms. All demographic variables, and nearly all of the drug use variables included in this report, are included in this "core" set of measures.

Representativeness and Validity

School Participation. Schools are invited to participate in the study for a two-year period, and with only very few exceptions, each school in the original sample, after participating for one year of the study, has agreed to participate for a second year. Depending on the year, from 66% to 80% of the schools initially invited to participate, agree to do so; for each school refusal, a similar school (in terms of size, geographic area, urbanicity, etc.) is recruited as a replacement. The selection of replacement schools almost entirely removes problems of bias in region, urbanicity, and the like that might result from certain schools refusing to participate. Other potential biases are more subtle, however. If, for example, it turned out that most schools with "drug problems" refused to participate, that would seriously bias the sample. And if any other single factor were dominant in most refusals, that also might suggest a source of serious bias. In fact, however, the reasons for a school refusing to participate are varied and are often a function of happenstance events; only a small proportion specifically object to the drug content of the survey. Thus we feel fairly confident that school refusals have not seriously biased the surveys.

In fact, we made use of the "matched half sample" feature of the design to check on possible biases in the year-to-year trend estimates. Specifically, four separate sets of one-year trends were computed using first those schools which participated in both 1975 and 1976, second those which participated in both 1976 and 1977, third those which participated in both 1977 and 1978, and fourth those which participated in both 1978 and 1979. Thus the particular schools which participated were held entirely constant for each one-year interval. When the resulting trend data (examined separately for each class of drugs) were compared with trends based on the total sample of schools, the results were highly similar, thus indicating that the trend estimates are little affected by turnover or shifting refusal rates in the school samples.

Student Participation. Completed questionnaires are obtained from 77% to 83% of all sampled students in participating schools each year. The single most important reason that students are missed is absence from class at the time of data collection; in most cases it is not workable to schedule a special follow-up data collection for absent students. Students with fairly high rates of absenteeism also report above-average rates of drug use; therefore, there is some degree of bias

introduced into the prevalence estimates by our missing the absentees. That bias could be largely corrected through the use of special weighting; however, we decided not to do so because the bias in overall drug use estimates was determined to be quite small, and because the necessary weighting procedures would have introduced undesirable complications (Appendix A of the 1978 main report provides a discussion of this point). Of course, some students are not absent from class, but simply refuse when asked to complete a questionnaire. However, the proportion of explicit refusals only amounts to about 1 percent of the target sample.

Accuracy of the Sample. For purposes of this introduction, it is sufficient to note that drug use estimates based on the total sample for 1979 have confidence intervals that average about $\pm 1\%$ (as shown in Table 1, confidence intervals vary from $+2.0\%$ to smaller than $+0.4\%$, depending on the drug). This means that had we been able to invite all schools and all seniors in the 48 coterminous states to participate, the results from such a massive survey should be within about one percentage point of our present findings for most drugs at least 95 times out of 100. We consider this to be a high level of accuracy, and one that permits the detection of fairly small changes from one year to the next.

Consistency and the Measurement of Trends. One other point is worth noting in a discussion of the validity of our findings. The Monitoring the Future project is, by intention, a study designed to be sensitive to changes from one time to another. Accordingly, the measures and procedures have been standardized and applied consistently across each data collection. To the extent that any biases remain because of limits in school and/or student participation, and to the extent that there are distortions (lack of validity) in the responses of some students, it seems very likely, that such problems will exist in much the same way from one year to the next. In other words, biases in the survey estimates will tend to be consistent from one year to another, which means that our measurement of trends should be affected very little by any such biases.

PREVALENCE OF DRUG USE

This section summarizes the levels of drug use reported by the class of 1979. Data are included for lifetime use, use during the past year, use during the past month, and daily use. There is also a comparison of key subgroups in the population (based on sex, college plans, region of the country, and population density or urbanicity).

Prevalence of Drug Use in 1979: All Seniors

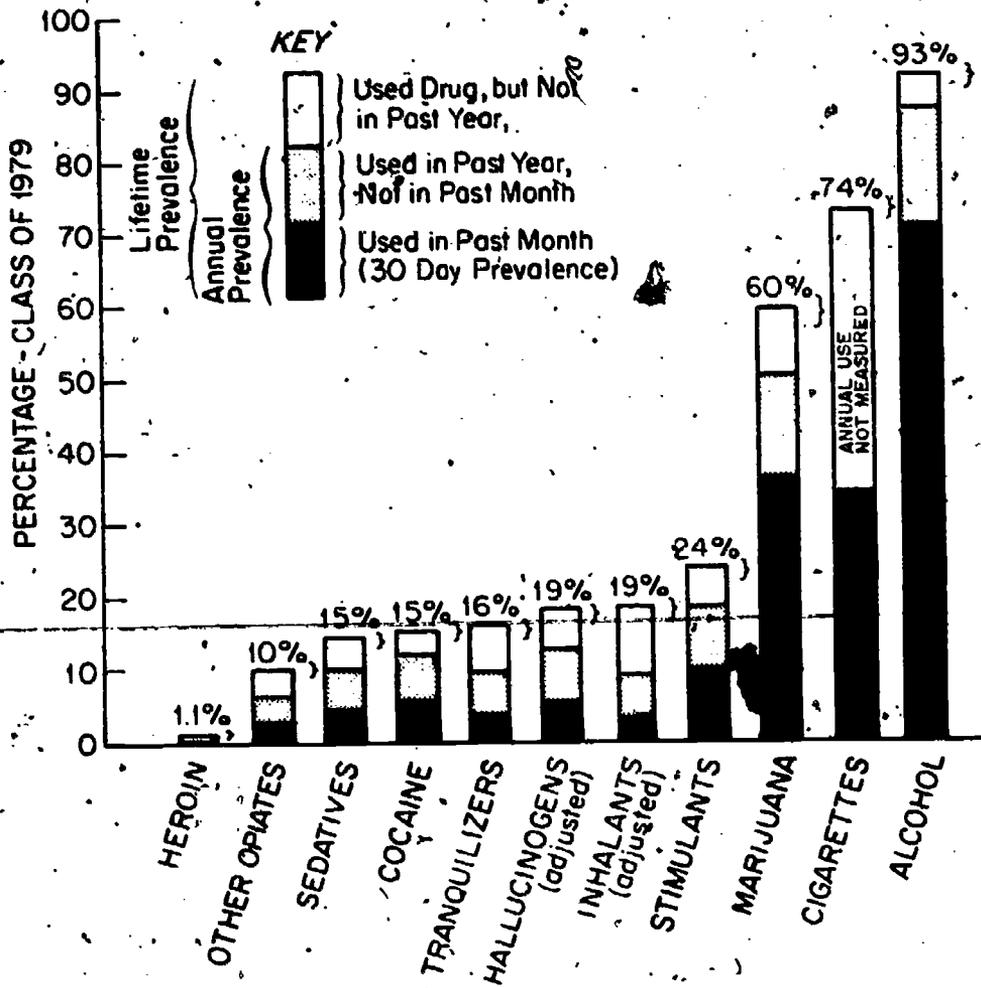
Lifetime, Monthly, and Annual Prevalence

- Between six and seven in every ten seniors (65%) report illicit drug use at some time in their lives. However, a substantial proportion of them have used only marijuana (28% of the sample or 43% of all illicit users).
- Over one-third of the seniors (37%) report using an illicit drug other than marijuana at some time.*
- Figure A gives a ranking of the various drug classes on the basis of their lifetime prevalence figures.
- Marijuana is by far the most widely used illicit drug with 60% reporting some use in their lifetime, 51% reporting some use in the past year, and 37% use in the past month.
- The most widely used class of other illicit drugs is stimulants (24% lifetime prevalence).**

*Use of "other illicit drugs" includes any use of hallucinogens, cocaine, or heroin or any use of other opiates, stimulants, sedatives, or tranquilizers which is not under a doctor's orders.

**Only use which was not medically supervised is included in the figures cited in this chapter.

FIGURE A
Prevalence and Recency of Use
Eleven Types of Drugs, Class of 1979



NOTE: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

TABLE 1

Prevalence (Percent Ever Used) of Thirteen Types of Drugs: Observed Estimates and 95% Confidence Limits (1979)

(N = 15500)

| | <u>Lower limit</u> | <u>Observed estimate</u> | <u>Upper limit</u> |
|---|--------------------|--------------------------|--------------------|
| Marijuana | 58.4 | 60.4 | 62.4 |
| Inhalants <i>Adjusted</i> ^a | 11.6 17.6 | 12.7 18.7 | 13.8 19.8 |
| Hallucinogens <i>Adjusted</i> ^b | 12.9 17.4 | 14.1 18.6 | 15.4 19.9 |
| Cocaine | 14.2 | 15.4 | 16.7 |
| Heroin | 0.9 | 1.1 | 1.4 |
| Other opiates ^c | 9.3 | 10.1 | 11.0 |
| Stimulants ^c | 22.8 | 24.2 | 25.7 |
| Sedatives ^c | 13.4 | 14.6 | 15.9 |
| Tranquillizers ^c | 15.1 | 16.3 | 17.6 |
| Alcohol | 91.8 | 93.0 | 94.0 |
| Cigarettes | 72.3 | 74.0 | 75.6 |
| Amyl and butyl nitrites ^d | 9.7 | 11.1 | 12.7 |
| PCP ^d | 11.4 | 12.8 | 14.4 |

^aAdjusted for underreporting of amyl and butyl nitrites. See text for details.

^bAdjusted for underreporting of PCP. See text for details.

^cOnly drug use which was not under a doctor's orders is included here.

^dData based on a single questionnaire form. N is one-fifth of N indicated.

- Next come inhalants (19%) and hallucinogens (19%). Our prevalence estimates for both of these drug classes have been adjusted upward this year, based on some special analyses, with the result that they now rank higher in the list of drugs.
- Inhalant estimates were adjusted upward because we found that not all users of a subclass of inhalants—amyl and butyl nitrites (described below)—were reporting themselves as inhalant users. Because we included questions specifically about nitrite use for the first time in one of the 1979 questionnaire forms, we were able to discover this problem and make estimates of the degree to which inhalant use is being underreported in the overall estimates. As a result, the lifetime prevalence estimate for inhalants has been increased by nearly half, annual prevalence by seven-tenths, and monthly prevalence by four-fifths. (The effect is greater for the more recent time intervals because use of the other common inhalants, such as glue and aerosol, is more likely to have been discontinued prior to senior year.)
- Hallucinogen use, we discover, has been similarly underestimated because some users of the hallucinogenic drug PCP do not report themselves as users of hallucinogens—even though PCP is explicitly included as an example in the question on hallucinogens. A special set of questions about PCP use, which provided other street names for it (such as angel dust), was included in one form this year. It allowed us to discover the underreporting of overall hallucinogen use and adjust the prevalence estimates accordingly. The lifetime prevalence estimate for hallucinogens has been increased by nearly a third, and the annual and monthly prevalence figures by roughly similar amounts.*
- After hallucinogens, the next most widely used class of drugs is tranquilizers, used by about one in every seven students (16%).
- About one in every six or seven students has used cocaine (15%), and a similar proportion used sedatives (15%). Opiates other than heroin have been used by one in ten (10%).

*Because the data to adjust inhalant and hallucinogen use are available from only a single questionnaire form in a single year, the original uncorrected variables will be used in most analyses. We believe relational analyses will be least affected by these underestimates, and that the most serious impact is on prevalence estimates, which from now on will be adjusted appropriately.

TABLE 2.

Prevalence (Percent Ever Used) and Recency of Use of
Thirteen Types of Drugs (1979)

(N = 15500)

| | Ever used | Past month | Past year, not past month | Not past year | Never used |
|--------------------------------------|--------------|---------------|---------------------------------------|---------------------|---------------|
| Marijuana | 60.4 | 36.5 | 14.3 | 9.6 | 39.6 |
| Inhalants ^a | 12.7 | 1.7 | 3.7 | 7.3 | 87.3 |
| <i>Adjusted</i> | 18.7 | 3.1 | 6.1 | 9.5 | 81.5 |
| Hallucinogens ^b | 14.1 | 4.0 | 5.9 | 4.2 | 85.9 |
| <i>Adjusted</i> | 18.6 | 5.5 | 7.3 | 5.8 | 81.4 |
| Cocaine | 15.4 | 5.7 | 6.3 | 3.4 | 84.6 |
| Heroin | 1.1 | 0.2 | 0.3 | 0.6 | 98.9 |
| Other opiates ^c | 10.1 | 2.4 | 3.8 | 3.9 | 89.9 |
| Stimulants ^c | 24.2 | 9.9 | 8.4 | 5.9 | 75.8 |
| Sedatives ^c | 14.6 | 4.4 | 5.5 | 4.7 | 85.4 |
| Tranquillizers ^c | 16.3 | 3.7 | 5.9 | 6.7 | 83.7 |
| Alcohol | 93.0 | 71.8 | 16.3 | 4.9 | 7.0 |
| Cigarettes | 74.0 | 34.4 | (39.6) ^d | | 26.0 |
| Amyl and butyl nitrites ^e | 11.1 | 2.4 | 4.1 | 4.6 | 88.9 |
| PCP ^e | 12.8 | 2.4 | 4.6 | 5.8 | 87.2 |

^aAdjusted for underreporting of amyl and butyl nitrites (see text).

^bAdjusted for underreporting of PCP (see text).

^cOnly drug use which was not under a doctor's orders is included here.

^dThe combined total for the two columns is shown because the question asked did not discriminate between the two answer categories.

^eData based on a single questionnaire form. N is one-fifth of N indicated.

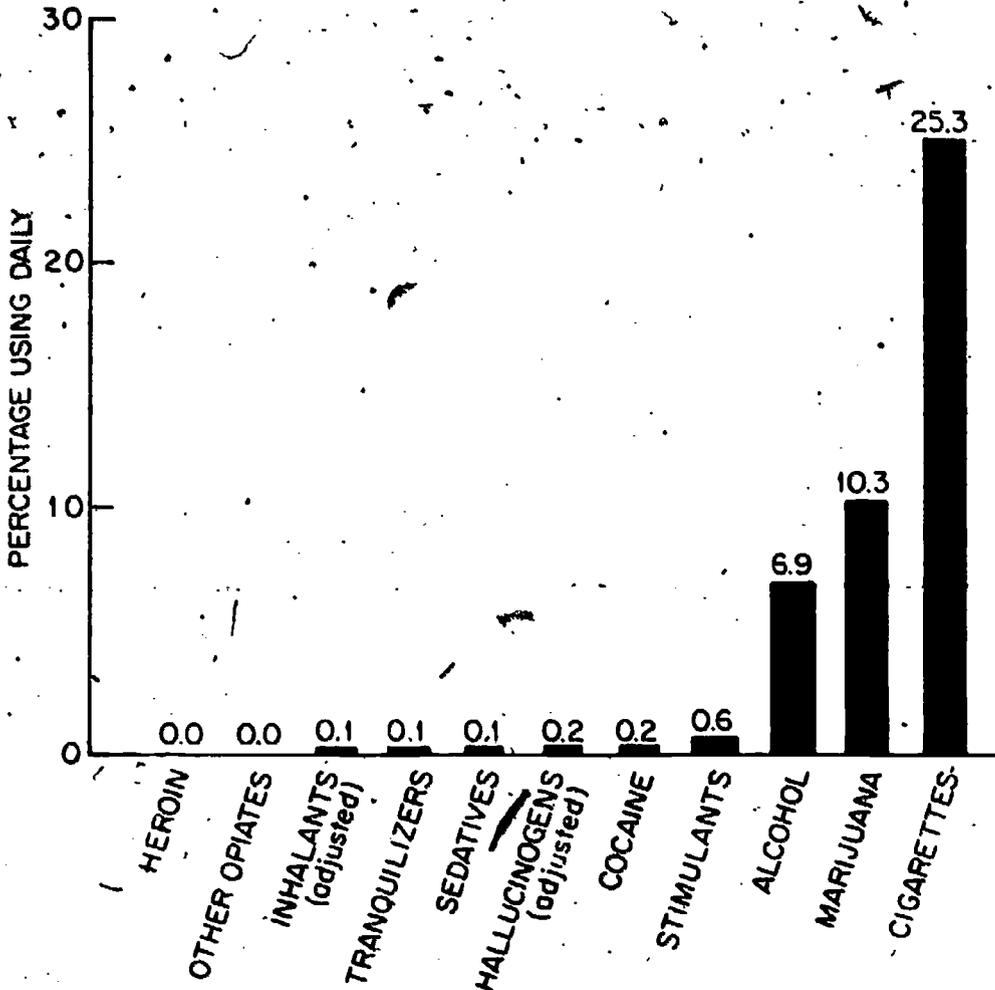
- Only 1.1% of the sample admitted to ever using any heroin, the most infrequently used drug. But given the highly illicit nature of this drug, it seems the most likely to be underreported.
 - Prevalence of the specific hallucinogenic drug PCP was found to be higher than expected at 13%, or one in every eight students.
 - Similarly, the specific class of inhalants known as amyl and butyl nitrites, which are sold legally and go by the street names of "poppers" or "snappers" and such brand names as Locker Room and Rush, have been tried by one in every nine seniors (11%).
 - The illicit drugs remain in roughly the same order when ranked by their prevalence in the most recent month and in the most recent year, as the data in Figure A illustrate. The major changes in ranking occur for inhalants and tranquilizers. This occurs because certain inhalants, like glue and aerosols, tend to be used primarily at an earlier age. Tranquilizers also have a higher quitting rate than the adjacent drugs in the rank ordering.
 - In fact, the drug classes with the highest rate of discontinuation of use are heroin (55% of previous users had not used in the past twelve months), followed by inhalants (51% of users, adjusted version), the hallucinogen PCP (45%), the nitrites specifically (41%), and tranquilizers (41%).
-
- Use of either of the two major licit drugs, alcohol and cigarettes, remains more widespread than use of any of the illicit drugs. Nearly all students have tried alcohol (93%) and the great majority (72%) have used it in the past month.
 - Some 74% report having tried cigarettes at some time, and 34% smoked at least some in the past month.

Daily Prevalence

- Frequent use of these drugs is of greatest concern from a health and safety viewpoint. Table 10 and Figure B show the prevalence of daily or near daily use of the various classes of drugs. For all drugs, except cigarettes, respondents are considered daily users if they indicate that they had used the drug on twenty or more occasions in the preceding 30 days. For cigarettes, they explicitly state use of one or more cigarettes per day.

FIGURE B

Thirty-Day Prevalence of Daily Use
Eleven Types of Drugs, Class of 1979



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TABLE 3

Frequency of Use of Twelve Types of Drugs in Lifetime, Last Year,
and Last Thirty Days, Class of 1979

| | Marijuana | Inhalants ^a | Hallucinogens ^a | Cocaine | Heroin | Other Opiates | Stimulants | Sedatives | Tranquilizers | Alcohol | PCP | Amyl/Butyl Nitrites |
|------------------------------|-----------|------------------------|----------------------------|---------|--------|---------------|------------|-----------|---------------|---------|------|------------------------|
| LIFETIME USE | | | | | | | | | | | | |
| No occasions | 39.6 | 87.3 | 85.9 | 84.6 | 98.9 | 89.9 | 75.8 | 85.4 | 83.7 | 7.0 | 87.2 | 88.9 |
| 1-2 occasions | 9.2 | 7.6 | 5.2 | 7.0 | 0.7 | 4.7 | 7.8 | 5.2 | 7.7 | 6.3 | 7.6 | 6.0 |
| 3-5 occasions | 5.9 | 2.0 | 3.8 | 2.8 | 0.1 | 2.3 | 4.3 | 3.5 | 3.2 | 7.6 | 2.2 | 2.0 |
| 6-9 occasions | 5.1 | 1.1 | 1.6 | 1.7 | 0.1 | 1.1 | 2.8 | 1.4 | 1.7 | 7.4 | 1.1 | 1.2 |
| 10-19 occasions | 6.8 | 1.0 | 1.9 | 1.6 | 0.1 | 1.0 | 3.4 | 2.2 | 1.6 | 12.1 | 1.1 | 0.7 |
| 20-39 occasions | 6.5 | 0.5 | 0.6 | 0.9 | 0.0 | 0.5 | 2.4 | 0.8 | 0.9 | 13.4 | 0.5 | 0.5 |
| 40 or more | 27.0 | 0.5 | 1.1 | 1.3 | 0.1 | 0.6 | 3.5 | 1.5 | 1.2 | 46.1 | 0.3 | 0.7 |
| USE IN LAST 12 MONTHS | | | | | | | | | | | | |
| No occasions | 49.2 | 94.6 | 90.1 | 88.0 | 99.5 | 93.8 | 87.7 | 90.1 | 90.4 | 11.9 | 98.0 | 93.5 |
| 1-2 occasions | 9.8 | 2.9 | 4.4 | 5.9 | 0.3 | 3.3 | 6.5 | 3.9 | 4.9 | 12.3 | 4.6 | 3.5 |
| 3-5 occasions | 6.6 | 1.2 | 2.8 | 2.3 | 0.1 | 1.3 | 3.4 | 2.6 | 2.1 | 11.4 | 1.1 | 1.2 |
| 6-9 occasions | 5.0 | 0.6 | 1.0 | 1.6 | 0.1 | 0.8 | 2.9 | 1.1 | 1.1 | 11.2 | 0.8 | 0.8 |
| 10-19 occasions | 6.8 | 0.3 | 1.1 | 1.1 | 0.0 | 0.5 | 2.6 | 1.4 | 0.9 | 15.9 | 0.3 | 0.5 |
| 20-39 occasions | 5.4 | 0.2 | 0.3 | 0.5 | 0.0 | 0.2 | 1.4 | 0.4 | 0.4 | 13.9 | 0.1 | 0.2 |
| 40 or more | 17.2 | 0.2 | 0.2 | 0.6 | 0.0 | 0.1 | 1.5 | 0.4 | 0.2 | 23.3 | 0.1 | 0.3 |
| USE IN LAST 30 DAYS | | | | | | | | | | | | |
| No occasions | 63.5 | 98.3 | 96.0 | 94.3 | 99.8 | 97.6 | 90.1 | 95.6 | 96.3 | 28.2 | 97.6 | 97.6 |
| 1-2 occasions | 9.4 | 1.2 | 2.5 | 3.5 | 0.1 | 1.4 | 4.7 | 2.3 | 2.2 | 21.6 | 1.7 | 1.5 |
| 3-5 occasions | 5.9 | 0.3 | 1.0 | 1.1 | 0.1 | 0.5 | 2.1 | 1.2 | 0.8 | 17.9 | 0.4 | 0.4 |
| 6-9 occasions | 4.5 | 0.1 | 0.2 | 0.5 | 0.0 | 0.2 | 1.5 | 0.5 | 0.3 | 14.6 | 0.2 | 0.3 |
| 10-19 occasions | 6.5 | 0.1 | 0.2 | 0.3 | 0.0 | 0.1 | 1.1 | 0.4 | 0.2 | 10.8 | 0.1 | 0.1 |
| 20-39 occasions | 5.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.4 | 0.1 | 0.1 | 4.1 | 0.1 | 0.0 |
| 40 or more | 5.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 2.8 | 0.0 | 0.0 |

^aUnadjusted for known underreporting of certain drugs. See page 10.

- The displays show that cigarettes are used daily by more of the respondents (25%) than any of the other drug classes. In fact, 17% say they smoke half a pack or more per day.
- A particularly important finding is that marijuana is now used on a daily or near daily basis by a substantial fraction of the age group (10.3%). By comparison, only two-thirds as many (6.9%) use alcohol that often.
- Less than 1% of the respondents report daily use of any of the illicit drugs other than marijuana. Still, 0.6% report unsupervised daily use of amphetamines, and the comparable figure for both cocaine and hallucinogens (adjusted) now stands at 0.2%. While very low, these figures are not inconsequential considering that 1% of each high school class represents over 30,000 individuals.
- Tranquilizers, sedatives, and inhalants (adjusted to include the nitrites) are used daily by only about 0.1%.
- Virtually no respondents (less than 0.05%) report daily use of heroin in senior year. However, in the opinion of the investigators heroin is the drug most likely to be underreported in surveys, so the absolute prevalence figures may be somewhat understated.
- While daily alcohol use stands at 6.9% for this age group, a substantially greater proportion report occasional heavy drinking. In fact 41% state that on at least one occasion during the prior two-week interval they had five or more drinks in a row.

Prevalence Comparisons for Important Subgroups

Sex Differences

- In general, higher proportions of males than females are involved in drug use, especially heavy drug use; however, this picture is a complicated one (see Tables 4 through 6).
- Overall marijuana use is somewhat higher among males, and daily use of marijuana is substantially higher among males (12.7% vs. 7.3% for females in 1979).
- On most other illicit drugs males have considerably higher prevalence rates. The annual prevalence for inhalants, cocaine, hallucinogens, and heroin tends to be one and one-half to two times as high among males

as among females. (Use of the nitrites, specifically, is more than twice as high among males.) Males also have slightly higher rates of use for opiates other than heroin and for sedatives. Further, males account for a disproportionate number of the heavy users of these various drugs.

- Annual prevalence rates for stimulants and tranquilizers are about equal for both sexes. However, slightly more females than males use stimulants frequently, whereas the opposite is true for tranquilizers.
- Despite the fact that most illicit drugs are used by more males than females, nearly equal proportions of both sexes report at least some illicit use of drugs other than marijuana during the last year (see Figure D). If one thinks of going beyond marijuana as an important threshold point in the sequence of illicit drug use, then roughly equal proportions of both sexes (29% for males vs. 26% for females) were willing to cross that threshold at least once during the year. However, on the average the female "users" take fewer drugs and with less frequency than their male counterparts.
- Frequent use of alcohol tends to be disproportionately concentrated among males. Daily use, for example, is reported by 9.6% of the males but by only 4.0% of the females. Also, males drink alcohol in large quantities more often than do females.
- Finally, for cigarettes, there is now a sex difference in the prevalence of smoking a half-a-pack or more daily. Of the females, 17.1% smoke this heavily versus 15.4% of the males.

Differences Related to College Plans

- Overall, seniors who are expecting to complete four years of college (referred to here as the "college-bound") have lower rates of illicit drug use than those who are not (see Tables 4 through 6).
- Annual marijuana use is reported by 47% of the college-bound vs. 53% of the noncollege-bound.
- There is a substantial difference in the proportion of these two groups using any illicit drug(s) other than marijuana. In 1979 only 24% of the college-bound reported any such behavior in the prior year vs. 32% of the noncollege-bound.

TABLE 4

Lifetime Prevalence of Use of Thirteen Types of Drugs
by Subgroups, Class of 1979

| | Marijuana | Inhalants ^a | Hallucinogens ^a | Cocaine | Heroin ^a | Other Opiates | Stimulants | Sedatives | Tranquilizers | Alcohol | Cigarettes | PCP ^a | Amyl/Butyl Nitrites |
|---------------------|-----------|------------------------|----------------------------|---------|---------------------|---------------|------------|-----------|---------------|---------|------------|------------------|---------------------|
| All seniors | 60.4 | 12.7 | 14.1 | 15.4 | 1.1 | 10.1 | 24.2 | 14.6 | 16.3 | 93.0 | 74.0 | 12.8 | 11.1 |
| Sex: | | | | | | | | | | | | | |
| Male | 65.0 | 15.4 | 16.1 | 18.4 | 1.4 | 11.4 | 23.4 | 15.0 | 15.7 | 93.8 | 72.7 | 14.1 | 15.3 |
| Female | 55.7 | 10.1 | 11.5 | 12.1 | 0.9 | 8.7 | 24.6 | 13.9 | 16.7 | 92.2 | 74.9 | 11.7 | 7.3 |
| College Plans: | | | | | | | | | | | | | |
| None or under 4 yrs | 62.9 | 15.2 | 16.3 | 17.8 | 1.6 | 11.1 | 29.0 | 17.5 | 18.3 | 93.3 | 80.1 | 15.5 | 14.4 |
| Complete 4 yrs | 66.8 | 10.3 | 11.0 | 12.0 | 0.7 | 8.4 | 19.2 | 11.1 | 14.0 | 92.7 | 68.1 | 10.6 | 8.6 |
| Region: | | | | | | | | | | | | | |
| Northeast | 69.8 | 13.6 | 18.2 | 17.5 | 1.2 | 11.0 | 27.6 | 17.7 | 18.2 | 97.1 | 75.7 | 19.0 | 13.8 |
| North Central | 60.9 | 13.2 | 14.9 | 13.9 | 1.2 | 10.3 | 24.8 | 13.3 | 13.5 | 93.9 | 76.0 | 10.3 | 10.1 |
| South | 51.6 | 11.7 | 8.7 | 11.6 | 1.2 | 8.4 | 19.4 | 14.1 | 17.0 | 90.4 | 74.5 | 10.8 | 11.6 |
| West | 62.1 | 12.1 | 16.3 | 21.9 | 0.8 | 11.4 | 27.1 | 13.5 | 17.1 | 90.0 | 66.9 | 12.6 | 8.4 |
| Population Density: | | | | | | | | | | | | | |
| Large SMSA | 68.5 | 10.8 | 17.8 | 19.8 | 0.8 | 11.4 | 25.0 | 16.2 | 16.7 | 96.2 | 72.7 | 16.7 | 12.9 |
| Other SMSA | 62.0 | 13.7 | 14.9 | 15.3 | 1.2 | 10.1 | 25.1 | 14.8 | 17.7 | 92.8 | 73.3 | 13.3 | 10.9 |
| Non-SMSA | 52.1 | 12.7 | 10.1 | 12.0 | 1.3 | 9.0 | 22.5 | 13.2 | 14.0 | 98.6 | 75.9 | 9.3 | 10.2 |

^aUnadjusted for known underreporting of certain drugs. See page 10.

TABLE 5

Annual Prevalence of Use of Thirteen Types of Drugs
by Subgroups, Class of 1979

| | Marijuana | Inhalants ^a | Hallucinogens ^a | Cocaine | Heroin | Other Opiates | Stimulants | Sedatives | Tranquilizers | Alcohol | Cigarettes | PCP | Amyl/Butyl Nitrites |
|---------------------|-----------|------------------------|----------------------------|---------|--------|---------------|------------|-----------|---------------|---------|------------|------|---------------------|
| All seniors | 50.8 | 5.4 | 9.9 | 12.0 | 0.5 | 6.2 | 18.3 | 9.9 | 9.6 | 88.1 | NA | 7.0 | 6.6 |
| Sex: | | | | | | | | | | | | | |
| Male | 55.8 | 6.7 | 11.8 | 14.6 | 0.6 | 7.3 | 18.4 | 10.4 | 9.9 | 89.7 | NA | 7.8 | 9.3 |
| Female | 45.7 | 4.2 | 7.6 | 9.3 | 0.3 | 5.1 | 17.8 | 9.0 | 9.3 | 86.5 | NA | 6.2 | 4.0 |
| College Plans: | | | | | | | | | | | | | |
| None or under 4 yrs | 53.1 | 6.3 | 11.3 | 13.7 | 0.7 | 7.3 | 21.8 | 11.8 | 11.0 | 88.6 | NA | 8.8 | 8.9 |
| Complete 4 yrs | 47.3 | 4.5 | 7.5 | 9.5 | 0.3 | 5.0 | 14.5 | 7.5 | 8.1 | 87.8 | NA | 5.7 | 4.9 |
| Region: | | | | | | | | | | | | | |
| Northeast | 60.6 | 6.4 | 12.9 | 13.8 | 0.6 | 7.0 | 22.0 | 12.9 | 11.5 | 94.8 | NA | 10.4 | 8.3 |
| North Central | 52.2 | 5.9 | 11.1 | 10.5 | 0.5 | 6.1 | 18.3 | 8.3 | 7.5 | 89.8 | NA | 6.2 | 6.0 |
| South | 41.2 | 4.3 | 5.7 | 8.5 | 0.6 | 5.2 | 14.0 | 9.8 | 10.4 | 83.3 | NA | 6.3 | 7.2 |
| West | 51.9 | 4.9 | 11.0 | 18.6 | 0.2 | 7.1 | 20.7 | 8.4 | 9.4 | 83.6 | NA | 5.1 | 3.8 |
| Population Density: | | | | | | | | | | | | | |
| Large SMSA | 58.7 | 5.1 | 12.3 | 16.6 | 0.4 | 7.3 | 19.5 | 11.7 | 9.9 | 92.6 | NA | 8.5 | 7.3 |
| Other SMSA | 51.9 | 4.8 | 10.5 | 11.7 | 0.6 | 6.3 | 18.9 | 9.9 | 10.2 | 88.0 | NA | 7.3 | 5.8 |
| Non-SMSA | 43.3 | 6.2 | 7.1 | 8.9 | 0.5 | 5.3 | 16.6 | 8.5 | 8.7 | 84.6 | NA | 5.5 | 6.9 |

^aUnadjusted for known underreporting of certain drugs. See page 10.

TABLE 6

Thirty-Day Prevalence of Use of Thirteen Types of Drugs
by Subgroups, Class of 1979

| | Marijuana | Inhalants | Hallucinogens ^a | Cocaine | Heroin | Other Opiates | Stimulants | Sedatives | Tranquilizers | Alcohol | Cigarettes | PCP | Amyl/Butyl Nitrites |
|---------------------|-----------|-----------|----------------------------|---------|--------|---------------|------------|-----------|---------------|---------|------------|-----|---------------------|
| All seniors | 36.5 | 1.7 | 4.0 | 5.7 | 0.2 | 2.4 | 9.9 | 4.4 | 3.7 | 71.8 | 34.4 | 2.4 | 2.4 |
| Sex: | | | | | | | | | | | | | |
| Male | 41.4 | 2.2 | 4.7 | 6.8 | 0.2 | 2.8 | 9.5 | 4.5 | 3.6 | 76.7 | 31.2 | 2.3 | 3.4 |
| Female | 31.3 | 1.3 | 2.9 | 4.4 | 0.1 | 2.0 | 9.9 | 4.1 | 3.8 | 67.0 | 37.1 | 2.5 | 1.3 |
| College Plans: | | | | | | | | | | | | | |
| None or under 4 yrs | 39.6 | 1.9 | 4.6 | 6.4 | 0.3 | 2.8 | 12.4 | 5.4 | 4.4 | 72.2 | 43.0 | 3.3 | 3.1 |
| Complete 4 yrs | 32.2 | 1.6 | 2.8 | 4.3 | 0.1 | 1.9 | 7.2 | 3.1 | 2.8 | 71.4 | 26.0 | 1.8 | 1.8 |
| Region: | | | | | | | | | | | | | |
| Northeast | 44.7 | 1.7 | 5.3 | 6.8 | 0.3 | 2.8 | 12.3 | 6.4 | 4.4 | 81.1 | 37.0 | 3.2 | 2.5 |
| North Central | 38.0 | 1.9 | 4.9 | 4.5 | 0.2 | 2.3 | 10.4 | 3.6 | 2.5 | 73.9 | 36.6 | 2.2 | 1.9 |
| South | 29.0 | 1.4 | 2.3 | 3.6 | 0.1 | 2.1 | 7.7 | 4.2 | 4.2 | 65.7 | 35.4 | 2.5 | 3.1 |
| West | 35.9 | 1.8 | 3.7 | 10.0 | 0.1 | 2.5 | 9.7 | 3.3 | 3.6 | 65.5 | 24.8 | 1.5 | 1.8 |
| Population Density: | | | | | | | | | | | | | |
| Large SMSA | 42.2 | 1.7 | 5.1 | 8.3 | 0.1 | 3.0 | 10.3 | 5.1 | 3.6 | 77.3 | 33.4 | 2.2 | 2.6 |
| Other SMSA | 37.5 | 1.8 | 4.5 | 5.3 | 0.2 | 2.3 | 10.3 | 4.4 | 4.1 | 72.0 | 33.5 | 2.3 | 1.5 |
| Non-SMSA | 30.9 | 1.7 | 2.4 | 4.1 | 0.2 | 1.9 | 9.1 | 3.8 | 3.1 | 67.3 | 36.4 | 2.6 | 3.2 |

^aUnadjusted for known underreporting of certain drugs. See page 10.

- For each of the specific illicit drugs other than marijuana annual prevalence for the college-bound is about two-thirds as large as for the noncollege-bound, as Table 5 illustrates.
- Frequent use of each of the illicit drugs is even more disproportionately concentrated among students not planning four years of college.
- Frequent alcohol use is also more prevalent among the noncollege-bound. For example, drinking on a daily basis is nearly twice as common at 9.0% for the noncollege-bound vs. 5.0% for the college-bound. On the other hand, there are practically no differences between the groups in annual or monthly prevalence.
- The largest difference relating to college plans involves daily smoking. Only 10% of the college-bound smoke a half-a-pack or more daily, compared with 23% of the noncollege-bound.

Regional Differences

- In general, there are not very great regional differences in 1979 in rates of illicit drug use among high school seniors. The highest rate is in the Northeast, where 63% say they have used a drug illicitly in the past year, followed by the West with 56%, and the North Central with 55%. The South is somewhat lower than the other regions with only 46% having used any illicit drug.
- There is even less regional variation in terms of the percent using some illicit drug other than marijuana in the past year: 33% in the West, 32% in the Northeast, 28% in the North Central, and 23% in the South.
- As Table 5 illustrates, the Northeast shows about the highest annual rate of use of each of the licit and illicit drugs, except cocaine. The West shows the highest cocaine use, and about the same level of other opiate use as the Northeast; yet the West has the lowest prevalence of heroin use, PCP use, and nitrite use. The South shows the lowest usage levels for marijuana, hallucinogens, inhalants, cocaine, other opiates, and stimulants; but the South shows one of the highest levels of heroin use.
- Alcohol use tends to be somewhat lower in the South and West than it is in the Northeast and North Central.

- One of the largest regional differences occurs for regular cigarette smoking. In the Northeast 20% say they smoke half-a-pack, or more per day of cigarettes compared with 17% in the North Central, 16% in the South, and only 11% in the West.

Differences Related to Population Density

- Three levels of population density (or urbanicity) have been distinguished for analytical purposes: (1) Large SMSA's, which are the twelve largest Standard Metropolitan Statistical Areas in the 1970 Census; (2) Other SMSA's, which are the remaining Standard Metropolitan Statistical Areas; and (3) Non-SMSA's, which are sampling areas not designated as metropolitan.
- Overall illicit drug use is highest in the largest metropolitan areas (61% annual prevalence), slightly lower in the other metropolitan areas (55%), and lowest in the nonmetropolitan areas (48%).
- There is somewhat less variation in the proportion using illicit drugs other than marijuana: 32% annual prevalence in the largest cities, 29% in the other cities, and 25% in the nonmetropolitan areas.
- For specific drugs, one of the largest differences associated with urbanicity occurs for marijuana, which has an annual prevalence of 59% in the large cities but only 43% in the nonmetropolitan areas (Table 5).
- The use of hallucinogens, opiates other than heroin, and cocaine also is positively correlated with urbanicity, as is the use of stimulants, sedatives, and alcohol.
- There appears to be rather little difference associated with urbanicity in the case of inhalants, tranquilizers, and heroin.

RECENT TRENDS

This section summarizes trends in drug use, comparing the classes of 1975, 1976, 1977, 1978, and 1979. As in the previous section, the data include lifetime use, use during the past year, use during the past month, daily use, and comparisons of key subgroups.

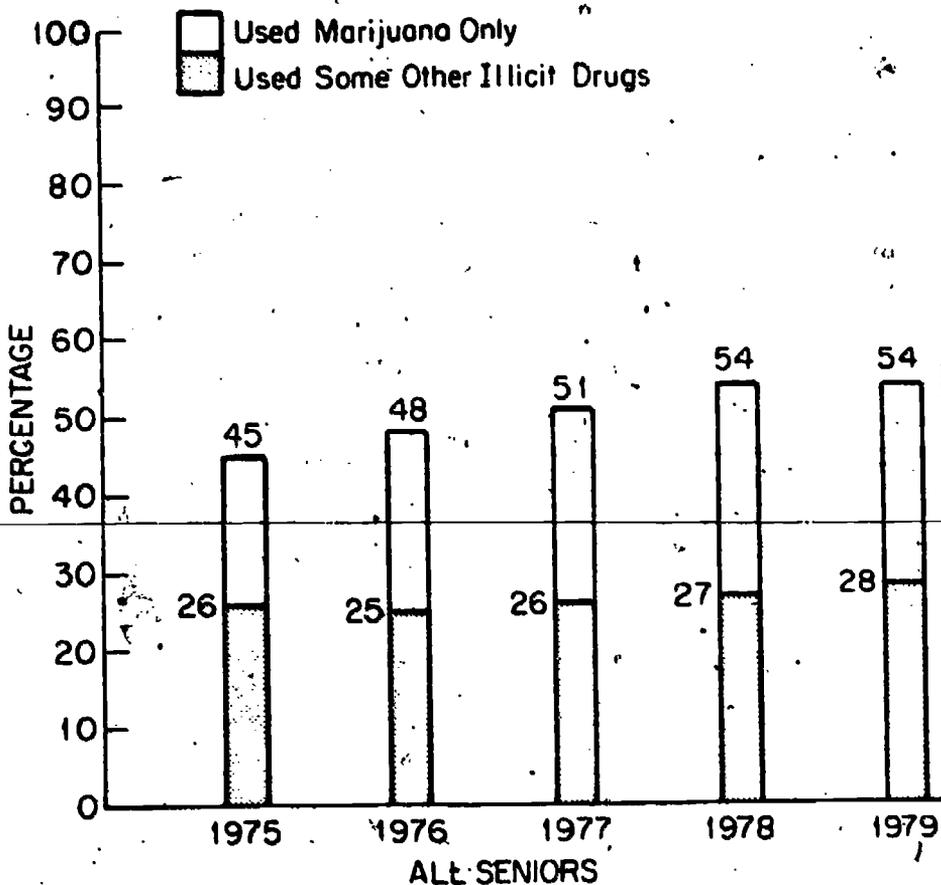
Trends in Prevalence 1975-1979: All Seniors

Trends in Lifetime, Annual, and Monthly Prevalence

- The past four years have witnessed an appreciable rise in marijuana use. While 47% of the class of 1975 used marijuana at least once during their lifetime, fully 60% of the class of 1979 had done so (Table 7). The corresponding trend in annual marijuana prevalence is from 40% to 51% (Table 8). However, this year's data provide some evidence that marijuana use may have peaked for this age group, since annual use rose only 0.6% and 30-day use actually declined by 0.6% (Table 9).
- Between 1975 and 1979 there has been only a very small concurrent increase in the proportion who go beyond marijuana to use some other illicit drug, with lifetime prevalence rising only 1% (from 36% to 37%) between 1975 and 1979, and annual prevalence rising only 2% (from 26% to 28%, see Figure C).
- Thus, the proportion of seniors involved in illicit drug use has been increasing primarily because of the increase in marijuana use. About 65% of the class of 1979 report having tried at least one illicit drug during their lifetime, compared with 55% of the class of 1975. Annual prevalence figures have risen from 45% to 54% over the same four-year interval (see Figure C). However, very little of this increase occurred during the past year.

FIGURE C

Trends in Annual Prevalence of Illicit Drug Use
All Seniors



NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not on a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

TABLE 7

Trends in Lifetime Prevalence of Thirteen Types of Drugs

| | Percent ever used | | | | | |
|--|-----------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------|
| | Class of 1975 N = (9400) | Class of 1976 (15400) | Class of 1977 (17100) | Class of 1978 (17800) | Class of 1979 (15500) | '78-'79 change |
| Marijuana | 47.3 | 52.8 | 56.4 | 59.2 | 60.4 | +1.2 |
| Inhalants Adjusted ^a | NA NA | 10.3 NA | 11.1 NA | 12.0 NA | 12.7 18.7 | +0.7 NA |
| Hallucinogens Adjusted ^b | 16.3 NA | 15.1 NA | 13.9 NA | 14.3 NA | 14.1 18.6 | -0.2 NA |
| Cocaine | 9.0 | 9.7 | 10.8 | 12.9 | 15.4 | +2.5 <i>eee</i> |
| Heroin | 2.2 | 1.8 | 1.8 | 1.6 | 1.1 | -0.5 <i>ee</i> |
| Other opiates ^d | 9.0 | 9.6 | 10.3 | 9.9 | 10.1 | +0.2 |
| Stimulants ^c | 22.3 | 22.6 | 23.0 | 22.9 | 24.2 | +1.3 |
| Sedatives ^c | 18.2 | 17.7 | 17.4 | 16.0 | 14.6 | -1.4 |
| Tranquilizers ^c | 17.0 | 16.8 | 18.0 | 17.0 | 16.3 | -0.7 |
| Alcohol | 90.4 | 91.9 | 92.5 | 93.1 | 93.0 | -0.4 |
| Cigarettes | 73.6 | 75.4 | 75.7 | 75.3 | 74.0 | -1.3 |
| Amyl and butyl nitrites ^d | NA | NA | NA | NA | 11.1 | NA |
| PCP ^d | NA | NA | NA | NA | 12.8 | NA |

NOTES: Level of significance of difference between the two most recent classes: * = .05, ** = .01, *** = .001.
NA indicates data not available.

^aAdjusted for underreporting of amyl and butyl nitrites (see text).

^bAdjusted for underreporting of PCP (see text).

^cOnly drug use which was not under a doctor's orders is included here.

^dData based on a single questionnaire form. N is one-fifth of N indicated.

TABLE 8

Trends in Annual Prevalence of Thirteen Types of Drugs

| | Percent who used in last twelve months | | | | | '78-'79 change |
|--------------------------------------|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------|
| | Class of 1975 N = (9400) | Class of 1976 (15400) | Class of 1977 (17100) | Class of 1978 (17800) | Class of 1979 (15500) | |
| Marijuana | 40.0 | 44.5 | 47.6 | 50.2 | 50.8 | +0.0 |
| Inhalants | NA | 3.0 | 3.7 | 4.1 | 5.4 | +1.3 <i>sss</i> |
| Adjusted ^a | NA | NA | NA | NA | 9.2 | NA |
| Hallucinogens | 11.2 | 9.4 | 8.8 | 9.6 | 9.9 | +0.3 |
| Adjusted ^b | NA | NA | NA | NA | 12.8 | NA |
| Cocaine | 5.6 | 6.0 | 7.2 | 9.0 | 12.0 | +3.0 <i>sss</i> |
| Heroin | 1.0 | 0.8 | 0.8 | 0.8 | 0.5 | -0.3 <i>s</i> |
| Other opiates ^c | 5.7 | 5.7 | 6.4 | 6.0 | 6.2 | +0.2 |
| Stimulants ^c | 16.2 | 15.8 | 16.3 | 17.1 | 18.3 | +1.2 |
| Sedatives ^c | 11.7 | 10.7 | 10.8 | 9.9 | 9.9 | 0.0 |
| Tranquillizers ^c | 10.6 | 10.3 | 10.8 | 9.9 | 9.6 | -0.1 |
| Alcohol | 84.8 | 85.7 | 87.0 | 87.7 | 88.1 | +0.4 |
| Cigarettes | NA | NA | NA | NA | NA | NA |
| Amyl and butyl nitrites ^d | NA | NA | NA | NA | 6.5 | NA |
| PCP ^d | NA | NA | NA | NA | 7.0 | NA |

NOTES: Level of significance of difference between the two most recent classes: *s* = .05, *ss* = .01, *sss* = .001.
NA indicates data not available.

^aAdjusted for underreporting of amyl and butyl nitrites (see text).

^bAdjusted for underreporting of PCP (see text).

^cOnly drug use which was not under a doctor's orders is included here.

^dData based on a single questionnaire form. N is one-fifth of N indicated.

TABLE 9

Trends in Thirty-Day Prevalence of Thirteen Types of Drugs

| | Percent who used in last thirty days | | | | | '78-'79 change |
|--------------------------------------|--------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------|
| | Class of 1975 N = (9400) | Class of 1976 (15400) | Class of 1977 (17100) | Class of 1978 (17800) | Class of 1979 (15500) | |
| Marijuana | 27.1 | 32.2 | 35.4 | 37.1 | 36.5 | -0.6 |
| Inhalants | NA | 0.9 | 1.3 | 1.5 | 1.7 | +0.2 |
| Adjusted ^a | NA | NA | NA | NA | 3.7 | NA |
| Hallucinogens | 4.7 | 3.4 | 4.1 | 3.9 | 4.0 | +0.1 ^a |
| Adjusted ^b | NA | NA | NA | NA | 5.5 | NA |
| Cocaine | 1.9 | 2.0 | 2.9 | 3.9 | 5.7 | +1.8 ^{aaa} |
| Heroin | 0.4 | 0.2 | 0.3 | 0.3 | 0.2 | -0.1 |
| Other opiates ^c | 2.1 | 2.0 | 2.8 | 2.1 | 2.4 | +0.3 |
| Stimulants ^c | 8.5 | 7.7 | 8.8 | 8.7 | 9.9 | +1.2 ^a |
| Sedatives ^c | 5.4 | 4.5 | 5.1 | 4.2 | 4.4 | +0.2 |
| Tranquillizers ^c | 4.1 | 4.0 | 4.6 | 3.4 | 3.7 | +0.3 |
| Alcohol | 68.2 | 68.3 | 71.2 | 72.1 | 71.8 | -0.3 |
| Cigarettes | 36.7 | 38.8 | 38.4 | 36.7 | 34.4 | -2.3 ^{aa} |
| Amyl and butyl nitrites ^d | NA | NA | NA | NA | 2.4 | NA |
| PCP ^d | NA | NA | NA | NA | 2.4 | NA |

NOTES: Level of significance of difference between the two most recent classes: *a* = .05, *aa* = .01, *aaa* = .001. NA indicates data not available.

^aAdjusted for underreporting of amyl and butyl nitrites (see text).

^bAdjusted for underreporting of PCP (see text).

^cOnly drug use which was not under a doctor's orders is included here.

^dData based on a single questionnaire form. N is one-fifth of N indicated.

- Although the overall proportion using other illicit drugs has remained relatively unchanged over the last four years, some interesting changes have been occurring for specific drugs within the class. (See Tables 7, 8, and 9 for recent trends in lifetime, annual, and monthly prevalence figures for each class of drugs.)
 - Cocaine has exhibited a dramatic and accelerating increase in popularity, with annual prevalence going from 5.6% in the class of 1975 to 12% in the class of 1979—a two-fold increase in four years. While about half of these seniors use cocaine only once or twice during the year, there is now getting to be a detectable number of frequent users. The proportion using ten or more times in the prior month rose from 0.0% in 1975 to 0.5% in 1979, while daily or near-daily use now stands at 0.2%.
 - For the period on which we have data on inhalant use (i.e., over the last three-year interval) there has been a rather steady increase in prevalence, with annual prevalence rising from 3.0% to 5.4%. This is a statistically significant change and likely an underestimate, since a fair number of the users of amyl and butyl nitrites (which have been increasing in popularity) fail to report these drugs under the inhalant category.
-
- Stimulant use, which had remained relatively unchanged between 1975 and 1978, now is beginning to show evidence of a gradual increase in use. For example annual prevalence has risen from 15.8% in 1976 to 18.3% in 1979.
 - The popularity of sedatives appears to have been declining very gradually among seniors. Lifetime prevalence dropped steadily from 18.2% in 1975 to 14.6% in 1979. However, this year annual use remained unchanged from 1978.
 - Tranquilizer use has shown some very modest indications of declining over the last two years. Annual prevalence dropped from 10.8% in 1977 to 9.6% in 1979.
 - Heroin lifetime prevalence has been dropping very steadily (from 2.2% in 1975 to 1.1% in 1979). Annual prevalence has also dropped by half, from 1.0% in 1975 to 0.5% in 1979.

- The use of opiates other than heroin has remained fairly stable, with annual prevalence at or near 6% every year since 1975.
- The decline in hallucinogen use in the middle of the decade (from 11.2% in 1975 to 9.6% in 1978 for annual prevalence), has halted. The 1979 figure is 9.9%.
- What role PCP has played in these changes is somewhat unclear, but what is clear is that it does not account for all of the reversal in hallucinogen use. Annual prevalence for LSD, which declined from 7.5% in 1975 to 5.6% in 1977, increased again to 6.3% in 1978 and 6.9% in 1979. "Other hallucinogens," taken as a class, had the following annual prevalence figures from 1975 through 1979: 9.6%, 7.0%, 7.0%, 7.3% and 6.8%. Even though PCP use is underreported in the "other hallucinogen" figures, some fair proportion certainly is included. The stability in these figures since 1976 suggests that any increase in PCP use has been at least partly offset by a decrease in the use of other hallucinogens. Examination of more detailed trend data for some of the other hallucinogens bears out this conclusion.

-
- Thus, while the proportion using any illicit drugs other than marijuana has remained relatively constant, the mix of drugs obviously has been changing somewhat.
 - Turning to the licit drugs, between 1975 and 1979 there has been a very gradual but steady upward shift in the prevalence of alcohol use among seniors. To illustrate, the annual prevalence rate rose steadily from 85% in 1975 to 88% in 1979. Over just the past year, however, thirty-day prevalence remained steady at 72%.
 - As for cigarette use, 1976 and 1977 appear to have been the peak years for thirty-day and lifetime prevalence. (Annual prevalence is not asked.) Over the last two graduating classes, thirty-day prevalence has been dropping, from 38% in the class of 1977 to 34% in the class of 1979.

Trends in Daily Prevalence

- Table 10 provides information on recent trends in the daily or near-daily use of the various drugs. It shows that for most illicit drugs there has been relatively little change over the last four years in their daily prevalence figures.

TABLE 10

Trends in Thirty-Day Prevalence of Daily Use of Thirteen Types of Drugs

| | Percent who used daily in last thirty days | | | | | '78-'79 change |
|--------------------------------------|---|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------|
| | Class of 1975 N = (9400) | Class of 1976 (15400) | Class of 1977 (17100) | Class of 1978 (17800) | Class of 1979 (15500) | |
| Marijuana | 6.0 | 8.2 | 9.1 | 10.7 | 10.3 | -0.4 |
| Inhalants | NA | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 ^a |
| Adjusted ^a | NA | NA | NA | NA | 0.1 | NA |
| Hallucinogens | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |
| Adjusted ^b | NA | NA | NA | NA | 0.2 | NA |
| Cocaine | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | +0.1 ^s |
| Heroin | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other opiates ^c | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | -0.1 |
| Stimulants ^c | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | +0.1 ^a |
| Sedatives ^c | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | -0.1 ^s |
| Tranquilizers ^c | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.0 |
| Alcohol | 5.7 | 5.6 | 6.1 | 5.7 | 6.9 | +1.2 ^{ss} |
| Cigarettes | 26.9 | 28.8 | 28.8 | 27.5 | 25.4 | -2.1 ^{ss} |
| Amyl and butyl nitrites ^d | NA | NA | NA | NA | 0.1 | NA |
| PCP ^d | NA | NA | NA | NA | 0.1 | NA |

NOTES. Level of significance of difference between the two most recent classes: ^s = .05, ^{ss} = .01, ^{sss} = .001. NA indicates data not available.

^aAdjusted for underreporting of amyl and butyl nitrites (see text).

^bAdjusted for underreporting of PCP (see text).

^cOnly drug use which was not under a doctor's orders is included here.

^dData based on a single questionnaire form. N is one-fifth of N indicated.

- The most dramatic exception has been marijuana, which between 1975 and 1978 showed a marked increase in the proportion using it (and/or hashish) daily. The proportion reporting daily use in the class of 1975 (6.0%) came as a surprise to many. That proportion then rose rapidly, so that by 1978 one in every nine high school seniors (10.7%) indicated that he or she used the drug on a daily or nearly daily basis. The evidence this year is that the rapid and troublesome increase has come to a halt, with 10.3% of the 1979 seniors reporting use at this level. (A special analysis based on the half-sample of participating schools which were included in both the 1978 and 1979 data collections confirms that the upward trend has been halted.)
- Alcohol has not shown a comparable rise in use since 1975. Daily use has remained relatively steady at between 5.7% and 6.9%, where it stands this year. However, there has been some increase in the frequency of heavy drinking. When asked whether they had taken five or more drinks in a row during the prior two weeks, 37% of the seniors in 1975 said they had. This proportion has risen gradually, but steadily, to 41% by 1979.
- Tranquilizer use on a daily basis increased significantly between 1975 and 1977 (from 0.1% to 0.3%) but has since dropped back significantly to 0.1% in 1978 and 1979.
- For cigarettes, daily use peaked in 1976 and 1977 at 29%, and has now dropped to 25%. Daily use of half-a-pack or more per day dropped over the same interval from 19.4% to 16.5%.

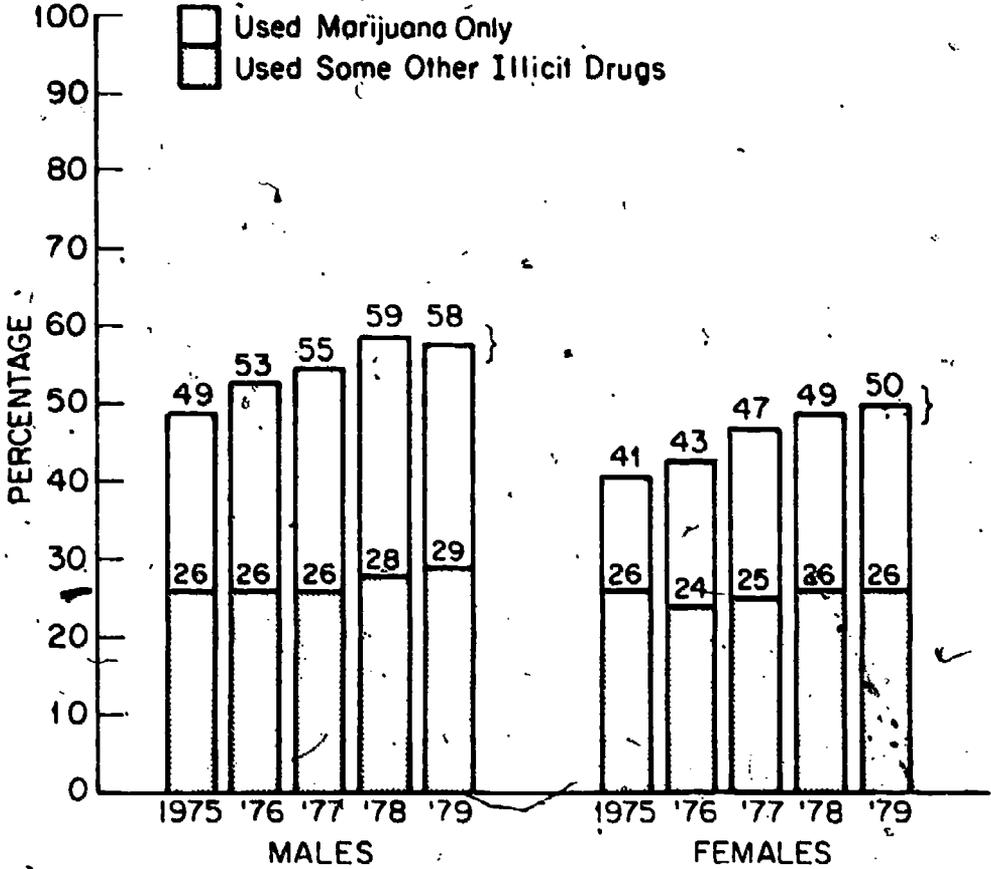
Trend Comparisons for Important Subgroups

Sex Differences in Trends

- Most of the sex differences mentioned earlier have remained relatively unchanged over the past three years--that is, any trends in overall use have occurred about equally among males and females, as the trend lines in Figures D through G demonstrate. There are however, two exceptions: one involving tranquilizer use, the other cigarette use.
- Since 1977, the small sex difference involving tranquilizer use (men this age used them less frequently than women) has disappeared or perhaps even reversed.

FIGURE D

Trends in Annual Prevalence of Illicit Drug Use
by Sex



NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

FIGURE E

Trends in Annual Prevalence of Eight Illicit Drugs by Sex

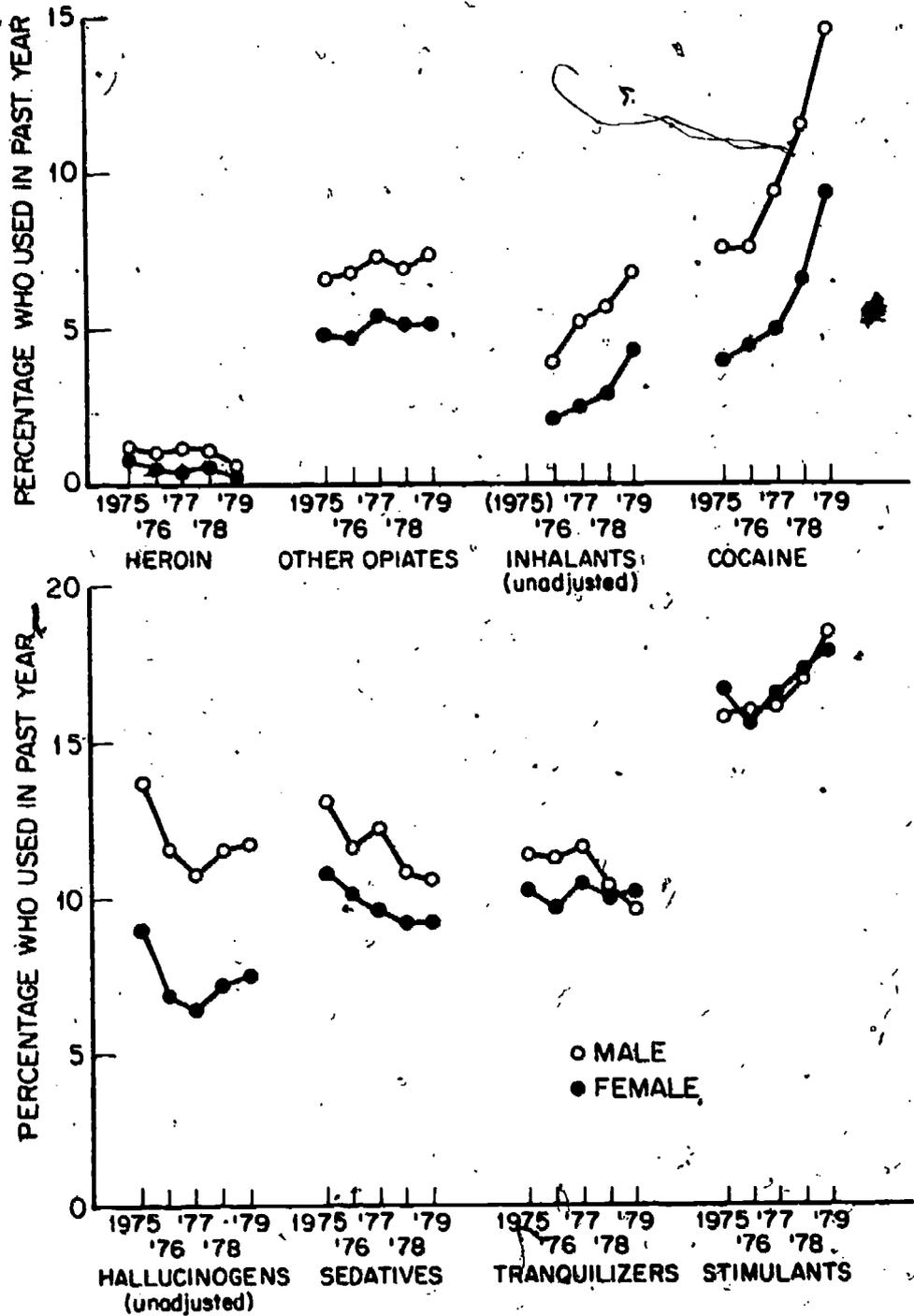


FIGURE F

Trends in Annual Prevalence of Marijuana and Alcohol
by Sex

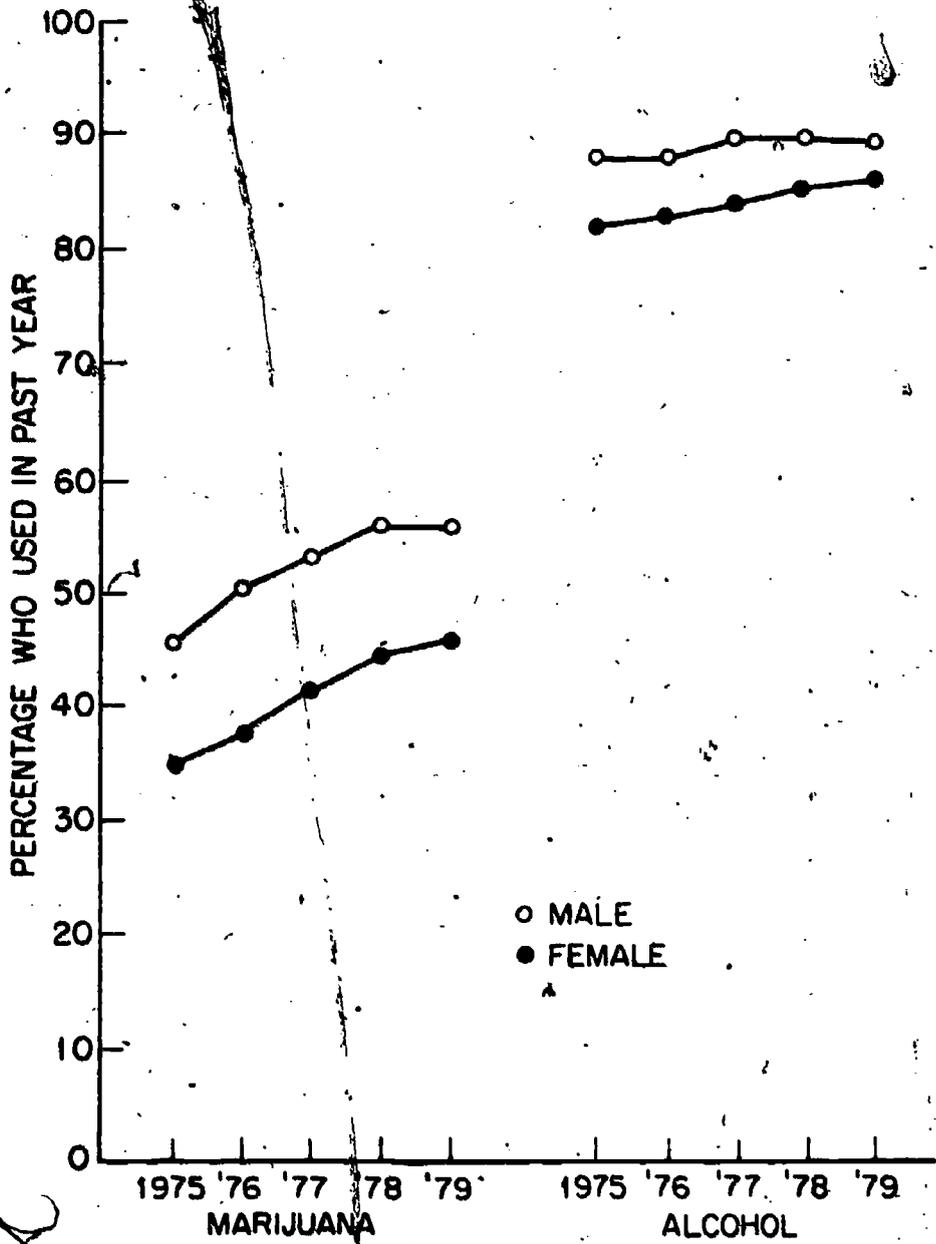
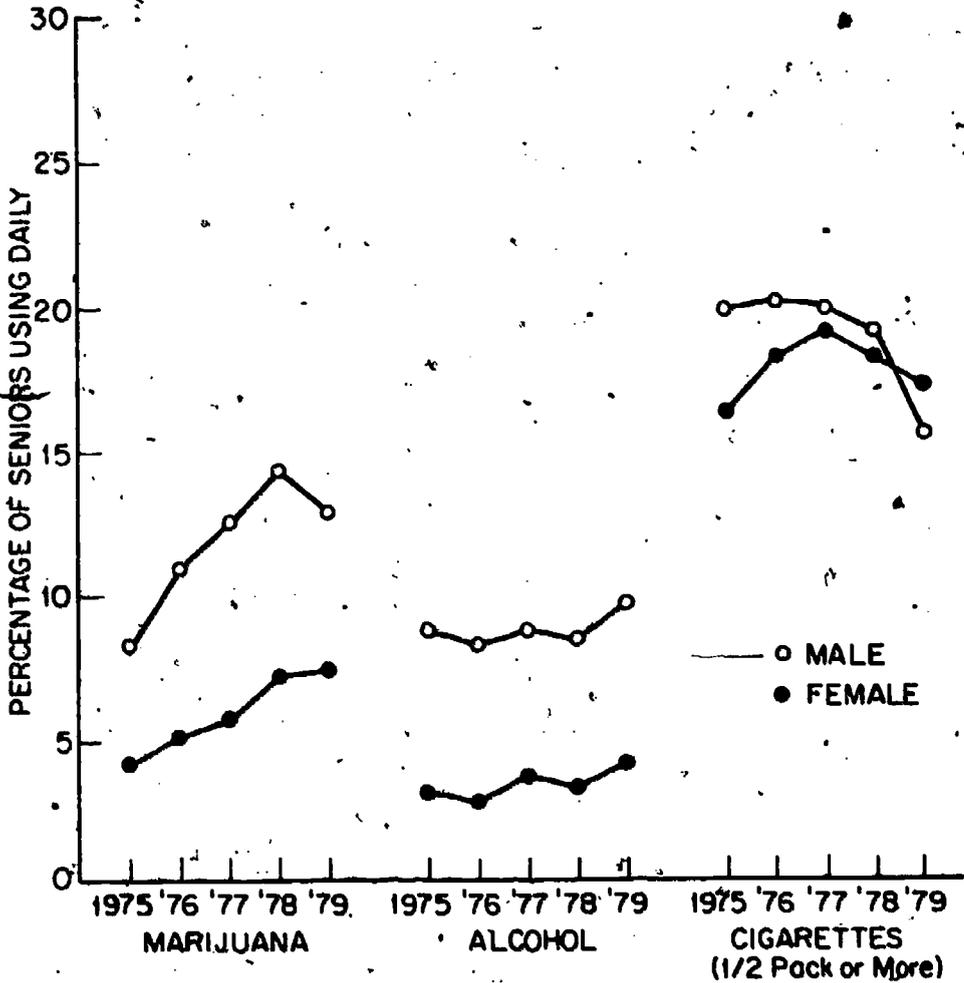


FIGURE G

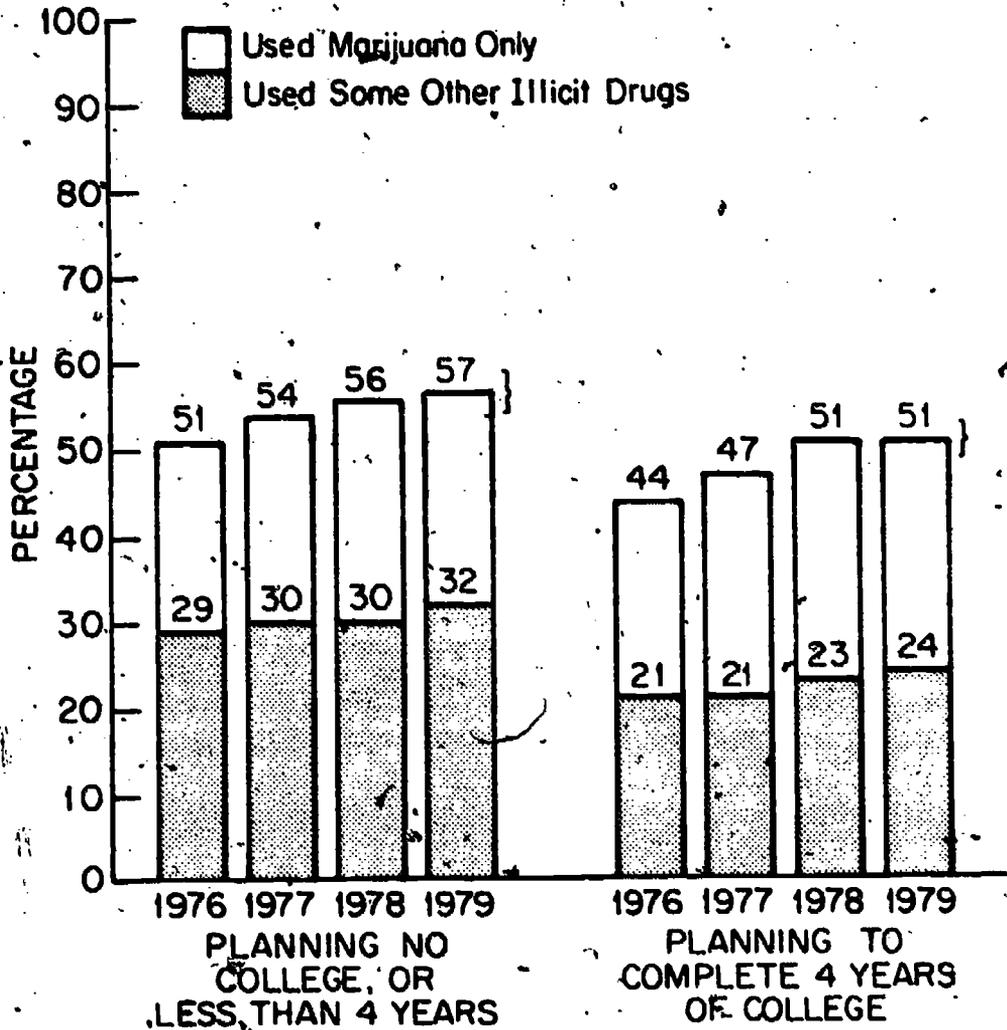
Trends in Thirty-Day Prevalence of Daily Use of Marijuana, Alcohol, and Cigarettes by Sex



NOTE: Daily use for alcohol and marijuana is defined as use on 20 or more occasions in the past thirty days. Daily use of cigarettes is defined as smoking a half-pack or more per day in the past thirty days.

FIGURE H

Trends in Annual Prevalence of Illicit Drug Use
by College Plans



NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

- Regarding cigarette smoking, we observed in 1977 that females had caught up to males at the half-a-pack per day smoking level. Since 1977, both sexes have shown a decline in the prevalence of smoking at this level but use among males appears to be declining faster. Thus, for the first time, female use is greater than male use (17.1% vs. 15.4%).

Trend Differences Related to College Plans

- Both the college-bound and the noncollege-bound have been showing parallel trends in overall illicit drug use over the last several years;* that is, both have shown a rising proportion using marijuana only, and a steady (or only slightly increasing) proportion using illicit drugs other than marijuana. (See Figure H.)
- Changes in use of the specific drug classes have also been quite parallel for the two groups since 1976, although the increase in cocaine use is occurring somewhat disproportionately among the noncollege-bound.

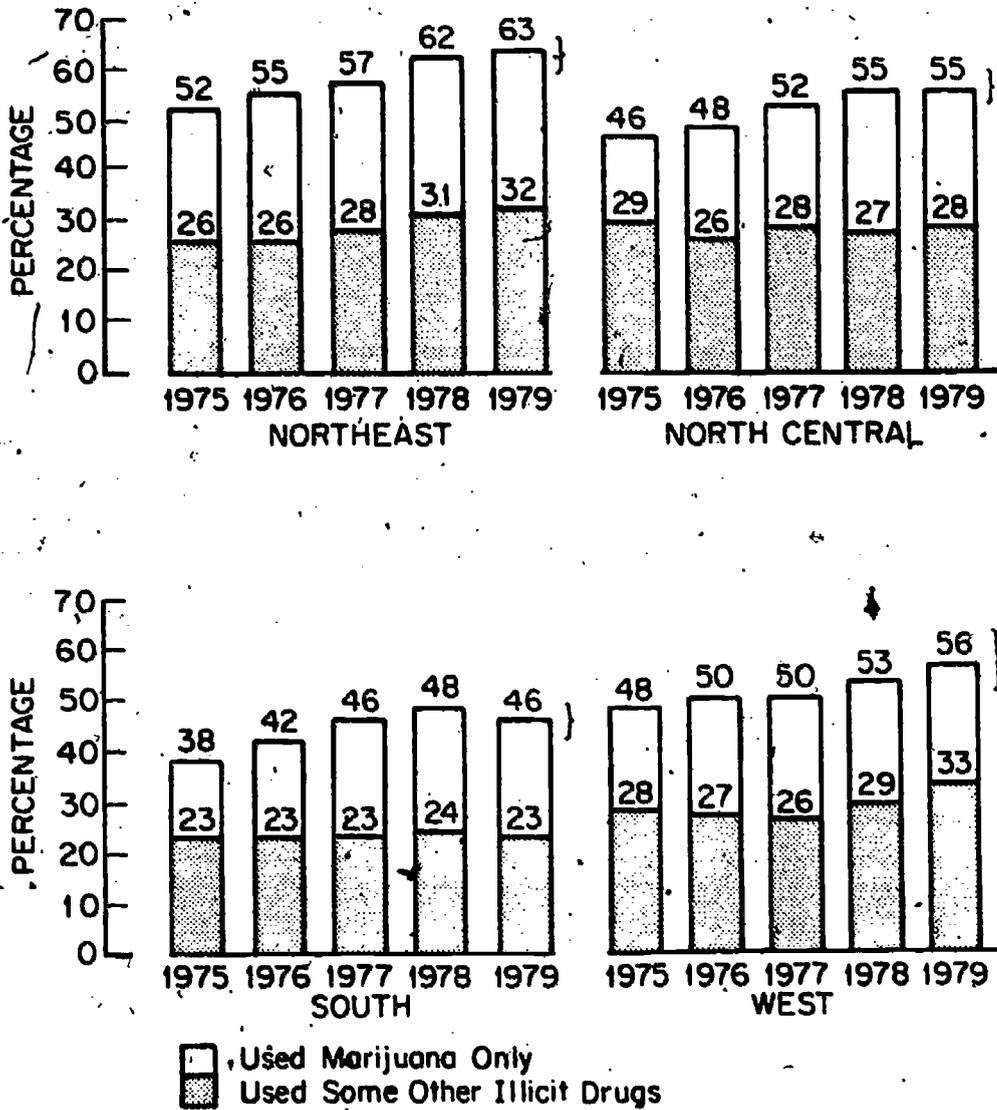
Regional Differences in Trends

- This year for the first time there was a virtual halt in the rise in the proportion using any illicit drug in three of the four regions of the country (see Figure I). Only the West showed a continuing increase of more than 1%.
- Until this year the proportion using only marijuana had been steadily increasing in all regions (though in the West the size of the increase had been smaller than elsewhere). This year, however, the increase halted in all regions, including the West.
- As Figure I illustrates, between 1975 and 1979 the proportion of seniors using illicit drugs other than marijuana has remained relatively steady in the South and North Central regions. However, over the last three years, there has been an increase in use in the Northeast (from 26% to 32%) and a similar increase in the West over the last two years. Much of the increase in these two regions is almost certainly due specifically to cocaine use, which has been increasing much faster in the West and Northeast than in the South and North Central regions.

*Because of excessive missing data in 1975 on the variable measuring college plans, group comparisons are not presented for that year; therefore, only three-year trends can be examined.

FIGURE I

Trends in Annual Prevalence of Illicit Drug Use
by Region of the Country

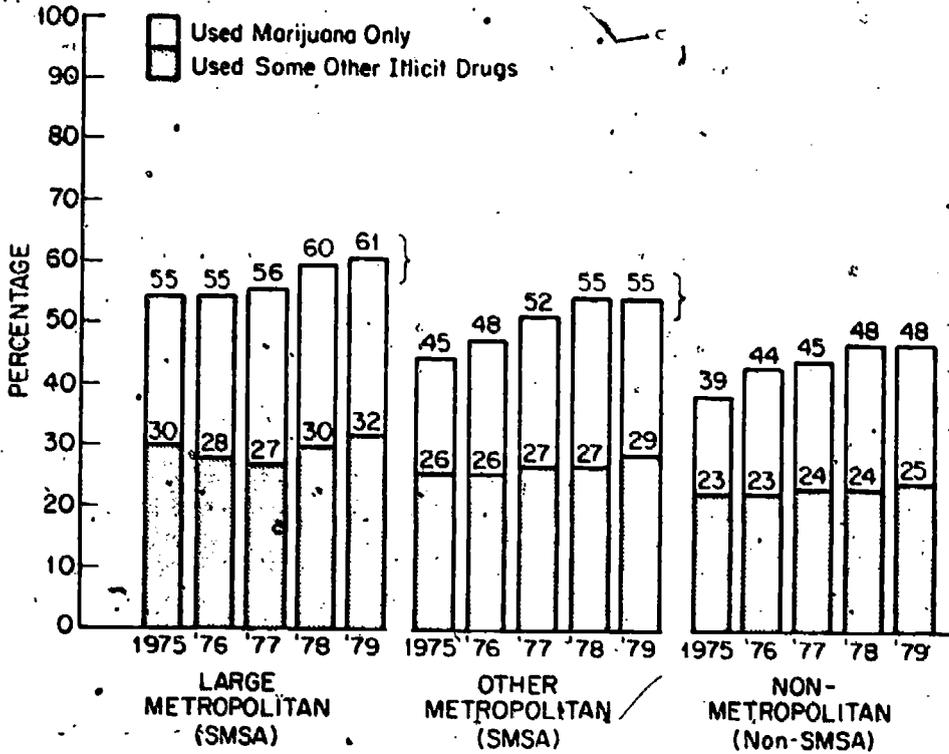


NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

FIGURE J

Trends in Annual Prevalence of Illicit Drug Use
by Population Density



NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

Trend Differences Related to Population Density

- From 1975 to 1979, the proportion using any illicit drug increased by about 6% in the large metropolitan areas, and by half again that amount in the other metropolitan and nonmetropolitan areas. As a result, the differences between the very large cities and less metropolitan areas have narrowed. Most of the narrowing is due to changing levels of marijuana use and most of it took place prior to 1979. (See Figure J.)
- The proportion using some illicit drug(s) other than marijuana appears to have been increasing over the last two years in the very large cities, and to have been increasing more slowly in the less metropolitan areas. The increase in cocaine use, although observed at all levels of urbanicity, has been particularly dramatic in the large cities. Since 1975, annual prevalence has jumped by 9.3% in the large SMSA's to 16.6%. It has risen by less than half that amount to a 1979 level of 8.9% in the nonmetropolitan areas.

USE AT EARLIER GRADE LEVELS

Students were asked to indicate the grade they were in when they first tried each class of drugs. Graphic presentations on a drug-by-drug basis of the trends for earlier grade levels and of the changing age-at-onset curves for the various graduating classes are contained in the large 1978 report from the study (cited earlier). For the purposes of these highlights, only a few of these figures are included, and some general points summarized. Those interested in more detail, particularly on trends, are referred to the 1978 report. Table 11 gives the percent first trying each drug at each of the earlier grade levels.

Grade Level at First Use

- Initial contact with most illicit drugs occurs during the final three years of high school. Each illegal drug, except marijuana, had been used by fewer than 7% of the class of 1979 by the time they entered tenth grade. (See Table 11.)
- However, for marijuana, alcohol, and cigarettes, much of the initial use took place before high school. For example, daily cigarette smoking was begun by 18% prior to tenth grade vs. only an additional 11% in high school (i.e., in grades ten through twelve). The figures for initial use of alcohol are 56% prior to and 38% during high school; and for marijuana, 30% prior to and 30% during high school.
- Among inhalant users, about half had their first experience prior to tenth grade. However, the underreporting of use of amyl and butyl nitrites in this category may yield an understatement of the number of students who initiated inhalant use in the upper grade levels.
- For each illicit drug class except inhalants and marijuana, less than half of the users had begun use prior to tenth grade. Among those who had used cocaine by senior year, only one in six had used prior

TABLE 11

Grade of First Use for Eleven Types of Drugs, Class of 1979

| Grade in which drug was first used: | Marijuana | Inhalants ^a | Hallucinogens ^a | Cocaine | Heroin | Other Opiates | Stimulants | Sedatives | Tranquilizers | Alcohol | Cigarettes (daily) |
|-------------------------------------|-----------|------------------------|----------------------------|---------|--------|---------------|------------|-----------|---------------|---------|--------------------|
| 12th | 5.2 | 1.7 | 2.6 | 5.1 | 0.2 | 2.3 | 4.9 | 2.6 | 2.4 | 6.4 | 2.3 |
| 11th | 10.8 | 2.2 | 4.1 | 5.5 | 0.4 | 2.8 | 7.4 | 4.0 | 4.6 | 12.6 | 3.9 |
| 10th | 14.1 | 2.7 | 3.7 | 3.0 | 0.2 | 2.7 | 5.7 | 4.2 | 4.6 | 18.5 | 4.7 |
| 9th | 16.4 | 1.3 | 2.3 | 1.3 | 0.2 | 1.6 | 4.1 | 2.6 | 2.7 | 24.9 | 6.0 |
| 7-8th | 12.2 | 3.5 | 1.4 | 0.5 | 0.2 | 0.5 | 1.8 | 1.3 | 1.5 | 22.5 | 8.9 |
| 6th or below | 1.8 | 1.3 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 | 0.0 | 0.3 | 8.1 | 3.5 |
| Never used | 39.6 | 87.3 | 85.9 | 84.6 | 98.9 | 89.9 | 75.8 | 85.4 | 83.7 | 7.0 | 70.6 |

NOTE: This question was asked in two of the five forms (N = approximately 5,700), except for inhalants which were asked about in only one form (N = approximately 2,500).

^aUnadjusted for known underreporting of certain drugs. See page 10.

to tenth grade. For the rest of the illicit drugs, the corresponding proportion is roughly one-third. These data do indicate, however, that significant minorities of these users are initiated into illicit drug use prior to tenth grade.

Trends in Use at Earlier Grade Levels

- Using the retrospective data provided by each of the last five senior classes concerning their grade at first use, it is possible to reconstruct lifetime prevalence curves for lower grade levels during the years when these five classes were in those various grade levels. Obviously, data from eventual dropouts from school are not included in any of the curves. Figures K through N show the reconstructed lifetime prevalence curves for earlier grade levels on marijuana, cocaine, sedatives, and cigarettes. These four drugs were selected because they show some of the most interesting patterns of change:
- As can be seen in Figure K, for the years covered across the decade of the 70's, marijuana use has been rising steadily at all grade levels down through eighth grade. There appears to have been little ripple effect in the elementary schools, by 1973, and the most recent national household survey by NIDA would suggest that this continues to be true; only 8% of the 12 to 13 year olds in 1977 reporting any experience with marijuana, and presumably sixth graders would have an even lower rate.*
- Cocaine use (Figure L) presents a somewhat different picture, with lifetime use seeming to level off in the mid 70's—at least in the lower grade levels—but then rising rapidly in the last two years among seniors. Undoubtedly the lower grade levels would show a parallel upswing if data were currently available.
- Lifetime prevalence of sedative use (Figure M) began declining for earlier grade levels in the mid 70's. (Recall that annual prevalence observed for seniors also has been declining steadily since 1975.) The comparable curves for tranquilizer use (not shown) are quite similar in shape to those shown for sedatives.

*See National Survey on Drug Abuse: 1977 by H.I. Abelson, P.M. Fishburne, and I. Cisin. Rockville, Md: National Institute on Drug Abuse, 1977.

FIGURE K

Marijuana: Retrospective Trends in Lifetime Prevalence for 6th Graders, 8th Graders, 9th Graders, etc.

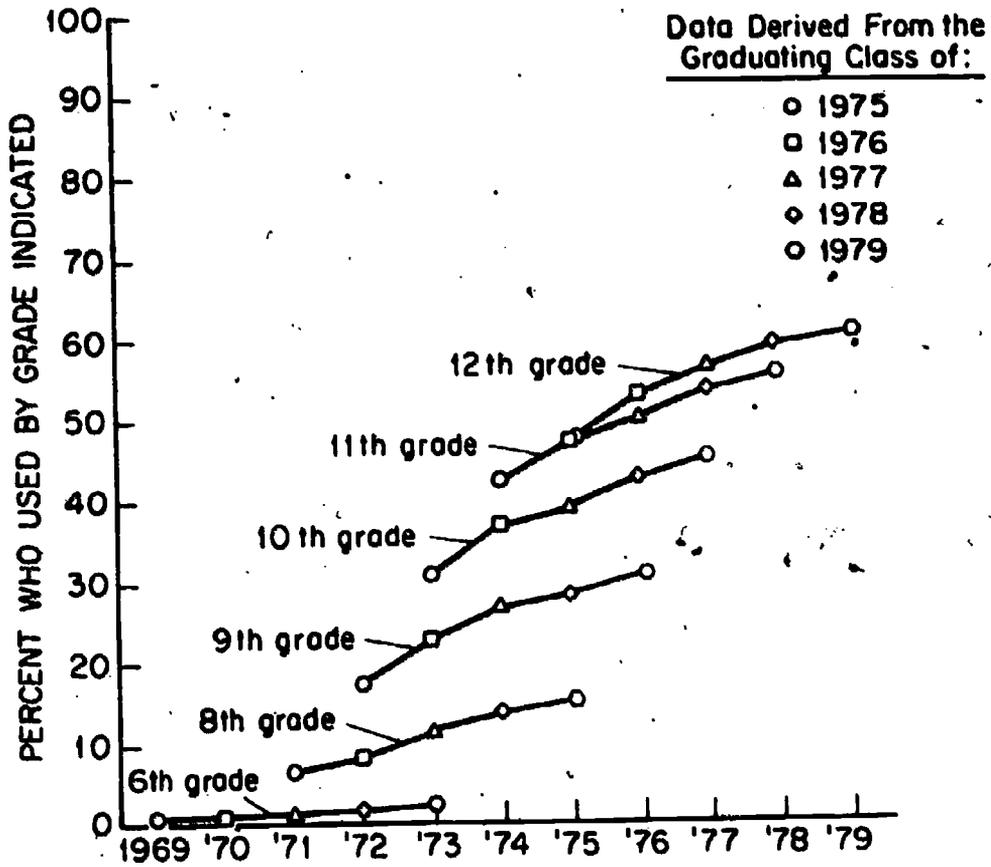
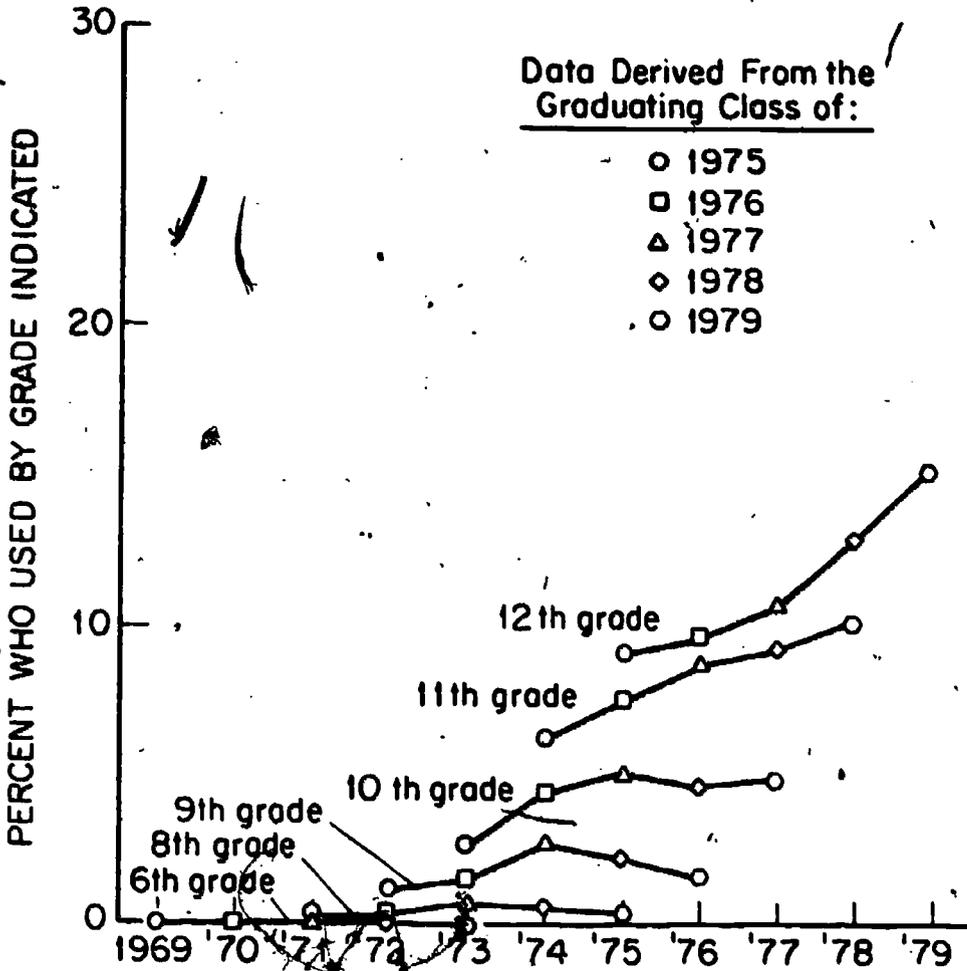


FIGURE L

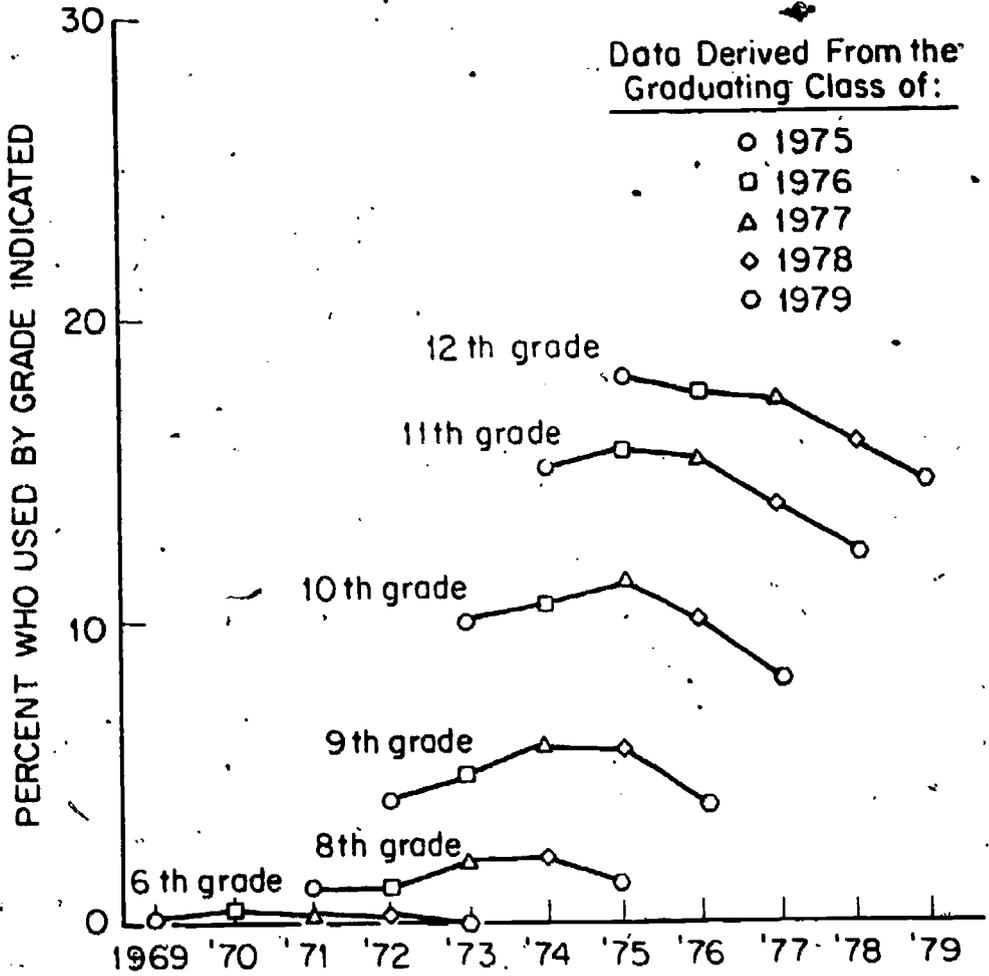
Cocaine: Retrospective Trends in Lifetime Prevalence for 6th Graders, 8th Graders, 9th Graders, etc.



450

FIGURE M

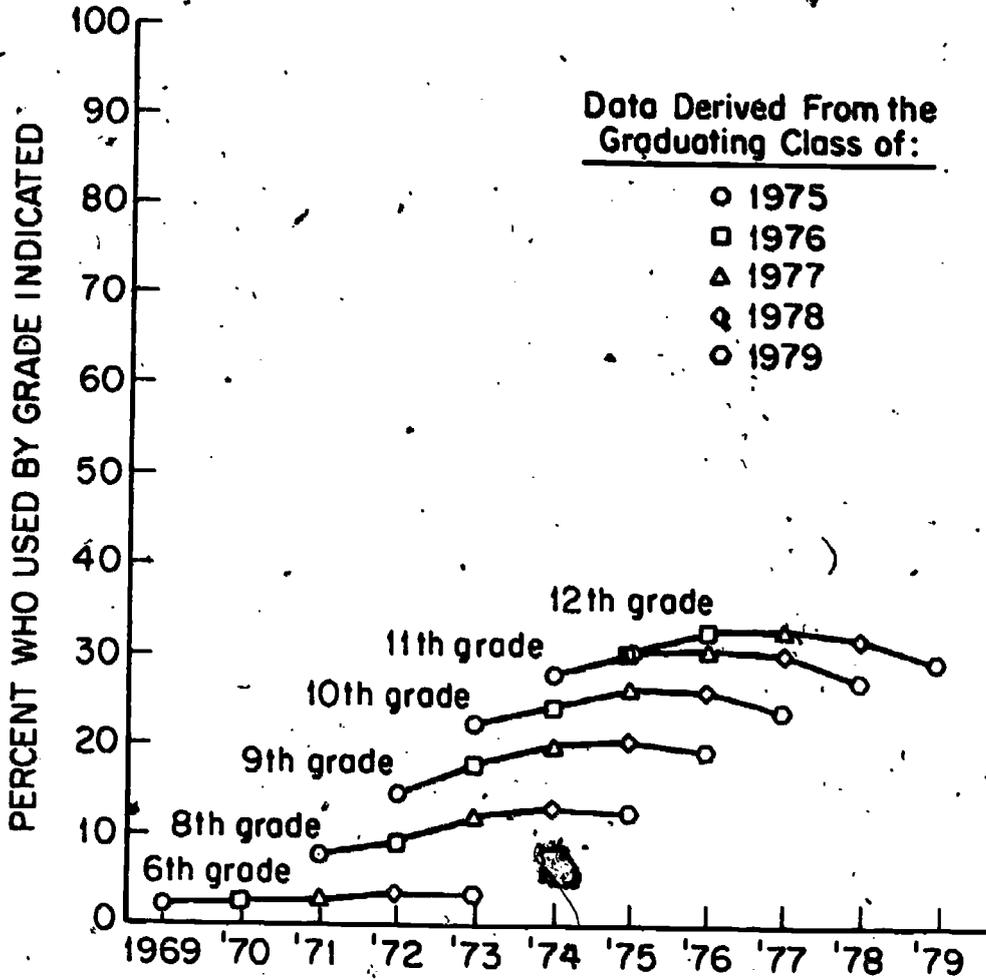
**Sedatives: Retrospective Trends in Lifetime Prevalence
for 6th Graders, 8th Graders, 9th Graders, etc.**



5.

FIGURE N

Cigarettes: Retrospective Trends in Lifetime Prevalence
for 6th Graders, 8th Graders, 9th Graders, etc.,
for Use on a Daily Basis



- Figure N presents the lifetime prevalence curves for smoking on a daily basis. It shows that initiation to daily smoking was beginning to peak at the lower grade levels in the early to mid 1970's. For high school seniors the peak did not become apparent until the late 70's.
- The comparable curves for lifetime prevalence of alcohol use at earlier grade levels (not shown) are very flat, suggesting very little change at earlier grade levels in the years covered. However, it must be remembered that the most important changes in alcohol use among seniors concern the frequency of high quantity drinking. It is altogether possible that shifts in these events have been taking place in lower grade levels, as well.

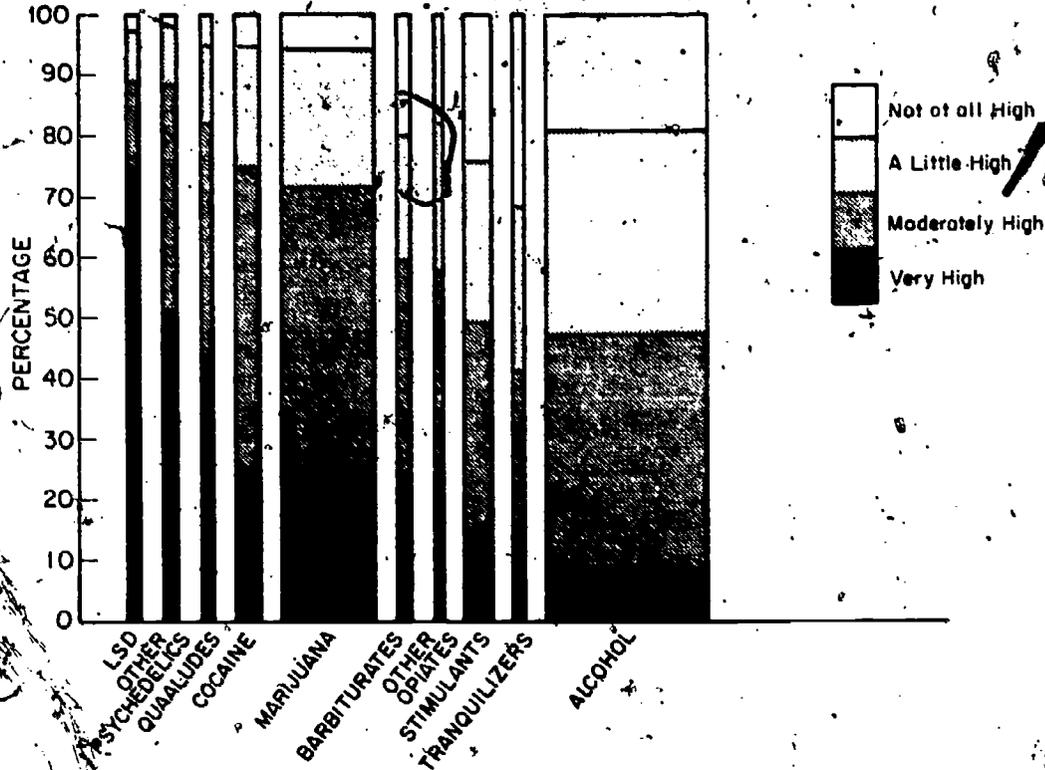
DEGREE AND DURATION OF HIGHS

On one of the five questionnaire forms, seniors who report use of a drug during the prior twelve months are asked how long they usually stay high and how high they usually get on that drug. These measures were developed both to help characterize the drug-using event and to provide indirect measures of dose or quantity of drugs consumed.

- Figure 0 shows the proportion of 1979 seniors who say that they usually get "not at all" high, "a little" high, "moderately" high, or "very" high when they use a given type of drug. The percentages are based on all respondents who report use of the given drug class in the previous twelve months, and therefore each bar cumulates to 100%. The ordering from left to right is based on the percentage of users of each drug who report that they usually get "very" high. (The width of each bar is proportional to the percentage of all seniors having used the drug class in the previous year; this should serve as a reminder that even though a large percentage of users of a drug may get very high, they may represent only a small proportion of all seniors.)
- The drugs which usually seem to result in intense highs are the psychedelics (LSD and other psychedelics), heroin and methaqualone (Quaaludes). (Actually, heroin has been omitted from Figure 0 because of the small number of cases available for a given year, but an averaging across years indicates that it would rank second, after LSD, in Figure 0.)
- Next come cocaine and marijuana, with over 70% of the users of each saying they usually get moderately high or very high when using the drug.
- The four major psychotherapeutic drug classes—barbiturates, opiates other than heroin, amphetamines, and tranquilizers—are less often used to get high; but substantial proportions of users (from 40% to 60%) still say they usually get moderately or very high after taking these drugs.

FIGURE O

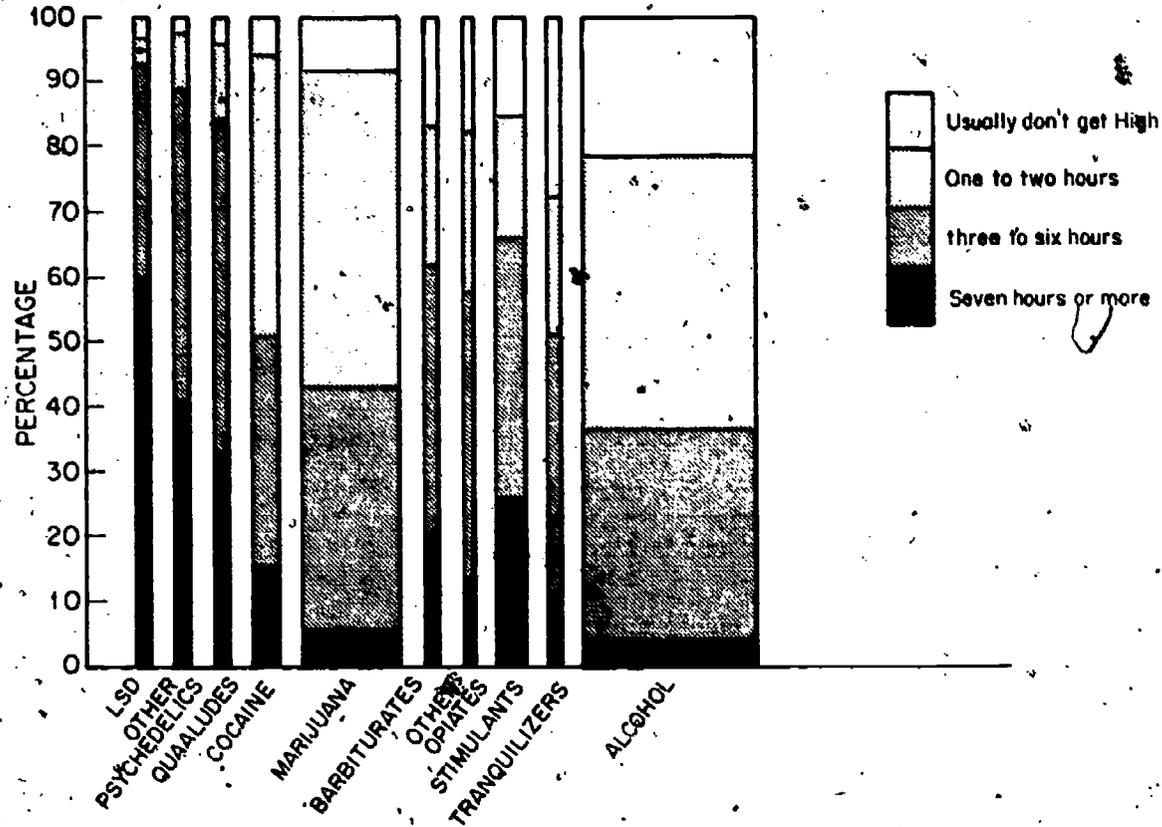
Degree of High Attained by Recent Users



NOTE: Heroin has been omitted from this figure because of the small number of heroin users who received these particular questions. The width of each bar is proportionate to the number of seniors reporting any use of each drug in the prior 12 months.

FIGURE P

Duration of High Attained by Recent Users



NOTE: Heroin has been omitted from this figure because of the small number of heroin users who received these particular questions. The width of each bar is proportionate to the number of seniors reporting any use of each drug in the prior 12 months.

- Relatively few of the many seniors using alcohol say that they usually get very high when drinking, although nearly half usually get at least moderately high. However, for a given individual we would expect more variability from occasion to occasion in the degree of intoxication achieved with alcohol than with most of the other drugs. Therefore, many drinkers who do not "usually" get very high certainly get very high sometimes
- Figure P presents the data on the duration of the highs usually obtained by users of each class of drugs. The drugs are arranged in the same order as for intensity of highs to permit an examination of the correspondence between the degree and duration of highs.
- As can be seen in Figure P, those drugs which result in the most intense highs also tend to result in the longest highs. For example, LSD, other psychedelics, and methaqualone rank one through three respectively on both dimensions, with substantial proportions (from 33% to 60%) of the users saying they usually stay high for seven hours or more. And alcohol ranks last on both dimensions; most users stay high for two hours or less.
- However, there is not a perfect correspondence between degree and duration of highs. The highs achieved with cocaine and marijuana, although intense for many users, tend to be relatively short-lived in comparison with most other drugs. Most users of both usually stay high less than three hours, and the modal and median time for both drugs is one to two hours.
- The modal and median duration of highs for the four classes of psychotherapeutic drugs—barbiturates, opiates other than heroin, stimulants, and tranquilizers—is three to six hours.
- In sum, the drugs vary considerably in both the duration and degree of the highs usually obtained with them. (These data obviously do not address the qualitative differences in the experiences of being "high.") Sizeable proportions of the users of all of these drugs report that they usually get high for at least three hours per occasion, and for a number of drugs appreciable proportions usually stay high for seven hours or more.

Trends in Degree and Duration of Highs

- There have been only a few shifts over the last four years in the degree or duration of highs usually experienced by users of the various drugs.
- The average duration of the highs reported by LSD users seems to have declined somewhat. In 1975, 74% of the recent LSD users reported usually staying high seven hours or more; by 1979 this proportion dropped to 60%.
- For opiates other than heroin, there has been a steady decline in both the intensity of the highs usually experienced and in the duration of those highs. In 1975, 39% said they usually got "very high" vs. 18% in 1979. The proportion usually staying high for seven or more hours dropped from 28% in 1975 to 13% in 1979.
- Amphetamines show a gradual increase, among users who are taking them without medical supervision, in the proportion using them for purposes other than for getting high. In 1975, 9% said they usually did not get high, but this proportion rose to 17% by 1979. Also, the average reported duration of amphetamine highs has been declining; 41% of the 1975 users said they usually stayed high seven or more hours vs. 26% of the 1979 users.
- For marijuana there has been no systematic trend in the degree of the highs obtained, but there are some interesting changes taking place in the duration figures. Recall that most marijuana users say they usually stay high either one to two hours or three to six hours. Since 1975 there has been a steady shift in the proportions selecting these two categories: a lower proportion of users is now answering three to six hours (45% in 1975 vs. 37% in 1979) while a higher proportion is now answering one to two hours (40% in 1975 vs. 49% in 1979). This shift appears to be due almost entirely to the fact that more seniors today are using marijuana; and the users in today's classes who would not have been users in earlier classes, tend to be relatively light users. We deduce this from the fact the percentage of all seniors reporting three to six hour highs has remained relatively unchanged since 1975, while the percentage of all seniors reporting one to two hour highs has been increasing steadily (from 16% in 1975 to 25% in 1979).
- Other than these, there are no clearly discernible patterns in the intensity or duration of the highs being experienced with those classes of drugs on which we have the relevant data. (Data have not been collected for highs experienced in the use of inhalants, PCP, and the nitrites.)

ATTITUDES AND BELIEFS ABOUT DRUGS

This section presents the cross-time results for three sets of attitude and belief questions. One set concerns how harmful the students think various kinds of drug use would be for the user, the second concerns how much they personally disapprove of various kinds of drug use, and the third asks about attitudes on the legality of using various drugs under different conditions. (The next section deals with the closely related topics of parents' and friends' attitudes about drugs, as the seniors perceive them.)

As the data below show, overall percentages disapproving various drugs, and the percentages believing their use to involve serious risk, both tend to parallel the percentages of actual users. Thus, for example, of the illicit drugs marijuana is the most frequently used and the least likely to be seen as risky to use. This and many other such parallels suggest that the individuals who use a drug, are less likely to disapprove use of it or view its use as involving risk. However, such a comparison of overall percentages, though strongly suggestive, does not establish that a comparable relationship exists at the individual level. Therefore, an extensive series of individual level analyses of these data, to be reported elsewhere, has been conducted: and the results confirm that strong correlations exist between individual use of drugs and the various attitudes and beliefs about drugs. Those seniors who use a given drug also are more likely to approve its use, downplay its risks, and view their own parents and friends as accepting of its use.

The attitudes and beliefs about drug use reported below have been changing during recent years, along with actual behavior. In particular, views about marijuana use, and legal sanctions against use, have shown important trends. A number of states have enacted legislation which in essence removes criminal penalties for marijuana use, many others have such legislation pending, and one (Alaska) has had certain types of use "decriminalized" by judicial decision. The President has recommended Federal decriminalization, a stand that would have been considered extremely radical only a few years ago. Certainly such events, and also the positions taken by the National Commission on Marijuana and Drug Abuse, the American Bar Association, the American Medical Association, and Consumers Union, are likely to have had an effect on public attitudes, and our trend data suggest that they did.

However, over the last year or so scientists, policy makers, and in particular the electronic and printed media, have given considerable attention to the increasing levels of regular marijuana use among young people, and to the potential hazards associated with such use. As will be seen below, over the last year there has been a shift in a more conservative direction of attitudes about regular use of marijuana—a shift which coincides with a halt in the rise of daily use, and which may well reflect the impact of this increased public attention.

Perceived Harmfulness of Drugs

Beliefs in 1979 about Harmfulness

- A substantial majority of high school seniors perceive regular use of any of the illicit drugs, other than marijuana, as entailing "great risk" of harm for the user (see Table 12). Some 88% of the sample feel this way about heroin—the highest proportion for any of these drugs. The proportions attributing great risk to amphetamines, barbiturates, and cocaine are all around 70%, while 82% associate great risk with using
- Regular use of cigarettes (i.e., one or more packs a day) is judged by the majority (63%) as entailing great risk of harm.
- In contrast to the above figures, regular use of marijuana is judged to involve great risk by only 42% of the sample.
- Regular use of alcohol was more explicitly defined in several questions. Very few (23%) associate much risk of harm with having one or two drinks almost daily. Only about a third (35%) think there is great risk involved in having five or more drinks once or twice each weekend. Considerably more (66%) think the user takes a great risk in consuming four or five drinks nearly every day.
- Compared with the above perceptions about the risks of regular use of each drug, many fewer respondents feel that a person runs a "great risk" of harm by simply trying the drug once or twice.
- Very few think there is much risk in using marijuana occasionally (14%).
- Occasional or experimental use of the other illicit drugs, however, is still viewed as risky by a substantial proportion. The percentage associating great risk with

experimental use ranges from 30% for amphetamines and barbiturates to 50% for heroin.

- Practically no one (4%) believes there is great risk involved in trying an alcoholic beverage once or twice.

Trends in Perceived Harmfulness

- Several important trends have been taking place over the last four years in these beliefs about the dangers associated with using drugs.
- In just the last year there has been a statistically significant increase in the proportion of seniors associating risk with regular use of all drugs—licit or illicit.
- Longer term, there has been a modest but consistent trend in the direction of fewer students associating much risk with experimental or occasional use of most of the illicit drugs. This trend continued in 1979 for all illicitly used drugs except marijuana.
- For marijuana there had been until this year a steady decline in the harmfulness associated with all levels of use, but in 1979, for the first time, there has been an increase in these proportions. The most impressive increase occurs for regular marijuana use, where there has been a full 7% jump in one year in the proportion perceiving it as involving great risk—i.e., from 35% to 42%. As stated above, this change occurs during a year in which a substantial amount of media attention has been devoted to the potential dangers of heavy marijuana use.
- The two other important changes which have been occurring involve cocaine and cigarettes. The percentage who think there is great risk in trying cocaine once or twice has dropped continuously from 43% in 1975 to 32% in 1979, which parallels a period of rapidly increasing use. The proportion seeing great risk in regular use dropped somewhat from 1975 to 1977, but thereafter has remained steady.
- There has been a substantial and steady increase in the number who think pack-a-day cigarette smoking involves great risk to the user (from 51% in 1975 to 63% in 1979), a particularly encouraging finding. This shift parallels, and to some degree even precedes, the downturn in regular smoking found in this age group.
- Higher proportions this year than last associate great risk with moderate or heavy rates of daily drinking.

TABLE 12

Trends in Perceived Harmfulness of Drugs

| Q. How much do you think people risk harming themselves (physically or in other ways), if they... | Percent saying "great risk" ^a | | | | | '78-'79 change |
|---|--|---------------|---------------|---------------|---------------|-----------------|
| | Class of 1975 | Class of 1976 | Class of 1977 | Class of 1978 | Class of 1979 | |
| Try marijuana once or twice | 15.1 | 11.4 | 9.5 | 8.1 | 9.4 | +1.3 |
| Smoke marijuana occasionally | 18.1 | 15.0 | 13.4 | 12.4 | 13.5 | +1.1 |
| Smoke marijuana regularly | 43.3 | 38.6 | 36.4 | 34.9 | 42.0 | +7.1 <i>bbb</i> |
| Try LSD once or twice | 49.4 | 45.7 | 43.2 | 42.7 | 41.6 | -1.1 |
| Take LSD regularly | 81.4 | 80.8 | 79.1 | 81.1 | 82.4 | +1.3 |
| Try cocaine once or twice | 42.6 | 39.1 | 35.6 | 33.2 | 31.5 | -1.1 |
| Take cocaine regularly | 73.1 | 72.3 | 68.2 | 68.2 | 69.5 | +1.3 |
| Try heroin once or twice | 60.1 | 58.9 | 55.8 | 52.9 | 50.4 | -2.5 |
| Take heroin occasionally | 75.6 | 75.6 | 71.9 | 71.4 | 70.9 | -0.5 |
| Take heroin regularly | 87.2 | 88.6 | 86.1 | 86.6 | 87.5 | +0.9 |
| Try amphetamines once or twice | 35.4 | 33.4 | 30.8 | 29.9 | 29.7 | -0.2 |
| Take amphetamines regularly | 69.0 | 67.3 | 66.6 | 67.1 | 69.9 | +2.8 <i>a</i> |
| Try barbiturates once or twice | 34.8 | 32.5 | 31.2 | 31.3 | 30.7 | -0.6 |
| Take barbiturates regularly | 69.1 | 67.7 | 68.6 | 68.4 | 71.6 | +3.2 <i>b</i> |
| Try one or two drinks of an alcoholic beverage (beer, wine, liquor) | 5.3 | 4.8 | 4.1 | 3.4 | 4.1 | +0.7 |
| Take one or two drinks nearly every day | 21.5 | 21.2 | 18.5 | 19.6 | 22.6 | +3.0 <i>b</i> |
| Take four or five drinks nearly every day | 63.5 | 61.0 | 62.9 | 63.1 | 66.2 | +3.1 <i>b</i> |
| Have five or more drinks once or twice each weekend | 37.8 | 37.0 | 34.7 | 34.5 | 34.9 | +0.4 |
| Smoke one or more packs of cigarettes per day | 51.3 | 56.4 | 58.4 | 59.0 | 63.0 | +4.0 <i>bb</i> |
| | Approx. N = (2804) | (3225) | (3570) | (3770) | (3250) | |

NOTE: Level of significance of difference between the two most recent classes:
a = .05, *bb* = .01, *bbb* = .001.

^a Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, Drug unfamiliar.

Personal Disapproval of Drug Use

A set of questions was developed to try to measure any general moralistic sentiment attached to various types of drug use. The phrasing, "Do you disapprove of..." was adopted.

Extent of Disapproval in 1979

- Regular use of any of the illicit drugs is not condoned by the great majority of these students. Even regular marijuana use is disapproved by 69%, and regular use of each of the other illicit drugs receives disapproval from between 91% and 98% of today's high school seniors (see Table 13).
- Smoking a pack (or more) of cigarettes per day receives the disapproval of fully 70% of the age group.
- Drinking at the rate of one or two drinks daily also receives disapproval from two-thirds of the seniors (68%)—about the same proportion who disapprove regular marijuana use. A curious finding is that weekend binge drinking (five or more drinks once or twice each weekend) is acceptable to more seniors than is moderate daily drinking. While only 57% disapprove of having five or more drinks once or twice a weekend, 68% disapprove of having one or two drinks daily. This is in spite of the fact that great risk is more often attached to the weekend binge drinking (35%) than to the daily drinking (23%). One possible explanation for these seemingly inconsistent findings may stem from the fact that a greater proportion of this age group are themselves weekend binge drinkers rather than regular daily drinkers. They have thus expressed attitudes accepting of their own behavior, even though they may be inconsistent with their beliefs about possible consequences.
- For all drugs fewer people indicate disapproval of experimental or occasional use than of regular use, as would be expected. The differences are not great, however, for the illicit drugs other than marijuana. For example, 75% disapprove experimenting with cocaine vs. 91% who disapprove its regular use.
- For marijuana the rate of disapproval is substantially less for experimental use (34%) and occasional use (45%) than for regular use (69%). In other words, only one out of three disapprove of trying marijuana, and less than half disapprove of occasional use of the drug.

TABLE 13

Trends in Proportions Disapproving of Drug Use

| Q. Do you disapprove of people (who are 18 or older) doing each of the following? ^b | Percent disapproving ^a | | | | | |
|--|-----------------------------------|---------------|----------------|---------------|---------------|----------------|
| | Class of 1975 | Class of 1976 | Class. of 1977 | Class of 1978 | Class of 1979 | '78-'79 change |
| Trying marijuana once or twice | 47.0 | 38.4 | 32.4 | 33.4 | 34.2 | +0.8 |
| Smoking marijuana occasionally | 54.8 | 47.8 | 44.3 | 43.5 | 45.3 | +1.8 |
| Smoking marijuana regularly | 71.9 | 69.5 | 65.5 | 67.5 | 69.2 | +1.7 |
| Trying LSD once or twice | 82.8 | 84.6 | 83.9 | 85.4 | 86.6 | +1.2 |
| Taking LSD regularly | 94.1 | 95.3 | 95.8 | 96.4 | 96.9 | +0.5 |
| Trying cocaine once or twice | 81.3 | 82.4 | 79.1 | 77.0 | 74.7 | -2.3 |
| Taking cocaine regularly | 93.3 | 93.9 | 92.1 | 91.9 | 90.8 | -1.1 |
| Trying heroin once or twice | 91.5 | 92.6 | 92.5 | 92.0 | 93.4 | +1.4 |
| Taking heroin occasionally | 94.8 | 96.0 | 96.0 | 96.4 | 96.8 | +0.4 |
| Taking heroin regularly | 96.7 | 97.5 | 97.2 | 97.8 | 97.9 | +0.1 |
| Trying an amphetamine once or twice | 74.8 | 75.1 | 74.2 | 74.8 | 75.1 | +0.3 |
| Taking amphetamines regularly | 92.1 | 92.8 | 92.5 | 93.5 | 94.4 | +0.9 |
| Trying a barbiturate once or twice | 77.7 | 81.3 | 81.1 | 82.4 | 84.0 | +1.6 |
| Taking barbiturates regularly | 93.3 | 93.6 | 93.0 | 94.3 | 95.2 | +0.9 |
| Trying one or two drinks of an alcoholic beverage (beer, wine, liquor) | 21.6 | 18.2 | 15.6 | 15.6 | 15.8 | +0.2 |
| Taking one or two drinks nearly every day | 67.6 | 68.9 | 66.8 | 67.7 | 68.3 | +0.6 |
| Taking four or five drinks nearly every day | 88.7 | 90.7 | 88.4 | 90.2 | 91.7 | +1.5 |
| Having five or more drinks once or twice each weekend | 60.3 | 58.6 | 57.4 | 56.2 | 56.7 | +0.5 |
| Smoking one or more packs of cigarettes per day | 67.5 | 65.9 | 66.4 | 67.0 | 70.3 | +3.3 |
| | Approx. N = (2677) | (3234) | (3582) | (3686) | (3221) | |

NOTE: Level of significance of difference between the two most recent classes:
 $\alpha = .05$, $\alpha\alpha = .01$, $\alpha\alpha\alpha = .001$.

^aAnswer alternatives were: (1) Don't disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

^bThe 1975 question asked about people who are "18 or older."

Trends in Disapproval

- There was a substantial decrease between 1975 and 1977 in disapproval of marijuana use at any level of frequency. About 14% fewer seniors in the class of 1977 (compared with the class of 1975) disapproved of experimenting, 11% fewer disapproved of occasional use, and 6% fewer disapproved of regular use. Between 1977 and 1979, however, there has been, if anything, a slight hardening of attitudes about marijuana, with disapproval of regular use having risen nearly 4%.
- Over the last four years disapproval has been increasing for experimenting with barbiturates (from 78% in 1975 to 84% in 1979); and over the last three years disapproval also has been increasing for regular cigarette smoking (from 66% in 1976 to 70% in 1979). Both of these changes coincide with reductions in actual use.
- Disapproval of experimental use of cocaine has declined somewhat, from a high of 82% in 1976 down to 75% in 1979.
- The small minority who disapprove of trying alcohol once or twice (22% in 1975) had become even smaller by 1977 (16%), but has remained unchanged since.

Attitudes Regarding the Legality of Drug Use

Since the legal restraints on drug use appeared likely to be in a state of flux for some time, we decided at the beginning of the study to measure attitudes about legal sanctions. Table 14 presents a statement of one set of general questions on this subject along with the answers provided by each senior class. The set lists a sampling of illicit and licit drugs and asks whether their use should be prohibited by law. A distinction is consistently made between use in public and use in private—a distinction which proved quite important in the results.

- Fully 43% believe that cigarette smoking in public places should be prohibited by law—almost as many as think getting drunk in such places should be prohibited (50%).
- The majority (62%) favor legally prohibiting marijuana use in public places despite the fact that the majority have used marijuana themselves.
- In addition, the great majority believe that the use in public of illicit drugs other than marijuana should be prohibited by law (e.g., 77% in the case of amphetamines and barbiturates, 84% for heroin).

TABLE 14

Trends in Attitudes Regarding Legality of Drug Use

| Q. Do you think that people (who are 18 or older) should be prohibited by law from doing each of the following? ^b | Percent saying "yes" ^a | | | | | |
|--|-----------------------------------|---------------|---------------|---------------|---------------|----------------|
| | Class of 1975 | Class of 1976 | Class of 1977 | Class of 1978 | Class of 1979 | '78-'79 change |
| Smoking marijuana in private | 32.8 | 27.5 | 26.8 | 25.4 | 28.0 | +2.6 s |
| Smoking marijuana in public places | 63.1 | 59.1 | 58.7 | 59.5 | 61.8 | +2.3 |
| Taking LSD in private | 67.2 | 65.1 | 63.3 | 62.7 | 62.4 | -0.3 |
| Taking LSD in public places | 85.8 | 81.9 | 79.3 | 80.7 | 81.5 | +0.8 |
| Taking heroin in private | 76.3 | 72.4 | 69.2 | 68.8 | 68.5 | -0.3 |
| Taking heroin in public places | 90.1 | 84.8 | 81.0 | 82.5 | 84.0 | +1.5 |
| Taking amphetamines or barbiturates in private | 57.2 | 53.5 | 52.8 | 52.2 | 53.4 | +1.2 |
| Taking amphetamines or barbiturates in public places | 79.6 | 76.1 | 73.7 | 75.8 | 77.3 | +1.5 |
| Getting drunk in private | 15.6 | 15.6 | 18.6 | 17.4 | 16.8 | -0.6 |
| Getting drunk in public places | 55.7 | 50.7 | 49.0 | 50.3 | 50.4 | +0.1 |
| Smoking cigarettes in certain specified public places | NA | NA | 42.0 | 42.2 | 43.1 | +0.9 |
| | Approx. N = (2620) | (3265) | (3629) | (3783) | (3288) | |

NOTES: Level of significance of difference between the two most recent classes:
 s = .05, ss = .01, sss = .001.

NA indicates question not asked.

^aAnswer alternatives were: (1) No, (2) Not sure, and (3) Yes.

^bThe 1975 question asked about people who are "20 or older."

TABLE 15

Trends in Attitudes Regarding Marijuana Laws
(Entries are percentages)

| | Class of <u>1975</u> | Class of <u>1976</u> | Class of <u>1977</u> | Class of <u>1978</u> | Class of <u>1979</u> |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Q. <i>There has been a great deal of public debate about whether marijuana use should be legal. Which of the following policies would you favor?</i> | | | | | |
| Using marijuana should be entirely legal | 27.3 | 32.6 | 33.6 | 32.9 | 32.1 |
| It should be a minor violation--like a parking ticket--but not a crime | 25.3 | 29.0 | 31.4 | 30.2 | 30.1 |
| It should be a crime | 30.5 | 25.4 | 21.7 | 22.2 | 24.0 |
| Don't know | 16.8 | 13.0 | 13.4 | 14.6 | 13.8 |
| | N = (2617) | (3264) | (3622) | (3721) | (3278) |
| Q. <i>If it were legal for people to USE marijuana, should it also be legal to SELL marijuana?</i> | | | | | |
| No | 27.8 | 23.0 | 22.5 | 21.8 | 22.9 |
| Yes, but only to adults | 37.1 | 49.8 | 52.1 | 53.6 | 53.2 |
| Yes, to anyone | 16.2 | 13.3 | 12.7 | 12.0 | 11.3 |
| Don't know | 18.9 | 13.9 | 12.7 | 12.6 | 12.6 |
| | N = (2616) | (3279) | (3628) | (3719) | (3280) |
| Q. <i>If marijuana were legal to use and legally available, which of the following would you be most likely to do?</i> | | | | | |
| Not use it, even if it were legal and available | 53.2 | 50.4 | 50.6 | 46.4 | 50.2 |
| Try it | 8.2 | 8.1 | 7.0 | 7.1 | 6.1 |
| Use it about as often as I do now | 22.7 | 24.7 | 26.8 | 30.9 | 29.1 |
| Use it more often than I do now | 6.0 | 7.1 | 7.4 | 6.3 | 6.0 |
| Use it less than I do now | 1.3 | 1.5 | 1.5 | 2.7 | 2.5 |
| Don't know | 8.5 | 8.1 | 6.6 | 6.7 | 6.1 |
| | N = (2602) | (3272) | (3625) | (3711) | (3277) |

- For all drugs, substantially fewer students believe that use in private settings should be illegal.
- Until this year there had been a steady, though moderate, decline in the proportion of seniors who favored legal prohibition of private use of any of the illicit drugs. And prior to 1978 there had been a similar decline in the proportions wanting to prohibit public use of those drugs. Now, however, the evidence suggests that these downward trends have ended.

The Legal Status of Marijuana

Another set of questions deals specifically with marijuana and what legal sanctions, if any, students think should be attached to its use and sale. Respondents also are asked to guess how they would be likely to react to legalized use and sale of the drug. While the answers to such a question must be interpreted cautiously, we think it worth exploring how young people think they might respond to such changes in the law. (The questions and responses are shown in Table 15.) :

- About a third of the 1979 seniors believe marijuana use should be entirely legal (32%). Nearly another third (30%) feel it should be treated as a minor violation—like a parking ticket—but not as a crime. Another 14% indicate no opinion, and only 24% feel it still should be a crime. In other words, fully three-quarters of those expressing an opinion believe that marijuana use should not be treated as a criminal offense.
- Asked whether they thought it should be legal to sell marijuana if it were legal to use it, nearly two-thirds (65%) said yes. Of those, the great majority would permit sale only to adults, however, suggesting more conservatism on this subject than might generally be supposed.
- High school seniors predict that they would be little affected by the legalization of the sale and use of marijuana. Half of the respondents (50%) say that they would not use the drug even if it were legal and available, and another 29% indicate they would use it about as often as they do now. Only 6% say they would use it more often than at present and only another 6% say they would try it. About 6% say they do not know how they would react.
- The predictions of personal marijuana use under legalization have been quite similar for all five high school classes. The slight shifts being observed are mostly attributable to the increased proportion of seniors who actually have used marijuana.

THE SOCIAL MILIEU

The preceding section dealt with seniors' attitudes about various forms of drug use. Attitudes about drugs, as well as drug-related behaviors, obviously do not occur in a social vacuum. Drugs are discussed in the media; they are a topic of considerable interest and conversation among young people; they are also a matter of much concern to parents, concern which often is strongly communicated to their children. Young people also are likely to be affected by the actual drug-taking behaviors of their friends and acquaintances, as well as by the availability of the various drugs. The remaining section presents data on several of these relevant aspects of the social milieu.

We begin with two sets of questions about parental and peer attitudes, questions which closely parallel the questions about respondents' own attitudes about drug use, discussed in the preceding section. (These two sets of questions are displayed in Tables 16 and 17.)

Perceived Attitudes of Parents and Friends

Current Perceptions of Parental Attitudes

- A large majority of seniors feel that their parents would disapprove or strongly disapprove of their exhibiting any of the drug use behaviors shown in Table 16.
- Over 97% of seniors say that their parents would disapprove or strongly disapprove of their smoking marijuana regularly, even trying LSD or amphetamines, or having four or five drinks every day. (Although the questions did not include more frequent use of LSD or amphetamines, or any use of heroin, it is obvious that if such behaviors were included in the list virtually all seniors would indicate parental disapproval.)
- While respondents feel that marijuana use would receive the least parental disapproval of all of the illicit drugs, even experimenting with it still is seen as

TABLE 16

Trends in Parental Disapproval of Drug Use

| Q. How do you think your parents would feel about you...: | Percent disapproving ^a | | | | | |
|---|-----------------------------------|---------------|---------------|---------------|---------------|----------------|
| | Class of 1975 | Class of 1976 | Class of 1977 | Class of 1978 | Class of 1979 | '78-'79 change |
| Trying marijuana once or twice | 90.8 | 87.4 | 85.8 | 83.2 | 84.9 | +1.7 |
| Smoking marijuana occasionally | 95.6 | 93.0 | 92.5 | 90.8 | 93.2 | +2.4 ss |
| Smoking marijuana regularly | 98.1 | 96.3 | 96.5 | 95.6 | 97.2 | +1.6 ss |
| Trying LSD once or twice | 99.0 | 97.4 | 98.1 | 97.5 | 98.8 | +1.3 ss |
| Trying an amphetamine once or twice | 98.0 | 97.1 | 97.2 | 96.7 | 97.9 | +1.2 ss |
| Taking one or two drinks nearly every day | 89.5 | 90.0 | 92.2 | 88.9 | 91.8 | +2.9 ss |
| Taking four or five drinks every day | 97.2 | 96.5 | 96.5 | 96.3 | 97.4 | +1.1 |
| Having five or more drinks once or twice every weekend | 85.3 | 85.9 | 86.5 | 82.6 | 84.5 | +1.9 |
| Smoking one or more packs of cigarettes per day | 88.5 | 87.6 | 89.2 | 88.7 | 91.3 | +2.6 ss |
| | Approx. N = (2546) | (2807) | (3014) | (3054) | (2748) | |

NOTE: NA indicates question not asked.

^a Answer alternatives were: (1) Not disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

a parentally sanctioned activity by the great majority of the seniors (85%). Assuming that the students are generally correct about their parents' attitudes, these results clearly show that there remains a rather massive generational difference of opinion about this drug.

- Also likely to be perceived as rating high parental disapproval (around 92% disapproval) are occasional marijuana use, taking one or two drinks nearly every day, and pack-a-day cigarette smoking.
- Slightly lower proportions of seniors (85%) think their parents would disapprove of their having five or more drinks once or twice every weekend. This happens to be exactly the same percentage as say their parents would disapprove of simply experimenting with marijuana.

Current Perceptions of Friends' Attitudes

- A parallel set of questions asked respondents to estimate their friends' attitudes about drug use (Table 17). These questions ask "How do you think your close friends feel (or would feel) about you ...?". The highest levels of disapproval are associated with trying LSD (86% think friends would disapprove), trying an amphetamine (79%), and heavy daily drinking (79%). Presumably, if heroin were on the list it would receive the highest peer disapproval; and, judging from respondents' own attitudes, barbiturates and cocaine would be roughly as unpopular among peers as amphetamines.
- Close to two-thirds (63% to 65%) think their friends would disapprove if they smoked marijuana daily, smoked a pack or more of cigarettes daily, or took one or two drinks daily.
- Just under half feel that friends would disapprove of occasional marijuana smoking or heavy drinking on weekends, and slightly fewer (41%) feel their friends would disapprove trying marijuana once or twice.
- In sum, peer norms differ considerably for the various drugs and for varying degrees of involvement with those drugs, but overall they tend to be relatively conservative. The great majority of seniors have friendship circles which do not condone use of the illicit drugs other than marijuana, and nearly two-thirds feel that their close friends would disapprove of regular marijuana use or daily drinking.

TABLE 17

Trends in Proportion of Friends Disapproving of Drug Use

| How do you think your close friends feel (or would feel) about you... | Percent Saying Friends Disapprove ^a | | | | |
|---|--|---------------------|---------------------|---------------------|---------------------|
| | Class of 1975 | Class of 1976 | Class of 1977 | Class of 1978 | Class of 1979 |
| Trying marijuana once or twice | 44.8 | NA | 42.3 | NA | 41.4 |
| Smoking marijuana occasionally | 54.0 | NA | 48.2 | NA | 47.4 |
| Smoking marijuana regularly | 70.4 | NA | 64.5 | NA | 65.6 |
| Trying LSD once or twice | 83.6 | NA | 84.6 | NA | 85.6 |
| Trying an amphetamine once or twice | 76.6 | NA | 78.1 | NA | 78.8 |
| Taking one or two drinks nearly every day | 59.4 | NA | 63.2 | NA | 63.2 |
| Taking four or five drinks every day | 79.9 | NA | 78.8 | NA | 79.2 |
| Having five or more drinks once or twice every weekend | 50.3 | NA | 48.7 | NA | 46.6 |
| Smoking one or more packs of cigarettes per day | 55.3 | NA | 60.0 | NA | 65.1 |
| | Approx. N = (2488) | (NA) | (2971) | (NA) | (2716) |

NOTE: NA indicates question not asked.

^a Answer alternatives were: (1) Not disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

A Comparison of the Attitudes of Parents, Peers, and Respondents Themselves

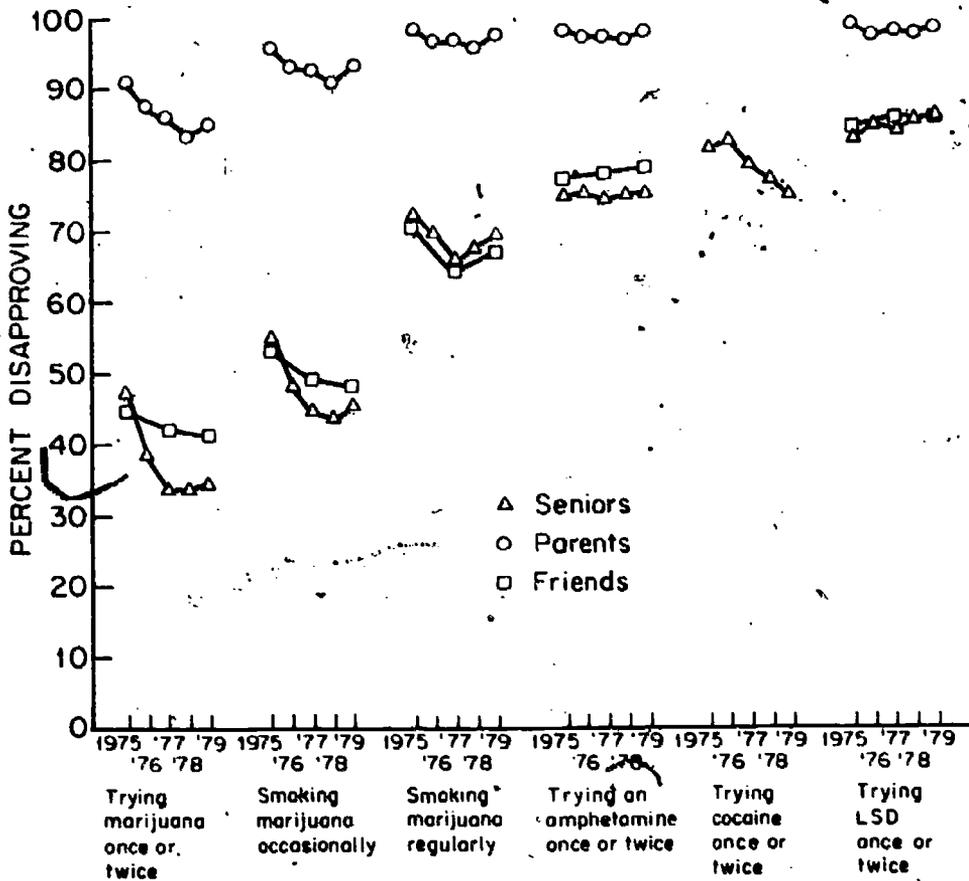
- A comparison of the perceptions of friends' disapproval with perceptions of parents' disapproval shows that the ordering of drug use behaviors is much the same for the two groups (e.g., highest frequencies of perceived disapproval for trying LSD or amphetamines, lowest frequencies for trying marijuana).
- A comparison with the seniors' own attitudes regarding drug use (see Figures Q and R) reveals that they are much more in accord with their peers than with their parents. The differences between seniors' own disapproval ratings and those of their parents tend to be large, with parents seen as more conservative overall in relation to every drug, licit or illicit. The largest difference occurs in the case of marijuana experimentation, where 34% say they disapprove but 85% say their parents would.

Trends in Perceptions of Parents' and Friends' Views

- Among all the drug use areas for which perceived disapproval of others was measured, the only one which showed consistent shifts over the past several years is marijuana use (see Figures Q and R). At each level of use—trying once or twice, occasional use, regular use—there had been a drop in perceived disapproval for both parents and friends up until 1977. We know from our other findings that these perceptions correctly reflected shifts in the attitudes of their peer groups—that is, that acceptance of marijuana was in fact increasing among seniors (see Figure Q). There is little reason to suppose such perceptions are less accurate in reflecting shifts in parents' attitudes. Therefore, it appears that the social norms regarding marijuana use to which American adolescents are directly exposed had been changing. However, consistent with the seniors' reports about their own attitudes, the liberal shift in these social norms appears to have stopped in the last year or two.
- Perceived parental and peer norms regarding most other drugs have shown either no change, or patterns of change which are not judged to be sufficiently consistent to be treated as trends. (It should be noted, however, that parental and peer attitudes about cocaine are not included in the questions. If they had been, they probably would have shown a shift toward greater acceptance, at least among peers.)

FIGURE Q

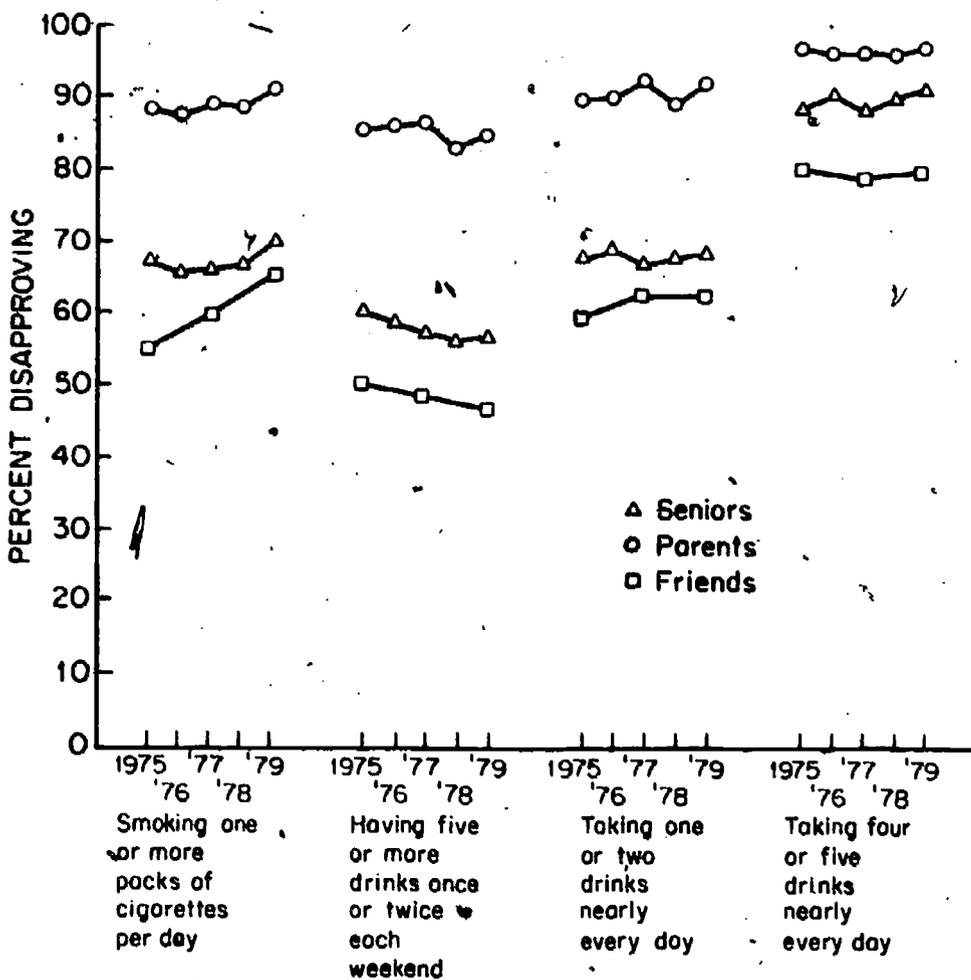
Trends in Disapproval of Illicit Drug Use
Seniors, Parents, and Peers



NOTE: For cocaine use data were not collected on parents' and friends' attitudes.

FIGURE R

Trends in Disapproval of Licit Drug Use
Seniors, Parents, and Peers



- The one exception is cigarette smoking (Figure R). More students in 1979 than 1975 (65% vs. 55%) report that their friends would disapprove if they smoked on a regular (pack-a-day) basis. This shift in perceptions of friends' disapproval may represent a convergence with reality—a reduction in pluralistic ignorance—because since 1975 a fairly consistent two-thirds of seniors have reported that they personally disapprove of pack-a-day cigarette smoking. Perhaps more young people are now openly expressing their attitudes about smoking, thus making their friends more aware of those attitudes.
- Alcohol represents the one other drug on which there is some discrepancy between the seniors' own attitudes and what they perceive to be those of their close friends—a discrepancy which is not narrowing as is the case for cigarettes (Figure R). Seniors generally say they are less tolerant of regular or heavy drinking than their friends. Their reports show that weekend binge drinking is becoming slightly more accepted by peers in recent classes. This shift parallels the changes in both their self-reported attitudes on this subject and in their actual behaviors.

Exposure to Drug Use by Friends and Others

It is generally agreed that much of youthful drug use is initiated through a peer social-learning process; and research has shown a high correlation between an individual's illicit drug use and that of his or her friends. Such a correlation can, and probably does, reflect several different causal patterns: (a) a person with friends who use a drug will be more likely to try the drug; (b) conversely, the individual who is already using a drug will be likely to introduce friends to the experience; and (c) one who is already a user is more likely to establish friendships with others who also are users.

Given the potential importance of exposure to drug use by others, we felt it would be useful to monitor seniors' association with others taking drugs, as well as seniors' perceptions about the extent to which their friends use drugs. Two sets of questions, each covering all or nearly all of the categories of drug use treated in this report, asked seniors to indicate (a) how often during the past twelve months they were around people taking each of the drugs to get high or for "kicks," and (b) what proportion of their friends use each of the drugs. (The questions dealing with friends' use are shown in Table 18.) Obviously, responses to these two questions are highly correlated with the respondents' own drug use; thus, for example, seniors who have recently used marijuana are much more likely to report that they have been around others getting high on marijuana, and that most of their friends use it.

FIGURE 5

Proportion of Friends Using Each Drug as Estimated by Seniors, in 1979

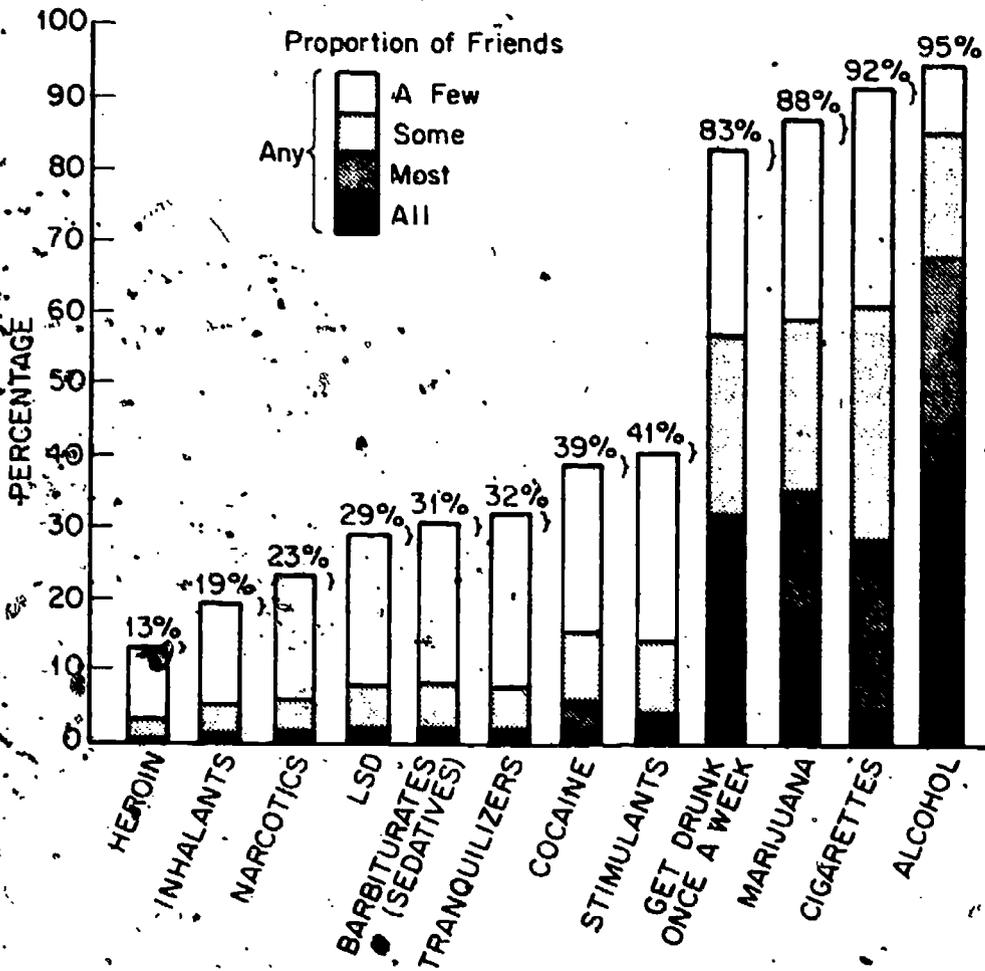


TABLE 18
Friends' Use of Drugs, Class of 1979
(Approximate N = 2933)

| <i>Q. How many of your friends would you estimate...</i> | Percent saying . . . | | | | |
|--|----------------------|--------------|-------------|-------------|------------|
| | <u>None</u> | <u>A Few</u> | <u>Some</u> | <u>Most</u> | <u>All</u> |
| Smoke marijuana | 12.4 | 28.3 | 23.8 | 27.2 | 8.3 |
| Use inhalants | 80.9 | 14.2 | 3.9 | 0.8 | 0.3 |
| Take LSD | 71.1 | 21.1 | 5.9 | 1.5 | 0.5 |
| Take other psychedelics | 71.8 | 19.7 | 6.3 | 1.6 | 0.6 |
| Take cocaine | 61.1 | 23.5 | 9.4 | 4.6 | 1.4 |
| Take heroin | 87.1 | 10.2 | 2.2 | 0.4 | 0.1 |
| Take other narcotics | 76.9 | 17.4 | 4.2 | 1.1 | 0.4 |
| Take amphetamines | 59.3 | 26.5 | 9.9 | 3.3 | 1.0 |
| Take barbiturates | 69.3 | 22.6 | 6.1 | 1.5 | 0.6 |
| Take hallucinogens | 72.3 | 18.8 | 6.1 | 2.3 | 0.5 |
| Take tranquilizers | 68.0 | 24.1 | 5.9 | 1.4 | 0.6 |
| Drink alcoholic beverages | 4.6 | 9.7 | 17.2 | 40.4 | 28.1 |
| Get drunk at least once a week | 16.7 | 26.3 | 24.9 | 21.6 | 10.5 |
| Smoke cigarettes | 7.9 | 30.9 | 32.6 | 26.7 | 1.9 |

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Exposure to Drug Use in 1979

- A comparison of responses about friends' use, and about being around people in the last twelve months who were using various drugs to get high, reveals a high degree of correspondence between these two indicators of exposure. For each drug, the proportion of respondents saying "none" of their friends use it is just about equal to the proportion who say that during the last twelve months they have not been around anyone who was using that drug to get high. Similarly, the proportion saying they are "often" around people getting high on a given drug is just about the same as the proportion reporting that "most" or "all" of their friends use that drug.
- Reports of exposure and friends' use closely parallel the figures on seniors' own use (compare Figures A and S). It thus comes as no surprise that the highest levels of exposure involve alcohol (a majority "often" around people using it to get high) and marijuana (39% "often" and 25% "occasionally" around people using it to get high).
- What may come as a surprise is that fully 32% of all seniors say that most or all of their friends get drunk at least once a week!
- For each of the drugs other than marijuana or alcohol, fewer than one in fifteen report they are "often" exposed to people using it to get high, fewer than one in four report that it occurs as much as "occasionally," and a majority (usually a large majority) report no such exposure in the previous year.

Recent Trends in Exposure to Drug Use

- During the two-year interval from 1976 to 1978, seniors' reports of exposure to marijuana use increased in just about the same proportion as percentages on actual monthly use. This year, both exposure to use and actual use stabilized.
- A drug reflecting a consistent increase since 1976 in the proportions exposed to use and to users is cocaine. This year there was another increase (about 6%) in the proportion of the age group exposed to use and having friends who used.
- The data showed some decrease in exposure to barbiturate use and to LSD use between 1976 and 1978, paralleling the decline in actual use during that period.

Recall that from 1978 to 1979, use of both drugs remained fairly stable. The same has been true for exposure to use and for friends' use.

- The proportion exposed to amphetamine use rose slightly this year, as did actual use; and the proportion of friends using tranquilizers declined some, along with actual use.
- The proportion saying that most or all of their friends smoke cigarettes has dropped steadily, from 37% in 1976 to 29% in 1979.
- The proportion saying most or all of their friends get drunk at least once a week has been increasing steadily, from 27% in 1976 to 32% in 1979.

Perceived Availability of Drugs

One set of questions asks for estimates of how difficult it would be to obtain each of a number of different drugs. The answers range across five categories from "probably impossible" to "very easy." While no systematic effort has been undertaken to assess the validity of these measures, it must be said that they do have a rather high level of face validity—particularly if it is the subjective reality of "perceived availability" which is purported to be measured. It also seems quite reasonable to us to assume that perceived availability tracks actual availability to some extent.

Perceived Availability in 1979

- There are substantial differences in the reported availability of the various drugs. In general, the more widely used drugs are reported to be available by the highest proportion of the age group, as would be expected (see Table 19 and Figure T).
- Marijuana appears to be almost universally available to high school seniors; 90% report that they think it would be "very easy" to "fairly easy" for them to get—30% more than the number who report ever having used it.
- After marijuana, the students indicate that the psychotherapeutic drugs are the most available to them: tranquilizers are seen as available by 61%, amphetamines by 60%, and barbiturates by 50%.
- Nearly half of the seniors (46%) now see cocaine as available to them.

TABLE 19
Trends in Reported Availability of Drugs

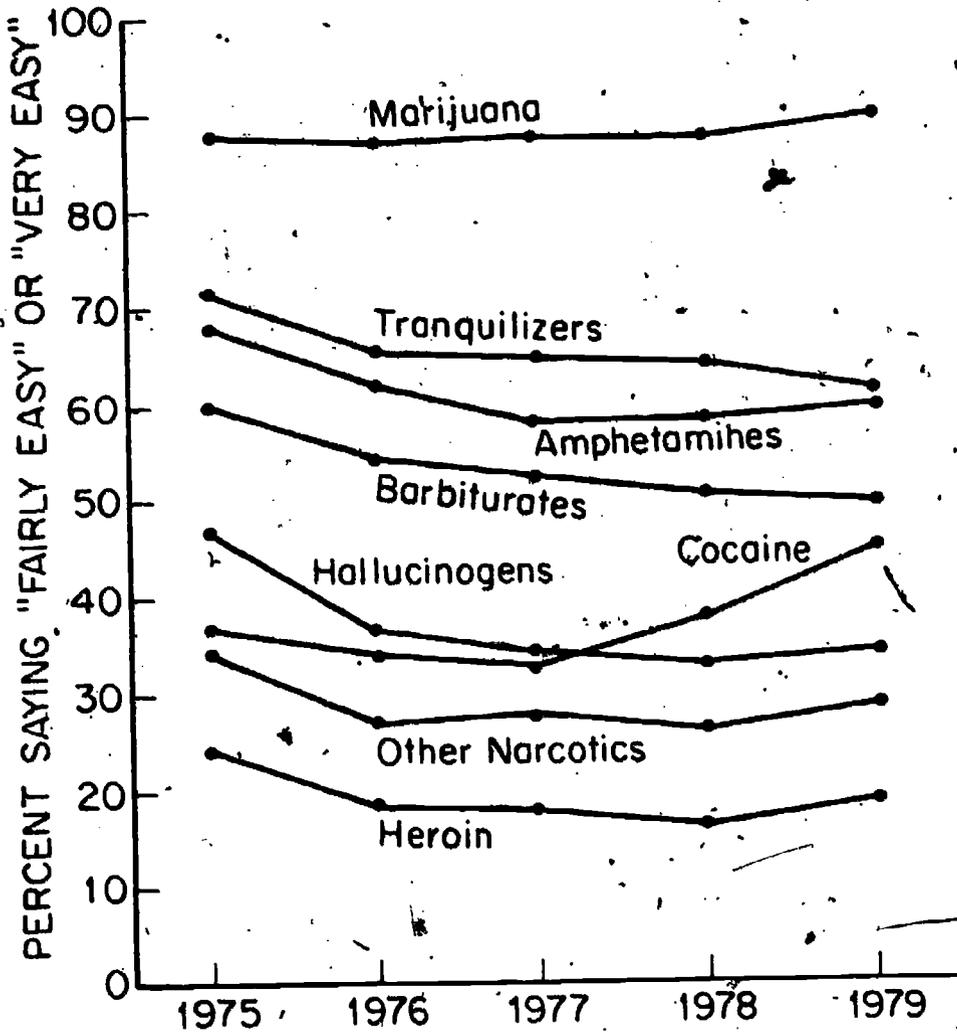
| Q. How difficult do you think it would be for you to get each of the following types of drugs if you wanted some? | Percent saying drug would be "Fairly easy" or "Very easy" for them to get ^a | | | | | 1978-1979 change |
|---|--|---------------|---------------|---------------|---------------|---------------------|
| | Class of 1975 | Class of 1976 | Class of 1977 | Class of 1978 | Class of 1979 | |
| Marijuana | 87.8 | 87.4 | 87.9 | 87.8 | 90.1 | +2.3 B |
| LSD | 46.2 | 37.4 | 34.5 | 32.2 | 34.2 | +2.0 |
| Some other psychedelic | 47.8 | 35.7 | 33.8 | 33.8 | 34.6 | +0.8 |
| Cocaine | 37.0 | 34.0 | 33.0 | 37.8 | 45.5 | +7.7 BBS |
| Heroin | 24.2 | 18.4 | 17.9 | 16.4 | 18.9 | +2.5 B |
| Some other narcotic (including methadone) | 34.5 | 26.9 | 27.8 | 26.1 | 28.7 | +2.6 |
| Amphetamines | 67.8 | 61.8 | 58.1 | 58.5 | 59.9 | +1.4 |
| Barbiturates | 60.0 | 54.4 | 52.4 | 50.6 | 49.8 | -0.9 |
| Tranquilizers | 71.8 | 65.5 | 64.9 | 64.3 | 61.4 | -2.9 B |
| | Approx. N = (2627) | (3163) | (3562) | (3598) | (3172) | |

NOTE: Level of significance of difference between the two most recent classes:
 = .05, BB = .01, BBS = .001.

^a Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, and (5) Very easy.

FIGURE T

Trends in Perceived Availability of Drugs



- Hallucinogens and opiates other than heroin are reported as available by only about three out of every ten seniors (35% and 29%, respectively).
- Heroin is seen by the fewest seniors (19%) as fairly easy to get.
- The majority of "recent users"—those who have illicitly used any drug in the past year—feel that it would be fairly easy for them to get that same type of drug.
- There is some variation by drug class, however. Most (from 78% to 97%) of the recent users of marijuana, psychotherapeutic drugs (amphetamines, barbiturates, and tranquilizers), or cocaine feel they could get those same drugs fairly easily. Smaller majorities of those who used hallucinogens (70%), heroin (68%), or other opiates (59%) feel it would be fairly easy for them to get those drugs again.

Trends in Perceived Availability

- Perceptions of marijuana availability have remained quite steady across the last three high school classes (at between 87% and 90% of the entire sample). If anything, there was a slight increase this year.
- Since 1977 there has been a substantial increase in the perceived availability of cocaine—with a jump of 5% last year and another 8% this year (see Figure T and Table 19). Even among recent users there is an increase observed (data not shown).
- For the other classes of illicitly used drugs (i.e., amphetamines, barbiturates, tranquilizers, hallucinogens, heroin, and other narcotics) perceived availability had been declining rather steadily until this year. However, the decline now seems to have stopped for all of those except tranquilizers.
- Tranquilizer availability continues to decline modestly.

Implications for Validity of Self-Reported Usage Questions

- We have noted a high degree of correspondence in the aggregate level data presented in this report between seniors' self-reports of their own drug use, their

reports concerning friends' use, and their own exposure to use. Drug-to-drug comparisons in any given year across these three types of measures tend to be highly parallel, as do the changes from year to year. We take this consistency as additional evidence for the validity of the self-report data, since there should be less reason to distort answers on friends' use, or general exposure to use, than to distort the reporting of one's own use.

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