

NATIONAL INSTITUTE ON DRUG ABUSE

DRUG USE AMONG AMERICAN  
HIGH SCHOOL STUDENTS 1975-1977

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Public Health Service

Alcohol, Drug Abuse, and Mental Health Administration

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	Total Sample	All Subgroups**		Total Sample	All Subgroups**
<u>MARIHUANA</u>			<u>STIMULANTS</u>		
Lifetime--prevalence	39	39	Lifetime--prevalence	109	109
--frequency	43		--frequency	113	
Annual --prevalence	40	40	Annual --prevalence	110	110
--frequency	43	42	frequency	113	112
Monthly --prevalence	41	41	Monthly --prevalence	111	111
--frequency	43		--frequency	113	
Daily --prevalence	47	47	Grade of First Use	114	115,116
Grade of First Use	44	45,46			
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Lifetime--prevalence	51	51	Lifetime--prevalence	122	122
--frequency	55		--frequency	126	
Annual --prevalence	52	52	Annual --prevalence	123	123
--frequency	55	54	--frequency	126	125
Monthly --prevalence	53	53	Monthly --prevalence	124	124
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--frequency	64		--frequency	138	
Annual --prevalence	61	61	Annual --prevalence	135	135
--frequency	64	63	--frequency	138	137
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--frequency	64		--frequency	138	
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--frequency	76	75	--frequency	151	150
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--frequency	88		--frequency	165	
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--frequency	88	87	--frequency	165	164
Monthly --prevalence	86	86	Daily --prevalence	163	163
--frequency	88		Grade of First Use	166	167,168
Grade of First Use	89	90,91			
<u>OTHER OPIATES</u>			* All tables contain 1975-1977 trends except those for which the page number is given in italics, in which case only 1977 data are contained.		
Lifetime--prevalence	96	96	** Data for subgroups defined on the following dimensions are given in the tables indicated: sex of respondent, college plans, region of the country, and population density (or urbanicity).		
--frequency	100				
Annual --prevalence	97	97			
--frequency	100	99			
Monthly --prevalence	98	98			
--frequency	100				
Grade of First Use	101	102,103			

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HIGH SCHOOL STUDENTS 1975-1977

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## PREFACE

This is the first major publication from a national research and reporting series being conducted at The University of Michigan's Institute for Social Research under the title, *Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth*. Presented herein are detailed statistics on the current prevalence of drug use among American high school seniors and on trends in those figures since 1975. Information on eleven separate classes of drugs is presented in Chapters 2 through 12, and the overall results on prevalence and trends in drug use are summarized in Chapter 1. The following classes of drugs are distinguished: marihuana (including hashish), inhalants, hallucinogens, cocaine, heroin, natural and synthetic opiates other than heroin, stimulants, sedatives, tranquilizers, 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 (Fishburne, Abelson, and Cisin, 1977).

Except for the use of alcohol and cigarettes, virtually all of the drug use discussed here is illicit. Respondents were asked to exclude any occasions on which they had used any of the psychotherapeutic drugs under medical supervision. A relatively small amount of data was gathered on the medically supervised use of such drugs (i.e., stimulants, sedatives, tranquilizers, and opiates other than heroin), and these results are given in the introduction to each of the relevant chapters.

We also have chosen to focus heavily on drug use at the higher frequency levels rather than simply reporting the proportions of various groups and subgroups who have ever used various drugs. This is done to help differentiate various 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. Therefore, it is important not only to talk about the breadth of involvement but about the depth of it, as well.

In addition to describing prevalence and trends in use, this volume contains an assessment of prevailing attitudes and beliefs among American high school seniors concerning various types of drug use and of the ways that these views have been changing over the last two years. It also considers in Chapter 14, just how available drugs are to high-school age youth and what has been happening to availability over the last two years--at least as the students see it.

### Intended Audience

A substantially smaller publication containing the highlights of this study is being published by the National Institute on Drug Abuse. Intended for a much wider audience, it contains the key findings on prevalence and trends in use up to 1977. The present volume is addressed to those who seek a more complete presentation of findings or more detailed information on the design and procedures of the study. We have presumed that this audience includes policy-makers in various branches of government and regulatory agencies, researchers and practicing clinicians in the drug field, and reporters interested in more in-depth information

on particular drugs or particular subgroups of the youth population. Given this likely mix of readers, we have attempted to write in a manner which is intelligible and interesting to those whose background is not in research. At the same time we have tried to be sufficiently thorough on the technical aspects of the study, particularly in the appendices, to allow other researchers to judge the scientific quality of the data.

### Organization of this Report

The Introduction provides an overview of the study design and purposes, including a definition of the larger population represented by our survey samples, the methods used to draw the samples, the nature of the questionnaires and questionnaire administrations, and a discussion of the representativeness of the resulting samples as well as the validity of our self-report measures of drug use. The first chapter of the Main Findings section, Summary and Overview, provides an overview and integration of the key results contained in the volume. Beyond these two sections, however, the chapters are not written to be read sequentially, so nothing is lost by reading selectively. In fact, the chapters have been organized and formatted to facilitate use of the volume as a reference work.

The key points to be derived from the data tables in each chapter are presented in a brief, structured format at the beginning of the chapter. Chapters 2 through 11 use a standard set of nine tables with comparable table numbers from chapter to chapter. Thus, for example, the information in Table 2-5 of Chapter 2 (marihuana) is comparable to that in Table 3-5 of Chapter 3 (inhalants). Since the questions concerning cigarette use are somewhat different from those on the other drugs, the table sequence in Chapter 12 differs somewhat from the first eleven chapters. A brief guide for interpreting the tables may be found in Appendix C, and all measures discussed in the volume are operationally defined in Appendix D, which has a separate tab to facilitate frequent access. Because the study contains so much instrumentation (five different questionnaire forms), it seemed neither practical nor helpful to include it all here. However, the full set of instruments may be secured by writing to the authors.

### Other Publications

This volume is the first in an intended annual series, the subsequent volumes of which will provide prevalence and trends for each new senior class. There also will be a number of other publications covering somewhat different topics from the Monitoring the Future project. Most immediate will be the publication in early 1978 of three volumes--one each for the surveys in 1975, 1976, and 1977--which will contain the responses of the entire sample and a number of subgroups to all questions in the five questionnaire forms administered each year. Each volume will have a cross-year reference index to permit the comparison of questions across all years of the study.

In addition to the usual publications in professional journals, there will be a series of occasional papers, published by the Institute for Social Research, containing methodological papers, study documentation, and pre-publication drafts of substantive papers. The first, for example, contains a detailed discussion of the purposes, research design, and technical procedures for the study.



## Acknowledgments

A great many people have contributed to the launching and development of this research effort. We are indebted to a number of officials of the National Institute on Drug Abuse and the former Special Action Office for Drug Abuse Prevention for their encouragement and advice at the outset--in particular, Drs. Richard Bucher, Robert DuPont, William Pollin, and Louise Richards. To the members of our Advisory Committee we also express our thanks for their review and suggestions regarding instrumentation and design. In addition to Drs. Bucher and Richards, the committee members are Drs. John Ball, Donald Campbell, Ira Cisin, Wilbur Cohen, O. Dudley Duncan, Ms. Dorothy Gilford, and Drs. Eric Josephson, Robert Kahn, Donald Michael, and Lee Robins.

Also fulfilling an advisory function in the development of this volume have been our project officer at the National Institute on Drug Abuse, Dr. Joan Dunne Rittenhouse, and our colleague at George Washington University, Dr. Ira Cisin. To both we express our appreciation.

Finally, we would like to acknowledge the thousands of recent high school seniors, their teachers and their principals, whose cooperation and generous giving of their time have made this work possible. We hope that in this and all the other publications from Monitoring the Future we represent them faithfully and that we do justice to the trust they have placed in us.

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## **I. INTRODUCTION**

## INTRODUCTION

This report deals with drug use, attitudes about drug use, and the perceived availability of drugs among high school seniors in 1977. The findings are based on the Monitoring the Future project, a series of annual surveys conducted by the Institute for Social Research at The University of Michigan under a research grant from the National Institute on Drug Abuse. The series began with the high school class of 1975; therefore, the present report also provides data on trends and changes from 1975 through 1977.

### Purpose and Rationale

Young people are often at the leading edge of social change, and 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 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 the assessment of the impact of major historical and policy-induced events much more conjectural.

Various methods exist for monitoring and assessing drug use. Many of them rely on data from existing institutions and social agencies--hospitals, coroners' offices, police agencies, treatment programs--and represent counts of various critical events related to drug use. What distinguishes the sample survey technique as used here from these other methods is that it can generate statistics on those segments of the population who do not come to the attention of such agencies (the majority), as well as on a good proportion of those who do. Further, surveys allow for the calibration of sampling accuracy. For purposes of monitoring trends, moreover, the methods of sampling and measurement can be held rigidly constant across time, whereas

social agencies may be capturing different proportions or segments of the larger drug-using population at different points in time.

On the other hand, agency based systems are superior for monitoring certain important "rare events"--such as overdose deaths, drug emergencies, drug arrests, and treatment admissions--since sample surveys simply contain too few respondents to estimate reliably their frequency of occurrence. For certain types of people, such as heavy heroin users, neither sample surveys nor agency based systems may provide very accurate estimates of overall prevalence, although it may be possible to monitor trends by using their results in combination.

In sum, the several methods for monitoring and assessing drug use and related factors each have some strengths and some limitations. For estimating and monitoring most types of illicit drug use in the general population, we believe that the sample survey technique provides not only the most accurate method currently available, but the most efficient as well.

Monitoring the Future 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 the effects on drug use of 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--in particular marijuana decriminalization--on all types of drug use; and determining the changing connotations of drug use and changing patterns of multiple drug use among youth.

This volume, which is the first in a series, is intended to provide a relatively accurate picture of the drug experiences and attitudes of each high school class in the United States, beginning with the class of 1975. More importantly, it is intended to monitor accurately changes from one year to another, both for high school seniors as a whole and for particular subgroups.

The type of information provided by this series of annual surveys obviously does not translate directly into specific policy decisions; but its availability should enhance the decision-making process by providing more insight into the size and nature of the problems, the rate of change occurring nationally and in subgroups, some of the social and psychological dynamics involved, and the effects of some large-scale interventions (such as changed drug laws and new drug education programs).

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. This study is intended to contribute to such a system of social reporting and research.

## 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 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. One is that 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 including college, business firms, military service, and homemaking. But entering such new environments is not the only important change which coincides with the end of high school. Most young men and women now reach the formal age of adulthood shortly before or after graduation; more significantly, they begin to assume real adult roles, including financial self-support, marriage, and parenthood.

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 present design is that it does not include in the target population those young men and women who drop out of high school before graduation (or before the last few months of the senior year, to be more precise). This excludes a relatively small proportion of each age cohort--between 15 and 20 percent--though not an unimportant segment, since we know that illicit drug use tends to be higher than average in this group (Johnston, 1973). However, the addition of a representative sample of dropouts would increase the cost of the present research enormously, because of their dispersion and generally higher level of resistance to being located and interviewed.

For the purposes of estimating certain characteristics of the entire age group, the omission of high school dropouts does introduce certain biases; however, for most purposes, their small proportion 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. Nevertheless, we recognize the value of periodically checking the results of the present monitoring system against those emerging from other data collection systems using different methods, such as household interviews. It is encouraging to note that when we have compared drug use data from this study with those from interview studies, the findings have shown a high degree of similarity.

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.

Stage 1. The geographic areas used in this study are the primary sampling units (PSUs) developed by the Sampling Section of the Survey Research Center for use in the Center's nationwide interview studies. These consist of 74 primary areas throughout the coterminous United States. In addition to the 12 largest metropolitan areas, containing about 30 percent of the nation's population, 62 other primary areas are included: 10 in the Northeast, 18 in the North Central area, 24 in the South, and 10 in the West. Because these same PSUs are used for personal interview studies by the Survey Research Center, local field representatives can be assigned to administer the data collections in practically all schools.

Stage 2. In the major metropolitan areas more than one high school is often included in the sampling design; in most other sampling areas a single high school is sampled. In all cases, the selections of high schools are made such that the probability of drawing a school is proportionate to the size of its senior class. The larger the senior class (according to recent records), the higher the selection probability assigned to the high school. When a sampled school is unwilling to participate, a replacement school as similar to it as possible is selected from the same geographic area.

Stage 3. Within each selected school, up to about 400 seniors may be included in the data collection. In schools with fewer than 400 seniors, the usual procedure is to include all of them in the data collection. In larger schools, a subset of seniors is selected either by randomly sampling classrooms or by some other random method that is convenient for the school and judged to be unbiased. Sample weights are assigned to each respondent so as to take account of variations in the sizes of samples from one school to another, as well as the (smaller) variations in selection probabilities occurring at the earlier stages of sampling.

The three-stage sampling procedure described above yielded the following numbers of participating schools and students:

	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>
Number of public schools	111	108	108
Number of private schools	<u>14</u>	<u>15</u>	<u>16</u>
Total number of schools	125	123	124
Total number of students	15,791	16,678	18,436

One other important feature of the base-year sampling procedure should be noted here. Each school (except for half of those in the 1975 data collection) is asked to participate in two data collections, thereby permitting replacement of half of the total sample of schools each year. This means, for example, that the 1977 sample consisted of two distinct half-samples: 63 schools which had already participated in the 1976 data collection before participating in 1977, plus another 61 schools which were participating for the first time in 1977 and were expected to participate again in 1978. (As of 1977, there has been only one school which participated for one year and then declined to participate in the second.) One motivation for requesting that schools participate for two years is administrative efficiency; it is a costly and time-consuming procedure to secure the cooperation of schools, and a two-year period of participation cuts down that effort substantially. Another important advantage is that whenever an appreciable shift in scores from one graduating class to the next is observed, it is possible to check whether the shift might be attributable to some differences in the newly sampled schools. This is done simply by repeating the analysis using only the 65 or so schools which participated both years. Thus far, the half-sample approach has worked quite well; an examination of drug prevalence data from the classes of 1975 and 1976 showed that the half-sample of repeat schools yielded drug prevalence trends which were virtually identical to trends based on all schools.

School Recruiting Procedures. Early during the fall semester an initial contact is made with each sampled school. First a letter is sent to the principal describing the study and requesting permission to survey seniors. The letter is followed by a telephone call from a project staff member, who attempts to deal with any questions or problems and (when necessary) makes arrangements to contact and seek permission from other school district officials. Basically the same procedures are followed for schools asked to participate for the second year.

Once the school's agreement to participate is obtained, arrangements are made by phone for selecting a random sample of seniors, when the school is large, and for administering the questionnaires. A specific date for the survey is mutually agreed upon and a local Survey Research Center representative is assigned to carry out the administration.

Pre-Administration Arrangements. The local SRC representative is instructed to visit the school two weeks ahead of the actual date of administration. This visit serves as an occasion to meet the teachers whose class(es) will be affected and to provide them with a brochure describing the study, a brief set of guidelines about the questionnaire administration, and a supply of flyers to be distributed to the students a week to 10 days in advance of the questionnaire administration. The guidelines to the teachers include a suggested announcement to students at the time the flyers are distributed.

From the students' standpoint, the first information about the study usually consists of the teacher's announcement and the short descriptive flyer. In announcing the study, the teachers are asked to stress that the questionnaires used in the survey are not tests, and that there are no right or wrong answers. The flyer tells students that they will be invited to participate in the study, points out that their participation is strictly voluntary, and stresses confidentiality (including a reference to the fact that the Monitoring the Future project has a special government grant of confidentiality which allows their answers to be protected). The flyer gives all participating students a somewhat standardized introduction to the study, covers the crucial topics of voluntary participation and confidentiality, and presents some positive reasons for participation (the topics are interesting, and the data will be important and widely distributed). It also provides something in writing which the students can show to their parents.

Questionnaire Administration. The actual questionnaire administration in each school is carried out by the local Survey Research Center representatives and their assistants, following standardized procedures detailed in a project instruction manual. The questionnaires are administered in classrooms during normal class periods whenever possible; however, circumstances in some schools require the use of larger group administrations. Teachers are not asked to do anything more than introduce the SRC staff members and (in most cases) remain present in order to help guarantee an orderly atmosphere for the survey. Teachers are urged to avoid walking around the room, lest students feel that their answers might be observed.

The actual process of completing the questionnaires is quite straightforward. Respondents are given sharpened pencils and asked to use them because the questionnaires are designed for automatic scanning. Most respondents can finish within a 45-minute class period; for those who cannot, an effort is made to provide a few minutes of additional time.

Questionnaire Content and Format. Drug use and related attitudes are the topics which receive the most extensive coverage in the Monitoring the Future project; however, the questionnaires deal with a wide range of other subject areas including attitudes about government, social institutions, race relations, changing roles for women, educational aspirations, occupational aims, marital and family plans, as well as a variety of background and demographic factors. Given this breadth of content, the study is not presented to respondents as a "drug use study," nor do they tend to view it as such.



Because many questions are needed to cover all of these topic areas, 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 that are common to all forms.\* This use of the full sample for drug and demographic measures provides a more accurate estimation on these dimensions and also makes it possible to link these dimensions statistically to all of the other measures which are included in a single form only. This use of multiple forms has worked quite smoothly, both in terms of questionnaire administration and also in terms of analysis and reporting of findings.

Procedures for Protecting Confidentiality. In any study that relies on voluntary reporting of drug use, it is essential to develop procedures which guarantee the confidentiality of such reports. It also is desirable that these procedures be described adequately to respondents so that they are comfortable about providing honest answers, to the best of their ability.

We noted that the first information given to students about the survey consists of a descriptive flyer stressing confidentiality and voluntary participation. This theme is repeated at the start of the actual questionnaire administration. Each participating student is instructed to read the message on the cover of the questionnaire, which stresses the importance and value of the study, notes that answers will be kept strictly confidential, and makes the following statement about voluntary participation: "This study is completely voluntary. If there is any question that you or your parents would find objectionable for an reason, just leave it blank." The instructions then point out that in a few months a summary of nationwide results will be mailed to all participants, and also that a follow-up questionnaire will be sent to some students after a year. The cover message explains that these are the reasons for asking for a name and address on a special form at the end of the questionnaire which will be torn out and handed in separately. The message also points out the the two different code numbers (one on the questionnaire and one on the tear-out form) cannot be matched except by a special computer tape at The University of Michigan.

Near the end of the administration period, the SRC staff member instructs students to separate the address form and then fill it out and pass it in separately. The completed questionnaires and the address forms then remain in the possession of the SRC representative until they are mailed. When mailed, the address forms go to SRC, while the questionnaires go directly to the company which scores them, using optical scanning procedures. Once the address forms are separated from the questionnaires it is virtually impossible for anyone, either SRC staff or school personnel, to match them up again. The questionnaires have an ordered sequence of code numbers, but the numbers on the address forms are random numbers. As the instructions to students state, the only way the two could be matched would be to use the special tape at The University of Michigan. (As a matter of fact, that particular match

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\*The "core" measures of drug use and the selected core demographic variables used in this report are reproduced in Appendix D.

is never made. Follow-up questionnaires with new numbers are matched to base-year questionnaires without ever directly associating respondents' names with either questionnaire.)

The statements and procedures dealing with confidentiality seem to satisfy nearly all high school seniors who participate in the project. As a part of the 1975 data collection, individual interviews were conducted in six participating schools located in five different states. Of the 123 interviewees, 91 completed a Monitoring the Future questionnaire within the previous day. Only two of these respondents said they were not aware of the project's promise of confidentiality. All respondents were asked, "how much faith do you have in this guarantee?" Only two said they did not have faith in the promise; 85 percent had complete faith in the confidentiality guarantee; the rest said that they did not care (often saying they "had nothing to hide").

### Representativeness and Validity

The samples for this study are intended to be representative of high school seniors throughout the 48 coterminous states. We have already discussed the fact that this definition of the sample excludes one important portion of the age cohort: those who have dropped out of high school before nearing the end of the senior year. But given the aim of representing high school seniors, it will now be useful to consider the extent to which the obtained samples of schools and students are likely to be representative of all seniors, and the degree to which the data obtained are likely to be valid.

We can distinguish at least four ways in which survey data of this sort might fall short of being fully accurate: (1) some sampled schools refuse to participate, which could introduce some bias; (2) the failure to obtain questionnaire data from 100 percent of the students sampled in participating schools could also introduce bias; (3) the answers provided by participating students are open to both conscious and unconscious distortions, which could reduce validity; and (4) limitations in sample size and/or design place limits on the accuracy of estimates. The problems of representativeness of both schools and students, and also the problem of validity of answers, are treated extensively in Appendix A; matters of accuracy and sampling error are treated in Appendix B. This section presents only the highlights of each of those discussions.

School Participation. As noted in the description of the sampling design, schools are invited to participate in the study for a two-year period, and with only one exception 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 (see Appendix A for details). 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.

Student Participation. Completed questionnaires are obtained from about three-fourths of all sampled students in participating schools. The single most important reason that students are missed is that they are absent from class at the time of data collection, and in most cases it is not workable to schedule a special follow-up data collection for such 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 by missing the absentees. That bias could be largely corrected through the use of special weighting; however, it was 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 (see Appendix A for a discussion of this point).

In addition to absenteeism, student nonparticipation occurs because of schedule conflicts with school trips and other activities which tend to be more frequent than usual during the final months of senior year. Of course, some students refuse to complete or turn in the questionnaire. However, interviewers in the field estimate this proportion at below 3 percent, and perhaps as low as 1 percent.

Validity of Self-Report Data. Survey measures of drug use depend upon respondents reporting what are, in many cases, illegal acts. Thus a critical question is whether such self-reports are likely to be valid. We have no direct, objective validation of the present measures; however, the considerable amount of inferential evidence which exists strongly suggests that these self-report questions produce largely valid data. In particular, the low rate of nonresponse on the drug questions, the large proportion admitting to some illicit drug use, the consistency of findings across several years of the present study, the close match between our data and the findings from other studies using other methods, and the findings from several methodological studies which have used objective validation methods, all leave us reasonably confident about the validity of the measures used here. (See Appendix A for a more complete discussion of these points.)

Accuracy of the Sample. A sample survey never can provide the same level of accuracy as would be obtained if the entire target population were to participate in the survey--in the case of the present study, about three million seniors. But perfect accuracy of this sort would be extremely expensive, and certainly not worthwhile considering the fact that a high level of accuracy can be provided by a carefully designed probability sample. The accuracy of the sample in this study is affected both by size of the student sample and by the number of schools in which they are clustered. Appendix B presents a discussion of the ways in which this clustering and other aspects of the sampling design are taken into account in computing

the precision or accuracy of the samples. For the purposes of this introduction, it is sufficient to note that estimates based on the total sample have confidence intervals of  $\pm 2.2$  percentage points or less--sometimes considerably less. This means that had we been able to invite all schools and all seniors in the 48 coterminous states to participate, we estimate that the results from such a massive survey would be within 2.2 percentage points of our present sample findings at least 95 times out of 100. (In fact, for the many drugs which have prevalence rates below 10%, or above 90%, the confidence interval is substantially smaller--sometimes as low as  $\pm .4\%$ .) We consider this to be a quite high level of accuracy, and one that permits the detection of fairly small trends 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.

## **II. MAIN FINDINGS: 1977**

## Chapter I

# SUMMARY AND OVERVIEW

This chapter presents a summary and integration of the findings contained in the remaining thirteen chapters in this volume, eleven of which deal with the use of specific drugs. Naturally, not all of the findings contained in the later chapters can be encompassed here, so the reader having an interest in a particular drug is advised to read the relevant chapter, as well. However, this chapter should prove useful for getting an overview as well as for putting the findings concerning any one drug into perspective by comparing them with the findings for all of the others.

Further, the information presented here is not simply a compilation of selected statistics from other chapters. An additional drug-use variable has been included which summarizes across the various illicit drugs. Because there is so much overlap in the user groups of the various illicit drugs, one cannot simply sum across them to get a total number of illicit users. Therefore, we have created an illicit drug use index which classifies respondents into one of three categories--(1) those who report using no illicit drugs during the time interval in question, (2) those who report using marihuana, but no other illicit drug during the time interval, and (3) those who report using any illicit drug other than marihuana during the time interval. People in the third category may or may not use marihuana in addition to the other illicit drug(s)--though most do. This index can be used to classify respondents based on their behavior during any relevant time interval. In this chapter, we classify respondents on it based on their pattern of use in their lifetime and also on their pattern of use in the past twelve months.

Summarized below are the major findings from the study concerning the current prevalence of licit drug use as well as overall and specific types of illicit use, recent trends in prevalence, and important differences among subgroups in the population (based on sex, college plans, region of the country, and population density or urbanicity). Also summarized are the key findings regarding the attitudes and beliefs of high school seniors regarding various types of drug use, and their perceptions regarding the availability of drugs.

Prevalence of Drug Use in 1977

<u>Lifetime, Annual and Monthly Prevalence</u>	<u>Table(s)</u>
● Six in every ten seniors ( 61.6%) report illicit drug use at some time in their lives. However, a substantial proportion of them have used only marihuana (25.8% of the sample, or 42% of all illicit users).	9
● <u>Marihuana</u> is by far the most widely used illicit drug with 56% reporting some use in their lifetime, 48% reporting some use in the past year, and 35% use in the past month.	1,2,3,4 <i>Fig. A</i>
● About one-third of the seniors ( 35.8%) report using an illicit drug other than marihuana at some time.*	9
● The most widely used of the other illicit drugs are <u>stimulants</u> (23% lifetime prevalence) followed by two other classes of psychotherapeutic drugs: <u>tranquilizers</u> (18% lifetime prevalence) and <u>sedatives</u> (17% lifetime prevalence.)**	1
● Next come <u>hallucinogens</u> (such as LSD, THC, PCP, mescaline, peyote) which have been used by about one in every seven students (14% lifetime prevalence).	1
● About one in every nine or ten students has used <u>inhalants</u> (11%), <u>cocaine</u> (11%), and <u>opiates other than heroin</u> (10%).	1
● Only 1.8% of the sample admitted to ever using any <u>heroin</u> , the most infrequently used drug.	1
● These illicit drugs remain in about the same order when ranked by the prevalence in the most recent month and in the most recent year, as the data in Figure A illustrate. The major change in ranking occurs for <u>inhalants</u> , which, unlike any other drug, are used in the senior year by only a small proportion of those who had ever used them. This occurs because <u>inhalants</u> tend to be used primarily at an earlier age.	3,4 <i>Fig. A</i>
● Use of either of the two major licit drugs, <u>alcohol</u> and <u>cigarettes</u> , is still more widespread than use of any of the illicit drugs. Nearly all students have tried <u>alcohol</u> (93%) and the great majority (71%) have used it in the past month.	3,4,5 <i>Fig. A</i>

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

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

Table(s)

- Some 76% report trying cigarettes at some time, and 38% smoked at least some in the past month. 3,5

Daily Prevalence

- Since frequent use of these drugs is of greatest concern from a health and safety viewpoint, Table 1-6 and Figure B have been included. Each shows 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. 6  
*Fig. B*
- The displays show that cigarettes are used daily by more of the respondents (29%) than any of the other drug classes. In fact, 19.4% say they are heavy daily smokers--that is, they smoke half-a-pack or more per day. 6,10  
*Fig. B*
- A particularly important finding is that marihuana is now used daily by a substantial fraction of the age group (9.1%)--even more than the proportion using alcohol daily, which stands at 6.1%. 6  
*Fig. B*
- Less than 1% of the respondents report daily use of any of the illicit drugs other than marihuana. Still, .5% report unsupervised daily use of amphetamines, and the comparable figure for tranquilizers is .3%, for sedatives .2%, and for opiates other than heroin .2%. While very low, these figures are not inconsequential considering that this is a nationally representative sample. 6  
*Fig. B*
- Not surprisingly, given the strength and duration of their effects, hallucinogens are used on a daily basis by only about .1% of the sample. Also to be expected, given its high price, is the finding that cocaine currently is used daily by only about .1% of the sample. 6  
*Fig. B*
- Virtually no respondents report daily use of inhalants or heroin in senior year. 6  
*Fig. B*

Recent Trends in Drug Use

Trends in Lifetime, Annual, and Monthly Prevalence

- The percentage who have ever used illicit drugs has been increasing steadily over the past three senior classes, 9  
*Fig. C*



Table(s)

from 55% in 1975 to 62% in 1977, a total increase of 7%. Annual prevalence figures have been rising in a parallel way.

- However, there has been no increase in the proportion who are users of illicit drugs other than marihuana. This proportion has remained steady at about 36% for lifetime prevalence and at about 26% for annual prevalence over the last three years. 9  
*Fig. C*
  
- Virtually all of the increase in illicit drug use is attributable to the increasing proportion who use marihuana but none of the other illicit drugs. As Figure C illustrates, annual use of the other illicit drugs has remained constant at about 26% while the proportion using only marihuana has risen steadily, from about 19% in 1975 to about 25% in 1977--an increase of 6.3%. Since annual prevalence for all marihuana use has risen by 7.6%, we know that most of this increase has occurred among young people who are not using other illicit drugs. This is an important finding, since there has been serious concern about the effect on other types of drug use of legislation which might affect marihuana use. In essence, over the past two years we have seen marihuana use rise substantially without any concomitant increase in the proportion using other illicit substances. 4,9  
*Fig. C*
  
- Returning to the other illicit drugs, we find that, although the proportion using at least one of them has remained unchanged over the last two years, some interesting changes have been occurring for specific drugs within the class. 3,4,5
  
- For example, there has been a decline over the past two years in the prevalence of hallucinogen use among seniors. Annual prevalence has dropped by about 2.4%, from 11.2% in 1975 to 8.8% in 1977--a statistically significant shift. The number of frequent users has also been declining steadily. In 1975, 1.0% reported use on 20 or more occasions per year vs. .7% in 1976 and .5% in 1977. (See Table 6 of Chapter 4.) 3,4,5
  
- Cocaine, on the other hand, has exhibited a modest but continuing increase in popularity, with annual prevalence going from 5.6% in the class of 1975 to 7.2% in the class of 1977--also a statistically significant shift. However, the frequency with which cocaine is used by these high school users is very low. 3,4,5

Table(s)

- The use of opiates other than heroin also has been increasing gradually since 1975, when 5.7% admitted use during the year compared with 6.4% in 1977. (The increase is statistically significant.) 3,4,5
- By way of contrast, use of the three psychotherapeutic drugs (stimulants, sedatives, and tranquilizers) has remained virtually unchanged over the last two years. 3,4,5
- Heroin prevalence also appears to have remained constant over the past year, although there may have been some drop between 1975 and 1976. 3,4,5
- Trend data on inhalant use exist only over the past one-year interval, since this class of drugs was included for the first time in 1976. There has been a slight increase in prevalence over that year. Annual prevalence rose from 3.0% to 3.7%—a small, but still statistically significant, change. 3,4,5
- Thus, while the proportion using any illicit drugs other than marihuana has remained remarkably constant, the mix of drugs they have been using has been changing somewhat.
- Turning to the licit drugs, between 1975 and 1977 there has been a slight upward shift in the prevalence of alcohol use among seniors, most of which was observed over the last year. To illustrate, annual prevalence for 1975, 1976, and 1977 respectively has been 84.8%, 85.7%, and 87.0%. 3,4,5
- Over the past year there was virtually no change in the prevalence of cigarette use, though a slight increase was observed between 1975 and 1976. 3,5

Trends in Daily Prevalence

- The information on trends in daily use indicate that for all illicit drugs other than marihuana there has been virtually no change over the last two years in the very low daily prevalence figures. Tranquilizers may constitute the one exception since daily use has risen from .1% in 1975 to .3% in 1977; however, because of the small absolute size of the change, further confirmation of this possible trend is needed. 6
- In contrast, marihuana has shown 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. However, since then the number has 6

risen considerably, so that now one in every eleven high school seniors (9.1%) indicates that he or she uses the drug on a daily or near daily basis.

- Alcohol has not shown a comparable rise in use of the same time period. Daily use remained steady between 1975 and 1976 (at 5.7% and 5.6% respectively), then rose slightly to 6.1% in 1977. The two-year increase is not statistically significant, however. 6

Prevalence and Trends for Important Subgroups

Sex Differences

- About equal proportions of both males and females report using illicit drugs other than marihuana. For example, in 1977 the annual prevalence figure for males is 26% vs. 25% for females. However, there are substantial sex differences for many of the specific drugs encompassed in this general category. 8  
*Fig. D*
- Annual prevalence for the use of stimulants is about equal for both sexes, though more of the frequent users are female than male. More females than males also are using tranquilizers, but frequent use occurs about equally for both sexes. (See Table 5 in Chapter 9 and Chapter 10 for data on frequent use.) 10
- On most illicit drugs, however, males have a considerably higher prevalence rate. The annual prevalence for inhalants, cocaine, and heroin tends to be two to three times as high among males as among females. Males also have substantially higher rates of use for hallucinogens, opiates other than heroin, and sedatives. Further, males account for a disproportionate number of the heavy users of these drugs, as is illustrated in Table 5 of each of the relevant chapters. 10
- Thus, there are substantially more male than female users of nearly all illicit drugs. Yet, about the same proportion of females as males are users of illicit drugs other than marihuana. These seemingly contradictory facts only can be reconciled by the conclusion that, on the average, the males who are using illicit drugs other than marihuana are using more drugs than are their female counterparts. *Fig. D*
- Overall, a greater proportion of males than females are using illicit drugs, but this is strictly due to the difference in *Fig. D*

Table(s)

the proportion using only marihuana. Some 29% of the males used marihuana but no other illicit drug in 1977. The comparable figure for females is only 22%

- Overall marihuana use is somewhat higher among males, and daily use of marihuana is substantially higher among males (12.4% vs. 5.6% for females in 1977). The daily use figure may be found in Table 10 of Chapter 2. 10
- Alcohol use also tends to be disproportionately concentrated among males, particularly frequent use. Daily use, for example, is reported by 8.6% of the males but by only 3.6% of the females (Chapter 11, Table 10). 10
- Finally, for cigarettes, there is practically no sex difference in the prevalence of smoking a half a pack or more daily (19.7% for males vs. 18.9% for females), although among these regular smokers males appear to consume a somewhat higher quantity of cigarettes (Chapter 12, Table 5). 10
- Most of the sex differences just mentioned have remained relatively unchanged over the past two years--that is, any trends in overall use have occurred about equally among males and females, as the trend lines in Figures H, I, and J demonstrate. There are, however, two important exceptions. 4  
*Fig. H,I,J*
- First, there is a divergence in the prevalence of daily marihuana use. Although daily prevalence is rising for both sexes, it appears to be rising more rapidly among males, which accounts for the considerable disparity in current rates of daily use. *Fig. J*
- Just the opposite is happening with regular cigarette smoking. While the proportion smoking half-a-pack or more per day has remained quite constant for males from 1975 to 1977 (at about 20%) the rate for females has increased from 16% to 19%, virtually eliminating the previous sex difference. *Fig. J*

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. Less than half of the college-bound (47%) report any illicit drug use in the previous year while more than half (54%) of the noncollege-bound report such use. *Fig. E*

Table(s)

- There is a substantial difference in the proportion of these two groups using illicit drugs other than marihuana. In 1977 only 21% of the college-bound reported any such behavior in the prior year vs. 30% of the noncollege-bound. *Fig. E*
  
- For all of the specific illicit drugs, annual prevalence is lower for the college-bound: in fact, the prevalence rates tend to be about half again as large (or more) for the noncollege-bound as for the college-bound on all illicit drugs except marihuana and tranquilizers. 10
  
- Annual marihuana use is observed in 43% of the college-bound and 51% of the noncollege-bound. 10
  
- The comparable figures for annual tranquilizer use are 9% and 12%. 10
  
- Frequent use of all of the illicit drugs is even more disproportionately concentrated among students not planning four years of college. (See Table 5 in Chapters 2 through 10.)
  
- Frequent alcohol use is also more prevalent among the noncollege-bound. For example, drinking on a daily basis is twice as common at 8.0% for the noncollege-bound vs. 4.0% for the college-bound (Table 10, Chapter 11). 10
  
- Oddly enough, however, there are practically no differences between the groups in annual prevalence of alcohol (88% vs. 87% in 1977) or monthly prevalence (73% vs. 69%), so the differences are confined to frequent drinking rather than infrequent or occasional drinking. 10
  
- Both groups have been showing parallel trends in overall illicit drug use over the last year:\* that is, both showed a steady proportion using illicit drugs other than marihuana and a rising proportion using marihuana only. *Fig. E*
  
- Looking at trends in the annual prevalence of specific drugs, the college-bound and noncollege-bound have had quite similar changes between 1976 and 1977 on marihuana, inhalants, hallucinogens, and alcohol. The noncollege-bound have shown a slightly greater increase on cocaine, heroin, other opiates, stimulants, sedatives, and tranquilizers. (See Table 3 of each chapter.) However, most *Fig. D*

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

of these trend differences are not statistically significant and need further corroboration before being accepted as fact.

Regional Differences

- In general, there are not very great regional differences in 1977 in terms of illicit drug use among high school seniors. The highest rate of overall illicit drug use is in the Northeast, where 57% say they have used a drug illicitly in the past year, followed by the North Central with 52%, the West with 50%, and the South with 46%. *Fig. F*
  
- There is even less regional variation in terms of the percent using some illicit drug other than marihuana in the past year: 28% in the Northeast, 28% in the North Central, 26% in the West, and 23% in the South. *Fig. F*
  
- The Northeast shows the highest annual rate on marihuana, hallucinogens, alcohol, and cigarettes. The North Central shows the highest rates on inhalants, heroin, other opiates, stimulants, and sedatives. The West shows the highest annual prevalence of cocaine use, while the South shows the highest for tranquilizer use and the lowest for marihuana, hallucinogens, cocaine, other opiates, stimulants, and alcohol. However, all of these findings must be taken with a grain of salt, since the regional differences tend to be so small. The degree to which they have been replicated across several years may be established by examining Table 3 of the chapter on the drug in question. 10
  
- Between 1975 and 1977 the proportion of seniors using any illicit drugs (in the past year) has been steadily increasing in all regions of the country except the West. In the West, the proportion has remained about steady. *Fig. F*
  
- The proportion using only marihuana in the previous year has increased in all regions, including the West. *Fig. F*
  
- The proportion using illicit drug(s) other than marihuana has remained relatively steady in other regions, although there may be evidence of a slight downturn in the West. *Fig. F*
  
- Alcohol use tends to be somewhat lower in the South and West than it is in the Northeast and North Central. 10

Table(s)

- The largest regional differences occur for regular cigarette smoking. In the Northeast 24% say they smoke half-a-pack or more per day of cigarettes compared with 20% in the North Central, 19% in the South, and only 12% in the West. 10

Differences Related to Population Density (Urbanicity)

- Overall illicit drug use is highest in the largest metropolitan areas (56% annual prevalence), slightly lower in the other metropolitan areas (52%), and lowest in the nonmetropolitan areas (45%). 7,8  
*Fig. G*
- There is less variation in the proportion using illicit drugs other than marihuana: 27% annual prevalence in the largest cities, 27% in the other cities, and 24% in the nonmetropolitan areas. *Fig. G*
- For specific drugs, the greatest urbanicity differences seem to occur for marihuana, which has an annual prevalence of 53% in the large cities but only 41% in the nonmetropolitan areas. 10
- The use of several other drugs is also positively correlated with urbanicity, though less strongly: hallucinogens, cocaine, and opiates other than heroin. Annual prevalence of alcohol use is positively correlated, but daily drinking is not (Table 10, Chapter 11). 10
- The annual prevalence statistics for two drug classes, inhalants and heroin, show a slight negative correlation with urbanicity, but the heroin finding is not consistent with earlier years. 10
- An examination of trends for the three levels of population density yields some interesting findings. While the proportion using illicit drugs other than marihuana may have increased slightly in the "other metropolitan areas" and the nonmetropolitan areas, such use appears to be declining in the large metropolitan areas. 8  
*Fig. G*
- Further, over the past two years the annual prevalence for the use of marihuana only has risen slightly more in the "other metropolitan" and nonmetropolitan areas than in the large metropolitan areas. 7  
*Fig. G*
- The net effect over the last two years has been a closing of the gap in illicit drug use between the large cities and the less metropolitan areas. While the three levels of population density have not yet reached parity, they are much closer to it. *Fig. G*

Table(s)

- For most of the illicit drugs, recent trends have led to the less urban areas narrowing the gap with the more urban areas, and in some cases completely closing it or even reversing the relationship. (More specific details may be found in Table 3 of each chapter.)
- A very similar thing has happened with alcohol use. 10  
Previously existing differences (the most urban areas had the highest prevalence) have narrowed. The most urban areas still have the highest overall prevalence rates for lifetime, last year, and last month. However, daily use is now about equivalent for all urbanicity groups and may actually be highest in the nonmetropolitan areas. (See Tables 2,3,4 and 10 in Chapter 11 for specifics.)

Attitudes and Beliefs

The results from three sets of attitude and belief questions about drug use are described in Chapter 13. One set concerns how harmful the students think various kinds of drug use would be for the user, the second concerns how much students personally disapprove of various kinds of drug use, and the third concerns the students' attitudes toward the legality of drug use.

Perceived Harmfulness of Drugs

- The great majority of students (at least two of every three) perceive regular use of any of the illicit drugs to entail "great risk" of harm for the user, with the single exception of marihuana. Only about one in three (36%) judge regular use of marihuana to involve great risk.
- A majority (58%) judge regular cigarette use (one or more packs a day) to entail great risk of harm.
- Very heavy drinking of alcohol--four or five drinks every day--is viewed as entailing great risk of harm by only 63%.
- Occasional or experimental use of illicit drugs other than marihuana is viewed as risky by substantial proportions.
- Very few see any great risk in the occasional use of marihuana, or of alcohol.
- For all of the illicit drugs there is a consistent trend over the past two years in the direction of fewer students associating risk with use.



- Regular use of marihuana and experimental use of cocaine and LSD have shown the largest declines in perceived risk.
- In contrast, there has been an increase in the proportion who think regular cigarette smoking involves great risk to the user (51% in 1975 vs. 58% in 1977).

#### Personal Disapproval of Drug Use

- The overwhelming majority of seniors (more than 90%) express disapproval of regular use of each of the illicit drugs, except for marihuana; regular marihuana use is disapproved by a smaller but still substantial majority of 66%.
- Drinking one or two drinks of alcohol daily, and smoking a pack or more of cigarettes daily is disapproved by virtually the same percentages as disapprove of regular marihuana use (67% and 66%).
- Even experimental use of illicit drugs other than marihuana receives the disapproval of the great majority (from 74% for amphetamines to 93% for heroin).
- About one in three (33%) disapprove of trying marihuana once or twice, and about half that proportion (16%) disapprove of trying alcohol once or twice.
- Despite the decline in perceived harmfulness of most drugs, licit and illicit, there has been very little change from 1975 to 1977 in levels of disapproval for any of them. There is one important exception:
- All levels of marihuana use (i.e., experimental, occasional, and regular use) are disapproved by fewer seniors in 1977 than in 1975. (See Table 2, Chapter 13 for details.)

#### Attitudes Regarding the Legality of Drug Use

- The majority of seniors favor legally prohibiting use of each of the illicit drugs in public, ranging from 59% for marihuana to 81% for heroin.
- A stunning 42% believe that even cigarette smoking in public places should be prohibited by law. Virtually half think getting drunk in public should be prohibited (49%).
- For all drugs, substantially fewer students believe use in private should be prohibited than express that view about public use. The differences are greatest for alcohol and marihuana, and much less pronounced for the other illicit drugs.

- There has been a steady decline in the last two years in the proportion of seniors who favor legal prohibition of use (in public or private) of any of the illicit drugs.
- Over the two years, fewer favor prohibition of public drunkenness, but more favor prohibition of private drunkenness.
- Only 22% of 1977 seniors believe marihuana use should be a crime, a decline from 31% in 1975.
- Seniors predict that they would be little affected by the legalization of the use and sale of marihuana. Only about 14% say they would try it, or would use it more often than at present.

### Perceived Availability

#### Status and Trends

- As would be expected, the more widely use drugs are reported to be more available.
- Marihuana is available to almost all high school seniors 88% report it to be "very easy" or "fairly easy" to get.
- The psychotherapeutic drugs (stimulants, sedatives, and tranquilizers) are the next most available. For each of these classes of drugs, between one-half and two-thirds of the seniors thought they would be easy for them to get.
- Hallucinogens and cocaine each are seen as available by about a third of the sample.
- Heroin is seen by the fewest seniors (18%) as very or fairly easy to get.
- Over the last two years, the proportion reporting relatively easy access has dropped for all illicit drugs except marihuana. Most of this decrement occurred between 1975 and 1976, although the trend appears to be continuing for psychedelics, stimulants, and sedatives.
- The greatest decrement in perceived availability has occurred for hallucinogens.
- These general trend findings are replicated in the data from recent users of each drug (Table 2, Chapter 14).
- Marihuana availability has remained essentially constant at between 87% and 88%.

TABLE 1-1

Prevalence (Percent Ever Used) of Eleven Types of Drugs: Observed  
Estimates and 95% Confidence Limits, Class of 1977

(N = 17116)

	<u>Lower</u> <u>limit</u>	<u>Observed</u> <u>estimate</u>	<u>Upper</u> <u>limit</u>
Marihuana	54.4	56.4	58.4
Inhalants	10.3	11.1	11.9
Hallucinogens	12.8	13.9	15.1
Cocaine	9.8	10.8	11.9
Heroin	1.5	1.8	2.2
Other Opiates <sup>a</sup>	9.6	10.3	11.1
Stimulants <sup>a</sup>	21.6	23.0	24.5
Sedatives <sup>a</sup>	16.1	17.4	18.7
Tranquilizers <sup>a</sup>	16.7	18.0	19.4
Alcohol	91.2	92.5	93.7
Cigarettes	74.2	75.7	77.1

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<sup>a</sup>Only drug use which was not under a doctor's orders is included here.

TABLE 1-2  
Prevalence (Percent Ever Used) and Recency of Use of  
Eleven Types of Drugs, Class of 1977  
 (N = 17116)

	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
Marihuana	56.4	35.4	12.2	8.8	43.6
Inhalants	11.1	1.3	2.4	7.4	88.9
Hallucinogens	13.9	4.1	4.8	5.1	86.1
Cocaine	10.8	2.9	4.2	3.6	89.2
Heroin	1.8	0.3	0.5	0.9	98.2
Other opiates <sup>a</sup>	10.3	2.8	3.6	3.9	89.7
Stimulants <sup>a</sup>	23.0	8.8	7.5	6.8	77.0
Sedatives <sup>a</sup>	17.4	5.1	5.6	6.7	82.6
Tranquilizers <sup>a</sup>	18.0	4.6	6.2	7.3	82.0
Alcohol	92.5	71.2	15.8	5.5	7.5
Cigarettes	75.7	38.4	{37.3} <sup>b</sup>		24.3

<sup>a</sup>Only drug use which was not under a doctor's orders is included here.

<sup>b</sup>The combined total for the two columns is shown because the question asked did not discriminate between the two answer categories.

TABLE 1-3

Trends in Lifetime Prevalence of Eleven Types of Drugs

	Percent ever used			
	Class of <u>1975</u> N = (9408)	Class of <u>1976</u> (15385)	Class of <u>1977</u> (17116)	'76-'77 <u>change</u>
Marihuana	47.3	52.8	56.4	+3.6 <i>ss</i>
Inhalants	NA	10.3	11.1	+0.8
Hallucinogens	16.3	15.1	13.9	-1.2
Cocaine	9.0	9.7	10.8	+1.1
Heroin	2.2	1.8	1.8	0.0
Other opiates <sup>a</sup>	9.0	9.6	10.3	+0.7
Stimulants <sup>a</sup>	22.3	22.6	23.0	+0.4
Sedatives <sup>a</sup>	18.2	17.7	17.4	-0.3
Tranquilizers <sup>a</sup>	17.0	16.8	18.0	+1.2
Alcohol	90.4	91.9	92.5	+0.6
Cigarettes	73.6	75.4	75.7	+0.3

NOTES: Level of significance of difference between 1976 and 1977:

*s* = .05, *ss* = .01, *sss* = .001.

NA indicates question not asked.

<sup>a</sup>Only drug use which was not under a doctor's orders is included here.

TABLE 1-4  
Trends in Annual Prevalence of Eleven Types of Drugs

	<u>Percent who used in last twelve months</u>			
	<u>Class of 1975</u> N = (9410)	<u>Class of 1976</u> (15345)	<u>Class of 1977</u> (17047)	<u>'76-'77 change</u>
Marihuana	40.0	44.5	47.6	+3.1 <i>ss</i>
Inhalants	NA	3.0	3.7	+0.7 <i>s</i>
Hallucinogens	11.2	9.4	8.8	-0.6
Cocaine	5.6	6.0	7.2	+1.2 <i>ss</i>
Heroin	1.0	0.8	0.8	0.0
Other opiates <sup>a</sup>	5.7	5.7	6.4	+0.7 <i>s</i>
Stimulants <sup>a</sup>	16.2	15.8	16.3	+0.5
Sedatives <sup>a</sup>	11.7	10.7	10.8	+0.1
Tranquilizers <sup>a</sup>	10.6	10.3	10.8	+0.5
Alcohol	84.8	85.7	87.0	+1.3
Cigarettes	NA	NA	NA	NA

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

NA indicates question not asked.

<sup>a</sup>Only drug use which was not under a doctor's orders is included here.

TABLE 1-5  
Trends in Thirty-Day Prevalence of Eleven Types of Drugs

	<u>Percent who used in last thirty days</u>			
	<u>Class of 1975</u> N = (9404)	<u>Class of 1976</u> (15377)	<u>Class of 1977</u> (17087)	<u>'76-'77 change</u>
Marihuana	27.1	32.2	35.4	+3.2 <i>sss</i>
Inhalants	NA	0.9	1.3	+0.4 <i>s</i>
Hallucinogens	4.7	3.4	4.1	+0.7 <i>s</i>
Cocaine	1.9	2.0	2.9	+0.9 <i>sss</i>
Heroin	0.4	0.2	0.3	+0.1
Other opiates <sup>a</sup>	2.1	2.0	2.8	+0.8 <i>sss</i>
Stimulants <sup>a</sup>	8.5	7.7	8.8	+1.1 <i>s</i>
Sedatives <sup>a</sup>	5.4	4.5	5.1	+0.6
Tranquilizers <sup>a</sup>	4.1	4.0	4.6	+0.6
Alcohol	68.2	68.3	71.2	+2.9 <i>s</i>
Cigarettes	36.7	38.8	38.4	-0.4

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

NA indicates question not asked.

<sup>a</sup>Only drug use which was not under a doctor's orders is included here.

TABLE 1-6

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

	Percent who used daily in last thirty days			
	Class of 1975 N = (9404)	Class of 1976 N = (15377)	Class of 1977 N = 17087)	'76-'77 change
Marihuana	6.0	8.2	9.1	+0.9
Inhalants	NA	0.0	0.0	0.0
Hallucinogens	0.1	0.1	0.1	0.0
Cocaine	0.1	0.1	0.1	0.0
Heroin	0.1	0.0	0.0	0.0
Other opiates <sup>a</sup>	0.1	0.1	0.2	+0.1
Stimulants <sup>a</sup>	0.5	0.4	0.5	+0.1
Sedatives <sup>a</sup>	0.3	0.2	0.2	0.0
Tranquilizers <sup>a</sup>	0.1	0.2	0.3	+0.1
Alcohol	5.7	5.6	6.1	+0.5
Cigarettes	26.9	28.8	28.8	0.0

NOTES: Level of significance of difference between 1976 and 1977:  
s = .05, ss = .01, sss = .001.

NA indicates question not asked.

<sup>a</sup>Only drug use which was not under a doctor's orders is included here.



TABLE 1-7

Trends in Proportions Using Marihuana but No Other Illicit Drug  
During the Last Twelve Months by Subgroups

	Number of Cases (Class of 1977)	Percent who used only marihuana in last twelve months			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	16922	18.8	22.7	25.1	+2.4 <i>ss</i>
Sex:					
Male	7882	23.1	26.9	29.1	+2.2 <i>s</i>
Female	8632	15.2	18.6	21.5	+2.9 <i>s</i>
College Plans:					
None or under 4 yrs	7182	NA	21.9	24.3	+2.4 <i>s</i>
Complete 4 yrs	8489	NA	23.4	26.0	+2.6 <i>s</i>
Region:					
Northeast	4288	25.5	29.2	29.1	-0.1
North Central	5356	16.3	21.5	24.2	+2.7
South	4450	15.6	18.9	23.2	+4.3 <i>s</i>
West	2828	20.1	23.1	24.0	+0.9
Population Density:					
Large SMSA	5270	24.2	27.2	29.2	+2.0
Other SMSA	7769	18.7	22.0	25.6	+3.6 <i>ss</i>
Non-SMSA	3883	15.4	20.4	21.0	+0.6

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 1-8

Trends in Proportions Using Any Illicit Drug(s) Other Than Marihuana During the Last Twelve Months by Subgroups

	Number of Cases (Class of 1977)	Percent who used some other illicit drug in last twelve months <sup>a</sup>			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	16922	26.2	25.4	26.0	+0.6
Sex:					
Male	7882	25.9	25.7	26.3	+0.6
Female	8632	26.2	24.4	25.3	+0.9
College Plans:					
None or under 4 yrs	7182	NA	28.7	30.0	+1.3
Complete 4 yrs	8489	NA	20.9	20.8	-0.1
Region:					
Northeast	4288	26.0	26.1	27.7	+1.6
North Central	5356	29.2	26.1	27.7	+1.6
South	4450	22.5	23.4	22.9	-0.5
West	2828	28.2	26.6	26.0	-0.6
Population Density:					
Large SMSA	5270	30.3	27.5	27.1	-0.4
Other SMSA	7769	26.3	25.8	26.8	+1.0
Non-SMSA	3883	23.4	23.3	24.2	+0.9

NOTES: Level of significance of difference between 1976 and 1977:  
 $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

<sup>a</sup>Use of "other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use of other opiates, stimulants, sedatives, or tranquilizers not under a doctor's orders.

TABLE 1-9

Trends in Lifetime and Annual Prevalence of Illicit Drug Use;  
Use of Only Marihuana and Use of Any Other Illicit Drug<sup>a</sup>

	<u>Percent reporting use in lifetime</u>			
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
Marihuana Only	19.0	22.9	25.8	+2.9 <i>ss</i>
Any Illicit Drug Other Than Marihuana <sup>a</sup>	36.2	35.4	35.8	+0.4
Total: Any Illicit Drug Use	55.2	58.3	61.6	+3.3 <i>ss</i>
	N = (9409)	(15455)	(17181)	

	<u>Percent reporting use in the last twelve months</u>			
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
Marihuana Only	18.8	22.7	25.1	+2.4 <i>s</i>
Any Illicit Drug Other Than Marihuana <sup>a</sup>	26.2	25.4	26.0	+0.6
Total: Any Illicit Drug Use	45.0	48.1	51.1	+3.0 <i>ss</i>
	N = (9294)	(15245)	(16922)	

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

See Appendix D for definition of variables in table.

<sup>a</sup>Use of "other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use of other opiates, stimulants, sedatives, or tranquilizers not under a doctor's orders.

TABLE 1-10

Annual Prevalence of Use of Eleven Types of Drugs by Subgroups, Class of 1977

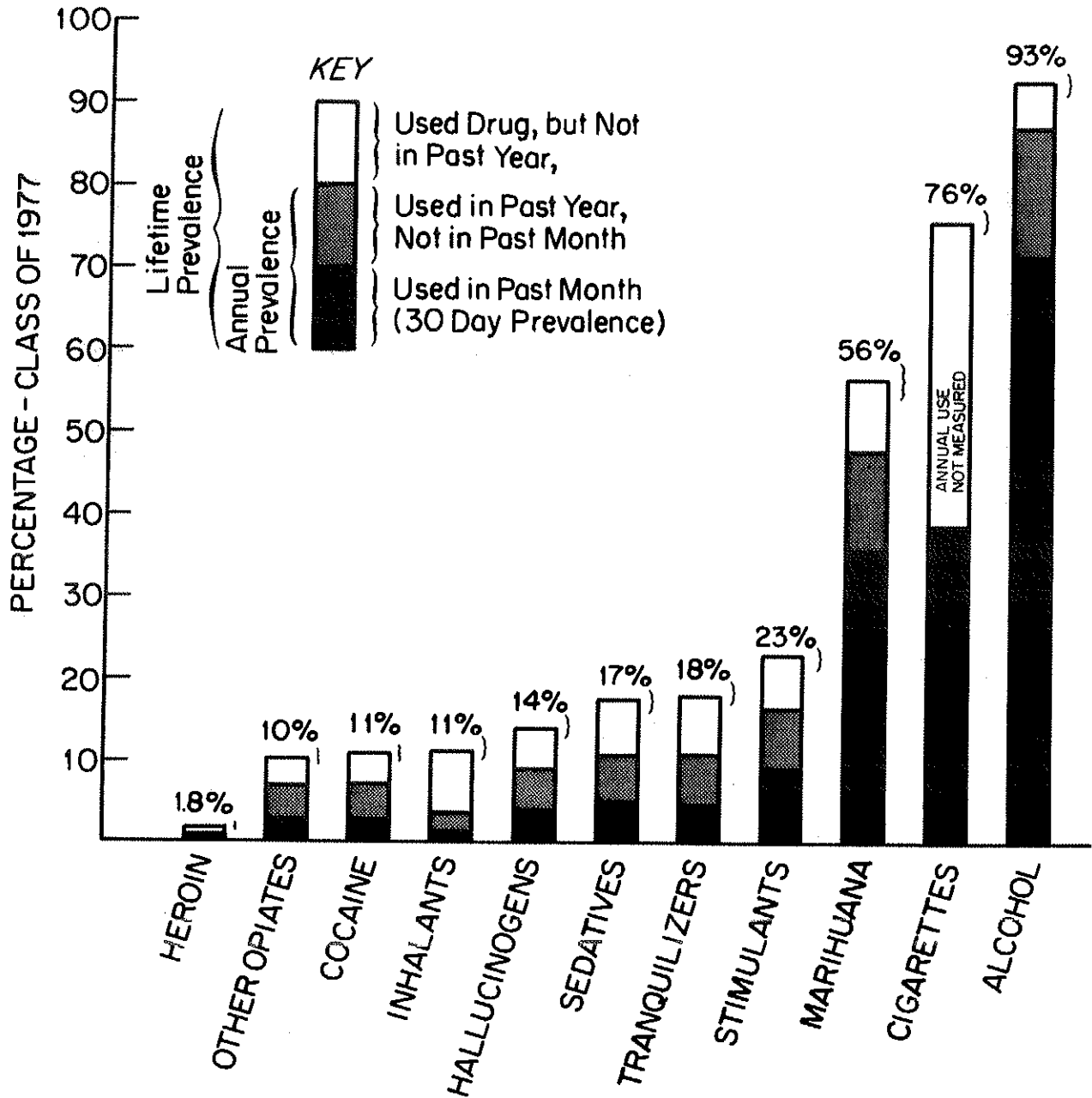
	Marihuana	Inhalants	Hallucinogens	Cocaine	Heroin	Other Opiates	Stimulants	Sedatives	Tranquilizers	Alcohol	Cigarettes <sup>a</sup>
All seniors	47.6	3.7	8.8	7.2	0.8	6.4	16.3	10.8	10.8	87.0	19.4
Sex:											
Male	53.2	5.1	10.8	9.3	1.2	7.3	16.0	12.0	10.2	90.0	19.7
Female	42.0	2.4	6.5	4.9	0.4	5.4	16.4	9.4	11.4	84.3	18.9
College Plans:											
None or under 4 yrs	50.7	4.7	10.6	8.1	1.1	8.0	20.5	12.9	12.3	87.7	26.9
Complete 4 yrs	43.4	2.9	6.4	5.5	0.5	4.7	11.5	8.1	9.0	86.5	11.2
Region:											
Northeast	53.5	4.1	10.6	7.9	0.7	6.6	16.8	10.7	10.4	92.8	24.2
North Central	48.1	4.2	9.7	6.3	1.0	7.5	19.0	11.9	11.0	90.4	20.3
South	42.5	3.3	6.8	6.0	0.9	5.2	13.2	11.3	11.4	81.0	18.5
West	46.8	3.0	8.2	10.2	0.5	6.0	16.0	7.5	9.6	82.3	11.5
Population Density:											
Large SMSA	53.2	3.4	9.9	8.6	0.5	6.7	15.3	9.8	9.6	90.4	20.4
Other SMSA	48.9	3.6	9.1	7.3	0.8	6.3	17.1	11.7	11.4	87.6	18.8
Non-SMSA	41.2	4.2	7.5	5.8	1.1	6.2	15.9	10.3	11.0	83.4	19.5

NOTES: Number of cases can be found in Appendix C,  
See Appendix D for definition of variables in table.

<sup>a</sup>Based on 30-day prevalence of a half pack a day of cigarettes, or more. Annual prevalence is not available.

FIGURE A

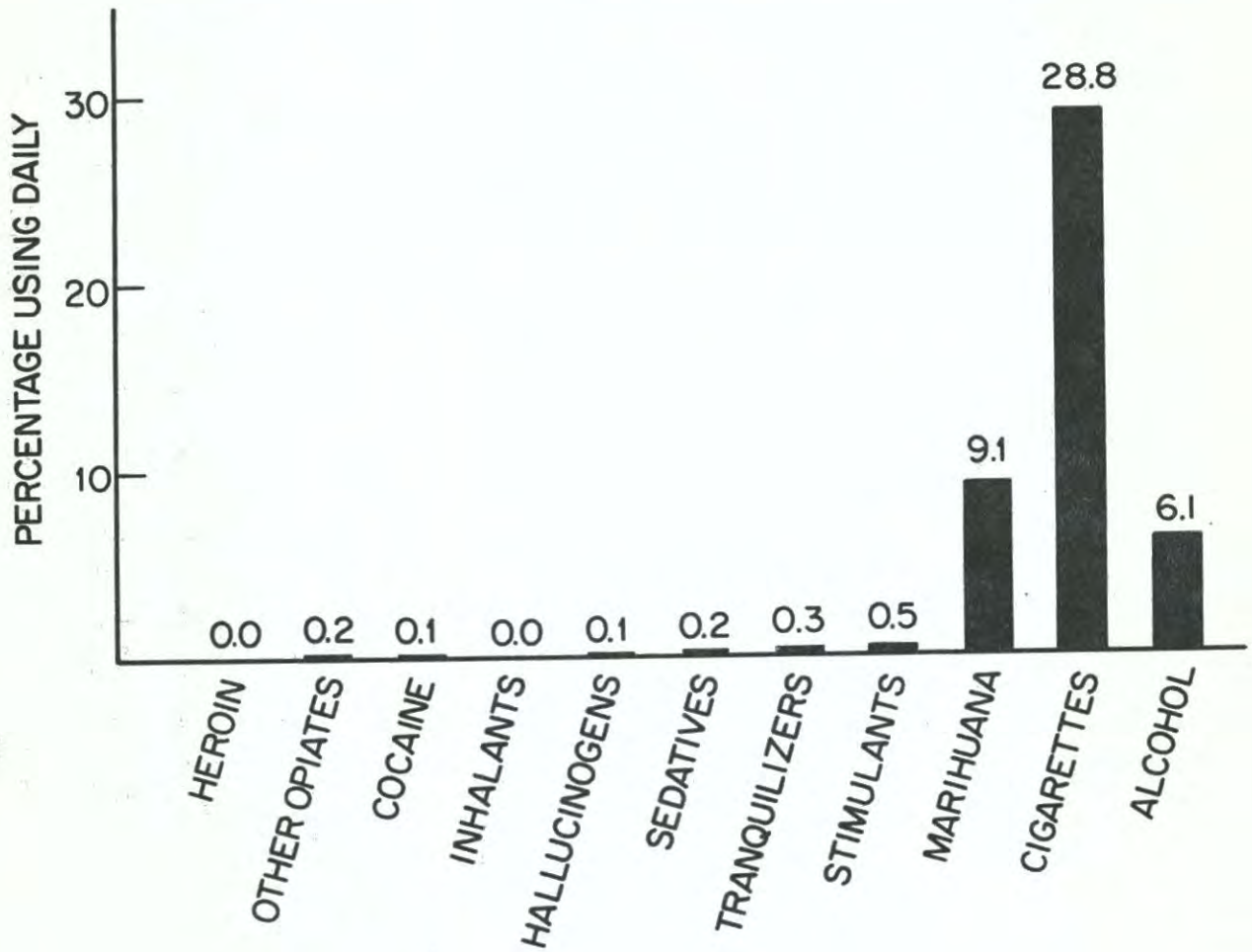
Lifetime, Annual, and Thirty-Day Prevalence of Use,  
(and Recency of Use) for Eleven Types of Drugs, Class of 1977



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

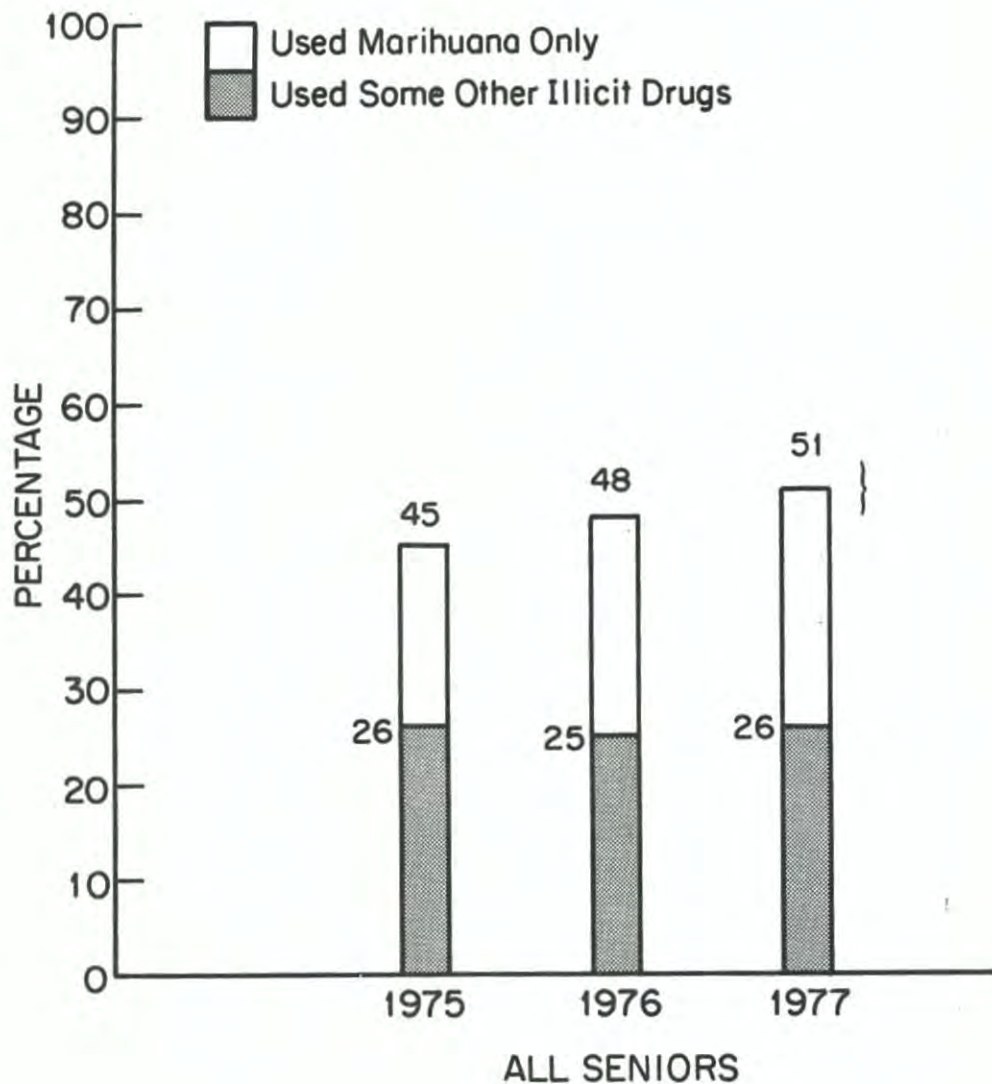
FIGURE B

Thirty-Day Prevalence of Daily Use  
for Eleven Types of Drugs, Class of 1977



NOTE: Daily use for all drugs, except cigarettes, is defined as use on 20 or more occasions in the past thirty days. Daily use of cigarettes is defined as smoking one or more cigarettes per day in the last thirty days.

FIGURE C  
Trends in Annual Prevalence of Illicit Drug Use,  
All Seniors

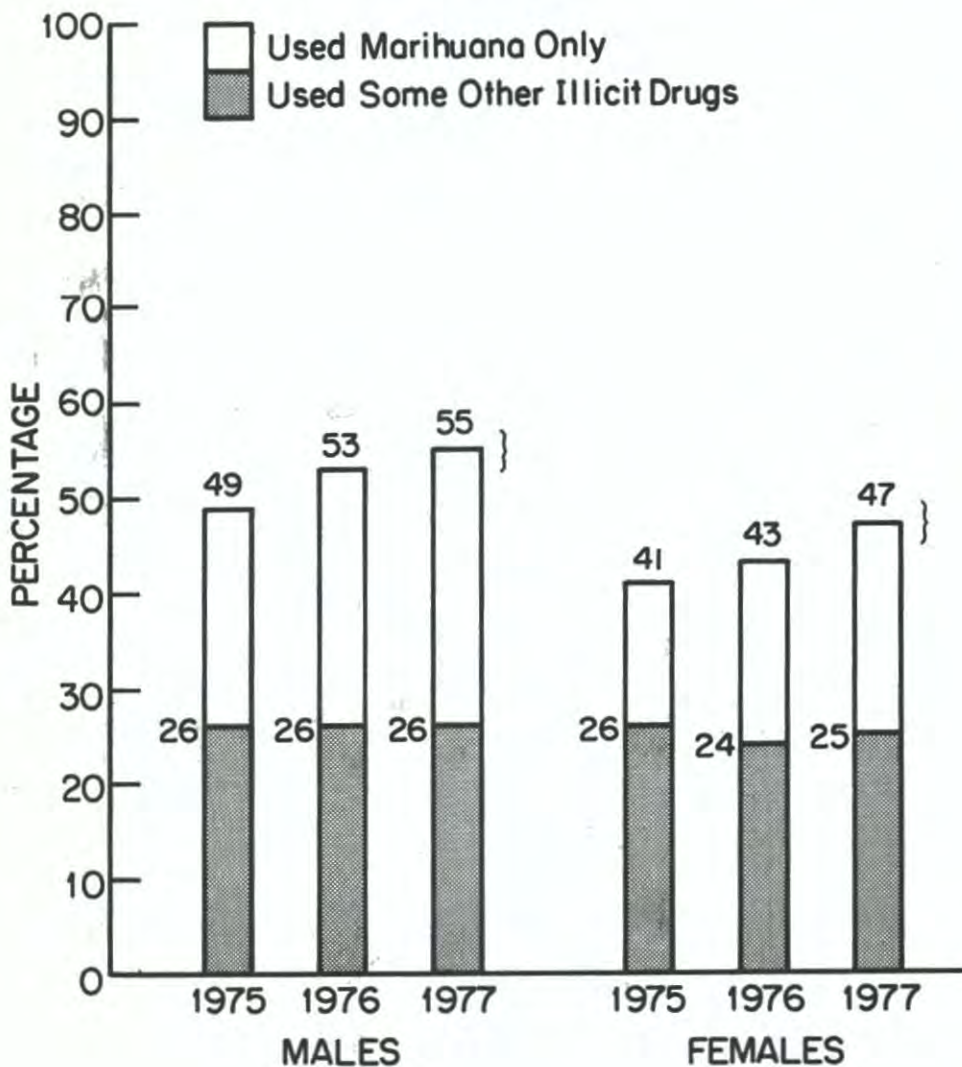


NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

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

FIGURE D

Trends in Annual Prevalence of Illicit Drug Use,  
by Sex



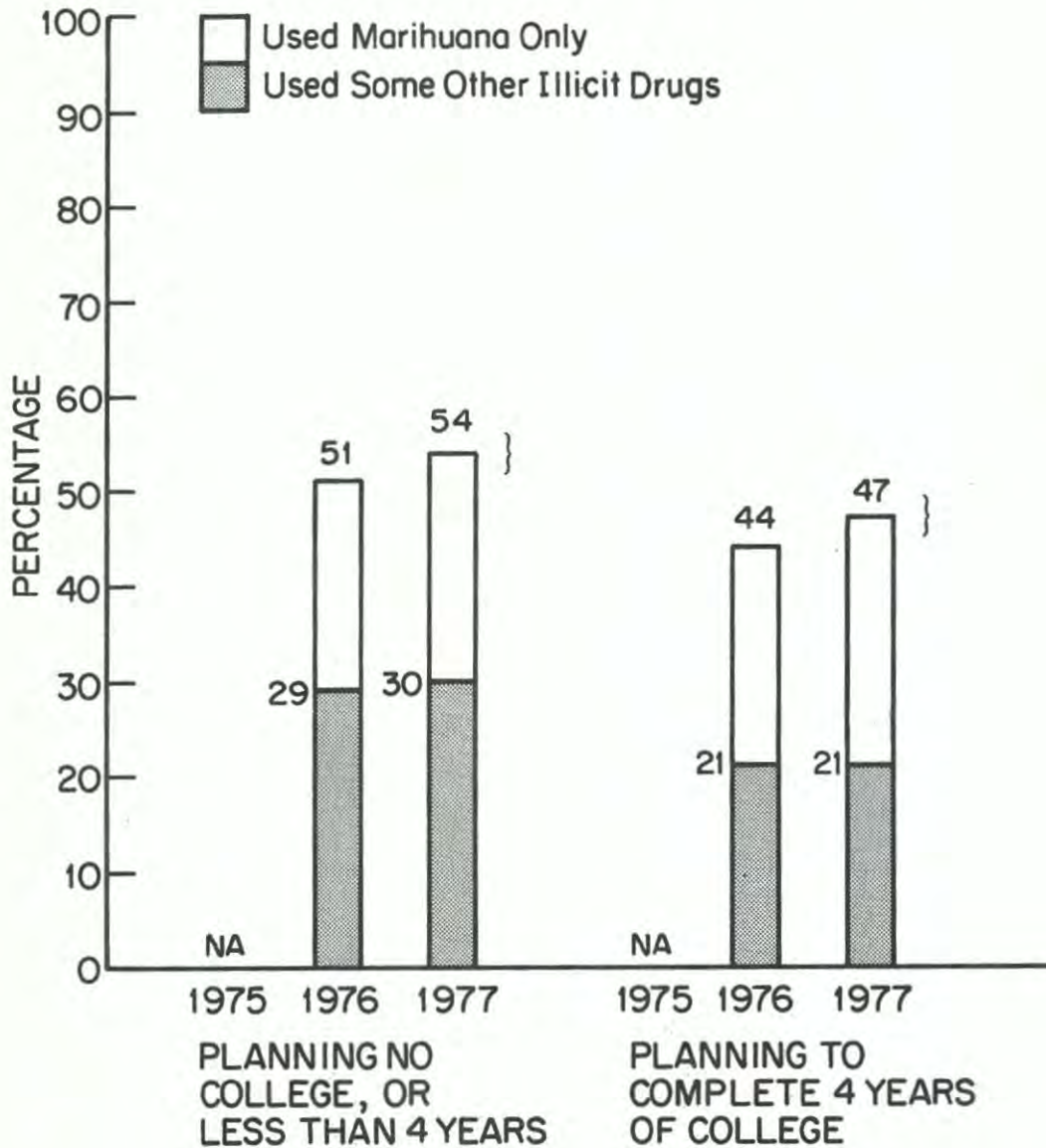
NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

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 Illicit Drug Use,  
by College Plans

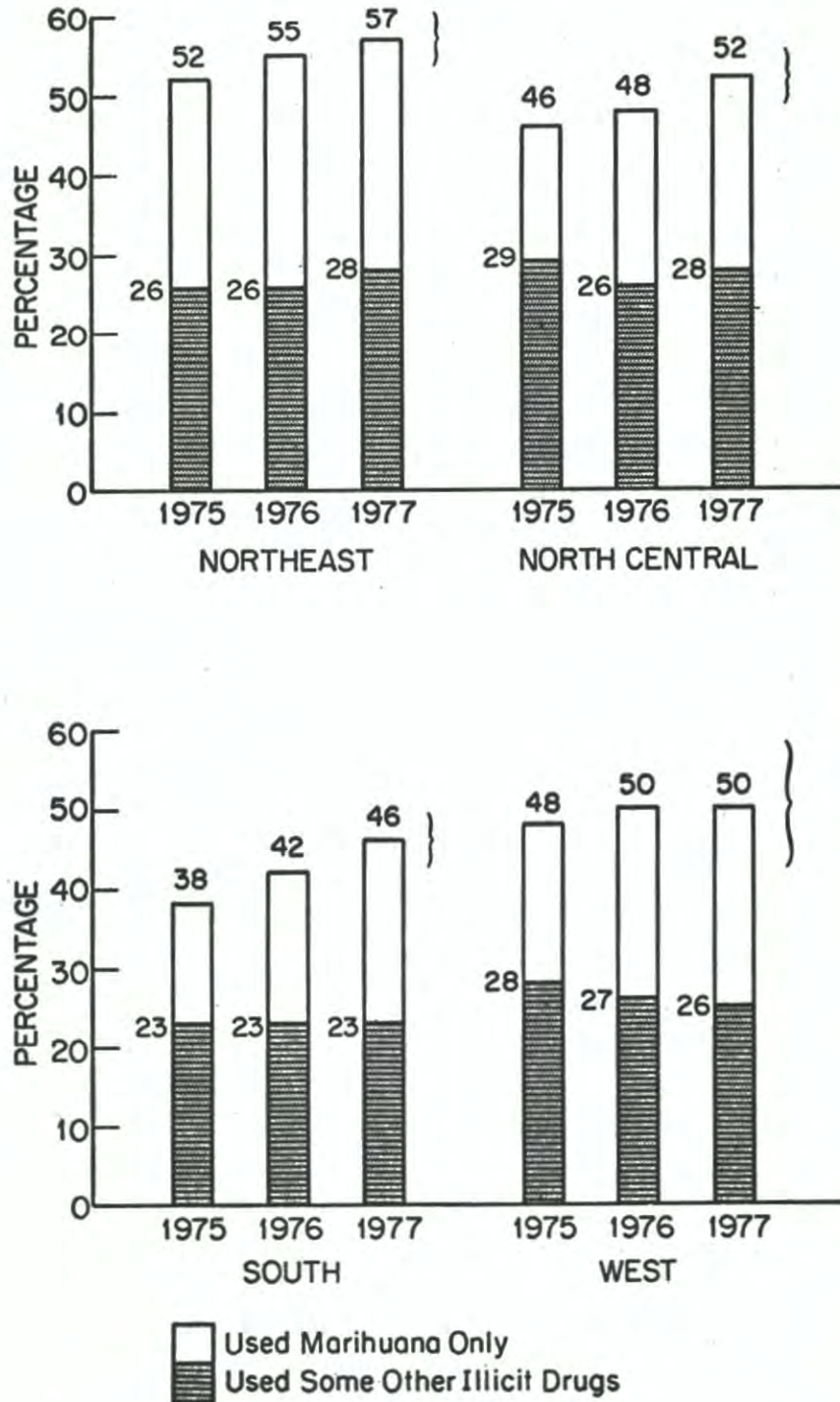


NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

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.

FIGURE F

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

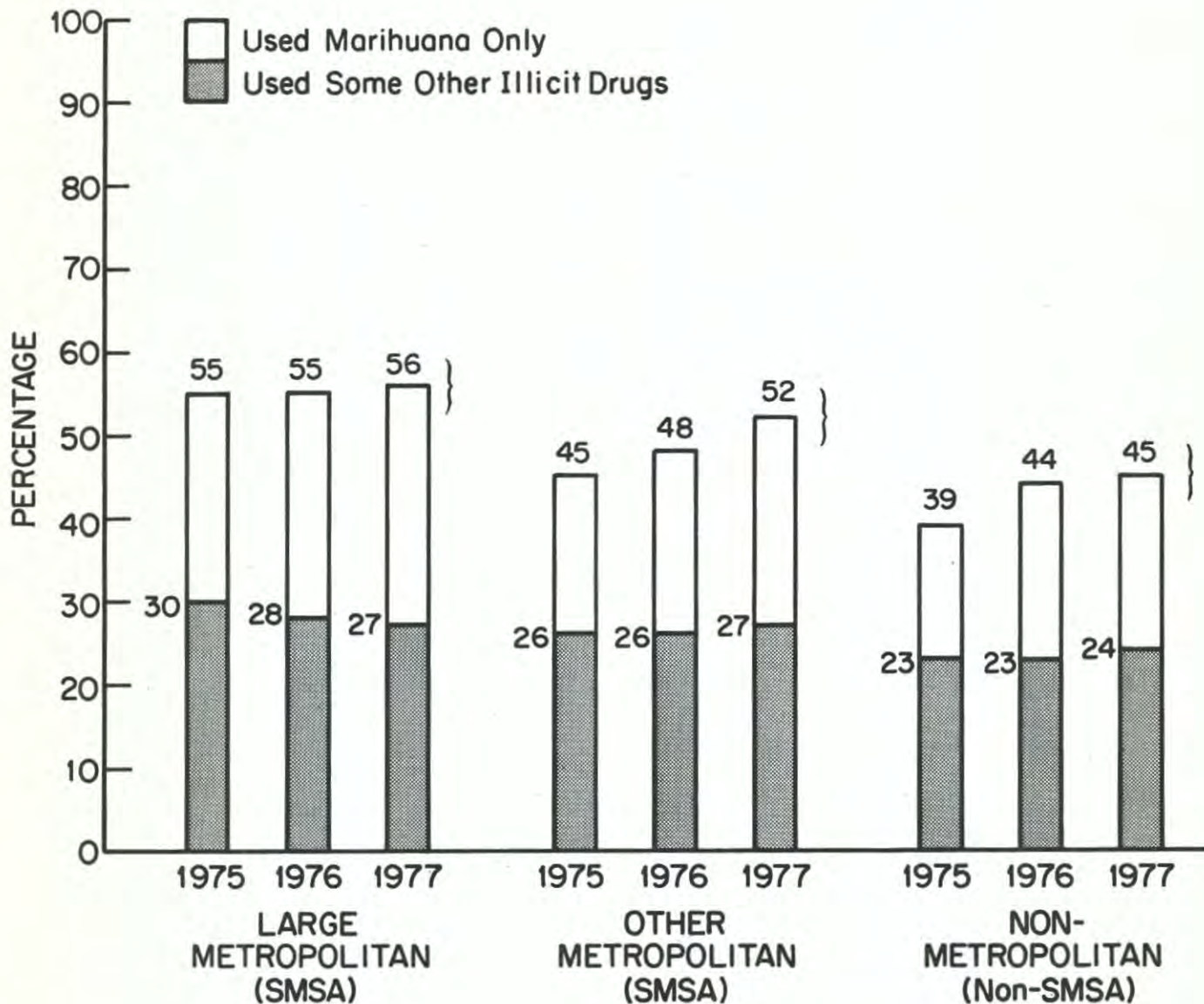


NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

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 G

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.

FIGURE H

Trends in Annual Prevalence of Eight Types of Illicit Drugs by Sex

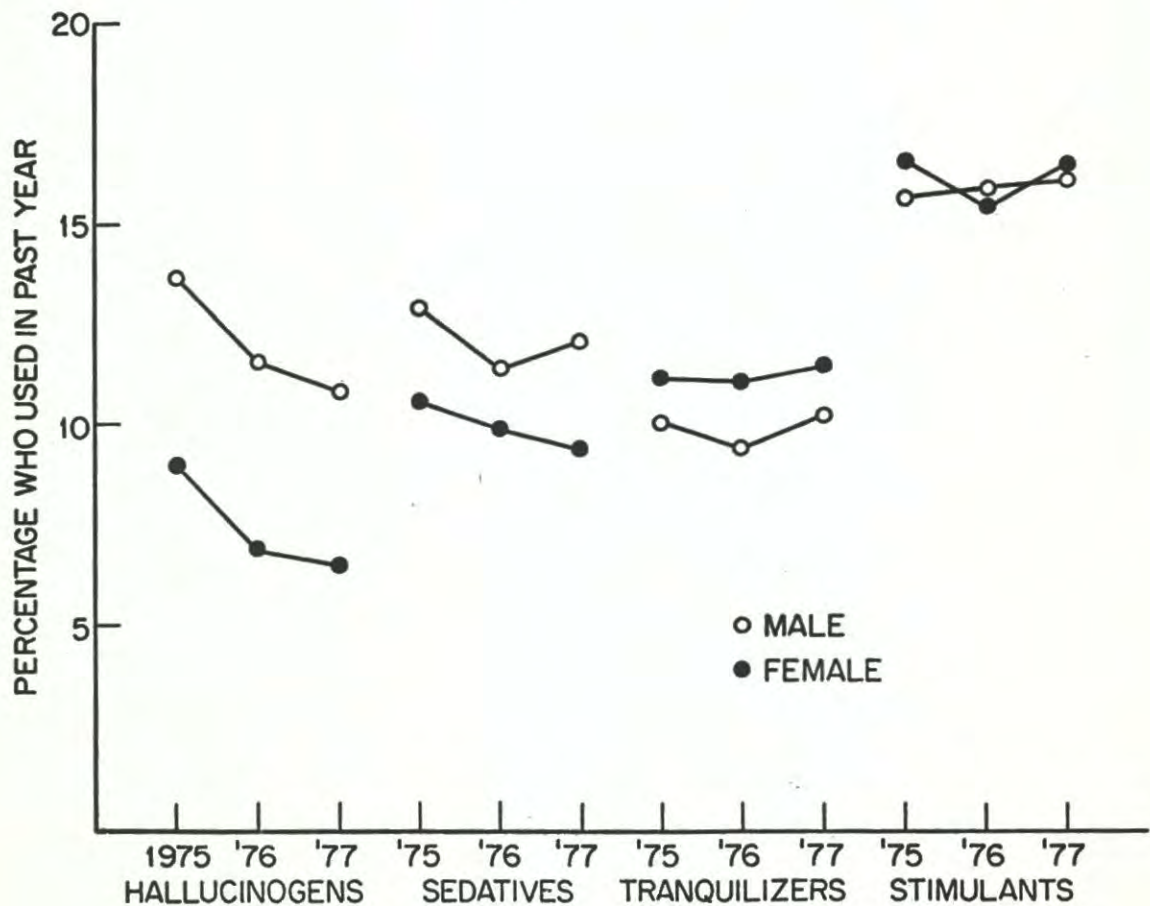
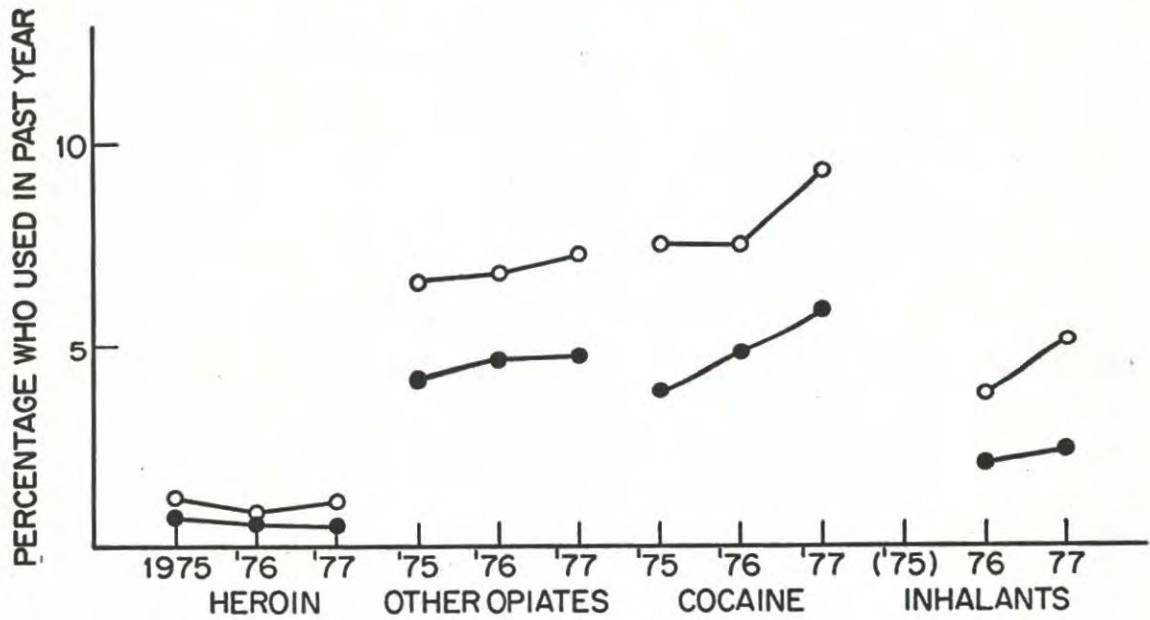


FIGURE I

Trends in Annual Prevalence of Marihuana and Alcohol, by Sex

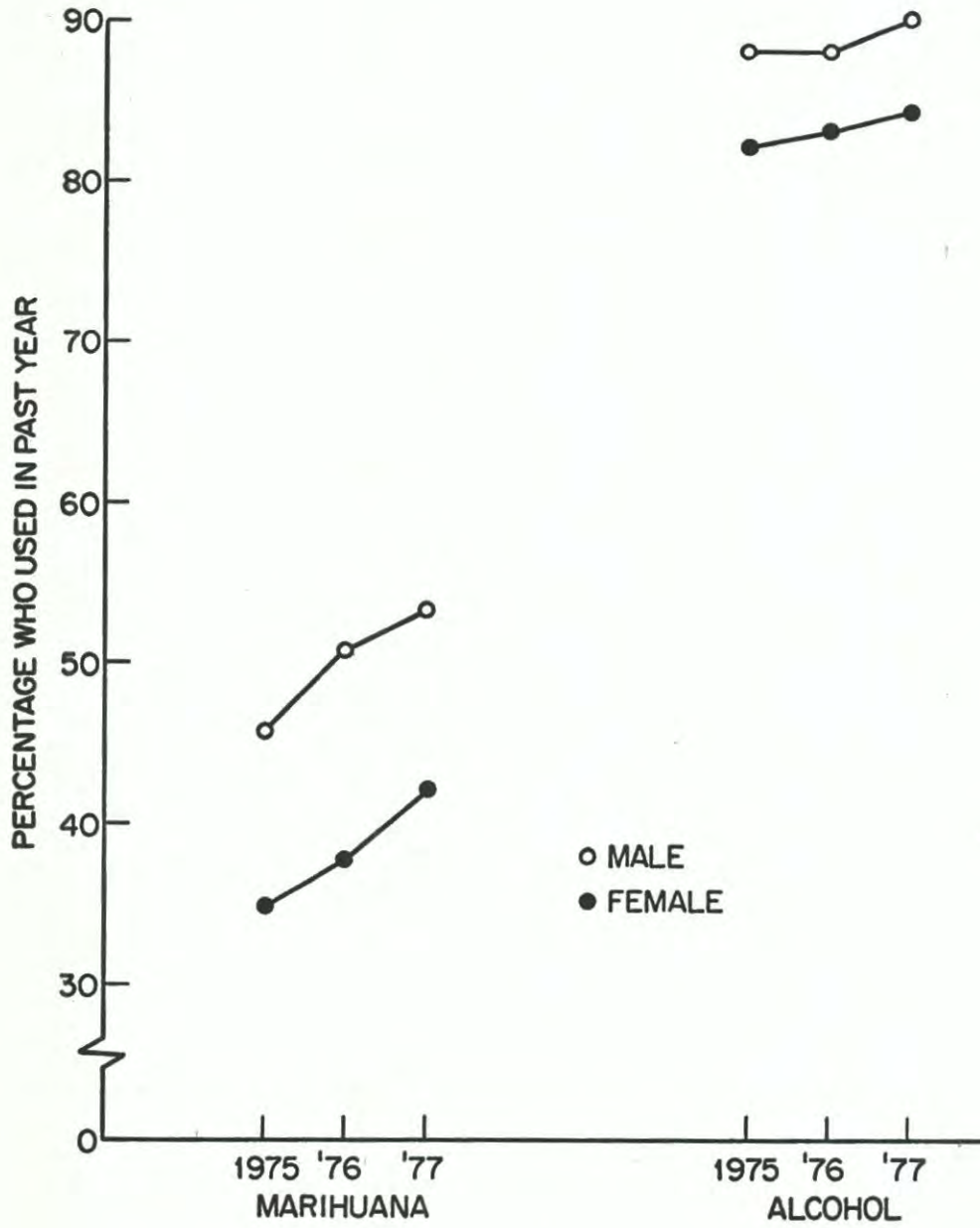
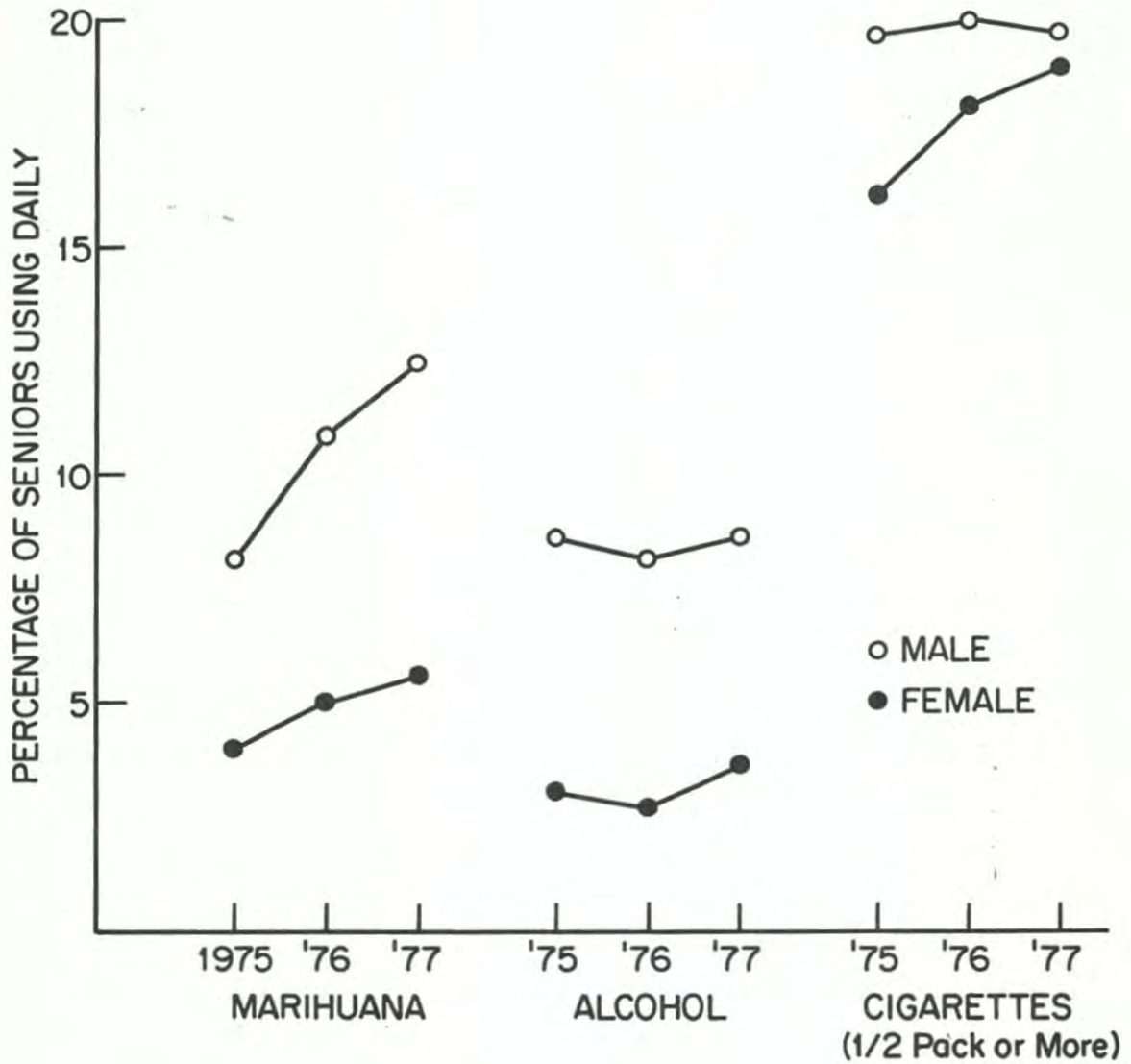


FIGURE J

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



NOTE: Daily use for alcohol and marihuana 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.

## Chapter 2

# MARIHUANA/HASHISH

Since marihuana and hashish both have the same major psychoactive ingredient--tetrahydrocannabinol--they were treated as a set in most of the questions in this study, as they are in most other epidemiological surveys in the field. (See Appendix D for the exact questions.) Separate questions for marihuana and hashish were included in one of the five questionnaire forms, however, and the results there indicate that marihuana accounts for the majority of the use and the users in this drug class.

A significant proportion of the age group under study is now using marihuana and/or hashish on a daily basis, as the figures below demonstrate. Because of this fact, a supplementary table was added to this chapter (Table 2-10) which shows trends in daily prevalence of marihuana/hashish use for various subgroups of the sample. The only other drugs for which comparable daily use tables will be presented are alcohol and cigarettes.

The key findings derived from the data tables in this chapter are presented in summary form below.

### Prevalence of Use in 1977

<u>Total Sample</u>	<u>Table(s)</u>
● Over half of all seniors (about 56%) have tried marihuana or hashish, and nearly half (about 48%) report use in the prior year.	2,3
● Over one-third (about 35%) had used it in the last month.	4
● A substantial fraction (about 30%) had used it on 20 or more occasions in their lifetime.	6
● About a quarter of the sample (26%) report about weekly use (defined as three or more occasions in the prior 30 days).	6
● Daily use (defined as 20 or more occasions in the last 30 days) is reported by 9.1% of the sample.	6

Subgroup Differences

Table(s)

- *Sex Differences.* Prevalence for all three time intervals is higher among males than females. (For example, annual prevalence is reported by 53% of the males and 42% of the females.) An even greater difference occurs between the sexes when use on 40 or more occasions during the last year is compared. (About 20% of the males and 10% of the females report usage of this frequency.) Also, more than twice as many males (12.4%) as females (5.6%) report daily use. 2,3,4,5,10
  
- *College Plans.* Use is more widespread among the noncollege-bound than among the college-bound (51% vs. 43% in annual prevalence). Again the differences are more pronounced for frequent use; about 11% of the college-bound have used 40 or more times in the previous year vs. about 18% of the noncollege-bound. Similarly, only 6% of the college-bound report daily use vs. 11% of noncollege-bound. 2,3,4,5,10
  
- *Region of the Country.* Prevalence tends to be lowest in the South and highest in the Northeast (43% and 54%, respectively, for annual prevalence). There is relatively little regional variation in the observed levels of daily use, however. 2,3,4,10
  
- *Population Density.* Prevalence is lowest in the nonmetropolitan areas (non-SMSAs show about 41% annual prevalence) and highest in the very large cities. (Large SMSAs have 53% annual prevalence.) The prevalence of daily use is also slightly lower than average (at 7.6%) in the nonmetropolitan areas. 2,3,4,10

Recent Trends in Prevalence

Total Sample

- There has been a continuing upward trend over the two years in the prevalence of use in all three time intervals (lifetime, last year, last 30 days). 2,3,4
  
- Observed lifetime prevalence has risen from 47.3% in 1975 to 56.4% in 1977. 2
  
- Observed annual prevalence and monthly prevalence increased almost as much. 3,4
  
- There has been a continuing increase in daily marihuana/ hashish use (i.e., 20 or more occasions in the last 30 days) since 1975. Of the 1975 seniors, 6.0% reported daily use vs. 8.2% in 1976 and 9.1% in 1977. The 1975 to 1977 change is significant at .001 level. 10



Subgroup Differences in Trends

Table(s)

- All subgroups show a continuing increase in the prevalence of marihuana/hashish use since 1975 for all three time intervals. 2,3,4
- Increases have been greatest in the South and North Central regions of the country; this has had the effect of narrowing regional differences as those regions "catch up" with the West and Northeast. 2,3,4
- Daily use has increased for all subgroups between 1975 and 1977. The increases have been greatest among males, the noncollege-bound, students in the South, and those not living in the very large cities. As a result, regional and urban differences in daily use have narrowed, while differences related to sex and college plans have increased. 10

Probability of Future Use

- Just over one quarter (27%) of 1977 seniors say they "probably" or "definitely" will be using marihuana five years in the future. 6
- This reflects a 1% increase over the figure for 1976 and an 8% increase over 1975. 6
- The proportion expecting to use it in the future is (for each year) substantially smaller than the proportion who reported some use during the previous 30 days-- apparently some of the current users view the current usage phase in their life as transitory. 6

Grade of First Use

- First use for most users occurred between the ninth and eleventh grades. 8
- Over one-quarter of all 1977 seniors had tried marihuana prior to tenth grade; for most of these early users the first experience was in ninth grade. Practically none had used it before seventh grade. 8
- Subgroup differences in grade of first use tend to follow differences in overall use; the subgroups with highest overall percentages of marihuana use also show the highest percentages of early users. 8
- There has been a substantial and continuing increase in the prevalence of early use. In the class of 1975, only 17% reported use prior to tenth grade, vs. 22% of the class of 1976 and 26% of the class of 1977. 9

Table(s)

- This increase in early prevalence has been true for all subgroups as well as for the total sample. It has been more pronounced, however, among males (since 1975), those from the South and North Central regions, and those from more urban areas.

9

TABLE 2-1

Marihuana: Prevalence (Ever Used) and Recency of Use  
by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
All seniors	17555	56.4	35.4	12.2	8.8	43.6
Sex:						
Male	8110	61.9	40.7	12.5	8.7	38.1
Female	8871	50.8	30.0	12.0	8.8	49.2
College Plans:						
None or under 4 yrs	7413	59.6	38.7	12.0	8.9	40.4
Complete 4 yrs	8706	52.0	31.0	12.5	8.6	48.0
Region:						
Northeast	4495	62.5	40.4	13.1	9.0	37.5
North Central	5493	56.0	36.1	12.1	7.9	44.0
South	4646	51.4	31.3	11.3	8.9	48.6
West	2921	57.1	33.6	13.2	10.3	42.9
Population Density:						
Large SMSA	5501	62.5	40.4	12.8	9.3	37.5
Other SMSA	8036	57.7	36.2	12.8	8.8	42.3
Non-SMSA	4018	49.7	30.2	11.1	8.5	50.3

NOTE: See Appendix D for definition of variables in table.

TABLE 2-2

Marihuana: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	17555	47.3	52.8	56.4	+3.6 <i>ss</i>
Sex:					
Male	8110	52.7	58.9	61.9	+3.0 <i>s</i>
Female	8871	42.7	46.1	50.8	+4.7 <i>sss</i>
College Plans:					
None or under 4 yrs	7413	NA	55.3	59.6	+4.3 <i>sss</i>
Complete 4 yrs	8706	NA	48.7	52.0	+3.3 <i>s</i>
Region:					
Northeast	4495	56.3	60.7	62.5	+1.8
North Central	5493	46.9	52.1	56.0	+3.9 <i>s</i>
South	4646	38.8	45.7	51.4	+5.7 <i>ss</i>
West	2921	52.5	55.9	57.1	+1.2
Population Density:					
Large SMSA	5501	58.1	60.1	62.5	+2.4
Other SMSA	8036	48.1	52.3	57.7	+5.4 <i>ss</i>
Non-SMSA	4018	39.6	47.8	49.7	+1.9

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 2-3

Marihuana: Trends in Annual Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last twelve months</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17490	40.0	44.5	47.6	+3.1 <i>ss</i>
Sex:					
Male	8082	45.8	50.6	53.2	+2.6 <i>s</i>
Female	8845	34.9	37.8	42.0	+4.2 <i>ss</i>
College Plans:					
None or under 4 yrs	7389	NA	46.8	50.7	+3.9 <i>ss</i>
Complete 4 yrs	8680	NA	40.7	43.4	+2.7
Region:					
Northeast	4477	47.4	52.7	53.5	+0.8
North Central	5479	40.1	44.0	48.1	+4.1 <i>s</i>
South	4620	32.4	37.9	42.5	+4.6 <i>s</i>
West	2914	44.1	45.8	46.8	+1.0
Population Density:					
Large SMSA	5483	50.4	51.3	53.2	+1.9
Other SMSA	8006	40.3	44.2	48.9	+4.7 <i>ss</i>
Non-SMSA	4001	32.9	39.8	41.2	+1.4

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 2-4

Marihuana: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last thirty days</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17473	27.1	32.2	35.4	+3.2 <i>ss</i>
Sex:					
Male	8065	32.3	37.7	40.7	+3.0 <i>s</i>
Female	8845	22.5	26.0	30.0	+4.0 <i>ss</i>
College Plans:					
None or under 4 yrs	7380	NA	34.5	38.7	+4.2 <i>sss</i>
Complete 4 yrs	8676	NA	28.4	31.0	+2.6 <i>s</i>
Region:					
Northeast	4475	32.2	38.6	40.4	+1.8
North Central	5480	27.6	31.4	36.1	+4.7 <i>ss</i>
South	4614	21.2	27.7	31.3	+3.6
West	2904	30.8	32.7	33.6	+0.9
Population Density:					
Large SMSA	5471	36.2	37.9	40.4	+2.5
Other SMSA	8008	26.4	32.5	36.2	+3.7 <i>ss</i>
Non-SMSA	3994	22.2	27.5	30.2	+2.7

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 2-5

Marihuana: Frequency of Use in the Last Year by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Number of occasions in last 12 months</u>						
		<u>None</u>	<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-19</u>	<u>20-39</u>	<u>40+</u>
All seniors	17490	52.4	8.9	6.5	5.1	6.3	5.6	15.1
Sex:								
Male	8082	46.8	9.4	6.9	5.2	6.5	5.5	19.7
Female	8845	58.0	8.5	6.2	4.9	6.3	5.8	10.3
College Plans:								
None or under 4 yrs	7389	49.3	9.2	5.9	5.3	6.6	6.0	17.7
Complete 4 yrs	8680	56.6	8.9	6.9	4.7	6.2	5.3	11.4
Region:								
Northeast	4477	46.5	8.9	7.2	5.7	7.8	7.3	16.6
North Central	5479	51.9	9.1	6.2	5.7	6.7	5.7	14.7
South	4620	57.5	8.7	6.3	4.1	4.8	4.4	14.2
West	2914	53.2	8.9	6.7	4.7	6.4	5.1	15.0
Population Density:								
Large SMSA	5483	46.8	9.6	7.0	5.8	7.9	6.7	16.2
Other SMSA	8006	51.1	9.0	6.9	5.1	6.1	5.3	16.5
Non-SMSA	4001	58.8	8.2	5.7	4.4	5.4	5.1	12.3

NOTE: See Appendix D for definition of variables in table.

TABLE 2-6

Marihuana: Trends in Frequency of Use for Lifetime, Last Year, and  
Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>
<u>Lifetime use</u>			
No occasions	52.7	47.2	43.6
1-2 occasions	8.8	9.0	9.1
3-5 occasions	5.1	5.4	6.1
6-9 occasions	4.0	4.0	4.7
10-19 occasions	5.4	5.9	6.5
20-39 occasions	5.1	5.6	5.8
40 or more	18.9	22.9	24.3
	N = (9841)	(15845)	(17555)
<u>Use in last twelve months</u>			
No occasions	60.0	55.5	52.4
1-2 occasions	8.7	8.6	8.9
3-5 occasions	5.2	5.9	6.5
6-9 occasions	4.3	4.7	5.1
10-19 occasions	5.5	5.8	6.3
20-39 occasions	4.5	5.1	5.6
40 or more	11.7	14.3	15.1
	N = (9792)	(15748)	(17490)
<u>Use in last thirty days</u>			
No occasions	72.9	67.8	64.6
1-2 occasions	7.7	8.3	9.6
3-5 occasions	4.8	5.4	5.8
6-9 occasions	4.0	4.7	5.0
10-19 occasions	4.6	5.7	5.9
20-39 occasions	3.2	4.3	4.5
40 or more	2.8	3.9	4.6
	N = (9796)	(15722)	(17473)
<u>Probability of future use</u>			
Definitely will not	58.8	53.3	50.5
Probably will not	22.1	21.3	22.4
Probably will	14.3	20.4	20.7
Definitely will	4.8	5.1	6.4
	N = (3063)	(3212)	(3572)



TABLE 2-7

Marihuana: Trends in Grade in Which First Used

	<u>Percent reporting first use in each grade</u>		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Sixth grade (or below)	0.6	0.8	1.3
Seventh or Eighth grade	5.8	7.6	10.1
Ninth grade	10.5	13.9	14.8
Tenth grade	13.1	13.8	12.1
Eleventh grade	11.5	10.1	11.0
Twelfth grade	4.8	5.6	6.0
Grade not known	1.0	1.0	1.1
Never used	52.7	47.2	43.6
	N <sup>a</sup> = (3082)	(2970)	(6109)

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 2-8

Marihuana: Grade in Which First Used by Subgroups, Class of 1977  
(Entries are percentages)

	Number of Cases	Grade in school							Not known	Never used
		6 or below	7/8	9	10	11	12			
All seniors	6109	1.3	10.1	14.8	12.1	11.0	6.0	1.1	43.6	
Sex:										
Male	2859	2.0	11.7	16.9	12.9	11.5	5.7	1.2	38.1	
Female	3131	0.4	8.7	12.8	11.5	10.4	6.2	0.8	49.2	
College Plans:										
None or under 4 yrs	2555	1.4	11.4	15.9	12.2	11.3	5.6	1.7	40.4	
Complete 4 yrs	3170	1.1	8.2	12.9	11.8	10.8	6.7	0.5	48.0	
Region:										
Northeast	1452	1.0	11.9	17.8	13.7	10.6	5.3	2.2	37.5	
North Central	2041	1.3	8.5	14.6	12.7	12.0	6.3	0.5	44.0	
South	1621	1.1	9.1	13.2	10.6	10.8	6.4	0.2	48.6	
West	995	1.7	13.2	13.8	11.6	9.6	5.2	1.9	42.9	
Population Density:										
Large SMSA	1822	1.7	12.8	18.3	12.6	10.3	6.0	0.8	37.5	
Other SMSA	2813	1.2	10.7	15.3	13.2	10.6	5.8	0.9	42.3	
Non-SMSA	1474	0.9	7.6	11.7	10.5	11.8	6.1	1.1	50.3	

NOTE: See Appendix D for definition of variables in table.

TABLE 2-9

Marihuana: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1977)	Percent reporting first use prior to tenth grade <sup>a</sup>			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	6109	16.9	22.3	26.2	+3.9 <i>ss</i>
Sex:					
Male	2859	18.2	26.9	30.6	+3.7 <i>s</i>
Female	3131	14.7	17.9	22.0	+4.1 <i>ss</i>
College Plans:					
None or under 4 yrs	2555	NA	24.8	28.7	+3.9 <i>s</i>
Complete 4 yrs	3170	NA	18.6	22.2	+3.6 <i>s</i>
Region:					
Northeast	1452	22.9	27.4	30.7	+3.3
North Central	2041	15.4	20.2	24.5	+4.3 <i>s</i>
South	1621	10.6	17.4	23.4	+6.0 <i>ss</i>
West	995	24.5	29.4	28.7	-0.7
Population Density:					
Large SMSA	1822	22.4	27.2	32.8	+5.6 <i>ss</i>
Other SMSA	2813	18.0	22.6	27.1	+4.5 <i>ss</i>
Non-SMSA	1474	11.9	18.5	20.2	+1.7

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 2-10

Marihuana: Trends in Thirty-Day Prevalence of Daily Use by Subgroups

	Number of Cases (Class of 1977)	Percent who used daily in last thirty days			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	17473	6.0	8.2	9.1	+0.9
Sex:					
Male	8065	8.1	10.8	12.4	+1.6 <i>s</i>
Female	8845	4.0	5.0	5.6	+0.6
College Plans:					
None or under 4 yrs	7380	6.0	9.9	11.1	+1.2
Complete 4 yrs	8676	3.0	5.5	6.3	+0.8
Region:					
Northeast	4475	6.7	10.2	9.9	-0.3
North Central	5480	6.2	8.1	8.8	+0.7
South	4614	5.0	6.7	9.1	+2.4 <i>ss</i>
West	2904	6.5	8.0	8.1	+0.1
Population Density:					
Large SMSA	5471	8.4	10.7	9.5	-1.2
Other SMSA	8008	5.9	8.2	10.0	+1.8 <i>s</i>
Non-SMSA	3994	4.5	6.3	7.6	+1.3

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

### Chapter 3

## INHALANTS

Inhalants constitute the only class of drug which is defined not in terms of pharmacological properties, but rather in terms of mode of administration. The definition includes any aerosol or gaseous fumes, other than smoke, which are inhaled for the purpose of making the users feel good or high or intoxicated. Glue, paint thinner, aerosols from spray cans, and many other classes of chemicals have been used by youngsters for this purpose.

Questions on inhalants were added to the survey for the first time in 1976 at the suggestion of NIDA officials. Therefore, trend data are available for only a one-year interval.\*

#### Prevalence of Use in 1977

<u>Total Sample</u>	<u>Table(s)</u>
● One of every nine seniors (about 11%) has used an inhalant at some time.	2
● However, only 4.4% have used inhalants more than once or twice, indicating that most previous users were only experimenting.	6
● Less than 4% have used in the prior year, the majority of whom used it only once or twice, and only 1.3% report use in the prior month.	3,4,6
● Very few report use on 20 or more occasions in their lifetime (.8%), and virtually no one reports daily use during the previous 30-day interval.	6

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\*Questions on inhalants were not added to one form which was longer than the others and was comprised largely of detailed questions on drug use. This decision affects Chapter 3 in two ways. First, the numbers of cases on which most tables in this chapter are based are closer to 14,000 than to 18,000. Second, because the questions concerning grade at first use and probability of future use were in the form which excluded inhalants, data on those two variables are not available for presentation here.

<u>Subgroup Differences</u>	<u>Table(s)</u>
● <u>Sex Differences.</u> Prevalence is substantially higher among males than females for all three time intervals (lifetime, annual, and 30-day). For example, 5.1% of the males report use in the last year vs. 2.4% of the females--a ratio of more than two to one.	2,3,4
● <u>College Plans.</u> Those not expecting to graduate from a four-year college also have substantially higher prevalence rates than those expecting to graduate. The annual prevalence rates are 4.7% and 2.9%, respectively. Most of the heavier users are in the former group.	2,3,4,5
● <u>Region of the Country.</u> There are relatively small regional differences in inhalant use.	2,3,4
● <u>Population Density.</u> Very small differences emerge among the three population density groups in the prevalence of inhalant use, although the rates tend to be slightly higher in the less urban areas.	2,3,4

#### Recent Trends in Prevalence

##### Total Sample

- Trend data exist across a one-year period only, 1976 to 1977. The class of 1977 reports a prevalence rate for all three time intervals which is only slightly higher than the rate observed in the class of 1976. The annual prevalence figures are 3.7% for the class of 1977, and 3.0% for the class of 1976. 2,3,4
- However the proportion using 10 or more times during the year is identical for both senior classes (i.e., .4%) indicating virtually no increase in heavier use. 6

##### Subgroup Differences in Trends

- There is very little change among subgroups, which is not surprising given that little change has been observed for the entire sample. 2,3,4
- A slightly greater-than-average increase is observed among males, the noncollege-bound, those from the North Central region, and those from middle-sized cities (Other SMSAs). 2,3,4

TABLE 3-1

Inhalants: Prevalence (Ever Used) and Recency of Use  
by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases<sup>a</sup></u>	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
All seniors	14186	11.1	1.3	2.4	7.4	88.9
Sex:						
Male	6638	14.1	1.9	3.2	9.0	85.9
Female	7271	8.2	0.7	1.7	5.8	91.8
College Plans:						
None or under 4 yrs	6148	13.5	1.8	2.9	8.9	86.5
Complete 4 yrs	7069	8.6	0.9	2.0	5.7	91.4
Region:						
Northeast	3602	12.0	1.3	2.8	7.9	88.0
North Central	4437	11.6	1.4	2.8	7.4	88.4
South	3780	10.6	1.1	2.2	7.3	89.4
West	2367	9.5	1.5	1.5	6.5	90.5
Population Density:						
Large SMSA	4429	10.2	1.1	2.4	6.8	89.8
Other SMSA	6496	11.1	1.3	2.3	7.5	88.9
Non-SMSA	3261	11.7	1.6	2.6	7.6	88.3

NOTE: See Appendix D for definition of variables in table.

<sup>a</sup>There are fewer total respondents for this drug because it was intentionally omitted from one form of the questionnaire.

TABLE 3-2

Inhalants: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977) <sup>a</sup>	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	14186	NA	10.3	11.1	+0.8
Sex:					
Male	6638	NA	12.6	14.1	+1.5
Female	7271	NA	7.9	8.2	+0.3
College Plans:					
None or under 4 yrs	6148	NA	12.4	13.5	+1.1
Complete 4 yrs	7069	NA	8.0	8.6	+0.6
Region:					
Northeast	3602	NA	10.9	12.0	+1.1
North Central	4437	NA	8.8	11.6	+2.8 <i>ss</i>
South	3780	NA	11.3	10.6	-0.7
West	2367	NA	10.1	9.5	-0.6
Population Density:					
Large SMSA	4429	NA	9.9	10.2	+0.3
Other SMSA	6496	NA	10.0	11.1	+1.1
Non-SMSA	3261	NA	10.9	11.7	+0.8

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates question not asked.

<sup>a</sup>There are fewer total respondents for this drug because it was intentionally omitted from one form of the questionnaire.



TABLE 3-3

Inhalants: Trends in Annual Prevalence of Use by Subgroups

	Number of Cases (Class of 1977) <sup>a</sup>	<u>Percent who used in last twelve months</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	14160	NA	3.0	3.7	+0.7 s
Sex:					
Male	6617	NA	3.8	5.1	+1.3 sss
Female	7269	NA	2.0	2.4	+0.4
College Plans:					
None or under 4 yrs	6137	NA	3.6	4.7	+1.1 s
Complete 4 yrs	7063	NA	2.2	2.9	+0.7 s
Region:					
Northeast	3597	NA	3.2	4.1	+0.9
North Central	4433	NA	2.6	4.2	+1.6 sss
South	3768	NA	3.8	3.3	-0.5
West	2362	NA	1.7	3.0	+1.3 s
Population Density:					
Large SMSA	4422	NA	2.9	3.4	+0.5
Other SMSA	6487	NA	2.6	3.6	+1.0 s
Non-SMSA	3251	NA	3.4	4.2	+0.8

NOTES: Level of significance of difference between 1976 and 1977:

s = .05, ss = .01, sss = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates question not asked.

<sup>a</sup>There are fewer total respondents for this drug because it was intentionally omitted from one form of the questionnaire.

TABLE 3-4

Inhalants: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977) <sup>a</sup>	Percent who used in last thirty days			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	14159	NA	0.9	1.3	+0.4 s
Sex:					
Male	6618	NA	1.3	1.9	+0.6 s
Female	7266	NA	0.5	0.7	+0.2
College Plans:					
None or under 4 yrs	6137	NA	1.1	1.8	+0.7 ss
Complete 4 yrs	7062	NA	0.7	0.9	+0.2
Region:					
Northeast	3597	NA	1.2	1.3	+0.1
North Central	4432	NA	0.8	1.4	+0.6 s
South	3767	NA	0.9	1.1	+0.2
West	2363	NA	0.7	1.5	+0.8 s
Population Density:					
Large SMSA	4424	NA	1.0	1.1	+0.1
Other SMSA	6485	NA	0.8	1.3	+0.5 s
Non-SMSA	3250	NA	0.9	1.6	+0.7 s

NOTES: Level of significance of difference between 1976 and 1977:  
s = .05, ss = .01, sss = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates question not asked.

<sup>a</sup>There are fewer total respondents for this drug because it was intentionally omitted from one form of the questionnaire.

TABLE 3-5

Inhalants: Frequency of Use in the Last Year by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases<sup>a</sup></u>	<u>Number of occasions in last 12 months</u>						
		<u>None</u>	<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-19</u>	<u>20-39</u>	<u>40+</u>
All seniors	14160	96.3	2.3	0.7	0.3	0.2	0.1	0.1
Sex:								
Male	6617	94.9	3.0	1.0	0.4	0.4	0.1	0.1
Female	7269	97.6	1.6	0.4	0.2	0.1	0.0	0.0
College Plans:								
None or under 4 yrs	6137	95.3	2.6	1.1	0.5	0.3	0.1	0.1
Complete 4 yrs	7063	97.1	1.9	0.5	0.2	0.2	0.0	0.0
Region:								
Northeast	3597	95.9	2.4	0.8	0.5	0.2	0.1	0.1
North Central	4433	95.8	2.6	0.9	0.3	0.3	0.1	0.1
South	3768	96.7	2.1	0.6	0.3	0.1	0.1	0.1
West	2362	97.0	1.8	0.7	0.3	0.2	0.0	0.0
Population Density:								
Large SMSA	4422	96.6	2.3	0.5	0.3	0.1	0.1	0.1
Other SMSA	6487	96.4	2.2	0.6	0.3	0.3	0.1	0.1
Non-SMSA	3251	95.8	2.3	1.1	0.4	0.2	0.1	0.0

NOTE: See Appendix D for definition of variables in table.

<sup>a</sup>These are fewer total respondents for this drug because it was intentionally omitted from one form of the questionnaire.

TABLE 3-6

Inhalants: Trends in Frequency of Use for Lifetime, Last Year, and Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
<u>Lifetime use</u>			
No occasions	NA	89.7	88.9
1-2 occasions	NA	6.4	6.6
3-5 occasions	NA	1.7	1.8
6-9 occasions	NA	0.8	1.1
10-19 occasions	NA	0.7	0.7
20-39 occasions	NA	0.3	0.4
40 or more	NA	0.4	0.4
N =	(NA)	(12827)	(14186)
<u>Use in last twelve months</u>			
No occasions	NA	97.0	96.3
1-2 occasions	NA	1.8	2.3
3-5 occasions	NA	0.6	0.7
6-9 occasions	NA	0.2	0.3
10-19 occasions	NA	0.2	0.2
20-39 occasions	NA	0.1	0.1
40 or more	NA	0.1	0.1
N =	(NA)	(12809)	(14160)
<u>Use in last thirty days</u>			
No occasions	NA	99.1	98.7
1-2 occasions	NA	0.6	0.9
3-5 occasions	NA	0.1	0.2
6-9 occasions	NA	0.0	0.1
10-19 occasions	NA	0.0	0.0
20-39 occasions	NA	0.0	0.0
40 or more	NA	0.0	0.0
N =	(NA)	(12800)	(14159)
<u>Probability of future use</u>			
Definitely will not	NA	NA	NA
Probably will not	NA	NA	NA
Probably will	NA	NA	NA
Definitely will	NA	NA	NA
N =	(NA)	(NA)	(NA)

NOTE: NA indicates question not asked.

## Chapter 4

# HALLUCINOGENS

The original questions included in this study asked separately about "LSD" and "other psychedelics." (See Appendix D for the exact question wordings.) Here they have been combined and presented under the general title of hallucinogens (which is synonymous with psychedelics) in order to heighten the comparability of this report with the report from the national household survey on drug use. The national household survey did not differentiate LSD from other psychedelics and used the general term hallucinogens to denote this class of drugs.

While there are various drugs which have hallucinogenic properties, it is a generally accepted fact that the specific hallucinogenic drug acquired often is not what the user believes it to be. LSD and PCP, for example, may be passed off to unsuspecting customers as peyote or mescaline. Thus, the ability of respondents to report accurately which of the hallucinogens they actually used on various occasions is somewhat blurred, which strengthens the case for grouping them into a single category. The prevalence of LSD was found to be roughly equal to the prevalence of "other psychedelics" in 1977, so the two sub-categories contribute roughly equally to the results in the combined category.

### Prevalence of Use in 1977

<u>Total Sample</u>	Table(s)
● Approximately one-seventh of this year's senior class has used a hallucinogen at some time (i.e., a lifetime prevalence of about 14%) while during the previous year about 9% had used one or more hallucinogens.	2,3
● Reported prevalence for the previous month is 4.1%; and daily use is virtually nonexistent.	4,6
● Only 2.2% report using hallucinogens on 20 or more occasions in their lifetime.	6

### Subgroup Differences

- |  |         |
|--|---------|
| ● <i>Sex Differences.</i> Recent use tends to be about twice as high among males as among females. For example, the annual prevalence figures are 10.8% and 6.5%, respectively, while the comparable 30-day prevalence | 2,3,4,5 |
|--|---------|

figures are 5.5% and 2.5%. The ratio for lifetime prevalence is considerably smaller (15.8% vs. 11.7%) suggesting that female users are more likely to stop using by twelfth grade than are male users. About three times as many males (.9%), as females (.3%), report use on 20 or more occasions during the previous year.

- *College Plans.* Those not planning to complete four years of college report higher prevalence figures for all three time intervals. Their annual prevalence, for example, is 10.6% vs. 6.4% for the college-bound. Frequent use is also disproportionately high among the noncollege-bound with .8% of them reporting use on 20 plus occasions in the previous year vs. .3% of the college-bound. 2,3,4,5
  
- *Region of the Country.* There are modest regional differences in hallucinogen use. The Northeast and North Central show the highest usage rates (e.g., about 11% and 10% prevalence in the last year) while the South shows the lowest (e.g., 7% in the last year). These differences have been replicated consistently in the previous years of the study. 2,3,4
  
- *Population Density.* There is a slight positive relationship between population density and the prevalence of hallucinogen use for all three time intervals--a relationship which has been replicated in all three years. In 1977 the annual prevalence rates were 7.5%, 9.1%, and 9.9% for Non-SMSAs, Other SMSAs, and Large SMSAs, respectively. 2,3,4

Recent Trends in Prevalence

Total Sample

- Since 1975 there has been a slight but continuing decline in the lifetime prevalence and annual prevalence of hallucinogen use among high school seniors. For example, reported annual prevalence has dropped from 11.2% in 1975 to 9.4% in 1976 to 8.8% in 1977. (The two-year shift is significant at the .001 level.) 2,3
  
- Surprisingly, however, 30-day prevalence increased slightly in 1977 (by about .7%) after dropping by about 1.3% in 1976. This anomalous finding could be explained by several factors: (1) sampling error, (2) a slightly later questionnaire administration in 1977 which might have inflated 30-day prevalence a little, or (3) a sudden return to hallucinogen use by some previous users just prior to the 1977 administration, possibly because of increased availability. 4

Table(s)

- The proportion of students reporting frequent use has declined steadily over the last two years. For example, in 1975, 1.0% reported use on 20 or more occasions during the previous year vs. .7% in 1976 and .5% in 1977. 6

Subgroup Differences in Trends

- Changes in the prevalence of use among the various subgroups all have been in the same direction and at approximately the same magnitude as the changes described for the total sample, with one minor exception. 2,3,4
- Nonmetropolitan areas have shown a less marked decline in hallucinogen use than the metropolitan areas.

Probability of Future Use

- The questions on the probability of future use asked about LSD specifically.
- Fewer than 3% of 1977 seniors expect to be using LSD five years in the future. 6
- About 86% say they "definitely will not" use LSD in the future, and about 12% say they "probably will not." 6
- These figures for 1977 represent virtually no change from 1975 or 1976. 6

Grade of First Use

- Most members of the class of 1977 who tried hallucinogens, first tried it in ninth, tenth, or eleventh grades (about 3% in each grade). 7,8
- Subgroup differences in lifetime prevalence are spread rather evenly across grades. Males and those not planning four years of college, for example, show above-average percentages of first users at each grade level, but not more than would be expected given the known subgroup differences in lifetime prevalence. 8
- No important trends in grade of first use appear consistently--either for the whole sample or for major subgroups--when the classes of 1975, 1976, and 1977 are compared. 7,9

TABLE 4-1

Hallucinogens: Prevalence (Ever Used) and Recency of Use  
by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
All seniors	17880	13.9	4.1	4.8	5.1	86.1
Sex:						
Male	8268	15.8	5.5	5.3	5.0	84.2
Female	9026	11.7	2.5	4.0	5.2	88.3
College Plans:						
None or under 4 yrs	7587	16.4	4.9	5.6	5.8	83.6
Complete 4 yrs	8814	10.5	2.6	3.8	4.2	89.5
Region:						
Northeast	4588	15.3	4.8	5.8	4.7	84.7
North Central	5569	15.3	4.8	4.9	5.6	84.7
South	4752	11.5	3.1	3.7	4.8	88.5
West	2971	13.4	3.2	5.0	5.2	86.6
Population Density:						
Large SMSA	5630	15.4	4.6	5.3	5.6	84.6
Other SMSA	8151	14.8	4.1	5.1	5.7	85.2
Non-SMSA	4099	11.4	3.5	4.0	4.0	88.6

NOTE: See Appendix D for definition of variables in table.



TABLE 4-2

Hallucinogens: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	17880	16.3	15.1	13.9	-1.2
Sex:					
Male	8268	18.1	17.2	15.8	-1.4
Female	9026	14.6	12.6	11.7	-0.9
College Plans:					
None or under 4 yrs	7587	NA	17.8	16.4	-1.4
Complete 4 yrs	8814	NA	11.5	10.5	-1.0
Region:					
Northeast	4588	19.1	16.8	15.3	-1.5
North Central	5569	17.8	16.3	15.3	-1.0
South	4752	12.6	12.5	11.5	-1.0
West	2971	16.6	15.5	13.4	-2.1
Population Density:					
Large SMSA	5630	20.1	17.9	15.4	-2.5
Other SMSA	8151	18.1	15.3	14.8	-0.5
Non-SMSA	4099	11.8	12.9	11.4	-1.5

NOTES: Level of significance of difference between 1976 and 1977:  
 $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 4-3

Hallucinogens: Trends in Annual Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last twelve months</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17874	11.2	9.4	8.8	-0.6
Sex:					
Male	8263	13.7	11.6	10.8	-0.8
Female	9026	9.0	6.9	6.5	-0.4
College Plans:					
None or under 4 yrs	7582	NA	11.2	10.6	-0.6
Complete 4 yrs	8815	NA	6.9	6.4	-0.5
Region:					
Northeast	4590	13.2	10.9	10.6	-0.3
North Central	5565	13.0	10.3	9.7	-0.6
South	4751	8.5	7.4	6.8	-0.6
West	2968	10.2	9.3	8.2	-1.1
Population Density:					
Large SMSA	5625	13.9	11.1	9.9	-1.2
Other SMSA	8151	12.1	9.8	9.1	-0.7
Non-SMSA	4098	8.5	7.7	7.5	-0.2

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 4-4

Hallucinogens: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last thirty days</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17877	4.7	3.4	4.1	+0.7 s
Sex:					
Male	8261	6.0	4.5	5.5	+1.0 s
Female	9030	3.6	2.2	2.5	+0.3
College Plans:					
None or under 4 yrs	7582	NA	4.2	4.9	+0.7
Complete 4 yrs	8814	NA	2.3	2.6	+0.3
Region:					
Northeast	4593	5.5	4.3	4.8	+0.5
North Central	5565	5.7	4.1	4.8	+0.7
South	4752	3.6	2.7	3.1	+0.4
West	2967	4.0	2.3	3.2	+0.9
Population Density:					
Large SMSA	5627	5.8	4.6	4.6	0.0
Other SMSA	8153	4.9	3.8	4.1	+0.3
Non-SMSA	4097	3.8	2.1	3.5	+1.4 s

NOTES: Level of significance of difference between 1976 and 1977:  
 s = .05, ss = .01, sss = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 4-5

Hallucinogens: Frequency of Use in the Last Year by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Number of occasions in last 12 months</u>						
		<u>None</u>	<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-19</u>	<u>20-39</u>	<u>40+</u>
All seniors	17874	91.2	3.4	2.6	1.1	1.1	0.3	0.2
Sex:								
Male	8263	89.2	4.0	3.2	1.3	1.5	0.5	0.4
Female	9026	93.5	2.7	2.1	0.7	0.7	0.2	0.1
College Plans:								
None or under 4 yrs	7582	89.4	4.0	3.0	1.2	1.6	0.5	0.3
Complete 4 yrs	8815	93.6	2.7	2.1	0.7	0.5	0.2	0.1
Region:								
Northeast	4590	89.4	4.1	3.3	1.3	1.3	0.3	0.3
North Central	5565	90.3	3.2	2.9	1.2	1.6	0.5	0.2
South	4751	93.2	3.1	1.7	0.8	0.7	0.3	0.2
West	2968	91.8	3.6	2.7	0.8	0.8	0.2	0.1
Population Density:								
Large SMSA	5625	90.1	3.9	2.9	1.2	1.3	0.3	0.3
Other SMSA	8151	90.9	3.8	2.5	1.0	1.2	0.4	0.2
Non-SMSA	4098	92.5	2.6	2.5	1.0	0.9	0.4	0.2

NOTE: See Appendix D for definition of variables in table.

TABLE 4-6

Hallucinogens: Trends in Frequency of Use for Lifetime, Last Year, and  
Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
<u>Lifetime use</u>			
No occasions	83.7	84.9	86.1
1-2 occasions	4.5	4.9	4.2
3-5 occasions	4.0	4.1	3.7
6-9 occasions	1.7	1.4	1.4
10-19 occasions	2.7	2.3	2.3
20-39 occasions	1.0	0.8	0.8
40 or more	2.3	1.6	1.4
	N = (9942)	(16094)	(17880)
<u>Use in last twelve months</u>			
No occasions	88.8	90.6	91.2
1-2 occasions	3.7	4.0	3.4
3-5 occasions	3.6	2.7	2.6
6-9 occasions	1.2	1.0	1.1
10-19 occasions	1.7	1.0	1.1
20-39 occasions	0.6	0.4	0.3
40 or more	0.4	0.3	0.2
	N = (9940)	(16085)	(17874)
<u>Use in last thirty days</u>			
No occasions	95.3	96.6	95.9
1-2 occasions	2.7	1.9	2.2
3-5 occasions	1.2	1.0	1.2
6-9 occasions	0.5	0.3	0.4
10-19 occasions	0.2	0.1	0.2
20-39 occasions	0.0	0.1	0.0
40 or more	0.1	0.0	0.0
	N = (9937)	(16085)	(17877)
<u>Probability of future use<sup>a</sup></u>			
Definitely will not	85.8	86.5	85.8
Probably will not	11.3	10.9	11.7
Probably will	2.0	2.0	1.8
Definitely will	0.8	0.6	0.7
	N = (2956)	(3053)	(3446)

<sup>a</sup>This question asked about LSD only.

TABLE 4-7

Hallucinogens: Trends in Grade in Which First Used

	<u>Percent reporting first use in each grade</u>		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Sixth grade (or below)	0.1	0.1	0.1
Seventh or Eighth grade	0.9	1.1	1.1
Ninth grade	3.1	3.1	2.9
Tenth grade	4.5	4.4	3.1
Eleventh grade	4.5	3.2	2.5
Twelfth grade	3.1	1.2	1.2
Grade not known	0.0	2.0	3.0
Never used	83.7	84.9	86.1
	N <sup>a</sup> = (2979)	(2934)	(6082)

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 4-8

Hallucinogens: Grade in Which First Used by Subgroups, Class of 1977  
(Entries are percentages)

	Number of Cases	Grade in school							Not known	Never used
		6 or below	7/8	9	10	11	12			
All seniors	6082	0.1	1.1	2.9	3.1	2.5	1.2	3.0	86.1	
Sex:										
Male	2842	0.1	1.2	3.3	3.7	2.8	1.5	3.2	84.2	
Female	3129	0.0	1.0	2.6	2.5	2.2	1.0	2.4	88.3	
College Plans:										
None or under 4 yrs	2551	0.2	1.1	3.5	3.8	3.0	1.4	3.3	83.6	
Complete 4 yrs	3163	0.0	0.9	2.2	2.3	1.7	1.0	2.5	89.5	
Region:										
Northeast	1443	0.1	1.3	3.8	2.9	2.8	1.4	3.0	84.7	
North Central	2006	0.2	1.3	2.6	3.1	3.0	1.6	3.5	84.7	
South	1641	0.0	0.7	2.8	3.2	1.9	0.4	2.5	88.5	
West	992	0.1	1.2	2.4	2.9	2.2	1.9	2.8	86.6	
Population Density:										
Large SMSA	1800	0.2	1.8	3.5	3.9	2.4	1.5	2.1	84.6	
Other SMSA	2806	0.0	1.2	3.4	3.1	2.3	1.2	3.5	85.2	
Non-SMSA	1476	0.1	0.5	1.8	2.4	2.8	1.1	2.7	88.6	

NOTE: See Appendix D for definition of variables in table.

TABLE 4-9

Hallucinogens: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1977)	Percent reporting first use prior to tenth grade <sup>a</sup>			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	6082	4.5	4.3	4.1	-0.2
Sex:					
Male	2842	4.8	4.2	4.7	+0.5
Female	3129	3.8	4.3	3.6	-0.7
College Plans:					
None or under 4 yrs	2551	NA	4.9	4.8	-0.1
Complete 4 yrs	3163	NA	3.3	3.1	-0.2
Region:					
Northeast	1443	5.0	5.0	5.2	+0.2
North Central	2006	4.3	4.9	4.0	-0.9
South	1641	3.4	3.0	3.6	+0.6
West	992	6.4	4.5	3.7	-0.8
Population Density:					
Large SMSA	1800	4.3	5.0	5.5	+0.5
Other SMSA	2806	6.3	4.9	4.6	-0.3
Non-SMSA	1476	2.4	2.9	2.5	-0.4

NOTES: Level of significance of difference between 1976 and 1977:  
 $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.



## Chapter 5

### COCAINE

Cocaine is a drug which has received extensive publicity of late and has been the center of much controversy. It is generally very expensive, which may account for the relatively low frequency of use currently observed among high school students.

#### Prevalence of Use in 1977

<u>Total Sample</u>	<u>Table(s)</u>
● About one in every nine seniors (or 11%) report cocaine use at some time in their lives. However, half of those have used it only once or twice.	2,6
● Annual prevalence is about 7% and 30-day prevalence about 3%.	3,4
● The proportion reporting use on 20 or more occasions in their lifetime is 1.1%, and virtually no seniors report using at a daily level in the prior month. In fact, only 1% report use on more than two occasions during the month.	6

#### Subgroup Differences

- |   |         |
|---|---------|
| ● <i>Sex Differences.</i> Cocaine use is substantially greater among males than females, with annual prevalence observed at 9.3% and 4.9%, respectively.  | 2,3,4   |
| ● <i>College Plans.</i> The prevalence rates among the noncollege-bound are roughly half again as high as they are among the college-bound--for example, annual prevalence was reported by 8.1% and 5.5%, respectively, in 1977. Frequent use occurs even more disproportionately among the noncollege-bound. | 2,3,4,5 |
| ● <i>Region of the Country.</i> There are modest regional differences, with higher-than-average prevalence rates of use observed in the West (10.2% in the prior year) and lower-than-average rates in the South and North Central (6.0% and 6.3%, respectively, in the prior year).                          | 2,3,4,5 |

Table(s)

- *Population Density.* Cocaine prevalence is highest in the large metropolitan areas (8.6% annual prevalence) and lowest in the nonmetropolitan areas (5.8% annual prevalence). 2,3,4,5

Recent Trends in Prevalence

Total Sample

- There has been a small, but continuing, increase in the observed prevalence of cocaine use among high school seniors over the past two years. Annual prevalence has risen from 5.6% in 1975 to 6.0% in 1976 and 7.2% in 1977. (The two-year trend is significant at the .01 level.) 2,3,4
- While very few high school seniors report use of cocaine on more than two occasions a year, this proportion has risen slightly from 2.4% in 1975 to 3.1% in 1977 ( $p < .05$ ). 5,6

Subgroup Differences in Trends

- All subgroups in the class of 1977 report higher prevalence rates of cocaine use than the comparable subgroups in the classes of 1975 and 1976. 2,3,4
- There are no really important differences among the subgroups in rates of change, although use by males may be increasing slightly faster than by females, the noncollege-bound slightly faster than the college-bound, the Northeast and West slightly faster than the other regions, and the nonmetropolitan areas slightly faster than the metropolitan areas. 2,3,4

Probability of Future Use

- The proportion of students indicating that they may use cocaine in the future has increased slightly. About 6% of 1977 seniors say they will "probably" or "definitely" be using cocaine five years in the future, which represents an increase of about one percent in each of the last two years. 6
- About 77% of the 1977 seniors say they "definitely will not" use cocaine five years in the future, a drop from 79% in 1976 and 81% in 1975. (The two-year trend is significant at the .01 level.) 6

Grade of First Use

- Of the members of the class of 1977 who have used cocaine, most tried it first in tenth grade or later, particularly in eleventh grade. 7

Table(s)

- Subgroup differences in lifetime prevalence are mirrored in the data for grade of onset. For example, at each grade level, about half again as many males as females first tried cocaine. A similar observation can be made for the two college-plan groups. 8
  
- Just as usage rates in cocaine show a slight rate of increase among seniors from 1975 through 1977, so there is a slight tendency toward higher prevalence at earlier ages. 7
  
- The increase in the percentage of users prior to tenth grade is greatest for males (2.9 percent for the class of 1977 compared with 1.0 percent for the class of 1975), for those not planning four years of college (2.6% for the class of 1977 compared with 1.4% for the class of 1976), and for those in the West (3.6% for the class of 1977 compared with 1.6% for the class of 1975). 9

TABLE 5-1

Cocaine: Prevalence (Ever Used) and Recency of Use  
by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
All seniors	17689	10.8	2.9	4.2	3.6	89.2
Sex:						
Male	8215	13.3	3.9	5.4	4.0	86.7
Female	8960	8.0	1.9	3.0	3.1	92.0
College Plans:						
None or under 4 yrs	7530	12.0	3.3	4.8	4.0	88.0
Complete 4 yrs	8768	8.6	2.1	3.4	3.1	91.4
Region:						
Northeast	4513	11.9	3.5	4.5	4.0	88.1
North Central	5522	9.7	2.4	3.9	3.5	90.3
South	4713	9.7	2.2	3.8	3.7	90.3
West	2941	13.1	4.8	5.5	3.0	86.9
Population Density:						
Large SMSA	5538	13.1	3.8	4.8	4.5	86.9
Other SMSA	8084	10.7	2.6	4.7	3.4	89.3
Non-SMSA	4067	8.9	2.6	3.2	3.1	91.1

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NOTE: See Appendix D for definition of variables in table.

TABLE 5-2

Cocaine: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	17689	9.0	9.7	10.8	+1.1
Sex:					
Male	8215	11.2	11.9	13.3	+1.4
Female	8960	6.9	7.4	8.0	+0.6
College Plans:					
None or under 4 yrs	7530	NA	10.8	12.0	+1.2
Complete 4 yrs	8768	NA	7.8	8.6	+0.8
Region:					
Northeast	4513	8.8	10.3	11.9	+1.6
North Central	5522	8.5	9.0	9.7	+0.7
South	4713	8.3	8.9	9.7	+0.8
West	2941	11.6	12.1	13.1	+1.0
Population Density:					
Large SMSA	5538	11.1	12.7	13.1	+0.4
Other SMSA	8084	9.6	9.5	10.7	+1.2
Non-SMSA	4067	6.9	7.8	8.9	+1.1

NOTES: Level of significance of difference between 1976 and 1977:  
 $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 5-3

Cocaine: Trends in Annual Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent who used in last twelve months			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	17676	5.6	6.0	7.2	+1.2 <i>ss</i>
Sex:					
Male	8204	7.5	7.5	9.3	+1.8 <i>ss</i>
Female	8959	3.9	4.4	4.9	+0.5
College Plans:					
None or under 4 yrs	7526	NA	6.6	8.1	+1.5 <i>s</i>
Complete 4 yrs	8762	NA	5.0	5.5	+0.5
Region:					
Northeast	4511	5.3	6.6	7.9	+1.3
North Central	5518	5.1	5.5	6.3	+0.8
South	4707	5.4	5.1	6.0	+0.9
West	2940	7.8	7.9	10.2	+2.3
Population Density:					
Large SMSA	5529	7.3	8.6	8.6	0.0
Other SMSA	8084	5.9	5.8	7.3	+1.5 <i>s</i>
Non-SMSA	4063	4.3	4.3	5.8	+1.5

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 5-4

Cocaine: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last thirty days</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17669	1.9	2.0	2.9	+0.9 <i>sss</i>
Sex:					
Male	8199	2.5	2.5	3.9	+1.4 <i>sss</i>
Female	8956	1.2	1.4	1.9	+0.5
College Plans:					
None or under 4 yrs	7523	NA	2.2	3.3	+1.1 <i>ss</i>
Complete 4 yrs	8760	NA	1.6	2.1	+0.5
Region:					
Northeast	4509	1.7	2.4	3.5	+1.1 <i>s</i>
North Central	5515	1.7	1.6	2.4	+0.8 <i>s</i>
South	4708	1.6	1.6	2.2	+0.6
West	2937	3.1	3.4	4.8	+1.4
Population Density:					
Large SMSA	5527	2.6	3.5	3.8	+0.3
Other SMSA	8081	1.9	1.8	2.6	+0.8 <i>s</i>
Non-SMSA	4061	1.4	1.3	2.6	+1.3 <i>ss</i>

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 5-5

Cocaine: Frequency of Use in the Last Year by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Number of occasions in last 12 months</u>						
		<u>None</u>	<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-19</u>	<u>20-39</u>	<u>40+</u>
All seniors	17676	92.8	4.0	1.3	0.9	0.5	0.2	0.2
Sex:								
Male	8204	90.7	5.1	1.6	1.2	0.7	0.2	0.4
Female	8959	95.1	2.7	0.9	0.6	0.4	0.2	0.1
College Plans:								
None or under 4 yrs	7526	91.9	4.4	1.3	1.2	0.6	0.2	0.3
Complete 4 yrs	8762	94.5	3.2	1.1	0.6	0.4	0.1	0.1
Region:								
Northeast	4511	92.1	4.1	1.6	1.3	0.4	0.2	0.4
North Central	5518	93.7	3.8	1.1	0.6	0.3	0.2	0.2
South	4707	94.0	3.6	0.8	0.7	0.6	0.1	0.2
West	2940	89.8	4.8	2.2	1.7	1.1	0.3	0.2
Population Density:								
Large SMSA	5529	91.4	4.2	1.9	1.3	0.6	0.2	0.4
Other SMSA	8084	92.7	4.4	1.3	0.8	0.6	0.1	0.2
Non-SMSA	4063	94.2	3.3	0.8	0.9	0.3	0.3	0.2

NOTE: See Appendix D for definition of variables in table.



TABLE 5-6

Cocaine: Trends in Frequency of Use for Lifetime, Last Year, and Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>
<u>Lifetime use</u>			
No occasions	91.0	90.3	89.2
1-2 occasions	4.3	5.1	5.4
3-5 occasions	2.0	2.0	1.9
6-9 occasions	0.9	1.0	1.2
10-19 occasions	0.8	0.7	1.1
20-39 occasions	0.5	0.5	0.5
40 or more	0.4	0.4	0.6
	N = (9874)	(15930)	(17689)
<u>Use in last twelve months</u>			
No occasions	94.4	94.0	92.8
1-2 occasions	3.3	3.5	4.0
3-5 occasions	1.0	1.2	1.3
6-9 occasions	0.6	0.6	0.9
10-19 occasions	0.4	0.4	0.5
20-39 occasions	0.2	0.2	0.2
40 or more	0.2	0.1	0.2
	N = (9864)	(15910)	(17676)
<u>Use in last thirty days</u>			
No occasions	98.1	98.0	97.1
1-2 occasions	1.2	1.4	1.9
3-5 occasions	0.4	0.3	0.6
6-9 occasions	0.1	0.2	0.3
10-19 occasions	0.0	0.1	0.1
20-39 occasions	0.0	0.0	0.0
40 or more	0.0	0.0	0.0
	N = (9861)	(15904)	(17669)
<u>Probability of future use</u>			
Definitely will not	81.2	79.3	77.1
Probably will not	15.1	15.7	16.7
Probably will	3.0	3.9	4.9
Definitely will	0.8	1.1	1.2
	N = (2894)	(3071)	(3435)

TABLE 5-7

Cocaine: Trends in Grade in Which First Used

	<u>Percent reporting first use in each grade</u>		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Sixth grade (or below)	0.0	0.0	0.2
Seventh or Eighth grade	0.2	0.3	0.4
Ninth grade	0.6	1.1	1.7
Tenth grade	1.2	2.6	2.0
Eleventh grade	2.8	2.8	3.0
Twelfth grade	2.2	1.9	1.7
Grade not known	2.1	1.0	1.8
Never used	91.0	90.3	89.2
	N <sup>a</sup> = (2915)	(2947)	(6160)

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<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 5-8

Cocaine: Grade in Which First Used by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Grade in school</u>							<u>Not known</u>	<u>Never used</u>
		<u>6 or below</u>	<u>7/8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>			
All seniors	6160	0.2	0.4	1.7	2.0	3.0	1.7	1.8	89.2	
Sex:										
Male	2878	0.3	0.5	2.0	2.8	4.1	1.9	1.6	86.7	
Female	3174	0.0	0.3	1.3	1.3	2.1	1.5	1.4	92.0	
College Plans:										
None or under 4 yrs	2589	0.4	0.4	1.8	2.2	3.7	2.2	1.3	88.0	
Complete 4 yrs	3201	0.0	0.3	1.3	1.7	2.2	1.3	1.7	91.4	
Region:										
Northeast	1459	0.3	0.2	1.4	2.1	3.5	2.3	2.1	88.1	
North Central	2038	0.2	0.3	1.3	2.0	3.3	1.8	1.0	90.3	
South	1657	0.1	0.4	2.0	2.3	2.5	0.7	1.6	90.3	
West	1006	0.2	1.0	2.4	1.4	2.8	2.8	2.5	86.9	
Population Density:										
Large SMSA	1814	0.1	0.4	2.0	2.9	3.9	2.6	1.3	86.9	
Other SMSA	2855	0.2	0.5	1.7	2.0	2.9	1.6	2.0	89.3	
Non-SMSA	1491	0.2	0.2	1.5	1.5	2.6	1.3	1.5	91.1	

NOTE: See Appendix D for definition of variables in table.

TABLE 5-9

Cocaine: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1977)	Percent reporting first use prior to tenth grade <sup>a</sup>			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	6160	0.8	1.4	2.2	+0.8 s
Sex:					
Male	2878	1.0	1.8	2.9	+1.1 s
Female	3174	0.7	0.9	1.6	+0.7
College Plans:					
None or under 4 yrs	2589	NA	1.4	2.6	+1.2 s
Complete 4 yrs	3201	NA	1.2	1.7	+0.5
Region:					
Northeast	1459	1.3	1.6	1.8	+0.2
North Central	2038	0.5	1.2	1.7	+0.5
South	1657	0.4	1.4	2.5	+1.1
West	1006	1.6	1.5	3.6	+2.1 s
Population Density:					
Large SMSA	1814	1.3	2.4	2.5	+0.1
Other SMSA	2855	1.0	1.5	2.3	+0.8
Non-SMSA	1491	0.3	0.6	2.0	+1.4 s

NOTES: Level of significance of difference between 1976 and 1977:  
s = .05, ss = .01, sss = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

## Chapter 6

# HEROIN

Heroin is the drug most widely perceived among high school students as carrying a great risk of harming the user; it also receives the greatest disapproval (see Chapter 13). Thus it is not surprising that heroin is the least widely used of the illicit drugs studied. However, the extreme social sanctions against its use may also tend to depress respondent willingness to report use of this particular drug. Therefore, the absolute prevalence figures must be interpreted with a high degree of caution. Insofar as under-reporting biases are likely to remain fairly constant from year to year, trends may be estimated more reliably than absolute prevalence levels.

### Prevalence of Use in 1977

<u>Total Sample</u>	<u>Table(s)</u>
● Fewer than one out of every 50 respondents (1.8%) report ever having used heroin, and fewer than one in a hundred (.8%) indicate use in the last year.	2,3
● The number indicating use in the prior 30 days is .3% (or about 50 respondents total).	4
● Virtually no respondents report use more frequently than five times in the last month.	6

### Subgroup Differences

- Because of the very low frequencies in the overall prevalence figures, subgroup differences must be interpreted with some caution. However, the two differences described below related to the sex and college plans of the respondent have been observed consistently across all three years of the study.
- *Sex Differences.* The prevalence rates for males appear to be somewhat higher than for females. For example, the annual prevalence figures in 1977 were 1.2% for males and .4% for females (difference significant at .001 level). 2,3,4

Table(s)

- *College Plans.* Those who do not plan to complete four years of college have somewhat higher prevalence rates than those who do. In 1977, the annual prevalence statistics were 1.1% and .5%, respectively (difference significant at .001 level). 2,3,4
- *Region of the Country.* Some regional differences were evident in 1977, but they have not been consistent across years and are too small to interpret reliably. 2,3,4
- *Population Density.* Class of 1977 seniors from nonmetropolitan areas report somewhat higher prevalence rates than those from metropolitan areas. However, these findings are not consistent across several years. 2,3,4

Recent Trends in Prevalence

Total Sample

- There was no change at all in lifetime prevalence (1.8%) or in annual prevalence (0.8%) between 1976 and 1977. In 1975 the prevalence rates for both reporting intervals were slightly higher (2.2% and 1.0%, respectively). 2,3
- Thirty-day prevalence showed no consistent trend from 1975 to 1977. 4

Subgroup Differences in Trends

- Because of the very small numbers of self-reported users in each year, subgroup trends can be estimated less reliably than overall trends. Further, downward trends (stated as a percentage of the sample) are very limited in their potential absolute size. Therefore, heroin trends based on three years of data must be taken only as suggestive--certainly not as conclusive.
- The lifetime prevalence and annual prevalence figures suggest that there may be a gradual decline in heroin use among females and the college-bound, as well as in the Northeast, North Central, West; and in the largest cities. There is not, however, a parallel decline among these groups in the 30-day prevalence figures. 2,3,4

Probability of Future Use

- About 1% of seniors surveyed in 1977 say they "definitely" or "probably" would be using heroin five years in the future. 6
- This represents no change from 1975 and 1976. 6
- About 90% of 1977 seniors say they "definitely will not" use heroin five years in the future and another 9% say they "probably will not." As might be expected, these proportions are higher than for any other drug class covered in the survey. 6

Grade of First Use

- Since only 1.8% report ever using heroin, the percentages reporting first use at any particular grade level are extremely low. Most who have tried heroin did so in tenth grade or later; less than half of one percent report trying it in ninth grade or earlier. 7
- Subgroup differences in lifetime prevalence are reflected in the data for age of onset; for example, about twice as many males as females first tried heroin at each of the grade levels. 8
- There are no consistent trends in age of onset when the classes of 1975, 1976, and 1977 are compared. 7,9

TABLE 6-1  
Heroin: Prevalence (Ever Used) and Recency of Use  
by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
All seniors	17609	1.8	0.3	0.5	0.9	98.2
Sex:						
Male	8213	2.4	0.5	0.8	1.1	97.6
Female	8979	1.1	0.2	0.3	0.7	98.9
College Plans:						
None or under 4 yrs	7525	2.2	0.4	0.7	1.1	97.8
Complete 4 yrs	8773	1.2	0.2	0.3	0.7	98.8
Region:						
Northeast	4465	1.5	0.5	0.3	0.8	98.5
North Central	5515	1.9	0.4	0.7	0.9	98.1
South	4690	2.1	0.2	0.6	1.2	97.9
West	2939	1.2	0.2	0.3	0.7	98.8
Population Density:						
Large SMSA	5501	1.4	0.3	0.2	0.8	98.6
Other SMSA	8055	1.7	0.3	0.5	0.9	98.3
Non-SMSA	4053	2.2	0.4	0.8	1.1	97.8

NOTE: See Appendix D for definition of variables in table.



TABLE 6-2

Heroin: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	17609	2.2	1.8	1.8	0.0
Sex:					
Male	8213	2.7	2.4	2.4	0.0
Female	8979	1.7	1.2	1.1	-0.1
College Plans:					
None or under 4 yrs	7525	NA	2.3	2.2	-0.1
Complete 4 yrs	8773	NA	1.3	1.2	-0.1
Region:					
Northeast	4465	1.9	1.7	1.5	-0.2
North Central	5515	2.6	2.0	1.9	-0.1
South	4690	2.1	2.0	2.1	+0.1
West	2939	1.8	1.4	1.2	-0.2
Population Density:					
Large SMSA	5501	2.5	2.1	1.4	-0.7
Other SMSA	8055	2.2	2.1	1.7	-0.4
Non-SMSA	4053	1.9	1.3	2.2	+0.9 s

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 6-3

Heroin: Trends in Annual Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last twelve months</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17602	1.0	0.8	0.8	0.0
Sex:					
Male	8208	1.2	1.0	1.2	+0.2
Female	8978	0.8	0.5	0.4	-0.1
College Plans:					
None or under 4 yrs	7521	NA	0.9	1.1	+0.2
Complete 4 yrs	8772	NA	0.6	0.5	-0.1
Region:					
Northeast	4467	1.1	0.7	0.7	0.0
North Central	5512	1.3	1.0	1.0	0.0
South	4687	0.9	0.7	0.9	+0.2
West	2936	0.7	0.6	0.5	-0.1
Population Density:					
Large SMSA	5500	1.3	1.0	0.5	-0.5 <i>s</i>
Other SMSA	8052	0.9	1.0	0.8	-0.2
Non-SMSA	4050	1.0	0.4	1.1	+0.7 <i>ss</i>

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 6-4

Heroin: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent who used in last thirty days			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	17601	0.4	0.2	0.3	+0.1
Sex:					
Male	8206	0.4	0.3	0.5	+0.2
Female	8979	0.3	0.1	0.2	+0.1
College Plans:					
None or under 4 yrs	7519	NA	0.2	0.4	+0.2 s
Complete 4 yrs	8772	NA	0.2	0.2	0.0
Region:					
Northeast	4468	0.3	0.3	0.5	+0.2
North Central	5511	0.6	0.2	0.4	+0.2
South	4687	0.4	0.2	0.2	0.0
West	2935	0.3	0.1	0.2	+0.1
Population Density:					
Large SMSA	5501	0.5	0.3	0.3	0.0
Other SMSA	8053	0.3	0.2	0.3	+0.1
Non-SMSA	4047	0.5	0.1	0.4	+0.3

NOTES: Level of significance of difference between 1976 and 1977:  
s = .05, ss = .01, sss = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 6-5

Heroin: Frequency of Use in the Last Year by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Number of occasions in last 12 months</u>						
		<u>None</u>	<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-19</u>	<u>20-39</u>	<u>40+</u>
All seniors	17602	99.2	0.5	0.1	0.1	0.0	0.0	0.1
Sex:								
Male	8208	98.8	0.7	0.2	0.1	0.1	0.0	0.1
Female	8978	99.6	0.3	0.0	0.0	0.0	0.0	0.0
College Plans:								
None or under 4 yrs	7521	98.9	0.7	0.2	0.1	0.1	0.0	0.1
Complete 4 yrs	8772	99.5	0.3	0.0	0.0	0.0	0.0	0.1
Region:								
Northeast	4467	99.3	0.5	0.1	0.1	0.0	0.0	0.1
North Central	5512	99.0	0.8	0.1	0.1	0.0	0.0	0.0
South	4687	99.1	0.5	0.1	0.0	0.1	0.0	0.1
West	2936	99.5	0.3	0.0	0.1	0.1	0.0	0.0
Population Density:								
Large SMSA	5500	99.5	0.4	0.1	0.1	0.0	0.0	0.0
Other SMSA	8052	99.2	0.5	0.0	0.1	0.0	0.0	0.0
Non-SMSA	4050	98.9	0.7	0.2	0.0	0.1	0.0	0.1

NOTE: See Appendix D for definition of variables in table.

TABLE 6-6

Heroin: Trends in Frequency of Use for Lifetime, Last Year, and Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
<u>Lifetime use</u>			
No occasions	97.8	98.2	98.2
1-2 occasions	1.4	1.2	1.1
3-5 occasions	0.2	0.2	0.2
6-9 occasions	0.1	0.1	0.1
10-19 occasions	0.2	0.1	0.1
20-39 occasions	0.0	0.0	0.1
40 or more	0.2	0.1	0.1
	N = (9494)	(15895)	(17609)
<u>Use in last twelve months</u>			
No occasions	99.0	99.2	99.2
1-2 occasions	0.6	0.5	0.5
3-5 occasions	0.1	0.1	0.1
6-9 occasions	0.1	0.1	0.1
10-19 occasions	0.1	0.0	0.0
20-39 occasions	0.0	0.0	0.0
40 or more	0.1	0.0	0.1
	N = (9525)	(15893)	(17602)
<u>Use in last thirty days</u>			
No occasions	99.6	99.8	99.7
1-2 occasions	0.2	0.1	0.2
3-5 occasions	0.1	0.0	0.1
6-9 occasions	0.0	0.0	0.0
10-19 occasions	0.0	0.0	0.0
20-39 occasions	0.0	0.0	0.0
40 or more	0.1	0.0	0.0
	N = (9527)	(15894)	(17601)
<u>Probability of future use</u>			
Definitely will not	90.9	91.8	90.3
Probably will not	8.2	7.4	8.6
Probably will	0.3	0.3	0.5
Definitely will	0.6	0.5	0.6
	N = (2867)	(2980)	(3370)

TABLE 6-7  
Heroin: Trends in Grade in Which First Used

	<u>Percent reporting first use in each grade</u>		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Sixth grade (or below)	0.1	0.0	0.1
Seventh or Eighth grade	0.1	0.1	0.1
Ninth grade	0.1	0.2	0.3
Tenth grade	0.5	0.4	0.3
Eleventh grade	0.3	0.3	0.5
Twelfth grade	0.4	0.2	0.2
Grade not known	0.8	0.6	0.3
Never used	97.8	98.2	98.2
	N <sup>a</sup> = (2898)	(2958)	(6189)

---

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 6-8

Heroin: Grade in Which First Used by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Grade in school</u>							<u>Not known</u>	<u>Never used</u>
		<u>6 or below</u>	<u>7/8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>			
All seniors	6189	0.1	0.1	0.3	0.3	0.5	0.2	0.3	98.2	
Sex:										
Male	2890	0.1	0.1	0.3	0.4	0.7	0.4	0.4	97.6	
Female	3189	0.0	0.1	0.2	0.2	0.4	0.1	0.2	98.9	
College Plans:										
None or under 4 yrs	2613	0.1	0.1	0.3	0.5	0.8	0.4	0.0	97.8	
Complete 4 yrs	3205	0.0	0.0	0.3	0.1	0.3	0.1	0.4	98.8	
Region:										
Northeast	1459	0.1	0.1	0.3	0.3	0.3	0.2	0.3	98.5	
North Central	2052	0.2	0.0	0.1	0.4	0.7	0.2	0.2	98.1	
South	1661	0.0	0.1	0.4	0.4	0.7	0.2	0.3	97.9	
West	1017	0.0	0.0	0.3	0.0	0.2	0.3	0.5	98.8	
Population Density:										
Large SMSA	1831	0.1	0.1	0.3	0.4	0.4	0.3	0.0	98.5	
Other SMSA	2858	0.0	0.1	0.2	0.3	0.3	0.1	0.6	98.3	
Non-SMSA	1500	0.1	0.0	0.4	0.2	0.9	0.3	0.2	97.8	

NOTE: See Appendix D for definition of variables in table.

TABLE 6-9

Heroin: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1977)	Percent reporting first use prior to tenth grade <sup>a</sup>			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	6189	0.2	0.4	0.4	0.0
Sex:					
Male	2890	0.4	0.5	0.5	0.0
Female	3189	0.1	0.3	0.2	-0.1
College Plans:					
None or under 4 yrs	2613	NA	0.4	0.5	+0.1
Complete 4 yrs	3205	NA	0.4	0.3	-0.1
Region:					
Northeast	1459	0.5	0.6	0.5	-0.1
North Central	2052	0.2	0.4	0.3	-0.1
South	1661	0.1	0.3	0.5	+0.2
West	1017	0.3	0.4	0.3	-0.1
Population Density:					
Large SMSA	1831	0.5	0.2	0.4	+0.2
Other SMSA	2858	0.2	0.4	0.3	-0.1
Non-SMSA	1500	0.1	0.5	0.5	0.0

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.



## Chapter 7

### OTHER OPIATES

The questionnaire items used in this survey ask about "other narcotics" because, in addition to opium and opium derivatives, synthetic opiates such as methadone were included in the examples given in the question (see Appendix D for the original question). To achieve consistency in terminology with the national household surveys on drug use, however, the term other opiates has been adopted here; perhaps a more accurate title would be other opiates and opiate-like substances.

Respondents were asked to report only about the occasions when they used such substances without a doctor's orders. One form of the questionnaire, however, included an additional question which asked whether the respondent had ever used any narcotics other than heroin under a doctor's orders. In 1977, 13.5% said that they had done so, and it was the first time they had used such a substance. Another 1.9% said that they had done so but had previously used such drugs on their own.

Summarized below are the prevalence and trend results for the use of natural and synthetic opiates (other than heroin) which was not under medical supervision.

#### Prevalence of Use in 1977

<u>Total Sample</u>	<u>Table(s)</u>
● About one in 10 students (10.3%) has used some opiate or opiate-like substance without medical supervision by the end of their senior year. Nearly half of those use it only once or twice, however.	2,6
● For the previous year 6.4% report some use, while the figure for the prior month is 2.8%.	3,4
● Relatively few (1.8%) report use on 20 or more occasions in their lifetime.	6
● Roughly .2% indicate daily or near-daily use in the prior 30 days, however.	6

Subgroup Differences

- *Sex Differences.* The use of other opiates is a little higher among males than among females in all three time intervals. Annual prevalence is 7.3% for males vs. 5.4% for females. 2,3,4
- *College Plans.* Other opiate use is somewhat more widespread among those not planning to attend a four-year college (8.0% used in the last year) than among those who do plan to attend (4.7% used in the same interval). These differences are even greater for frequent use; for example, 1.0% of the non college-bound used 20-plus times in the last year vs. .4% of the college-bound. 2,3,4,5
- *Region of the Country.* There are some relatively small regional differences in the use of other opiates, with the South generally having below average rates and the Northeast and North Central having slightly above average rates. These basic differences have been replicated over three years. 2,3,4
- *Population Density.* There are, at present, practically no differences in the prevalence of other opiate use among the three levels of population density, either in terms of overall use or in terms of heavy use. 2,3,4,5

Recent Trends in Prevalence

Total Sample

- There has been a slight increase in reported lifetime prevalence from 9.0% in 1975 to 9.6% in 1976 to 10.3% in 1977. 2
- However, annual and 30-day prevalence show an increase only over the past year. Annual prevalence increased .7% to 6.4% and 30-day prevalence rose by about the same amount. 3,4
- Frequent use also has risen some over the past year. For example, the number using other opiates on 10 or more occasions in the prior month rose from .2% to .5%. 6

Subgroup Differences in Trends

- No differential trends are discernible between the two sexes or among the regions of the country. 2,3,4

- |   | <u>Table(s)</u> |
|---|-----------------|
| ● The noncollege-bound show a somewhat greater increase in the use of other opiates than the college-bound.   | 2,3,4           |
| ● The nonmetropolitan areas show an above-average increase over the past two years, while the largest metropolitan areas actually show some decrease. The net effect has been to virtually eliminate the differences which previously existed among the three population density groupings. | 2,3,4           |

Probability of Future Use

- |  |   |
|--|---|
| ● In 1977 3.5% of the seniors reported they "probably" or "definitely" will be using other opiates five years in the future. | 6 |
| ● This represents no change from 1976 and a slight (1%) increase over the 1975 proportion.                                   | 6 |

Grade of First Use

- |   |     |
|---|-----|
| ● Most members of the class of 1977 who have used opiates other than heroin had their first experience with them in tenth grade or later; less than 1% of the seniors report any experience prior to ninth grade. | 7   |
| ● There are no important subgroup differences in grade at onset.  | 8   |
| ● No important trends in grade at onset appear when the classes of 1975, 1976, and 1977 are compared.   | 7,9 |

TABLE 7-1

Other Opiates: Prevalence (Ever Used) and Recency of Use  
by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
All seniors	17485	10.3	2.8	3.6	3.9	89.7
Sex:						
Male	8191	11.6	3.3	4.0	4.3	88.4
Female	8921	9.0	2.3	3.1	3.6	91.0
College Plans:						
None or under 4 yrs	7489	12.6	3.6	4.5	4.6	87.4
Complete 4 yrs	8733	7.9	2.0	2.7	3.2	92.1
Region:						
Northeast	4428	10.8	3.0	3.7	4.1	89.2
North Central	5484	11.3	3.4	4.2	3.9	88.7
South	4656	8.9	2.4	2.8	3.7	91.1
West	2917	10.2	2.4	3.7	4.1	89.8
Population Density:						
Large SMSA	5444	10.8	3.0	3.8	4.1	89.2
Other SMSA	8008	10.6	2.7	3.7	4.3	89.4
Non-SMSA	4033	9.5	2.9	3.3	3.4	90.5

NOTE: See Appendix D for definition of variables in table.

TABLE 7-2

Other Opiates: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	17485	9.0	9.6	10.3	+0.7
Sex:					
Male	8191	9.9	11.0	11.6	+0.6
Female	8921	8.3	8.1	9.0	+0.9
College Plans:					
None or under 4 yrs	7489	NA	11.1	12.6	+1.5 s
Complete 4 yrs	8733	NA	7.8	7.9	+0.1
Region:					
Northeast	4428	10.0	11.1	10.8	-0.3
North Central	5484	9.3	9.7	11.3	+1.6
South	4656	7.8	8.5	8.9	+0.4
West	2917	9.7	8.9	10.2	+1.3
Population Density:					
Large SMSA	5444	11.5	12.0	10.8	-1.2
Other SMSA	8008	9.2	9.9	10.6	+0.7
Non-SMSA	4033	7.3	7.4	9.5	+2.1 s

NOTES: Level of significance of difference between 1976 and 1977:  
 s = .05, ss = .01, sss = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 7-3

Other Opiates: Trends in Annual Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last twelve months</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17468	5.7	5.7	6.4	+0.7 s
Sex:					
Male	8180	6.6	6.8	7.3	+0.5
Female	8915	4.8	4.7	5.4	+0.7
College Plans:					
None or under 4 yrs	7478	NA	6.8	8.0	+1.2 s
Complete 4 yrs	8730	NA	4.6	4.7	+0.1
Region:					
Northeast	4429	6.1	6.5	6.6	+0.1
North Central	5475	6.2	6.2	7.5	+1.3
South	4654	4.9	5.0	5.2	+0.2
West	2910	5.4	5.0	6.0	+1.0
Population Density:					
Large SMSA	5437	7.3	6.7	6.7	0.0
Other SMSA	8002	5.5	6.1	6.3	+0.2
Non-SMSA	4029	4.8	4.6	6.2	+1.6 s

NOTES: Level of significance of difference between 1976 and 1977:  
s = .05, ss = .01, sss = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 7-4

Other Opiates: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent who used in last thirty days			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	17460	2.1	2.0	2.8	+0.8 <i>sss</i>
Sex:					
Male	8179	2.5	2.4	3.3	+0.9 <i>ss</i>
Female	8910	1.7	1.6	2.3	+0.7 <i>ss</i>
College Plans:					
None or under 4 yrs	7478	NA	2.6	3.6	+1.0 <i>ss</i>
Complete 4 yrs	8722	NA	1.5	2.0	+0.5 <i>s</i>
Region:					
Northeast	4426	2.5	2.1	3.0	+0.9 <i>s</i>
North Central	5476	2.3	2.5	3.4	+0.9 <i>s</i>
South	4649	1.9	1.6	2.4	+0.8 <i>s</i>
West	2909	1.9	1.8	2.4	+0.6
Population Density:					
Large SMSA	5434	3.3	2.6	3.0	+0.4
Other SMSA	8002	1.9	2.2	2.7	+0.5
Non-SMSA	4024	1.6	1.4	2.9	+1.5 <i>sss</i>

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 7-5

Other Opiates: Frequency of Use in the Last Year by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Number of occasions in last 12 months</u>						
		<u>None</u>	<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-19</u>	<u>20-39</u>	<u>40+</u>
All seniors	17468	93.6	3.1	1.3	0.6	0.7	0.4	0.4
Sex:								
Male	8180	92.7	3.5	1.5	0.7	0.9	0.3	0.5
Female	8915	94.6	2.8	1.0	0.5	0.4	0.4	0.2
College Plans:								
None or under 4 yrs	7478	92.0	3.6	1.5	0.9	0.9	0.5	0.5
Complete 4 yrs	8730	95.3	2.5	1.0	0.4	0.5	0.3	0.1
Region:								
Northeast	4429	93.4	3.4	1.2	0.6	0.7	0.4	0.3
North Central	5475	92.5	3.6	1.4	0.9	0.9	0.3	0.5
South	4654	94.8	2.4	1.2	0.4	0.5	0.5	0.3
West	2910	94.0	3.2	1.3	0.4	0.5	0.3	0.3
Population Density:								
Large SMSA	5437	93.3	3.4	1.2	0.7	0.7	0.3	0.4
Other SMSA	8002	93.7	3.2	1.2	0.5	0.7	0.4	0.3
Non-SMSA	4029	93.8	2.8	1.3	0.7	0.5	0.4	0.4

NOTE: See Appendix D for definition of variables in table.



TABLE 7-6

Other Opiates: Trends in Frequency of Use for Lifetime, Last Year, and Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
<u>Lifetime use</u>			
No occasions	91.0	90.4	89.7
1-2 occasions	3.7	4.6	4.3
3-5 occasions	1.7	2.0	2.0
6-9 occasions	0.9	0.9	1.3
10-19 occasions	1.2	0.9	0.9
20-39 occasions	0.5	0.4	0.7
40 or more	1.0	0.8	1.1
	N = (9408)	(15741)	(17485)
<u>Use in last twelve months</u>			
No occasions	94.3	94.3	93.6
1-2 occasions	2.6	3.2	3.1
3-5 occasions	1.1	1.1	1.3
6-9 occasions	0.8	0.6	0.6
10-19 occasions	0.6	0.4	0.7
20-39 occasions	0.2	0.3	0.4
40 or more	0.3	0.2	0.4
	N = (9410)	(15741)	(17468)
<u>Use in last thirty days</u>			
No occasions	97.9	98.0	97.2
1-2 occasions	1.0	1.2	1.6
3-5 occasions	0.6	0.4	0.5
6-9 occasions	0.3	0.2	0.3
10-19 occasions	0.2	0.1	0.3
20-39 occasions	0.0	0.0	0.1
40 or more	0.0	0.1	0.1
	N = (9404)	(15738)	(17460)
<u>Probability of future use</u>			
Definitely will not	81.0	79.2	79.2
Probably will not	16.6	17.3	17.3
Probably will	1.9	2.9	2.9
Definitely will	0.6	0.5	0.6
	N = (2888)	(3044)	(3419)

TABLE 7-7

Other Opiates: Trends in Grade in Which First Used

	<u>Percent reporting first use in each grade</u>		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Sixth grade (or below)	0.1	0.3	0.2
Seventh or Eighth grade	0.2	0.4	0.6
Ninth grade	0.8	1.3	1.0
Tenth grade	1.3	1.9	1.7
Eleventh grade	1.7	2.2	1.7
Twelfth grade	0.8	1.4	1.1
Grade not known	4.1	2.2	4.0
Never used	91.0	90.4	89.7
	N <sup>a</sup> = (2776)	(2859)	(5912)

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<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 7-8

Other Opiates: Grade in Which First Used by Subgroups, Class of 1977  
(Entries are percentages)

	Number of Cases	Grade in school						Not known	Never used
		6 or below	7/8	9	10	11	12		
All seniors	5912	0.2	0.6	1.0	1.7	1.7	1.1	4.0	89.7
Sex:									
Male	2731	0.3	0.7	1.0	2.0	2.1	1.1	4.4	88.4
Female	3075	0.2	0.4	1.0	1.4	1.5	1.0	3.4	91.0
College Plans:									
None or under 4 yrs	2454	0.4	0.7	1.1	2.7	2.2	1.0	4.6	87.4
Complete 4 yrs	3106	0.1	0.5	0.9	0.8	1.2	1.0	3.3	92.1
Region:									
Northeast	1398	0.5	0.6	1.2	1.6	1.7	0.7	4.5	89.2
North Central	1955	0.3	0.8	1.1	1.8	2.1	1.4	3.9	88.7
South	1588	0.1	0.3	1.0	1.8	1.6	0.7	3.4	91.1
West	971	0.0	0.7	0.9	1.2	1.3	1.6	4.5	89.8
Population Density:									
Large SMSA	1753	0.2	1.0	0.9	2.6	1.8	1.2	3.0	89.2
Other SMSA	2713	0.2	0.5	1.1	1.7	1.4	1.1	4.5	89.4
Non-SMSA	1446	0.3	0.3	1.0	0.9	2.1	0.9	3.9	90.5

NOTE: See Appendix D for definition of variables in table.

TABLE 7-9

Other Opiates: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1977)	Percent reporting first <sup>a</sup> use prior to tenth grade			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	5912	1.1	1.9	1.8	-0.1
Sex:					
Male	2731	1.1	2.4	2.0	-0.4
Female	3075	1.0	1.5	1.6	+0.1
College Plans:					
None or under 4 yrs	2454	NA	2.3	2.2	-0.1
Complete 4 yrs	3106	NA	1.5	1.5	0.0
Region:					
Northeast	1398	1.3	2.4	2.3	-0.1
North Central	1955	1.0	2.1	2.2	+0.1
South	1588	1.0	1.7	1.3	-0.4
West	971	0.9	1.6	1.6	0.0
Population Density:					
Large SMSA	1753	0.8	2.5	2.2	-0.3
Other SMSA	2713	1.4	1.8	1.8	0.0
Non-SMSA	1446	0.9	1.7	1.6	-0.1

NOTES: Level of significance of difference between 1976 and 1977:  
 $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

## Chapter 8

# STIMULANTS

The relevant set of questions in this study asks about the drug class "amphetamines." Although there are some non-amphetamine stimulants, amphetamines account for the majority of the psychotherapeutic stimulants. Therefore, for purposes of maintaining comparability with the national household survey, it was decided to entitle this chapter "stimulants" even though "amphetamines" would have been more literally correct.

Stimulants account for more of the illicit drug use among young people in high school and young adulthood (Johnston, 1973) than any other class of drugs except marihuana. Some of that illicit use--defined in this study as use of the drug without the instructions of a doctor--could be defined as instrumental rather than recreational. For example, some young people use amphetamines to stay awake for studying, to help them lose weight, to increase their energy for sports, and so on. Others use stimulants to counteract the effects of other drugs, such as barbiturates, which may have left them sleepy or lethargic when they wanted to be awake or alert. Still others, of course, use them recreationally to attain euphoric states. Whatever the purposes, stimulant use without medical supervision has been rather widespread for some time.

It may be worth noting that data from the 1977 questionnaire form containing the more detailed drug questions indicate that around 11% of the seniors are introduced to amphetamine use at some time during their lives by a physician. Another 3.7% report that while they had used amphetamines under a doctor's orders, they had previously used such drugs on their own. The findings presented below, however, deal exclusively with the use of stimulants without medical supervision.

### Prevalence of Use in 1977

<u>Total Sample</u>	<u>Table(s)</u>
• Nearly one in four high school seniors (23%) reports using amphetamines at some time without medical supervision--the highest rate for any of the illicitly used drugs except marihuana. About a third of the "users" have used only once or twice, however.	2,6
• About one in six (16.3%) have used this class of drugs during the past year, and one in eleven (8.8%) did so during the month preceding the survey. Of those using in the prior month, about half had used once or twice.	3,4

Table(s)

- Frequent use--that is, use on 20 or more occasions by senior year--is reported by 6.3% of the sample. 6
- Daily use (i.e., use on 20 or more occasions in the last 30 days) is reported by .5% of the 1977 respondents--again, the highest rate for any of the illicitly used drugs except marihuana.

Subgroup Differences

- *Sex Differences.* Males and females report almost identical prevalence rates for the three time intervals. To illustrate, the annual prevalence for male seniors is 16.0%, while for females it is 16.4%. However, there is a slightly greater sex difference at heavier usage levels, with female users tending to use more frequently (difference significant at the .05 level). Thus, 4.6% of all males used 10-plus times during the year in contrast to 5.5% of all females. 2,3,4,5
- *College Plans.* There is a substantial difference between the college-bound and the noncollege-bound in amphetamine usage rates. Annual prevalence is about 12% for the former group in contrast to 21% for the latter. Frequent stimulant use is particularly concentrated among the noncollege-bound; 6.8% of them report use on 10 or more occasions during the year contrasted with 3.2% of the college-bound. This difference is significant at .001 level. 2,3,4,5
- *Region of the Country.* There are modest regional differences in the prevalence of amphetamine use (for all three prevalence intervals) which have been replicated consistently in the study. The South consistently shows a below-average rate (for example, 13.2% annual prevalence in 1977), while North Central consistently exhibits an above-average rate (19.0% annual prevalence in 1977). 2,3,4,5
- *Population Density.* There are only small differences in stimulant use among the three levels of population density being examined in 1977. 2,3,4,5

Recent Trends in Prevalence

Total Sample

- The observed prevalence of amphetamine use over all three time intervals (lifetime, 12 months, and 30 days) has been extremely stable overall. 2,3,4

Table(s)

- The prevalence of use at higher frequency levels also has remained very stable. For example, the rate of daily or near daily use has been observed at .5%, .4%, and .5% in 1975, 1976, and 1977, respectively. 5

Subgroup Differences in Trends

- Over the one year interval between 1976 and 1977 there was a slight increase in the prevalence of amphetamine use among the noncollege-bound (annual prevalence, for example, rose from 19.3% to 20.5%, not statistically significant) and practically no change among the college-bound. 2,3,4
- Shifts in prevalence for the various regions have been small and erratic, although there has been a slight net decrease in the West over the last two years. 2,3,4
- The most interesting subgroup changes have been related to urbanicity or population density. Over the three years of the study there has been some shifting in the relationship between urbanicity and amphetamine use. In 1975, the more urban the area, the higher the prevalence of amphetamine use. Since 1975, however, the observed prevalence has dropped in the Large SMSA's (from 19.6% annual prevalence in 1975 to 15.3% in 1977) while it has risen slightly in the Other SMSAs and the Non-SMSAs. The net effect has been to eliminate the positive relationship between urbanicity and amphetamine use. 2,3,4,5

Probability of Future Use

- Just under 7% of 1977 seniors say they "probably" or "definitely" will be using stimulants five years in the future. 6
- The comparable proportions in 1975 and 1976 are just about the same. The proportion saying they "definitely will not" be using stimulants five years in the future shows a slight drop (from 74% in 1975 to 71% in 1977). 6

Grade of First Use

- While 23% of the class of 1977 report some use of amphetamines by the end of their senior year, fewer than 2% had tried them prior to ninth grade. 7

Table(s)

- Initial use of amphetamines was concentrated in ninth, tenth, and eleventh grades, with the highest incidence occurring in tenth grade. 7
- There has been no major change in grade of onset between the high school classes of 1975 and 1977, although there is some evidence of a slight shift toward starting earlier. This shift is observed in practically all subgroups. There seem to be regional trends in early use: in the Northeast and the South the proportions who tried stimulants prior to tenth grade increased by nearly 2 percent from 1975 to 1977; in the West this proportion dropped by 3 percent during the same period. The net effect has been a virtual elimination by 1977 of regional differences in use prior to tenth grade. 7,9



TABLE 8-1.

Stimulants: Prevalence (Ever Used) and Recency of Use  
by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
All seniors	17673	23.0	8.8	7.5	6.8	77.0
Sex:						
Male	8234	22.0	8.5	7.6	6.0	78.0
Female	8941	23.7	9.0	7.4	7.4	76.3
College Plans:						
None or under 4 yrs	7512	27.8	11.4	9.1	7.4	72.2
Complete 4 yrs	8761	17.5	5.7	5.8	6.0	82.5
Region:						
Northeast	4510	23.8	9.6	7.3	7.0	76.2
North Central	5514	25.6	10.4	8.5	6.7	74.4
South	4708	19.5	7.0	6.2	6.4	80.5
West	2941	23.5	7.6	8.6	7.5	76.5
Population Density:						
Large SMSA	5533	22.5	8.3	7.0	7.3	77.5
Other SMSA	8084	24.7	8.7	8.5	7.7	75.3
Non-SMSA	4056	21.2	9.2	6.7	5.4	78.8

NOTE: See Appendix D for definition of variables in table.

TABLE 8-2

Stimulants: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	17673	22.3	22.6	23.0	+0.4
Sex:					
Male	8234	20.4	22.3	22.0	-0.3
Female	8941	23.7	22.7	23.7	+1.0
College Plans:					
None or under 4 yrs	7512	NA	27.0	27.8	+0.8
Complete 4 yrs	8761	NA	17.7	17.5	-0.2
Region:					
Northeast	4510	22.8	21.9	23.8	+1.9
North Central	5514	24.2	23.8	25.6	+1.8
South	4708	18.3	20.2	19.5	-0.7
West	2941	26.1	26.2	23.5	-2.7
Population Density:					
Large SMSA	5533	26.2	23.2	22.5	-0.7
Other SMSA	8084	22.2	23.3	24.7	+1.4
Non-SMSA	4056	19.9	21.5	21.2	-0.3

NOTES: Level of significance of difference between 1976 and 1977:

*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 8-3

Stimulants: Trends in Annual Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last twelve months</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17632	16.2	15.8	16.3	+0.5
Sex:					
Male	8209	15.6	15.8	16.0	+0.2
Female	8929	16.5	15.4	16.4	+1.0
College Plans:					
None or under 4 yrs	7497	NA	19.3	20.5	+1.2
Complete 4 yrs	8750	NA	11.9	11.5	-0.4
Region:					
Northeast	4500	16.5	14.7	16.8	+2.1
North Central	5503	18.7	17.8	19.0	+1.2
South	4700	12.6	13.7	13.2	-0.5
West	2929	18.5	17.2	16.0	-1.2
Population Density:					
Large SMSA	5522	19.6	15.4	15.3	-0.1
Other SMSA	8063	15.5	16.3	17.1	+0.8
Non-SMSA	4047	14.8	15.4	15.9	+0.5

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 8-4

Stimulants: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent who used in last thirty days			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	17624	8.5	7.7	8.8	+1.1 <i>s</i>
Sex:					
Male	8206	8.2	7.8	8.5	+0.7
Female	8927	8.5	7.6	9.0	+1.4 <i>s</i>
College Plans:					
None or under 4 yrs	7494	NA	9.6	11.4	+1.8 <i>ss</i>
Complete 4 yrs	8747	NA	5.7	5.7	0.0
Region:					
Northeast	4498	8.8	7.0	9.6	+2.6 <i>ss</i>
North Central	5499	10.9	9.7	10.4	+0.7
South	4698	6.1	6.3	7.0	+0.7
West	2929	8.2	7.8	7.6	-0.2
Population Density:					
Large SMSA	5522	11.0	7.7	8.3	+0.6
Other SMSA	8064	7.8	7.8	8.7	+0.9
Non-SMSA	4038	7.7	7.8	9.2	+1.4

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 8-5

Stimulants: Frequency of Use in the Last Year by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Number of occasions in last 12 months</u>						
		<u>None</u>	<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-19</u>	<u>20-39</u>	<u>40+</u>
All seniors	17632	83.7	5.7	3.2	2.3	2.5	1.5	1.2
Sex:								
Male	8209	84.0	5.8	3.3	2.4	2.3	1.2	1.1
Female	8929	83.6	5.6	3.0	2.3	2.6	1.7	1.2
College Plans:								
None or under 4 yrs	7497	79.5	6.9	4.0	2.8	3.1	2.2	1.5
Complete 4 yrs	8750	88.5	4.4	2.3	1.6	1.7	0.8	0.7
Region:								
Northeast	4500	83.2	5.2	3.5	2.8	2.6	1.6	1.1
North Central	5503	81.0	6.9	3.3	2.5	2.6	1.8	1.8
South	4700	86.8	4.6	2.5	1.8	2.4	1.2	0.8
West	2929	84.0	6.3	3.6	2.2	2.3	1.0	0.7
Population Density:								
Large SMSA	5522	84.7	5.8	3.1	2.0	2.1	1.1	1.2
Other SMSA	8063	82.9	5.9	3.4	2.7	2.7	1.4	1.1
Non-SMSA	4047	84.1	5.3	2.9	2.2	2.5	1.8	1.3

NOTE: See Appendix D for definition of variables in table.

TABLE 8-6

Stimulants: Trends in Frequency of Use for Lifetime, Last Year, and Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>
<u>Lifetime use</u>			
No occasions	77.7	77.4	77.0
1-2 occasions	6.7	7.1	7.0
3-5 occasions	3.4	3.8	3.8
6-9 occasions	2.4	2.8	2.8
10-19 occasions	3.3	3.2	3.1
20-39 occasions	2.3	2.0	2.4
40 or more	4.2	3.8	3.9
	N = (9694)	(15891)	(17673)
<u>Use in last twelve months</u>			
No occasions	83.8	84.2	83.7
1-2 occasions	5.5	5.7	5.7
3-5 occasions	2.8	2.9	3.2
6-9 occasions	2.4	2.3	2.3
10-19 occasions	2.4	2.2	2.5
20-39 occasions	1.6	1.3	1.5
40 or more	1.5	1.4	1.2
	N = (9671)	(15853)	(17632)
<u>Use in last thirty days</u>			
No occasions	91.5	92.3	91.2
1-2 occasions	4.1	3.9	4.3
3-5 occasions	1.7	1.6	1.9
6-9 occasions	1.1	1.0	1.3
10-19 occasions	1.1	0.7	0.8
20-39 occasions	0.3	0.3	0.3
40 or more	0.2	0.1	0.2
	N = (9660)	(15856)	(17624)
<u>Probability of future use</u>			
Definitely will not	74.4	72.3	71.2
Probably will not	19.2	21.5	22.2
Probably will	5.4	5.4	5.5
Definitely will	1.1	0.8	1.1
	N = (2975)	(3050)	(3469)

TABLE 8-7

Stimulants: Trends in Grade in Which First Used

	<u>Percent reporting first use in each grade</u>		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Sixth grade (or below)	0.1	0.2	0.1
Seventh or Eighth grade	0.8	1.2	1.4
Ninth grade	3.6	3.4	3.6
Tenth grade	4.8	5.5	5.2
Eleventh grade	6.2	4.8	3.9
Twelfth grade	3.1	2.5	2.1
Grade not known	3.6	5.0	6.6
Never used	77.7	77.4	77.0
	N <sup>a</sup> = (2936)	(2871)	(5836)

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 8-8

Stimulants: Grade in Which First Used by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Grade in school</u>							<u>Not known</u>	<u>Never used</u>
		<u>6 or below</u>	<u>7/8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>			
All seniors	5836	0.1	1.4	3.6	5.2	3.9	2.1	6.6	77.0	
Sex:										
Male	2734	0.2	1.7	2.8	5.2	4.0	1.8	6.4	78.0	
Female	2993	0.1	1.1	4.4	5.2	3.9	2.4	6.5	76.3	
College Plans:										
None or under 4 yrs	2426	0.3	1.4	4.4	6.7	4.9	2.2	7.8	72.2	
Complete 4 yrs	3047	0.0	1.1	2.4	3.9	2.6	2.0	5.5	82.5	
Region:										
Northeast	1392	0.1	1.4	4.2	5.1	4.1	2.1	6.8	76.2	
North Central	1924	0.2	1.4	3.7	6.1	5.5	2.7	6.0	74.4	
South	1566	0.2	1.1	3.3	4.3	2.5	1.5	6.8	80.5	
West	954	0.0	2.2	3.3	5.3	3.1	2.1	7.5	76.5	
Population Density:										
Large SMSA	1730	0.1	1.6	4.3	5.2	3.7	2.5	5.1	77.5	
Other SMSA	2695	0.1	1.5	3.9	5.6	3.7	2.0	7.9	75.3	
Non-SMSA	1411	0.2	1.1	2.7	4.8	4.3	2.0	6.1	78.8	

NOTE: See Appendix D for definition of variables in table.



TABLE 8-9

Stimulants: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1977)	Percent reporting first use prior to tenth grade <sup>a</sup>			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	5836	4.5	4.8	5.2	+0.4
Sex:					
Male	2734	3.9	4.2	4.6	+0.4
Female	2993	4.8	5.2	5.6	+0.4
College Plans:					
None or under 4 yrs	2426	NA	5.7	6.1	+0.4
Complete 4 yrs	3047	NA	3.3	3.5	+0.2
Region:					
Northeast	1392	3.7	4.6	5.6	+1.0
North Central	1924	5.2	4.9	5.3	+0.4
South	1566	2.7	3.8	4.5	+0.7
West	954	8.6	7.0	5.5	-1.5
Population Density:					
Large SMSA	1730	5.6	5.6	6.0	+0.4
Other SMSA	2695	5.9	5.8	5.5	-0.3
Non-SMSA	1411	2.3	3.0	4.1	+1.1

NOTES: Level of significance of difference between 1976 and 1977:  
 $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

## Chapter 9

### SEDATIVES

The two questionnaire items relevant to this chapter ask about "barbiturates," treated as a class, and "methaqualone" (a sedative-hypnotic). They have been collapsed into a single category entitled "sedatives," again to attain comparability with the categories used in the national household survey on drug use. While there exist some nonbarbiturate sedatives other than methaqualone, the great majority of sedative use is captured in the currently defined category.

Barbiturate use accounts for the majority of the use (roughly two-thirds of the occasions) in the combined variable and encompasses nearly all of the users of methaqualone. For example, barbiturate users account for 15.6% of the 1977 sample, while the addition of methaqualone increases the total number using "sedatives" to only 17.4% on the combined variable.

As with the other psychotherapeutic drugs covered in the present study, only use which was not under a doctor's orders is included in the reporting. In some cases such use may amount to self-medication, but it is very difficult to distinguish true self-medication from rationalization. Therefore, it was decided not to try to distinguish different types of medically unsupervised use.

In one form of the questionnaire, respondents were asked whether they had ever used barbiturates under a doctor's orders. In 1977, 13.1% answered "yes," which broke down to 9.8% whose first use was under a doctor's orders and another 3.3% who had previously used barbiturates on their own before having them prescribed by a doctor.

#### Prevalence of Use in 1977

<u>Total Sample</u>	<u>Table(s)</u>
● Roughly one in every six seniors (17.4%) reports trying sedatives by the end of senior year. Roughly a third of those have used only once or twice.	2,6
● One in nine (10.8%) has used sedatives in the last year and one in 20 (5.1%) has used in the last month without medical instructions.	3,4

Table(s)

- Of those using in the preceding month, about a half have used only once or twice. At the other extreme, the proportion of the sample reporting use on a daily or near daily basis is .2% (or about 35 respondents).

6

Subgroup Differences

- *Sex Differences.* Male seniors in high school report somewhat more sedative use without medical supervision than do female seniors. To illustrate, the annual prevalence for males was 12.0% in 1977 vs. 9.4% for females. Males also report a higher level of frequent use.
- *College Plans.* Those not planning four years of college illicitly use sedatives more often than do those with such plans. Annual prevalence is about 13% and 8%, respectively. Heavy use is particularly concentrated among the noncollege-bound; 3.7% of them report use on 10 or more occasions in the last year vs. 1.7% for the college-bound.
- *Region of the Country.* The West shows a lower-than-average prevalence of sedative use for all three time intervals (for example, 7.5% for the last year vs. 10.8% for the entire sample). The other regions have about equivalent overall prevalence figures. However, frequent use is most common in the North Central (as was true for stimulants) and least common in the West.
- *Population Density.* Comparisons of three levels of urbanicity indicate relatively small and inconsistent differences in prevalence across the three different time intervals.

2,3,4,5

2,3,4,5

2,3,4,5

2,3,4,5

Recent Trends in Prevalence

Total Sample

- There has been very little movement in sedative prevalence rates among seniors over the last two years. Between 1975 and 1977, reported lifetime prevalence only shifted from 18.2% to 17.4%, reported annual prevalence from 11.7% to 10.8%, and reported monthly prevalence from 5.4% to 5.1%.
- The prevalence of frequent use also remained stable.

2,3,4

6

Subgroup Differences in Trends

- The prevalence rates for males and females appear to have diverged very gradually over the past two years, because male rates remained stable while female rates declined slightly. For example, lifetime prevalence for males is estimated to be 18.1%, 18.0%, and 18.3% over the three sequential years, while for females it went from 18.2% to 17.1% to 16.3%. 2,3,4
- Lifetime prevalence figures for sedative use in the West dropped from a near average value of 17.8% in 1975 to a below average value of 13.8% in 1977. 2,3,4
- Prevalence estimates from the large cities have dropped gradually over the last two years, from slightly above average to slightly below average. 2,3,4

Probability of Future Use

- 4.6% of seniors in 1977 say they "probably" or "definitely" will be using sedatives five years in the future. 6
- That represents a slight (.9%) and nonsignificant increase over the proportions in 1975 and 1976. 6

Grade of First Use

- Although 17% of seniors use sedatives (without a doctor's orders) by the end of senior year, only 1.4% report use prior to ninth grade. 7
- Most eventual users start in ninth, tenth, or eleventh grade, with the highest rate of onset occurring in tenth grade. 7
- Subgroup differences in early prevalence pretty much parallel the differences observed in twelfth grade. 8,9
- A very slight trend toward earlier first use of sedatives appears when the classes of 1975, 1976, and 1977 are compared. This shift is observed in practically all subgroups, with the major exceptions noted below. 7,9

Table(s)

9

- There is a suggestion of some regional trends in early use; in the North Central and South the proportions who tried sedatives before tenth grade increased about 2% between 1975 and 1977, while this proportion dropped by about 1 percent in the West. These trends have been consistent over the three years, but they are not yet large enough to be statistically significant. It remains to be seen whether they continue over the next year or two.

TABLE 9-1

Sedatives: Prevalence (Ever Used) and Recency of Use  
by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
All seniors	17762	17.4	5.1	5.6	6.7	82.6
Sex:						
Male	8268	18.3	5.7	6.3	6.4	81.7
Female	9004	16.3	4.4	5.0	6.9	83.7
College Plans:						
None or under 4 yrs	7561	20.7	6.2	6.7	7.8	79.3
Complete 4 yrs	8807	13.5	3.6	4.4	5.5	86.5
Region:						
Northeast	4532	17.4	5.0	5.7	6.9	82.6
North Central	5543	18.6	5.6	6.2	6.8	81.4
South	4729	17.8	5.6	5.6	6.7	82.2
West	2958	13.8	3.3	4.3	6.4	86.2
Population Density:						
Large SMSA	5559	16.8	4.9	5.0	7.1	83.2
Other SMSA	8124	18.5	5.8	5.9	6.9	81.5
Non-SMSA	4079	16.5	4.5	5.9	6.2	83.5

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NOTE: See Appendix D for definition of variables in table.

TABLE 9-2

Sedatives: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	17762	18.2	17.7	17.4	-0.3
Sex:					
Male	8268	18.1	18.0	18.3	+0.3
Female	9004	18.2	17.1	16.3	-0.8
College Plans:					
None or under 4 yrs	7561	NA	20.5	20.7	+0.2
Complete 4 yrs	8807	NA	14.2	13.5	-0.7
Region:					
Northeast	4532	18.4	18.8	17.4	-1.4
North Central	5543	19.1	17.6	18.6	+1.0
South	4729	17.2	18.3	17.8	-0.5
West	2958	17.8	15.0	13.8	-1.2
Population Density:					
Large SMSA	5559	19.8	18.6	16.8	-1.8
Other SMSA	8124	18.4	17.9	18.5	+0.6
Non-SMSA	4079	16.8	16.7	16.5	-0.2

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 9-3

Sedatives: Trends in Annual Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last twelve months</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17752	11.7	10.7	10.8	+0.1
Sex:					
Male	8260	12.9	11.4	12.0	+0.6
Female	9003	10.6	9.9	9.4	-0.5
College Plans:					
None or under 4 yrs	7556	NA	12.7	12.9	+0.2
Complete 4 yrs	8803	NA	8.3	8.1	-0.2
Region:					
Northeast	4534	10.9	11.5	10.7	-0.8
North Central	5539	13.4	11.4	11.9	+0.5
South	4724	11.1	11.1	11.3	+0.2
West	2955	10.4	7.3	7.5	+0.2
Population Density:					
Large SMSA	5560	12.3	11.4	9.8	-1.6
Other SMSA	8118	12.1	10.8	11.7	+0.9
Non-SMSA	4074	10.7	10.1	10.3	+0.2

NOTES: Level of significance of difference between 1976 and 1977:  
 $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.



TABLE 9-4

Sedatives: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent who used in last thirty days			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	17748	5.4	4.5	5.1	+0.6
Sex:					
Male	8258	5.7	4.5	5.7	+1.2 <i>ss</i>
Female	9001	5.1	4.3	4.4	+0.1
College Plans:					
None or under 4 yrs	7555	NA	5.6	6.2	+0.6
Complete 4 yrs	8803	NA	3.2	3.6	+0.4
Region:					
Northeast	4535	4.6	4.2	5.0	+0.8
North Central	5538	6.4	5.3	5.6	+0.3
South	4719	5.3	4.8	5.6	+0.8
West	2956	4.6	2.7	3.3	+0.6
Population Density:					
Large SMSA	5559	5.7	4.3	4.9	+0.6
Other SMSA	8118	5.6	4.6	5.8	+1.2 <i>s</i>
Non-SMSA	4071	4.9	4.6	4.5	-0.1

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 9-5

Sedatives: Frequency of Use in the Last Year by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Number of occasions in last 12 months</u>						
		<u>None</u>	<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-19</u>	<u>20-39</u>	<u>40+</u>
All seniors	17752	89.2	4.0	2.5	1.4	1.7	0.6	0.7
Sex:								
Male	8260	88.0	4.4	2.7	1.5	1.9	0.6	0.9
Female	9003	90.6	3.6	2.2	1.2	1.6	0.5	0.4
College Plans:								
None or under 4 yrs	7556	87.1	4.6	3.0	1.6	2.1	0.7	0.9
Complete 4 yrs	8803	91.9	3.3	1.9	1.0	1.1	0.3	0.3
Region:								
Northeast	4534	89.3	4.0	2.7	1.3	1.6	0.4	0.6
North Central	5539	88.1	4.3	2.5	1.5	2.1	0.7	0.9
South	4724	88.7	3.8	2.7	1.5	1.8	0.6	0.7
West	2955	92.5	3.5	1.5	0.9	0.9	0.4	0.2
Population Density:								
Large SMSA	5560	90.2	3.8	2.3	1.2	1.4	0.5	0.6
Other SMSA	8118	88.3	4.1	2.7	1.5	2.0	0.6	0.7
Non-SMSA	4074	89.7	3.9	2.3	1.3	1.6	0.5	0.7

NOTE: See Appendix D for definition of variables in table.

TABLE 9-6

Sedatives: Trends in Frequency of Use for Lifetime, Last Year, and  
Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	Class of <u>1975</u>	Class of <u>1976</u>	Class of <u>1977</u>
<u>Lifetime use</u>			
No occasions	81.8	82.3	82.6
1-2 occasions	5.7	6.2	5.9
3-5 occasions	4.2	3.8	3.6
6-9 occasions	1.8	2.0	1.9
10-19 occasions	2.4	2.4	2.5
20-39 occasions	1.2	1.1	1.2
40 or more	2.8	2.2	2.4
	N = (9675)	(15995)	(17762)
<u>Use in last twelve months</u>			
No occasions	88.3	89.3	89.2
1-2 occasions	4.2	4.3	4.0
3-5 occasions	3.0	2.7	2.5
6-9 occasions	1.4	1.2	1.4
10-19 occasions	1.7	1.5	1.7
20-39 occasions	0.6	0.5	0.6
40 or more	0.8	0.5	0.7
	N = (9671)	(15980)	(17752)
<u>Use in last thirty days</u>			
No occasions	94.6	95.5	94.9
1-2 occasions	2.6	2.3	2.4
3-5 occasions	1.4	1.2	1.5
6-9 occasions	0.6	0.5	0.5
10-19 occasions	0.5	0.3	0.5
20-39 occasions	0.2	0.1	0.1
40 or more	0.1	0.1	0.1
	N = (9666)	(15980)	(17748)
<u>Probability of future use<sup>a</sup></u>			
Definitely will not	77.3	77.1	75.2
Probably will not	19.0	19.2	20.3
Probably will	3.1	3.1	4.0
Definitely will	0.6	0.5	0.6
	N = (2893)	(3055)	(3443)

<sup>a</sup>This question asked about barbiturates only.

TABLE 9-7

Sedatives: Trends in Grade in Which First Used

	<u>Percent reporting first use in each grade</u>		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Sixth grade (or below)	0.1	0.3	0.2
Seventh or Eighth grade	0.7	0.6	1.2
Ninth grade	2.2	2.7	2.7
Tenth grade	4.3	4.1	3.6
Eleventh grade	3.7	3.7	2.8
Twelfth grade	2.2	1.4	1.4
Grade not known	5.0	4.9	5.4
Never used	81.8	82.3	82.6
	N <sup>a</sup> = (2822)	(2914)	(6004)

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 9-8

Sedatives: Grade in Which First Used by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Grade in school</u>						<u>Not known</u>	<u>Never used</u>
		<u>6 or below</u>	<u>7/8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>		
All seniors	6004	0.2	1.2	2.7	3.6	2.8	1.4	5.4	82.6
Sex:									
Male	2811	0.2	1.3	3.0	3.6	2.9	1.6	5.6	81.7
Female	3084	0.1	1.1	2.6	3.5	2.7	1.2	5.1	83.7
College Plans:									
None or under 4 yrs	2514	0.3	1.4	3.1	4.9	3.3	1.3	6.5	79.3
Complete 4 yrs	3131	0.1	0.9	2.2	2.2	2.2	1.5	4.3	86.5
Region:									
Northeast	1427	0.1	1.3	3.2	3.5	2.8	1.6	4.9	82.6
North Central	1979	0.4	1.2	3.0	3.8	3.7	1.6	5.0	81.4
South	1611	0.1	1.4	2.9	3.9	2.5	1.1	6.0	82.2
West	987	0.1	0.8	1.1	2.5	1.7	1.6	6.0	86.2
Population Density:									
Large SMSA	1776	0.3	1.6	3.2	4.4	2.3	2.0	3.0	83.2
Other SMSA	2774	0.1	1.2	2.8	3.9	2.6	1.6	6.2	81.5
Non-SMSA	1454	0.2	0.9	2.4	2.6	3.5	0.8	6.2	83.5

NOTE: See Appendix D for definition of variables in table.

TABLE 9-9

Sedatives: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1977)	Percent reporting first use prior to tenth grade <sup>a</sup>			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	6004	3.0	3.7	4.1	+0.4
Sex:					
Male	2811	3.1	3.0	4.5	+1.5 <i>s</i>
Female	3084	2.8	4.1	3.7	-0.4
College Plans:					
None or under 4 yrs	2514	NA	3.7	4.7	+1.0
Complete 4 yrs	3131	NA	2.9	3.2	+0.3
Region:					
Northeast	1427	4.3	4.8	4.5	-0.3
North Central	1979	2.9	3.1	4.6	+1.5
South	1611	2.1	3.7	4.3	+0.6
West	987	3.1	2.8	2.0	-0.8
Population Density:					
Large SMSA	1776	4.8	4.6	5.1	+0.5
Other SMSA	2774	3.3	4.0	4.1	+0.1
Non-SMSA	1454	1.4	2.6	3.4	+0.8

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.  
 See Appendix D for definition of variables in table.  
 NA indicates data not available.

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

## Chapter 10

# TRANQUILIZERS

As was the case for the other psychotherapeutic drugs, in the questions on tranquilizers respondents were asked to report only occasions when they used such drugs without a doctor's orders. Their purposes for use may be recreational (e.g., to get high, feel good) or they may be instrumental (e.g., to offset the effects of other drugs, to calm their nerves). The questions do not distinguish among these various purposes.

One form of the questionnaire does contain a question about any use of tranquilizers which might have occurred under a doctor's direction. It revealed that more students had received tranquilizers through physicians than was the case for any of the other psychotherapeutic classes of drugs. In all, 17.5% of the class of 1977 reported previous use under medical supervision. For 14.8% it was the first time they had used tranquilizers; the remaining 2.7% reported that their initial use was on their own.

### Prevalence of Use in 1977

<u>Total Sample</u>	<u>Table(s)</u>
● More than one in every six seniors (18.0%) reports using a tranquilizer at some time. Slightly less than half of those have used on only one or two occasions, and thus can be considered experimenters.	2,6
● One in nine (10.8%) reports use in the prior year and about one in 20 (4.6%) reports use in the prior month.	3,4
● Relatively few (2.7%) have used on 20 or more occasions in their lifetime.	6
● The proportion reporting daily or near-daily use in the prior month is .2% (or about 35 respondents).	10

### Subgroup Differences

- *Sex Differences.* Females show a slightly higher prevalence of use than males on all three time 2,3,4,5

Table(s)

intervals.\* This is the only class of illicitly used drugs for which this is true. Annual prevalence for females is 11.4% vs. 10.2% for males (difference not significant); lifetime prevalence is 19.5% for females vs. 16.5% for males (difference significant at .001 level).

- *College Plans.* Those not planning to complete four years of college report a slightly higher prevalence of tranquilizer use than those with four year college plans.\* The figures for annual prevalence, for example, are 12.3% and 9.0%, respectively. Frequent use is more disproportionately concentrated among the noncollege-bound, however. Some 2.5% of them report use on 10 or more occasions in the last year, vs. 1.5% of the college-bound (difference significant at .001 level). 2,3,4,5
- *Region of the Country.* There are only small regional differences in tranquilizer use. 2,3,4,5
- *Population Density.* There are similarly small differences related to population density. 2,3,4,5

Recent Trends in Prevalence

Total Sample

- Overall, 1977 shows a very small upward shift in prevalence rates over 1975 and 1976, which were about equal to each other. Observed lifetime prevalence rose 1.2% to 18.0% since 1976, while annual prevalence rose .5% to 10.8%. (These differences are not statistically significant, however.) 2,3,4,6

Subgroup Differences in Trends

- The trends have been parallel for males and females.
- The noncollege-bound show a rise in lifetime prevalence from the class of 1976 to the class of 1977; the college-bound show only a small and not statistically significant rise. 2,3,4
- There has been a steady, and larger-than-average increase in tranquilizer use in the Northeast over the past two years. Annual prevalence rose from 9.2% to 9.7% to 2,3,4

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\*These small differences have been replicated consistently in all three years of the study.



Table(s)

10.4%--a net increase of 1.2%. There has been a decline in one region (the West) over the same period, with annual prevalence dropping from 11.7% in 1975 to 9.6% in 1977. These changes are not large enough to be statistically significant, however.

- Practically no change in tranquilizer use has occurred in the metropolitan areas (Large SMSAs and Other SMSAs) over the last two years. In contrast, there has been a rise in the nonmetropolitan areas, where annual prevalence rose from 9.9% in 1975 to 11.0% in 1977. Larger increases were observed in lifetime and 30-day prevalence figures; however all of these increases fall short of being statistically significant. In essence, the nonmetropolitan areas have tended to catch up to (and possibly even pass) the metropolitan areas in rates of tranquilizer use. 2,3,4,5

Probability of Future Use

- 5.5% of 1977 seniors say they "probably" or "definitely" will be using tranquilizers five years in the future, while 67% say they "definitely" will not. 6
- This represents a slight but consistent trend since 1975 when 3.8% expected to use in the future and about 71% said they "definitely" would not. 6

Grade of First Use

- Of the 18% of seniors who have used tranquilizers without a doctor's order, the great majority first did so in ninth grade or later. Ninth, tenth, and eleventh grade were the most frequent grades of onset. 7
- No important subgroup differences exist in grade of onset. 8
- There is a slight trend toward earlier first use of tranquilizers: 2.2% of the class of 1975 tried them prior to tenth grade, while 2.9% of the class of 1976 and 3.8% of the class of 1977 did so. 9
- There are no subgroup differences in trends that are clear enough to report with confidence. 9

TABLE 10-1

Tranquilizers: Prevalence (Ever Used) and Recency of Use  
by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
All seniors	17574	18.0	4.6	6.2	7.3	82.0
Sex:						
Male	8206	16.5	4.4	5.8	6.4	83.5
Female	8930	19.5	4.8	6.6	8.2	80.5
College Plans:						
None or under 4 yrs	7487	20.4	5.4	6.9	8.1	79.6
Complete 4 yrs	8757	15.4	3.5	5.5	6.5	84.6
Region:						
Northeast	4463	17.4	4.3	6.1	7.1	82.6
North Central	5510	18.1	5.2	5.8	7.1	81.9
South	4669	19.0	4.6	6.8	7.7	81.0
West	2932	16.9	3.6	6.0	7.3	83.1
Population Density:						
Large SMSA	5500	16.8	4.0	5.6	7.3	83.2
Other SMSA	8042	18.7	4.4	7.0	7.4	81.3
Non-SMSA	4032	18.0	5.3	5.7	7.2	82.0

NOTES: See Appendix D for definition of variables in table.

TABLE 10-2

Tranquilizers: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	17574	17.0	16.8	18.0	+1.2
Sex:					
Male	8206	15.7	15.5	16.5	+1.0
Female	8930	18.1	18.0	19.5	+1.5
College Plans:					
None or under 4 yrs	7487	NA	18.6	20.4	+1.8
Complete 4 yrs	8757	NA	14.7	15.4	+0.7
Region:					
Northeast	4463	14.7	16.2	17.4	+1.2
North Central	5510	17.3	15.8	18.1	+2.3
South	4669	17.3	18.7	19.0	+0.3
West	2932	19.5	16.2	16.9	+0.7
Population Density:					
Large SMSA	5500	17.5	16.5	16.8	+0.3
Other SMSA	8042	18.1	18.4	18.7	+0.3
Non-SMSA	4032	15.4	15.3	18.0	+2.7

NOTES: Level of significance of difference between 1976 and 1977:  
 $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 10-3

Tranquilizers: Trends in Annual Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last twelve months</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17538	10.6	10.3	10.8	+0.5
Sex:					
Male	8189	10.0	9.4	10.2	+0.8
Female	8918	11.1	11.0	11.4	+0.4
College Plans:					
None or under 4 yrs	7467	NA	11.5	12.3	+0.8
Complete 4 yrs	8750	NA	8.9	9.0	+0.1
Region:					
Northeast	4459	9.2	9.7	10.4	+0.7
North Central	5499	10.6	10.1	11.0	+0.9
South	4656	11.3	11.7	11.4	-0.3
West	2924	11.7	8.5	9.6	+1.1
Population Density:					
Large SMSA	5492	11.2	9.6	9.6	0.0
Other SMSA	8022	11.0	11.3	11.4	+0.1
Non-SMSA	4024	9.9	9.5	11.0	+1.5

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 10-4

Tranquilizers: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent who used in last thirty days			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	17520	4.1	4.0	4.6	+0.6
Sex:					
Male	8183	3.8	3.8	4.4	+0.6
Female	8907	4.3	4.2	4.8	+0.6
College Plans:					
None or under 4 yrs	7457	NA	4.4	5.4	+1.0 <i>s</i>
Complete 4 yrs	8744	NA	3.3	3.5	+0.2
Region:					
Northeast	4452	3.2	3.6	4.3	+0.7
North Central	5493	4.2	4.1	5.2	+1.1
South	4650	4.7	4.7	4.6	-0.1
West	2925	4.0	3.0	3.6	+0.6
Population Density:					
Large SMSA	5484	4.1	3.6	4.0	+0.4
Other SMSA	8018	4.6	4.2	4.4	+0.2
Non-SMSA	4018	3.5	4.0	5.3	+1.3

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 10-5

Tranquilizers: Frequency of Use in the Last Year by Subgroups, Class of 1977  
 (Entries are percentages)

	Number of Cases	Number of occasions in last 12 months						
		None	1-2	3-5	6-9	10-19	20-39	40+
All seniors	17538	89.2	5.1	1.9	1.6	1.1	0.5	0.5
Sex:								
Male	8189	89.8	4.7	1.7	1.8	0.9	0.5	0.6
Female	8918	88.6	5.7	2.2	1.4	1.3	0.5	0.3
College Plans:								
None or under 4 yrs	7467	87.7	5.5	2.4	1.9	1.3	0.6	0.6
Complete 4 yrs	8750	91.0	4.8	1.5	1.2	0.8	0.4	0.3
Region:								
Northeast	4459	89.6	5.0	1.9	1.6	1.0	0.5	0.4
North Central	5499	89.0	4.9	1.8	1.6	1.4	0.7	0.6
South	4656	88.6	5.2	2.3	1.8	1.0	0.6	0.6
West	2924	90.4	5.8	1.5	1.1	0.7	0.2	0.2
Population Density:								
Large SMSA	5492	90.4	5.1	1.8	1.1	0.7	0.3	0.5
Other SMSA	8022	88.6	5.4	2.0	1.8	1.1	0.6	0.4
Non-SMSA	4024	89.0	4.9	1.9	1.6	1.4	0.6	0.5

NOTE: See Appendix D for definition of variables in table.

TABLE 10-6

Tranquilizers: Trends in Frequency of Use for Lifetime, Last Year, and Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
<u>Lifetime use</u>			
No occasions	83.0	83.2	82.0
1-2 occasions	7.8	7.5	7.8
3-5 occasions	3.1	3.4	3.3
6-9 occasions	2.1	2.0	2.1
10-19 occasions	1.6	1.7	2.1
20-39 occasions	1.0	1.0	1.2
40 or more	1.4	1.2	1.5
	N = (9523)	(15832)	(17574)
<u>Use in last twelve months</u>			
No occasions	89.4	89.7	89.2
1-2 occasions	5.4	5.2	5.1
3-5 occasions	2.2	2.2	1.9
6-9 occasions	1.2	1.3	1.6
10-19 occasions	0.9	0.8	1.1
20-39 occasions	0.5	0.4	0.5
40 or more	0.4	0.4	0.5
	N = (9518)	(15788)	(17538)
<u>Use in last thirty days</u>			
No occasions	95.9	96.0	95.4
1-2 occasions	2.4	2.5	2.5
3-5 occasions	0.9	0.8	1.0
6-9 occasions	0.5	0.4	0.5
10-19 occasions	0.3	0.2	0.3
20-39 occasions	0.0	0.1	0.1
40 or more	0.0	0.1	0.1
	N = (9507)	(15782)	(17520)
<u>Probability of future use</u>			
Definitely will not	70.7	69.8	67.1
Probably will not	25.5	25.9	27.5
Probably will	3.4	3.8	4.7
Definitely will	0.4	0.5	0.8
	N = (2911)	(3031)	(3375)

TABLE 10-7

Tranquilizers: Trends in Grade in Which First Used

	<u>Percent reporting first use in each grade</u>		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Sixth grade (or below)	0.1	0.3	0.3
Seventh or Eighth grade	0.5	0.5	1.1
Ninth grade	1.5	2.2	2.4
Tenth grade	2.0	3.1	3.0
Eleventh grade	2.8	3.8	3.2
Twelfth grade	1.8	1.3	1.7
Grade not known	8.2	5.6	6.2
Never used	83.0	83.2	82.0
	N <sup>a</sup> = (2831)	(2832)	(5821)

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<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.



TABLE 10-8

Tranquilizers: Grade in Which First Used by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Grade in school</u>						<u>Not known</u>	<u>Never used</u>
		<u>6 or below</u>	<u>7/8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>		
All seniors	5821	0.3	1.1	2.4	3.0	3.2	1.7	6.2	82.0
Sex:									
Male	2749	0.3	1.0	1.9	3.0	3.0	1.1	6.2	83.5
Female	2967	0.3	1.1	2.9	3.1	3.4	2.3	6.4	80.5
College Plans:									
None or under 4 yrs	2440	0.5	1.0	2.9	3.3	3.9	1.9	7.0	79.6
Complete 4 yrs	3033	0.2	1.0	1.8	2.8	2.6	1.5	5.5	84.6
Region:									
Northeast	1393	0.3	1.5	2.4	2.6	3.0	2.0	5.7	82.6
North Central	1915	0.5	0.9	2.0	3.3	3.7	1.5	6.2	81.9
South	1551	0.2	0.8	3.3	3.4	2.9	1.6	6.7	81.0
West	962	0.4	1.3	1.5	2.4	3.0	2.0	6.3	83.1
Population Density:									
Large SMSA	1721	0.3	1.3	2.2	3.8	3.1	1.4	4.8	83.2
Other SMSA	2686	0.2	1.1	2.5	3.1	3.1	1.7	7.0	81.3
Non-SMSA	1414	0.5	0.9	2.4	2.4	3.4	2.0	6.3	82.0

NOTE: See Appendix D for definition of variables in table.

TABLE 10-9

Tranquilizers: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1977)	Percent reporting first <sup>a</sup> use prior to tenth grade				'76-'77 <i>change</i>
		Class of 1975	Class of 1976	Class of 1977		
All seniors	5821	2.2	2.9	3.8	+0.9 s	
Sex:						
Male	2749	1.9	2.8	3.3	+0.5	
Female	2967	2.5	2.9	4.3	+1.4 s	
College Plans:						
None or under 4 yrs	2440	NA	2.7	4.4	+1.7 s	
Complete 4 yrs	3033	NA	2.7	3.0	+0.3	
Region:						
Northeast	1393	1.9	2.7	4.1	+1.4	
North Central	1915	1.8	2.5	3.4	+0.9	
South	1551	2.3	4.0	4.3	+0.3	
West	962	3.2	2.1	3.2	+1.1	
Population Density:						
Large SMSA	1721	2.3	3.0	3.8	+0.8	
Other SMSA	2686	2.4	3.3	3.8	+0.5	
Non-SMSA	1414	1.9	2.5	3.9	+1.4	

NOTES: Level of significance of difference between 1976 and 1977:  
 s = .05, ss = .01, sss = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.  
 See Appendix D for definition of variables in table.  
 NA indicates data not available.

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

## Chapter 11

# ALCOHOL

Alcohol is the most widely used of all of the drugs discussed in this report. It is, of course, available in the United States in the form of beer, wine, and hard liquor. Distinctions will not be made among the classes of beverage since the majority of respondents were asked to answer about the use of alcohol in any of its forms. (There are both practical and analytic advantages to getting data in a form in which the respondent summarizes across beverages.) From more detailed information gathered separately for the different classes of beverage, however, we know that beer is the alcoholic beverage used predominantly by high school students.

Because of the very high alcohol prevalence figures for all classes and all subgroups, overall prevalence proves not to be a very sensitive statistic for differentiating groups. Thus, much of the discussion will focus on the shorter time periods and the higher frequency levels within time periods. In fact, a special table (Table 11-10) has been added to show prevalence figures for daily use.

Although this study gathers a considerable amount of information on the quantity of alcohol consumed, as well as on the frequency with which it is consumed, this discussion will focus only on prevalence and frequency statistics. A more complex and elaborated discussion of alcohol use will be provided in further publications from the study.

### Prevalence of Use in 1977

<u>Total Sample</u>	<u>Table(s)</u>
• Nearly all seniors (93%) have <u>tried</u> alcohol, and the great majority (87%) have used it during the past year.	2,3,4
• Most (71%) have used it during the month prior to the survey.	
• About half (49%) report recent weekly use (i.e., three or more occasions during the past 30 days).	6
• Daily use (defined as 20 or more occasions during the prior 30 days) was reported by 6.1% of the sample.	6

Subgroup Differences

- *Sex Differences.* Alcohol use is more prevalent among males than among females. About 78% of the males have used alcohol during the prior 30 days, compared with 65% of the females. About twice as many males as females (29% versus 14%) report using alcohol 40 or more times during the past year; and daily use occurs more than twice as often among males than females (8.6% vs. 3.6%). 2,3,4,5,10
  
- *College Plans.* Alcohol consumption on about a weekly basis over the year (i.e., 40 or more times during the past twelve months) is somewhat lower among those planning four years of college (19%) than among those without such plans (24%). Similarly, daily use is only half as prevalent (4.0% vs. 8.0%) among the college-bound. 2,3,4,5,10
  
- *Region of the Country.* The four regions divide into two groups on the prevalence of alcohol use. The South and the West have about the same (lower) prevalence rates for all three time intervals, while the Northeast and North Central have about equivalent (higher) rates. For example, about 65% of the students in the South and West report use in the prior 30 days, while the comparable number for the Northeast and North Central is 77%. More frequent use is also less common in the former two regions. 2,3,4,5,10
  
- *Population Density.* While there are not large differences between the three levels of urbanicity, alcohol prevalence is positively correlated with urbanicity. To illustrate, the 30-day prevalence figures are 74% for large metropolitan areas, 72% for other metropolitan areas, and 68% for non-metropolitan areas.\* There are, however, virtually no differences among the three urbanicity levels in the percentage using on 20 or more occasions in the past year, which suggests that the urbanicity differences primarily reflect differences in the number of infrequent and occasional drinkers. At the level of daily use, in fact, the correlation between alcohol use and urbanicity is slightly reversed--the highest rate of daily use occurs in nonmetropolitan areas--but the differences are very small and not statistically significant. 2,3,4,5,10

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\*This modest relationship has been replicated in all three years of the study.

Recent Trends in Prevalence

Total Sample

- The data indicate some upward shifts in the prevalence of alcohol use among high school seniors over the past two years (though most of these are not statistically significant). 2,3,4
- Annual prevalence was observed at about 85% in 1975, 86% in 1976, and 87% in 1977. Thirty-day prevalence was 68%, 68% and 71%. 3,4
- The proportion using frequently has also risen slightly, primarily in the last year. Use on 20 or more occasions in the prior year was 32.3% in 1975, 32.5% in 1976, and 34.8% in 1977. 6
- Similarly, daily use (defined as 20-plus occasions in the prior month) remained steady between 1975 and 1976 (at 5.7% and 5.6% respectively), but rose slightly to 6.1% in 1977. 6,10

Subgroup Differences in Trends

- The prevalence figures for males and females have been moving in parallel, as have those for the college and noncollege groups. 2,3,4
- Observed alcohol prevalence has remained relatively constant in the Northeast, where it historically has been highest. However, two of the other regions --the North Central and the West--have had fair increases since 1975 and appear to be narrowing the gap. Thirty-day prevalence in the North Central rose from 71% to 76% between 1975 and 1977, while in the West it rose from 60% to 64%. (Neither trend is statistically significant.) 2,3,4
- While the large urban areas (which have had the highest prevalence rates) remained about level over the last two years, the less urban areas have shown slight increases in prevalence rates, and thus have been "catching up." For example, between 1975 and 1977 the 30-day prevalence rates rose from 63.2% to 67.8% for those in Non-SMSAs, while they dropped very slightly from 75.3% to 74.0% for those in Large SMSAs. Thus, a gap of about 12% in 1975 was reduced to 6% in 1977. The most urban areas still have the 2,3,4,5,10

highest overall prevalence rates for lifetime, last year, and last month. However, more frequent use (i.e., use on 20-plus occasions in the last year) is about equivalent for all urbanicity groups, as is daily use of alcohol.

Probability of Future Use

- Over two-thirds of 1977 seniors expect to be using alcohol five years in the future. 6
- This proportion has shown very little change since 1975. 6
- The proportion expecting to use alcohol in the future far exceeds the proportion expecting to use the next most popular drug (marihuana--27%). This undoubtedly reflects alcohol's continuing widespread acceptance as a recreational drug. 6

Grade of First Use

- Over half of all respondents have tried alcohol before reaching tenth grade; most of the rest did so in tenth or eleventh grade. The modal grade of first use was ninth grade, when 24% tried it. 7
- Males are more likely than females to have tried alcohol by eighth grade (34% versus 24%); in later grades the females tend to close the gap. 8
- First use of alcohol tends to occur a bit earlier than average among those not planning four years of college, those from the Northeast, and those from larger cities; it tends to occur a little later than average among those with four-year college plans and those from the South. 8
- There is little overall change in the pattern of onset reflected in these data for the classes of 1975, 1976, and 1977. 7
- The one exception is an increase in the percentages of females who tried alcohol before tenth grade: 41% from the class of 1975, 44% from the class of 1976, 47% from the class of 1977. 9

TABLE 11-1

Alcohol: Prevalence (Ever Used) and Recency of Use  
by Subgroups, Class of 1977  
 (Entries are percentages)

	<u>Number of Cases</u>	<u>Ever used</u>	<u>Past month</u>	<u>Past year, not past month</u>	<u>Not past year</u>	<u>Never used</u>
All seniors	17116	92.5	71.2	15.8	5.5	7.5
Sex:						
Male	7921	94.2	77.8	12.2	4.2	5.8
Female	8620	90.9	65.0	19.3	6.6	9.1
College Plans:						
None or under 4 yrs	7188	93.0	72.8	14.9	5.3	7.0
Complete 4 yrs	8532	92.2	69.4	17.1	5.7	7.8
Region:						
Northeast	4407	96.0	76.6	16.2	3.2	4.0
North Central	5370	94.5	76.4	14.0	4.1	5.5
South	4493	89.1	64.7	16.3	8.1	10.9
West	2846	89.2	64.4	17.9	6.9	10.8
Population Density:						
Large SMSA	5366	94.7	74.0	16.4	4.3	5.3
Other SMSA	7864	92.9	72.0	15.6	5.3	7.1
Non-SMSA	3886	90.2	67.8	15.6	6.8	9.8

NOTE: See Appendix D for definition of variables in table.

TABLE 11-2

Alcohol: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	17116	90.4	91.9	92.5	+0.6
Sex:					
Male	7921	92.0	93.2	94.2	+1.0
Female	8620	89.2	90.6	90.9	+0.3
College Plans:					
None or under 4 yrs	7188	NA	92.4	93.0	+0.6
Complete 4 yrs	8532	NA	91.4	92.2	+0.8
Region:					
Northeast	4407	95.0	95.4	96.0	+0.6
North Central	5370	92.0	93.5	94.5	+1.0
South	4493	88.0	88.8	89.1	+0.3
West	2846	85.0	89.3	89.2	-0.1
Population Density:					
Large SMSA	5366	95.4	95.0	94.7	-0.3
Other SMSA	7864	90.5	91.0	92.9	+1.9 <i>s</i>
Non-SMSA	3886	87.2	90.6	90.2	-0.4

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.



TABLE 11-3

Alcohol: Trends in Annual Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last twelve months</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17047	84.8	85.7	87.0	+1.3
Sex:					
Male	7904	88.1	88.3	90.0	+1.7 <i>s</i>
Female	8578	82.1	83.2	84.3	+1.1
College Plans:					
None or under 4 yrs	7167	NA	86.7	87.7	+1.0
Complete 4 yrs	8497	NA	84.9	86.5	+1.6
Region:					
Northeast	4405	91.9	91.6	92.8	+1.2
North Central	5341	87.6	88.7	90.4	+1.7
South	4457	79.9	80.2	81.0	+0.8
West	2844	78.2	81.2	82.3	+1.1
Population Density:					
Large SMSA	5355	91.7	90.4	90.4	0.0
Other SMSA	7837	85.1	84.7	87.6	+2.9 <i>s</i>
Non-SMSA	3855	80.0	83.4	83.4	0.0

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 11-4

Alcohol: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who used in last thirty days</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17087	68.2	68.3	71.2	+2.9 s
Sex:					
Male	7916	75.0	74.5	77.8	+3.3 ss
Female	8606	62.2	61.8	65.0	+3.2 s
College Plans:					
None or under 4 yrs	7197	NA	69.9	72.8	+2.9 s
Complete 4 yrs	8505	NA	66.5	69.4	+2.9
Region:					
Northeast	4414	76.9	75.7	76.6	+0.9
North Central	5354	71.1	73.2	76.4	+3.2
South	4474	62.8	60.2	64.7	+4.5 s
West	2845	60.0	62.2	64.4	+2.2
Population Density:					
Large SMSA	5360	75.3	72.6	74.0	+1.4
Other SMSA	7860	68.5	67.0	72.0	+5.0 ss
Non-SMSA	3867	63.2	66.5	67.8	+1.3

NOTES: Level of significance of difference between 1976 and 1977:

s = .05, ss = .01, sss = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 11-5

Alcohol: Frequency of Use in the Last Year by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Number of occasions in last 12 months</u>						
		<u>None</u>	<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-19</u>	<u>20-39</u>	<u>40+</u>
All seniors	17047	13.0	12.9	11.6	11.7	16.0	13.2	21.6
Sex:								
Male	7904	10.0	9.5	10.5	10.9	15.9	13.8	29.4
Female	8578	15.7	15.9	12.8	12.7	16.3	12.5	14.1
College Plans:								
None or under 4 yrs	7167	12.3	12.2	11.1	10.8	16.0	13.3	24.3
Complete 4 yrs	8497	13.5	13.7	12.1	12.7	16.4	12.8	18.7
Region:								
Northeast	4405	7.2	11.8	12.0	13.4	18.5	14.4	22.7
North Central	5341	9.6	11.0	12.0	10.9	17.3	15.1	24.1
South	4457	19.0	14.9	10.5	11.0	13.1	11.1	20.5
West	2844	17.7	14.7	12.4	12.1	14.9	11.3	16.8
Population Density:								
Large SMSA	5355	9.6	12.6	12.8	13.3	17.1	14.4	20.2
Other SMSA	7837	12.4	12.7	11.9	11.7	16.1	12.8	22.4
Non-SMSA	3855	16.6	13.4	10.3	10.5	14.9	12.6	21.7

NOTE: See Appendix D for definition of variables in table.

TABLE 11-6

Alcohol: Trends in Frequency of Use for Lifetime, Last Year, and  
Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
<u>Lifetime use</u>			
No occasions	9.6	8.1	7.5
1-2 occasions	7.6	8.0	7.1
3-5 occasions	8.8	8.3	8.2
6-9 occasions	8.3	8.5	8.3
10-19 occasions	12.6	11.9	12.0
20-39 occasions	13.6	13.5	13.7
40 or more	39.6	41.7	43.2
	N = (9796)	(15385)	(17116)
<u>Use in last twelve months</u>			
No occasions	15.2	14.3	13.0
1-2 occasions	12.8	13.3	12.9
3-5 occasions	12.5	12.3	11.6
6-9 occasions	11.5	11.1	11.7
10-19 occasions	15.7	16.5	16.0
20-39 occasions	13.0	12.6	13.2
40 or more	19.3	19.9	21.6
	N = (9738)	(15345)	(17047)
<u>Use in last thirty days</u>			
No occasions	31.8	31.7	28.8
1-2 occasions	22.1	22.0	22.2
3-5 occasions	17.5	18.4	18.3
6-9 occasions	12.8	12.6	13.4
10-19 occasions	10.1	9.6	11.2
20-39 occasions	3.5	3.3	3.5
40 or more	2.2	2.3	2.6
	N = (9737)	(15377)	(17087)
<u>Probability of future use</u>			
Definitely will not	17.0	18.1	13.9
Probably will not	14.7	15.7	16.7
Probably will	54.4	53.3	54.8
Definitely will	13.9	12.9	14.6
	N = (3078)	(3263)	(3623)

TABLE 11-7

Alcohol: Trends in Grade in Which First Used

	<u>Percent reporting first use in each grade</u>		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Sixth grade (or below)	9.7	7.4	7.8
Seventh or Eighth grade	17.3	21.2	21.1
Ninth grade	22.9	22.7	24.0
Tenth grade	18.2	19.5	18.4
Eleventh grade	15.4	12.8	13.9
Twelfth grade	6.1	7.2	7.1
Grade not known	0.9	1.2	0.2
Never used	9.6	8.1	7.5
	N <sup>a</sup> = (3037)	(2776)	(5792)

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 11-8

Alcohol: Grade in Which First Used by Subgroups, Class of 1977  
(Entries are percentages)

	Number of Cases	Grade in school						Not known	Never used
		6 or below	7/8	9	10	11	12		
All seniors	5792	7.8	21.1	24.0	18.4	13.9	7.1	0.2	7.5
Sex:									
Male	2735	10.3	23.7	24.9	16.9	12.6	5.4	0.5	5.8
Female	2956	5.4	18.4	23.3	19.8	15.4	8.7	0.0	9.1
College Plans:									
None or under 4 yrs	2476	8.5	21.4	25.7	18.1	12.2	6.6	0.5	7.0
Complete 4 yrs	2961	6.8	20.0	22.3	19.4	15.8	7.8	0.1	7.8
Region:									
Northeast	1406	8.3	26.0	24.7	18.5	11.9	6.3	0.3	4.0
North Central	1948	9.0	20.3	26.8	18.0	13.8	6.9	0.0	5.3
South	1522	5.5	16.7	21.7	19.7	16.5	7.9	1.0	10.9
West	916	9.2	23.7	21.1	16.6	12.0	6.9	0.0	10.6
Population Density:									
Large SMSA	1723	8.7	25.4	24.7	18.1	11.8	6.1	0.0	5.2
Other SMSA	2676	6.7	20.6	22.9	19.5	15.3	7.5	0.3	7.1
Non-SMSA	1393	8.5	18.3	24.7	17.4	13.7	7.3	0.2	9.8

NOTE: See Appendix D for definition of variables in table.

TABLE 11-9

Alcohol: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1977)	Percent reporting first <sup>a</sup> use prior to tenth grade			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	5792	50.0	51.2	52.9	+1.7
Sex:					
Male	2735	58.6	58.1	58.8	+0.7
Female	2956	41.4	44.3	47.1	+2.8
College Plans:					
None or under 4 yrs	2476	NA	51.6	55.6	+4.0
Complete 4 yrs	2961	NA	49.9	49.1	-0.8
Region:					
Northeast	1406	59.0	59.6	59.0	-0.6
North Central	1948	50.9	54.1	56.0	+1.9
South	1522	40.2	40.2	43.9	+3.7
West	916	55.4	53.2	53.9	+0.7
Population Density:					
Large SMSA	1723	55.7	57.1	58.8	+1.7
Other SMSA	2676	49.3	49.3	50.2	+0.9
Non-SMSA	1393	46.9	49.2	51.5	+2.3

NOTES: Level of significance of difference between 1976 and 1977:  
 $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

<sup>a</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 11-10

Alcohol: Trends in Thirty-Day Prevalence of Daily Use by Subgroups

	Number of Cases (Class of 1977)	Percent who used daily in last thirty days			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	17087	5.7	5.6	6.1	+0.5
Sex:					
Male	7916	8.6	8.1	8.6	+0.5
Female	8606	3.0	2.7	3.6	+0.9 <i>s</i>
College Plans:					
None or under 4 yrs	7197	6.3	7.3	8.0	+0.7
Complete 4 yrs	8505	3.2	3.5	4.0	+0.5
Region:					
Northeast	4414	6.1	6.3	6.5	+0.2
North Central	5354	6.6	6.9	6.7	-0.2
South	4474	5.1	4.6	5.9	+1.3
West	2845	4.5	3.8	4.3	+0.5
Population Density:					
Large SMSA	5360	6.1	5.4	5.9	+0.5
Other SMSA	7860	5.4	5.3	5.8	+0.5
Non-SMSA	3867	5.9	6.1	6.5	+0.4

NOTES: Level of significance of difference between 1976 and 1977:

*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.



## Chapter 12

# CIGARETTES

Because cigarette smokers tend to have more regularized patterns of use than users of other drugs, and because the number of occasions of use tends to be so high for regular users, a somewhat different set of questions was developed for measuring cigarette smoking than was used for the other drugs. Therefore, several of the data tables in this chapter are unique in their structure and do not correspond exactly to comparably numbered tables in other chapters.

One cautionary note should be mentioned regarding the data on lifetime prevalence of cigarette use. In the judgement of the investigators, the wording of the question may have caused some people who had smoked a few cigarettes, but who never considered themselves "smokers" to have answered "never" when asked "Have you ever smoked cigarettes?" (See Appendix D for the full set of answers.) In other words, they may have interpreted the question to mean "Have you ever smoked cigarettes regularly?" If this is so, lifetime prevalence may be somewhat understated, but the remaining figures on regular use should be unaffected.

### Prevalence of Use in 1977

<u>Total Sample</u>	<u>Table(s)</u>
<ul style="list-style-type: none"> <li>● Three-quarters of the seniors (76%) indicate that they have smoked cigarettes at some time in their lives, and this may be an underestimate for the reasons noted above. However, over a third of those (27% of the sample) report doing so only once or twice.</li> </ul>	1,2
<ul style="list-style-type: none"> <li>● A quarter of the sample (24%) describe themselves as smoking "regularly now," although on a separate question about 29% indicate smoking one or more cigarettes per day in the most recent month.</li> </ul>	1,5
<ul style="list-style-type: none"> <li>● Another 9% say they smoked "regularly in the past," but do not now.</li> </ul>	1
<ul style="list-style-type: none"> <li>● The proportion smoking half-a-pack per day or more in the last month is 19.4%, or about one out of every five seniors. Of these, the great majority report smoking either "about a half-a-pack a day" (9.1%) or "about a pack a day" (8.1%).</li> </ul>	4,5

Subgroup Differences

- There are relatively minor differences among the various subgroups in the proportions who have ever tried cigarettes. However, there are major differences in rates for current regular smoking related to college plans and region of the country. 2
- *Sex Differences.* For the class of 1977 there is practically no difference in the proportion of males and females who smoke a half-a-pack of cigarettes or more per day (19.7% vs. 18.9% in the last 30 days). Among those "smokers," however, males appear to consume a slightly larger number of cigarettes on the average. For example, 2% more males than females (11.2% vs. 9.2%) report smoking a pack or more per day (a difference significant at the .01 level). 4,5
- *College Plans.* Smoking is strongly related to college plans. The proportion of the noncollege-bound who currently smoke half-a-pack or more daily is two-and-one-half times as great as the proportion of the college-bound who do so (26.9% vs. 11.2%). 4,5
- *Region of the Country.* There are also very large regional differences in regular smoking. Daily rates of half-a-pack a day (or more) are roughly twice as high in the Northeast (24.2%), which has the heaviest rate of use, as in the West (11.5%) which has the lightest use. The North Central and South have about average rates of use at about 20% and 19%, respectively. 4,5
- *Population Density.* The use of cigarettes--particularly current, regular use--is roughly equivalent for the three urbanicity levels examined. 4,5

Recent Trends in PrevalenceTotal Sample

- There has been virtually no change between 1976 and 1977 in the observed rate of regular smoking (19.2% and 19.4%). There may have been a slight increase from 1975, when 17.9% of the sample indicated that they were smoking half-a-pack a day or more (though this shift falls short of statistical significance). 4

Subgroup Differences in Trends

- Regular smoking among males of high school age appears to have remained constant over the period 1975 to 1977, while female use rose from 16.1% to 18.9% (trend significant at .001 level). Previously existing sex differences have been nearly eliminated by 1977. 4
  
- Differences have been narrowing over the last two years among the three different urbanicity levels examined here (although none of the trends reach statistical significance). Large SMSAs show a steady or perhaps declining rate of regular smoking over the last two-year interval, while Other SMSAs show a slight increase since 1975 and Non-SMSAs show a sizeable increase (up 3.6%). Most of this observed change occurred between 1975 and 1976, however. There was little differential change between 1976 and 1977. 4

Probability of Future Use

- Practically no current smokers are resigned to the fact that their habits will continue, since only 1% of the sample say they will "definitely" be smoking five years in the future. This proportion has not changed since 1975. 6
  
- Substantially more (18% of the sample) say they "probably" will be smoking five years hence. This projection has declined substantially, however, since the class of 1975 when 27% gave the same answer. 6
  
- More seniors now say they "definitely will not" be smoking five years in the future than in 1975 (51% vs. 41%)--apparently reflecting a considerable shift in attitudes about smoking. 6

Grade of First Use

- Over half of the seniors who have ever smoked on a regular daily basis first did so in ninth grade or earlier. Only about 2% of the sample become regular smokers during their senior year. 7
  
- The prevalence of early smoking is about the same for both sexes, but is dramatically higher among the non-college-bound (26%) vs. the college-bound (13%). It is lower than average in the West (13%). 9

Table(s)

- A comparison of the classes of 1975, 1976, and 1977 indicates a continuing decrease in the average age at which regular smoking begins. Only 13.5% of the class of 1975 reported regular smoking by tenth grade vs. 19.4% in the class of 1977. 9
  
- This shift has been occurring among all subgroups. However, the greatest increases have occurred in the South and North Central regions of the country and in the nonmetropolitan areas. In essence, these subgroups have been catching up with the others in terms of the prevalence of early cigarette use. 9

TABLE 12-1

Cigarette Use by Subgroups, Class of 1977  
(Entries are percentages)

	<u>Number of Cases</u>	<u>Never</u>	<u>Once or Twice</u>	<u>Occasion- ally but not Regularly</u>	<u>Regularly in the past</u>	<u>Regular- ly now</u>
All seniors	17929	24.3	26.7	16.4	8.8	23.8
Sex:						
Male	8244	23.5	29.6	16.3	8.6	22.0
Female	9023	25.2	24.1	16.5	9.1	25.0
College Plans:						
None or under 4 yrs	7582	19.0	24.0	15.8	9.9	31.3
Complete 4 yrs	8777	30.0	30.0	16.7	7.8	15.4
Region:						
Northeast	4607	23.5	23.0	15.8	8.9	28.8
North Central	5566	22.2	26.1	18.1	9.0	24.5
South	4774	24.6	27.6	15.7	9.0	23.2
West	2982	29.3	32.6	15.1	7.8	15.1
Population Density:						
Large SMSA	5656	23.2	25.4	17.1	8.7	25.7
Other SMSA	8173	26.2	27.2	15.5	8.6	22.5
Non-SMSA	4100	22.7	27.3	16.8	9.2	23.9

NOTE: See Appendix D for definition of variables in table.

TABLE 12-2

Cigarettes: Trends in Lifetime Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent ever used			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	17929	73.6	75.4	75.7	+0.3
Sex:					
Male	8244	75.7	75.6	76.5	+0.9
Female	9023	71.7	74.8	74.8	0.0
College Plans:					
None or under 4 yrs	7582	NA	80.8	81.0	+0.2
Complete 4 yrs	8777	NA	69.1	70.0	+0.9
Region:					
Northeast	4607	74.7	78.2	76.5	-1.7
North Central	5566	75.5	76.3	77.8	+1.5
South	4774	72.9	75.6	75.4	-0.2
West	2982	69.6	68.8	70.7	+1.9
Population Density:					
Large SMSA	5656	74.7	75.5	76.8	+1.3
Other SMSA	8173	71.5	73.8	73.8	0.0
Non-SMSA	4100	75.4	77.2	77.3	+0.1

NOTES: Level of significance of difference between 1976 and 1977:  
 $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 12-3

Cigarettes: Trends in Thirty-Day Prevalence of Use by Subgroups

	Number of Cases (Class of 1977)	Percent who used in last thirty days			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 <i>change</i>
All seniors	17902	36.7	38.8	38.4	-0.4
Sex:					
Male	8226	37.2	37.7	36.6	-1.1
Female	9021	35.9	39.1	39.6	+0.5
College Plans:					
None or under 4 yrs	7569	NA	46.3	46.2	-0.1
Complete 4 yrs	8769	NA	29.8	29.4	-0.4
Region:					
Northeast	4596	40.1	41.8	43.0	+1.2
North Central	5554	39.5	41.3	40.5	-0.8
South	4775	36.2	39.1	37.6	-1.5
West	2977	26.3	28.3	27.7	-0.6
Population Density:					
Large SMSA	5643	39.7	40.4	40.9	+0.5
Other SMSA	8166	35.1	35.9	36.1	+0.2
Non-SMSA	4093	36.7	40.9	39.2	-1.7

NOTES: Level of significance of difference between 1976 and 1977:

*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

TABLE 12-4

Cigarettes: Trends in Thirty-Day Use of Half-Pack a Day or More  
by Subgroups

	Number of Cases (Class of 1977)	<u>Percent who smoked half-pack a day or more in last thirty-days</u>			
		<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
All seniors	17902	17.9	19.2	19.4	+0.2
Sex:					
Male	8226	19.6	19.9	19.7	-0.2
Female	9021	16.1	18.0	18.9	+0.9
College Plans:					
None or under 4 yrs	7569	NA	25.5	26.9	+1.4
Complete 4 yrs	8769	NA	11.9	11.2	-0.7
Region:					
Northeast	4596	22.0	22.5	24.2	+1.7
North Central	5554	18.8	20.3	20.3	0.0
South	4775	16.8	19.0	18.5	-0.5
West	2977	11.3	12.4	11.5	-0.9
Population Density:					
Large SMSA	5643	21.7	20.1	20.4	+0.3
Other SMSA	8166	17.4	18.9	18.8	-0.1
Non-SMSA	4093	15.9	19.0	19.5	+0.5

NOTES: Level of significance of difference between 1976 and 1977:  
s = .05, ss = .01, sss = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.



TABLE 12-5

Cigarettes: Frequency of Use in Past Thirty Days by Subgroups, Class of 1977  
(Entries are percentages)

	Number of Cases	Not at all	Under 1 per day	1-5 per day	About ½ pack a day	About 1 pack a day	About 1½ pack a day	2 or more pack a day
All seniors	17902	61.6	9.6	9.4	9.1	8.1	1.8	0.4
Sex:								
Male	8226	63.4	9.5	7.5	8.5	8.8	2.0	0.4
Female	9021	60.4	9.6	11.1	9.6	7.3	1.6	0.3
College Plans:								
None or under 4 yrs	7569	53.8	9.0	10.2	12.1	11.5	2.7	0.7
Complete 4 yrs	8769	70.6	10.1	8.0	5.6	4.5	1.0	0.2
Region:								
Northeast	4596	57.0	9.1	9.7	11.5	9.9	2.1	0.6
North Central	5554	59.5	11.1	9.1	9.2	9.0	1.7	0.5
South	4775	62.4	8.9	10.2	8.5	7.4	2.3	0.3
West	2977	72.3	8.6	7.7	6.1	4.5	0.8	0.1
Population Density:								
Large SMSA	5643	59.1	10.0	10.5	9.8	8.2	1.8	0.5
Other SMSA	8166	63.9	8.8	8.5	8.7	8.0	1.7	0.4
Non-SMSA	4093	60.8	10.1	9.6	9.1	8.0	2.1	0.4

NOTE: See Appendix D for definition of variables in table.

TABLE 12-6

Cigarettes: Trends in Frequency of Use for Lifetime and Last Thirty Days and in Probability of Future Use  
(Entries are percentages)

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
<u>Lifetime use</u>			
Never	26.4	24.6	24.3
Once or twice	26.8	25.8	26.7
Occasionally but not regularly	16.4	16.9	16.4
Regularly in the past	8.6	9.2	8.8
Regularly now	21.9	23.5	23.8
	N = (10373)	(16107)	(17929)
<u>Use in last thirty days</u>			
Not at all	63.3	61.2	61.6
Under 1 per day	9.8	10.0	9.6
1-5 per day	9.0	9.5	9.4
About 1/2 pack/day	8.3	9.3	9.1
About 1 pack/day	7.3	7.9	8.1
About 1 1/2 pack/day	1.9	1.7	1.8
2 or more pack/day	0.4	0.3	0.4
	N = (10315)	(16079)	(17902)
<u>Probability of future use</u>			
Definitely will not	40.6	50.2	51.0
Probably will not	31.0	28.1	29.4
Probably will	27.4	20.5	18.2
Definitely will	1.0	1.2	1.4
	N = (2259)	(3262)	(3624)

TABLE 12-7

Cigarettes: Trends in Grade in Which First Used  
on a Regular Daily Basis<sup>a</sup>

	Percent reporting first regular daily use in each grade		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Sixth grade (or below)	1.9	2.4	2.6
Seventh or Eighth grade	5.3	6.6	8.9
Ninth grade	6.2	8.3	7.9
Tenth grade	7.3	6.4	6.0
Eleventh grade	5.1	5.9	4.3
Twelfth grade	2.6	2.5	2.1
Grade not known	2.0	0.6	0.8
Never smoked daily	69.5	67.3	67.4
	N <sup>b</sup> = (3085)	(2901)	(5926)

<sup>a</sup>Question asks respondents when they first smoked cigarettes "on a daily basis." If a student did not indicate that she/he ever smoked regularly on the lifetime prevalence question for cigarettes, she/he was automatically assigned to the answer category "Never smoked daily" on this question.

<sup>b</sup>This question was asked in one form only in 1975 and 1976 and in two forms in 1977.

TABLE 12-8

Cigarettes: Grade in Which First Used by Subgroups, Class of 1977<sup>a</sup>  
 (Entries are percentages)

	Number of Cases	Grade in school							Not known	Never smoked daily
		6 or below	7/8	9	10	11	12			
All seniors	5926	2.6	8.9	7.9	6.0	4.3	2.1	0.8	67.4	
Sex:										
Male	2745	3.7	8.8	7.2	5.0	3.8	1.6	0.4	69.4	
Female	3062	1.5	9.0	8.7	6.9	4.7	2.6	0.7	65.9	
College Plans:										
None or under 4 yrs	2468	3.5	12.1	10.3	7.9	5.3	2.5	0.0	58.4	
Complete 4 yrs	3066	1.5	5.5	5.5	4.1	3.3	1.7	1.5	76.8	
Region:										
Northeast	1428	2.4	11.5	8.7	7.7	3.9	1.8	1.8	62.3	
North Central	1956	2.6	9.2	8.5	5.9	5.3	2.1	0.0	66.5	
South	1572	2.9	8.0	8.1	5.5	4.3	2.6	0.8	67.8	
West	970	2.2	6.1	5.0	4.2	2.9	1.8	0.7	77.1	
Population Density:										
Large SMSA	1773	3.0	11.1	8.9	5.8	4.2	1.8	0.0	65.2	
Other SMSA	2729	2.5	8.0	7.7	6.0	4.2	1.7	1.1	68.9	
Non-SMSA	1424	2.3	8.5	7.5	6.2	4.6	2.8	1.3	66.9	

NOTE: See Appendix D for definition of variables in table.

<sup>a</sup>Question asks respondents when they first smoked cigarettes "on a daily basis." If a student did not indicate that she/he ever smoked regularly on the lifetime prevalence question for cigarettes, she/he was automatically assigned to the answer category "Never smoked daily" on this question.

TABLE 12-9

Cigarettes: Trends in Use Prior to Tenth Grade by Subgroups

	Number of Cases (Class of 1977)	Percent reporting first use prior to tenth grade <sup>a</sup>			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
All seniors	5926	13.5	17.3	19.4	+2.1 s
Sex:					
Male	2745	14.0	17.8	19.7	+1.9
Female	3062	12.3	16.7	19.2	+2.5
College Plans:					
None or under 4 yrs	2468	NA	22.8	25.8	+3.0 s
Complete 4 yrs	3066	NA	10.8	12.5	+1.7
Region:					
Northeast	1428	19.5	20.4	22.5	+2.1
North Central	1956	14.5	17.7	20.2	+2.5
South	1572	9.8	16.7	18.9	+2.2
West	970	10.2	13.0	13.3	+0.3
Population Density:					
Large SMSA	1773	19.3	17.4	23.0	+5.6 sss
Other SMSA	2729	13.3	17.0	18.1	+1.1
Non-SMSA	1424	9.9	17.5	18.2	+0.7

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

Number of cases for 1975 and 1976 can be found in Appendix C.

See Appendix D for definition of variables in table.

NA indicates data not available.

<sup>a</sup>Question asks respondents when they first smoked cigarettes "on a daily basis." If a student did not indicate that she/he ever smoked regularly on the lifetime prevalence question for cigarettes, she/he was automatically assigned to the answer category "Never smoked daily" on this question.

## Chapter 13

# ATTITUDES AND BELIEFS ABOUT DRUG USE

In the drug area, like most other areas of social behavior, the causal linkages among beliefs, attitudes, and actual behaviors are very complex. Changes in attitudes about drug use, or in beliefs about the probable consequences of drug use, may lead to changes in actual usage--particularly if there are not off-setting influences, such as changes in availability. On the other hand, if behaviors change (e.g., more people try a drug) attitudes about such behavior, particularly the attitude of the new users, may change subsequently--thus reversing the causal and temporal connection. But it also seems quite plausible that causation could work in both direction at once.

Despite these complexities in interpretation, in designing the study we felt that monitoring some general beliefs and attitudes concerning drug use might eventually contribute to understanding changes in drug use over time (and perhaps even to predicting them). In this chapter we present the cross-time results for three sets of attitude and belief questions: one concerning how harmful the students think various kinds of drug use would be for the user, the second concerning how much they personally disapprove of various kinds of drug use, and the third about the legality of using various drugs under various conditions.

### Perceived Harmfulness of Drugs

#### Beliefs in 1977 about Harmfulness

#### Table(s)

- Regular use of any of the illicit drugs, other than marihuana, is perceived as entailing "great risk" of harm for the user by a substantial majority of high school seniors. Some 86% of the sample feel this way about heroin--the highest proportion for any of these drugs. About equal proportions (around 68%) attribute great risk to amphetamines, barbiturates, and cocaine while 79% associate great risk with using LSD. 1
- Regular use of cigarettes (i.e., one or more packs a day) is judged by the majority (58%), but by no means all students, as entailing great risk of harm. 1
- In contrast to the above figures, regular use of marihuana is judged to involve great risk by only 36% of the sample, or about one in three. 1

Table(s)

- Regular use of alcohol was more explicitly defined in several questions. Very few (19%) 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 (63%) think the user takes a great risk in consuming four or five drinks nearly every day. However, very heavy drinking is not judged to be as harmful as the regular use of any of the illicit drugs, marihuana excepted. 1
- As would be expected, fewer respondents feel that the experimental or occasional user runs a risk than feel that way about regular users. 1
- Very few think there is much risk in using marihuana occasionally (13%). 1
- 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 31% for amphetamines and barbiturates to 56% for heroin. 1
- Practically no one (4%) believes there is great risk involved in trying an alcoholic beverage once or twice. 1

Trends in Perceived Harmfulness

- For all of the illicit drugs there is a consistent trend over the past two years in the direction of fewer students associating personal risk with use. The shift is most clearly evident in relation to experimental and occasional use. 1
- The greatest decline in perceived risk has occurred for marihuana. The proportion seeing great risk in regular use of marihuana declined from 43% to 36% between 1975 and 1977, during the same period over which regular use actually has increased considerably. 1
- The next greatest decline has occurred for cocaine; the percentage who think there is great risk in trying it once or twice has dropped from 43% in 1975 to 36% in 1977. 1
- Experimental (but not regular) use of LSD has also shown a decline in perceived risk, perhaps reflecting some recovery from the effects of the widely publicized studies which suggested possible genetic and brain damage. 1

Table(s)

- In dramatic contrast to all the above trends, there has been a fair-sized increase in the number who think smoking cigarettes involves great risk to the user (51% in 1975 vs. 58% in 1977). 1

Personal Disapproval of Drug Use

A set of question was developed to try to uncover any general moralistic sentiment attached to various types of drug use. The rudimentary, but oft-used, phrasing of "Do you disapprove of..." was adopted. In the 1975 questionnaires we presented two different versions of the questions on disapproval--one asking about the use of drugs by adults (defined as people "20 or older") and the other asking about use by people under 20. We assumed that students would make differential judgements for these two age groups; but, in fact, the results were almost identical. Therefore, only a single set of questions was retained in subsequent years which asks about "people who are 18 or older." The age is specified in the question primarily to help clarify it and to help keep its meaning constant over time.

Extent of Disapproval in 1977

Table(s)

- A substantial majority of high school seniors express disapproval of regular use of each of the illicit drugs, ranging from 66% disapproving regular marihuana use to 92% disapproving regular cocaine use (the second lowest) to 97% disapproving regular heroin use. 2
- Drinking at the rate of one or two drinks daily receives disapproval from two-thirds of the seniors (67%)--almost exactly the same proportion who disapprove regular marihuana use. Interestingly, weekend binge drinking (five or more drinks once or twice each weekend) was acceptable to more people (only 57% disapproved). 2
- Smoking a pack (or more) of cigarettes per day also received the disapproval of two-thirds (66%). 2
- For all drugs fewer people indicate disapproval of experimental or occasional use than of regular use, as would be expected. 2
- The differences are not so great, however, for the illicit drugs other than marihuana. To illustrate, 84% disapprove of trying LSD even once or twice, and 93% disapprove experimenting with heroin. 2
- For marihuana, however, the rate of disapproval is substantially less for experimental use (33%) and occasional use (44%) than for regular use (66%). In other words only one out of three disapprove of trying marihuana and less than half disapprove of occasional use of the drug. 2



Trends in Disapproval

- Despite the decline in perceived harmfulness of most drugs, licit and illicit, there has been very little change over the past two years in levels of disapproval for any of them. There are two exceptions: 2
- The small minority who disapprove of trying alcohol once or twice (22% in 1975) has grown even smaller (16% in 1977). 2
- More important, there has been a substantial and steady decrease over the last two years in the proportion of seniors who disapprove of marihuana use at any level of frequency. About 14% fewer of them in the class of 1977 (compared with the class of 1975) disapprove of experimenting, 11% fewer disapprove of occasional use, and 6% fewer disapprove of regular use. These are greater changes than have been observed in the actual usage figures, so a shifting proportion of users cannot account for all of the change. 2

Attitudes Regarding the Legality of Drug Use

Since the legal restraints on drug use appeared likely to be in a state of flux, we decided at the beginning of the study to measure attitudes about legal sanctions. Table 13-3 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.

Attitudes in 1977 Regarding the Legality of Use

- A stunning 42% 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 (49%). 3
- The majority (59%) favor legally prohibiting marihuana use in public places. 3
- In addition, the great majority believe that the public use of illicit drugs other than marihuana should be prohibited by law (e.g., 74% in the case of amphetamines and barbiturates, 81% for heroin). 3
- For all drugs, substantially fewer students believe use in private should be illegal than express that view about public use. 3

Table(s)

- The difference is greatest in the case of excessive alcohol use. While 49% favor legal prohibition for public drunkenness, only 19% favor prohibiting private drunkenness. 3
- The percentage who think the private use of marihuana should be legally prohibited (27%) is less than half the percentage who think that use in public should be illegal (59%). 3
- The differences in attitudes regarding public vs. private use are less pronounced for the other illicit drugs, however. A fair majority feel that use of heroin (69%) and LSD (63%) should be illegal, even when it occurs in private. A slight majority (53%) favor the prohibition of amphetamine or barbiturate use in private. 3

Trends in Attitudes about the Legality of Use

- Over the last two years there has been a steady decline in the proportion of seniors who favor legal prohibition of use in public or private of any of the illicit drugs. 3
- There has been a similar decline relevant to public drunkenness; but, strangely enough, an increasing proportion favor legal prohibition against getting drunk in private. 3

The Legal Status of Marihuana

Another set of questions was included dealing specifically with marihuana 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 taken with a grain of salt, we think it worth exploring how young people think they might respond to such changes in the law.

Attitudes and Beliefs in 1977

- About a third of the 1977 seniors believe marihuana use should be entirely legal (34%). Nearly another third (31%) feel it should be treated as a minor violation--like a parking ticket--but not as a crime. (This constitutes a rough definition of decriminalization.) Another 13% indicate no opinion, and only 22% feel it should be a crime. In other words, fully three-quarters of those expressing an opinion believe that marihuana use should not be treated as a criminal offense. 4

Table(s)

- Asked whether they thought it should be legal to sell marihuana if it were legal to use it, nearly two-thirds (65%) said yes. Most of those would permit sale only to adults, however. 4
- In the aggregate, high school seniors predict that they would be little affected by the legalization of the sale and use of marihuana. About half of the respondents (51%) say that they would not use marihuana, even if it were legal and available, and another 27% indicate they would use it about as often as they do now. Slightly more than 7% say they would use it more often than at present and another 7% say they would try it. About 7% more say they do not know how they would react. 4

Trends in Attitudes about the Legal Status of Marihuana

- Over the last two years the proportion of seniors who favor treating use as a crime has dropped 9% from 31% to 22%. The number undecided has also dropped about 3%. (It should be noted that during this two-year period a number of states actually enacted decriminalization statutes.) 4
- The proportion opposing the legalized sale of marihuana has dropped from 28% in 1975 to 23% in 1977. Interestingly, the proportion favoring sale to anyone (not just to adults) also has dropped, as has the proportion who are undecided. 4
- Over the same two years the proportion favoring legalized sale to adults only (assuming legalized use) has risen a full 15% from 37% to 52%. 4
- The predictions of personal marihuana use under legalization are quite similar for the high school classes of 1975, 1976, and 1977. The slight shifts over the two-year interval can be attributed to the increased proportion of seniors who actually have used marihuana. 4

TABLE 13-1

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" <sup>a</sup>			
	Class of 1975	Class of 1976	Class of 1977	'76-'77 change
Try marihuana once or twice	15.1	11.4	9.5	-1.9 s
Smoke marihuana occasionally	18.1	15.0	13.4	-1.6
Smoke marihuana regularly	43.3	38.6	36.4	-2.2
Try LSD once or twice	49.4	45.7	43.2	-2.5
Take LSD regularly	81.4	80.8	79.1	-1.7
Try cocaine once or twice	42.6	39.1	35.6	-3.5 s
Take cocaine regularly	73.1	72.3	68.2	-4.1 ss
Try heroin once or twice	60.1	58.9	55.8	-3.1 s
Take heroin occasionally	75.6	75.6	71.9	-3.7 ss
Take heroin regularly	87.2	88.6	86.1	-2.5 s
Try amphetamines once or twice	35.4	33.4	30.8	-2.6
Take amphetamines regularly	69.0	67.3	66.6	-0.7
Try barbiturates once or twice	34.8	32.5	31.2	-1.3
Take barbiturates regularly	69.1	67.7	68.6	+0.9
Try one or two drinks of an alco- holic beverage (beer, wine, liquor)	5.3	4.8	4.1	-0.7
Take one or two drinks nearly every day	21.5	21.2	18.5	-2.7 s
Take four or five drinks nearly every day	63.5	61.0	62.9	+1.9
Have five or more drinks once or twice each weekend	37.8	37.0	34.7	-2.3
Smoke one or more packs of cigarettes per day	51.3	56.4	58.4	+2.0
	N = (2804)	(3225)	(3570)	

NOTE: Level of significance of difference between 1976 and 1977:  
s = .05, ss = .01, sss = .001.

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

TABLE 13-2

Trends in Proportions Disapproving of Drug Use

Q. Do you disapprove of people (who are 18 or older) doing each of the following? <sup>b</sup>	Percent disapproving <sup>a</sup>			
	Class of 1975	Class of 1976	Class of 1977	'76-'77 change
Trying marihuana once or twice	47.0	38.4	33.4	-5.0 <i>sss</i>
Smoking marihuana occasionally	54.8	47.8	44.3	-3.5 <i>s</i>
Smoking marihuana regularly	71.9	69.5	65.5	-4.0 <i>ss</i>
Trying LSD once or twice	82.8	84.6	83.9	-0.7
Taking LSD regularly	94.1	95.3	95.8	+0.5
Trying cocaine once or twice	81.3	82.4	79.1	-3.3 <i>ss</i>
Taking cocaine regularly	93.3	93.9	92.1	-1.8 <i>s</i>
Trying heroin once or twice	91.5	92.6	92.5	-0.1
Taking heroin occasionally	94.8	96.0	96.0	0.0
Taking heroin regularly	96.7	97.5	97.2	-0.3
Trying an amphetamine once or twice	74.8	75.1	74.2	-0.9
Taking amphetamines regularly	92.1	92.8	92.5	-0.3
Trying a barbiturate once or twice	77.7	81.3	81.1	-0.2
Taking barbiturates regularly	93.3	93.6	93.0	-0.6
Trying one or two drinks of an alco- holic beverage (beer, wine, liquor)	21.6	18.2	15.6	-2.6 <i>s</i>
Taking one or two drinks nearly every day	67.6	68.9	66.8	-2.1
Taking four or five drinks every day	88.7	90.7	88.4	-2.3 <i>s</i>
Having five or more drinks once or twice each weekend	60.3	58.6	57.4	-1.2
Smoking one or more packs of cigarettes per day	67.5	65.9	66.4	+0.5
	N = (2677)	(3234)	(3582)	

NOTE: Level of significance of difference between 1976 and 1977:

*s* = .05, *ss* = .01, *sss* = .001.

<sup>a</sup>Answer alternatives were: (1) Don't disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

<sup>b</sup>The 1975 question asked about people who are "20 or older."

TABLE 13-3

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: <sup>b</sup>	Percent saying "yes" <sup>a</sup>			
	Class of 1975	Class of 1976	Class of 1977	'76-'77 change
Smoking marihuana in private	32.8	27.5	26.8	-0.7
Smoking marihuana in public places	63.1	59.1	58.7	-0.4
Taking LSD in private	67.2	65.1	63.3	-1.8
Taking LSD in public places	85.8	81.9	79.3	-2.6 s
Taking heroin in private	76.3	72.4	69.2	-3.2 s
Taking heroin in public places	90.1	84.8	81.0	-3.8 sss
Taking amphetamines or barbiturates in private	57.2	53.5	52.8	-0.7
Taking amphetamines or barbiturates in public places	79.6	76.1	73.7	-2.4
Getting drunk in private	14.1	15.6	18.6	+3.0 ss
Getting drunk in public places	55.7	50.7	49.0	-1.7
Smoking cigarettes in public places	NA	NA	42.0	NA
	N = (2620)	(3265)	(3629)	

NOTES: Level of significance of difference between 1976 and 1977:  
*s* = .05, *ss* = .01, *sss* = .001.

NA indicates question not asked.

<sup>a</sup>Answer alternatives were: (1) No, (2) Not sure, and (3) Yes.

<sup>b</sup>The 1975 question asked about people who are "20 or older."

TABLE 13-4

Trends in Attitudes Regarding Marihuana Laws  
(Entries are percentages)

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
<i>Q. There has been a great deal of public debate about whether marihuana use should be legal. Which of the following policies would you favor?</i>			
Using marihuana should be entirely legal	27.3	32.6	33.6
It should be a minor violation--like a parking ticket--but not a crime	25.3	29.0	31.4
It should be a crime	30.5	25.4	21.7
Don't know	16.8	13.0	13.4
	N = (2617)	(3264)	(3622)
<i>Q. If it were legal for people to USE marihuana, should it also be legal to SELL marihuana?</i>			
No	27.8	23.0	22.5
Yes, but only to adults	37.1	49.8	52.1
Yes, to anyone	16.2	13.3	12.7
Don't know	18.9	13.9	12.7
	N = (2616)	(3279)	(3628)
<i>Q. If marihuana 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
Try it	8.2	8.1	7.0
Use it about as often as I do now	22.7	24.7	26.8
Use it more often than I do now	6.0	7.1	7.4
Use it less than I do now	1.3	1.5	1.5
Don't know	8.5	8.1	6.6
	N = (2602)	(3272)	(3625)

## Chapter 14

### PERCEIVED AVAILABILITY OF DRUGS

Various indicators of drug availability through illicit channels have been developed--for example, indexes of price and purity of drugs bought on the street by undercover agents and police informants. However, most of these efforts have been addressed specifically to heroin availability. To our knowledge, there has been much less effort to measure the availability of most other drug classes and there has never been an attempt to sample systematically either populations "at risk," e.g., high school students, or actual users, for the purpose of monitoring through survey techniques their perceptions regarding the availability of drugs. In this study we have attempted to make such an assessment.

A set of self-report questions, which ask each respondent how difficult s/he thinks it would be to obtain each type of drug if s/he wanted some, was included in the study. 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 strong 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, at least to some extent.

Data are presented in this chapter on two different types of respondents: first, on all respondents completing a questionnaire form--both users and nonusers--and second, on those respondents who are relatively recent users of the drug for which availability is being ascertained. The entire sample is a relevant reporting group in that the presumed availability of a drug--whether accurately perceived or not--may well influence their propensity to use it. The "recent user" group (that is, people who report use within the previous year) is relevant as well, not only because they are the most "at risk" segment of the population, but because they are also most likely to be aware of the objective realities. Further, by looking only at user groups in examining trends, one is more likely to remove any shifts in the subjective data caused by shifting proportions of the population who are users.



Perceived Availability in 1977

Total Sample

Table

- 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. 1
- Marihuana appears to be almost universally available to high school seniors; 88% reported that they think it would be "very easy" or "fairly easy" for them to get--about 20% more than the number who report ever having used it. 1
- After marihuana, the students indicate that the psychotherapeutic drugs are the most available to them: tranquilizers are seen as available to 65%, amphetamines to 58%, and barbiturates to 52%. 1
- Each of a number of the less frequently used drugs (i.e., hallucinogens, cocaine, and opiates other than heroin) are reported as available by only about three or four out of every ten seniors (from 28% to 35%). 1
- Heroin is seen by the fewest seniors (18%) as fairly easy to get. 1

"Recent User" Subgroups

- The majority of 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. 2
- There is some variation by drug class, however. Nearly all (from 80% to 98%) of the users of marihuana or psychotherapeutic drugs (amphetamines, barbiturates, and tranquilizers) feel they could still get the same drug(s). Fewer (around 70%) of the users of cocaine or of hallucinogens other than LSD feel they could get those drugs fairly easily. And still fewer (around 55%) of those who used LSD, heroin, or other opiates in the past year feel it would be fairly easy for them to get the same drug. 2

Trends in Perceived Availability

- Over the last two years, the proportion reporting relatively easy access has dropped for all illicit drugs except marihuana. 1
- Marihuana availability, in contrast, has remained almost perfectly steady across the last three high school classes (at between 87% to 88% of the entire sample). 1
- The greatest decrement in perceived availability occurs for hallucinogens, i.e., for LSD and for other psychedelics. (The proportion of the sample who report fairly easy access dropped from about 48% to about 34% between 1975 and 1977.) 1
- The above-mentioned trends from the entire sample all are replicated in the reports from recent users of each type of drug, i.e., from those who report use in the preceding year. (Note that the data from recent users of heroin must be taken only as suggestive, due to the low numbers of cases.) 2
- Most of the decrement for illicit drugs other than marihuana occurred between 1975 and 1976, but the trend seems to have continued into 1977 for hallucinogens, amphetamines, and barbiturates. 1,2
- The perceived availability of heroin, other narcotics, tranquilizers, and cocaine appears to have remained about steady over the past year, after dropping considerably between 1975 and 1976. 1,2

TABLE 14-1  
Trends in Reported Availability of Drugs

	Percent saying drug would be "Fairly easy" or "Very easy" for them to get <sup>a</sup>			
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>'76-'77 change</u>
<i>Q. How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?</i>				
Marihuana	87.8	87.4	87.9	+0.5
LSD	46.2	37.4	34.5	-2.9 s
Some other psychedelic	47.8	35.7	33.8	-1.9
Cocaine	37.0	34.0	33.0	-1.0
Heroin	24.2	18.4	17.9	-0.5
Some other narcotic (including methadone)	34.5	26.9	27.8	+0.9
Amphetamines	67.8	61.8	58.1	-3.7 s
Barbiturates	60.0	54.4	52.4	-2.0
Tranquilizers	71.8	65.5	64.9	-0.6
	N = (2627)	(3163)	(3562)	

NOTE: Level of significance of difference between 1976 and 1977:  
s = .05, ss = .01, sss = .001.

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

TABLE 14-2

Trends in Perceived Availability of Each Drug as Reported  
by Recent Users of that Drug<sup>a</sup>

	Number of Cases (Class of 1977)	Percent saying drug would be "Fairly easy" or "Very easy" for them to get <sup>b</sup>			
		Class of 1975	Class of 1976	Class of 1977	'76-'77 change
<i>Q. How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?</i>					
Marihuana	1714	97.7	98.6	98.2	- 0.4
LSD	225	77.1	66.4	55.6	-10.8
Some other psychedelic	249	79.0	71.1	68.3	- 2.8
Cocaine	267	72.2	69.8	68.9	- 0.9
Heroin	27	56.5	66.9	53.0	-13.9
Some other narcotic (including methadone)	245	67.4	56.0	56.2	+ 0.2
Amphetamines	568	92.5	86.4	84.7	- 1.7
Barbiturates	341	81.9	82.9	79.0	- 3.9
Tranquilizers	397	89.3	83.0	84.4	+ 1.4

NOTES: Level of significance of difference between 1976 and 1977:  
s = .05, ss = .01, sss = .001.

<sup>a</sup>Figures are based on all respondents who report use of the drug in the prior twelve months.

<sup>b</sup>Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, and (5) Very easy.

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### **III. APPENDICES**

## Appendix A

### REPRESENTATIVENESS AND VALIDITY

As discussed in the Introduction to this report, the data reported herein are intended to be representative of high school seniors throughout the 48 coterminous states. Four factors were noted which could render the data less than fully accurate: (1) some schools which are sampled fail to participate; (2) some students who are sampled fail to participate; (3) the answers of some participating students may be distorted; and (4) the sample selected may not be truly representative of the total population. The effects of this last factor can be estimated statistically; in Appendix B the estimates are presented and discussed. The possible effects of the other three factors, however, are not amenable to such precise quantification; rather, their effects are more matters of informed judgement. In the following sections we discuss and offer our judgements on each, elaborating on the facts which underly our inferences.

#### School Participation

The study is designed in such a way that each year (after the first), the sample of schools consists of half participating for the first time, and half participating for the second time. Of the 128 schools initially selected in 1975, we eventually secured cooperation and collected data from 102. This represents a participation rate of 79% for the half-sample invited to participate for two years, and 81% for the half-sample invited to participate for only one. For the remaining 26 schools, whose cooperation was not secured, substitute schools were selected to match closely the nonparticipating schools according to their goodness of fit on several criteria. These substitute schools were from the same geographic areas, from similar neighborhoods, and of similar size and racial composition. In the event of a refusal by the substitute school, a second (and if necessary, a third or fourth) substitute school was selected and invited to participate. Cooperation was obtained from an original or a substitute school in all but one or two instances each year. In the very few cases where no school was obtained, compensatory weighting of the data from similar participating schools was used to improve the population estimates.

In 1976 and 1977, cooperation was obtained from 66% and 67% of the new half samples of schools, respectively. In both years, half of the sample consisted of repeat schools, schools which had participated in the previous year, and only once did one of these fail to participate for a



second year. For 1976, 98% of the repeat schools participated, and for 1977, the corresponding figure was 100%. A substitute school was used to replace the school which dropped out.\*

Reasons for Nonparticipation by Schools. Securing the cooperation of selected schools is often a long and arduous process. No school is an isolated unit; each is part of a larger local school district or system. Frequently, approval for a school's participation in the survey was required from some official in addition to the principal of the selected school. In some cases this would be the superintendent or, particularly in the larger systems, an official whose approval was required for all research conducted in the system.

Complicating the process was the fact that considerable variation exists in the local laws governing research conducted in schools. In some cases, parental consent must be obtained. School boards, teacher associations, and parent associations all may have a voice in whether or not a school participates.

Efforts to secure cooperation entails letters, telephone calls, and occasionally a personal visit from some member of the survey staff. Most of this personal contact is now being carried out by University of Michigan doctoral students who have had previous experience themselves in school administration, either as superintendents, principals, or other high level administrators.

The standard procedure is for them initially to contact the principal of a selected school by phone after s/he has received a letter of invitation. Many of the refusals come at this point. The reasons most commonly given are that the school objects to using student time for surveys, that they have already committed to too many surveys that year, that there is some temporary crisis or disruption in the system that year (mandatory integration, a teacher strike, budgetary difficulties), that the necessary people will not approve the survey due to its content, or that they fear parental reaction to a survey dealing with social issues. Often a principal will want, or be required, to obtain approval from another source even if s/he favors participation by his school. The reasons given for refusal at these higher levels also tend to be of the same variety as those listed above.

It should be remembered that there is no concrete incentive or reward for a school's participation, other than a promise of future reports from the study. Therefore, the major motivation for most administrators is their desire to contribute to the goals of the research. Under those conditions, it is not surprising that a number decline to participate in any given year.

Though somewhat of an aside, it may be useful to compare the participation rates obtained in this study with other studies of similar populations. The most comparable study was performed for the National Institute on

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\*Early results for the 1978 administration indicate 98% of the repeat half-sample will continue to participate for their second year and that between 76% and 83% of the new half-sample will participate in the administration.

Alcohol Abuse and Alcoholism (Rachal et al., 1975). This national study of drinking behavior among youth sampled classrooms from Grades 7 through 12 for questionnaire administrations in the spring of 1974 in a large (unspecified) number of schools. The researchers were able to obtain cooperation from 68% of the original classrooms; so presumably the school participation rates were about the same. This figure compares to our school participation figures of 80%, 73%, and 67% for the classes of 1975, 1976, and 1977.

Another large national study is the National Longitudinal Study of the High School Class of 1972. This study, which did not contain questions about drug use, obtained cooperation from 80% of the initially sampled schools (Fetters, 1975). The Youth in Transition Study samples of high school students, conducted at the Institute for Social Research in 1966, obtained a school participation rate of 81% (Bachman, 1971). Finally, the Congressionally mandated Equality of Educational Opportunity study, conducted in 1965, obtained pupil questionnaires and tests from no more than 67% of the sampled high schools (Coleman et al., 1966).

Given the sensitive nature of the questions in the present study, and the increasing conservatism of school administrators concerning research (because of the new, poorly understood privacy laws) we feel that the present participation rates are quite good, although we will be attempting to improve them.

Effects of Nonparticipation. It is reasonable to ask whether nonparticipation of some of the originally sampled schools has a significant effect on the findings. Insofar as population estimates of drug use and attitudes are concerned, the answer depends on two factors: the size of the refusal rate and the similarity of the substitute schools to the original schools they are replacing. With respect to the first factor, first year cooperation has been obtained from between 66% and 81%, so that only between one-fifth and one-third of the schools are substitutes in any given year. Further, the substitutes are chosen to be as similar as possible to the original school. With respect to the second factor, there is no particular reason to expect that the students in schools which refused are greatly different from those in schools which agreed to participate. The reasons for nonparticipation are based primarily on general policy issues and/or on somewhat happenstance events that particular year which would not be expected to relate systematically to drug use. In sum, the school refusal rate is not excessively high for school-based studies and the substitute schools seem likely to be quite similar to the refusal schools.

There is an additional point to be considered. Insofar as monitoring changes is concerned, the effects of school nonparticipation should be minimal. Any systematic biases that might emerge (say, underrepresenting conservative districts) should be approximately replicated from year to year, so the trend data should accurately reflect any major changes which might be occurring. A partial check on the adequacy of the sample of schools is to compare trend data based on the total sample with trend data based only on the half-sample which remains constant from one year to the next. Since this half-sample consists of the same set of schools, the trends cannot be affected by schools' participation or refusals. We examined drug use trend estimates for 1975 and

1976, comparing the data from all schools with the data from only the constant half-sample. These estimates were extremely similar, suggesting that any errors due to sampling of schools is constant.

### Student Participation

The response rates for eligible seniors are given in Table A-1. Usable questionnaires were obtained from between 73% and 80% of eligible students over the first three years of the study. A very small percentage actually refused to fill out the questionnaires; the much greater source of nonparticipation was absenteeism. Because only one survey administration is conducted in each school (except in cases where the participation rate is less than 70%), students who are absent from class on that day are excluded. We know that students with higher absentee rates tend to have higher than average rates of drug use (Kandel, 1975), so missing them will have some effect on drug use estimates.

Effects of Student Nonparticipation. It is possible to use absentee rates in order to adjust drug use estimates. The logic of the adjustment is as follows. A student's probability of being administered the questionnaire is inversely proportional to his or her absentee rate. For example, students who are absent about half the time have only a 50% chance of being present on the survey day. But assuming that on any given day a random half of such students are present, their data can be double-weighted to represent the random half who are absent. One need only determine the probability that students who are present on the survey day would be present, which can be done by asking how many days during the past, say 20 days, the student was absent. Each student's data can then be weighted by a factor equal to  $20/(20 \text{ minus the number of days absent})$ . Thus, a student absent zero days would have a weight equal to 1, and a student absent the maximum of 19 days would have a weight equal to 20.

While this method of adjusting for absenteeism has some appeal, we have elected not to incorporate the correction into the data for this report. There are several reasons for this decision. First, after such adjustments were made in the drug usage rates using the data on absenteeism, it was found that the adjusted figures were only slightly higher than the unadjusted ones. (For example, overall prevalence figures were usually increased by only one-half to two percent for the various drugs.) The complexity of computing adjusted data did not seem to be justified by such slight changes. Second, the very disparate weights engendered by such adjustment substantially increase the sampling variance (Kish, 1965, p. 560). Finally, as has been pointed out earlier, this study focuses on trends, and any systematic, consistent errors are not likely to affect trend data. Thus, we conclude that the effects of student nonparticipation on prevalence and trend estimates are minimal and not worth the cost and difficulty of correction.

### Validity of Self-Report Data

A basic question in all survey work is the extent to which to believe what respondents say, in this case, about their use of drugs. While there is no direct, objective validation of our self-report measures, there exists a

good deal of inferential evidence for their validity:

1. A considerable proportion of respondents, well over half, admit to some illegal use of drugs.
2. There are some rather substantial, and predictable relationships between self-reported drug use and other items dealing with attitudes about drug use, and with behaviors such as academic performance, delinquency, and the self-reported use of licit drugs (Johnston, 1973; Johnston, O'Malley, & Eveland, 1976). In other words, there is considerable empirical evidence of construct validity.
3. The missing data rates on the drug use questions are just about normal for that point in the questionnaire, even though respondents specifically are instructed to leave blank any questions they feel they cannot answer honestly. For all drugs except marihuana, the rate of missing data runs between 2.5% and 3.0%, while the average amount of missing data for the preceding questions run between 1.8% and 2.2%. For marihuana the missing data rate in 1977 is 4.5%, suggesting rather slight underreporting by intentional skipping of questions.
4. Although the longitudinal design of the present study precludes our providing absolute anonymity to respondents, anonymity has appeared to make little difference in self-reported drug use. Other investigators have compared groups differing in degree of anonymity and found little or no difference in self-reports (Haberman et al., 1972; Leutgert & Armstrong, 1973).
5. A number of methodological studies (e.g., Petzel, Johnson, & McKillip, 1973) have included fictitious drugs in survey questionnaires. These fictitious drugs have shown very low levels of reported use, indicating that intentional overreporting is likely to be minimal.
6. Studies employing other data collection methods have shown similar prevalence rates of drug use for the same age group (Abelson & Atkinson, 1975; Abelson & Fishburne, 1976; O'Donnell, 1976).
7. Methodological studies have utilized various methods to determine the validity of self-report data including: urinalysis for drug use; polygraph verification; official police, court, and treatment agency documents; and reports by peers, parents, and teachers. Generally, these studies have been encouraging in their findings. (See, for example, Amsel et al., 1976; Bonito et al., 1976). Gold has reviewed the literature on self-reported delinquent behavior of adolescents and concluded that "the best single measure of delinquent behavior available is self-report of delinquency, and [that]... it is accurate enough for use in rigorous research designs and with sophisticated statistics" (1977).

While there is almost certainly some degree of underreporting of illicit drug use on self-report surveys, we feel that it is far less than most people intuitively assume. Further, for purposes of monitoring trends across time, a fairly constant degree of underreporting should have almost no effect on trend estimates. (For a further discussion of this latter point, see Johnston, 1976.)

TABLE A-1

Response Rates for Seniors

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
Number of obtained questionnaires (weighted)*	15104	15299	15839
Number of eligible respondents (weighted)	20673	20003	20145
Percent response rate	73%	77%	79%

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\*The total weighted N is lower than the total actual N because the average weight assigned to individuals has been less than 1.0. Actual number of cases (unweighted) are 15792 for 1975, 16865 for 1976, and 18436 for 1977.

## Appendix B

### ESTIMATION OF SAMPLING ERRORS

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The errors possible in an estimate based on a sample survey like the present study can be classified into two categories--sampling and nonsampling. Several possible sources of nonsampling errors have been discussed in Appendix A; in the present appendix we focus on sampling errors.

Sampling errors occur because observations are made only on a sample, not on the entire population under study. There are roughly three million seniors located in more than twenty thousand high schools throughout the coterminous United States. Our samples of about 16,000 to 18,000 seniors clustered in about 125 schools can provide close, but less than perfect, estimates of the responses that would have been obtained if all seniors had been asked to complete the survey questionnaires.

### Confidence Intervals and Significant Differences

For any particular percentage resulting from a sample survey we cannot know exactly how much error has resulted from sampling. We can, however, make reasonably good estimates of "confidence intervals"--ranges within which the true population value is very likely to fall. For example, Table 1-1 reports that 56.4% of the seniors sampled from the class of 1977 reported using marihuana at least once in their lifetime. The table also lists a lower limit of 54.4% and an upper limit of 58.4%. These upper and lower boundaries demarcate the 95% confidence interval, which means that the chances are 19 out of 20 (95%) that the true value of the underlying population lies between these limits. A somewhat wider set of limits (in the case of the marihuana illustration they would be from 53.8% to 59.0%) indicate the 99% confidence interval, and a still wider set indicate the 99.9% confidence interval (i.e., there is only 1 chance in 1000 that the true population value would lie beyond these limits).

A confidence interval can be applied to the difference between two percentages, as well as to any single percentage. For example, the difference between the high school classes of 1976 and 1977 in percentages ever using marihuana is 3.6% as shown in Table 1-3, and the 95% confidence limits for that difference are from 1.4% to 5.8%. In other words, the chances are 95 out of 100 that the true population difference between the classes of 1976 and 1977 is at least as large as 1.4% but no larger than 5.8%. The 99% confidence interval would be from 0.8% to 6.5%. Since the lower value is larger than zero, we can also say that the difference between the percentage for 1976 and that for 1977 is "significant at (or beyond) the .01 level," meaning that the chances are less than 1 in 100 that the true values for 1976 and 1977 do not differ (by at least some amount) in the direction shown. (It happens that this difference falls slightly short of significance at the .001 level.)

### Factors Influencing the Size of Confidence Intervals in this Report

The most straightforward types of samples, from a statistical standpoint at least, are simple random samples. In such samples the confidence limits for a proportion are influenced by the size of the sample or subgroup being considered, and also by the size of the proportion. For example, the 95% confidence interval for a proportion (p) based on a simple random sample is

approximated by:  $p \pm 1.96\sqrt{p(1-p)/N}$ . In a complex probability sample such as the present one, there are a number of other factors which influence the size of confidence limits. In this section we list all of the factors which have been taken into account in calculating the confidence intervals used in this report beginning with the most simple factors and then proceeding to the more complex.

Number of Cases (N). Other things equal, the larger the size of a sample (or subgroup within a sample), the smaller or more precise will be the confidence interval for a percentage based on that sample. One of the factors determining the size of the confidence interval is  $1/\sqrt{N}$ . Thus, for example, if all other things were equal a sample of 400 would have confidence intervals half as large (or twice as precise) as a sample of 100, because  $1/\sqrt{400}$  is half as large as  $1/\sqrt{100}$ .

Size of Percentage. Other things equal, percentage values around 50% have larger confidence intervals than higher or lower percentage values. This is because another of the factors determining the size of the confidence interval is  $\sqrt{p(1-p)}$  where p is a proportion ranging from 0 to 1.0 (or, to put it in percentage terms, the factor is  $\sqrt{x\%(100-x\%)}$ ). Thus, for example, a proportion of either .1 or .9 (i.e., a percentage of either 10% or 90%) will have a confidence interval only three fifths as large as the confidence interval around a proportion of .5 (or 50%), because  $\sqrt{.1(1-.1)}$  is three fifths as large as  $\sqrt{.5(1-.5)}$ .

Design Effects in Complex Samples. Under conditions of simple random sampling a confidence interval can be determined simply on the basis of the number of cases and the percentage value involved. More complex samples, such as the one used in the present study, make use of stratification and clustering and often differential weighting of respondent scores, and these all influence sampling error. While stratification tends to heighten the precision of a sample, the effects of clustering and weighting reduce precision (compared with a simple random sample of the same size). Therefore, it is not appropriate to apply the standard, simple random sampling formulas to such complex samples in order to obtain estimates of sampling errors, because they would almost always underestimate the actual sampling errors.

Methods exist for correcting for this underestimation, however. Kish (1965, p. 258) defines a correction term called the design effect (DEFF), where:

$$\text{DEFF} = \frac{\text{actual sampling variance}}{\text{expected sampling variance from simple random sample with same number of elements}}$$

Thus, if the actual sampling variance in a complex sample is four times as large as the expected sampling variance from a simple random sample with the same number of cases, the DEFF is 4.0. Since confidence intervals are proportionate to the square root of variance the confidence intervals for the complex sample would be twice as large (because the square root of 4 is 2) as the confidence interval from a simple random sample with the same number of cases.



A fairly simple and straightforward way of applying the concept of design effect may be to note that an increase in design effect has the same impact on precision as a reduction in the number of cases in a simple random sample. For example, a sample of 4000 cases with a design effect of 4.0 would have the same degree of precision (the same size confidence intervals around various percentages) as a simple random sample of 1000. Thus it is possible to convert actual sample Ns into "effective Ns" by the simple expedient of dividing the actual sample Ns by the design effect. The advantage of doing so is that we can then apply formulas and tables based on simple random sampling without underestimating the actual sampling errors involved in complex samples.\* As we shall see below, the "effective Ns" for the present study are substantially smaller than the actual numbers of cases. This would be true to some degree for nearly all complex samples, but is more true in a highly clustered sample like the present one.\*\*

In principle, every different statistic resulting from a complex sample such as the present one can have its own design effect, and different statistics in the same sample may have quite different design effects. However, it is not feasible to compute every design effect, nor would it be feasible to report every one. Thus, in practice, design effects are averaged across a number of statistics and these average values are used to estimate the design effects for other statistics based on the same sample. Often a single design effect is applied to all statistics of a given type (e.g., percentages) for a given sample. In the present study, however, a rather extensive exploration of design effects revealed systematic differences that prompted us to employ several different average design effects. These systematic differences have to do with the particular measures being examined, the subgroups involved, and the question of whether a trend over time is being considered.

Measures: Drug Use Estimates. There is some tendency for drug usage levels to differ from one school to another, which increases the design effect for samples clustered in schools. The degree of difference among schools varies considerably from one drug to another; therefore, it has proven useful to estimate different sets of average design effects for different classes of drugs. Thus alcohol use and marijuana use both have relatively high design effects. Heroin, on the other hand, shows rather little difference from school to school and thus has relatively low design effects

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\* In studies that make a single estimate of design effect for all data derived from the sample, this conversion into "effective Ns" offers less of an advantage, since a single design effect can be incorporated directly into the sampling error tables. However, in the present study we feel it is most accurate to develop a number of different design effects for different variables, which makes the strategy of converting to "effective Ns" particularly useful.

\*\* It may be worth noting that if the same funds were spent to obtain a simple random sample (unclustered), many fewer cases could be obtained because of the rise in cost per respondent--fewer than the "effective Ns" that result from the present sample. Thus the overall precision of our population estimates would be lower--probably by a considerable margin.

The period over which use is reported also is linked to the size of the design effect. With a rather high degree of regularity it turns out that design effects for measures of use during lifetime are a bit higher than corresponding (i.e., same drug) design effects for measures of use during the past twelve months, while measures of use during the past thirty days have lower design effects than the twelve month measures. (One important exception to this general pattern is alcohol.)

The tables of "effective Ns" presented in this appendix have been developed in sufficient detail to take account of these differences in design effects from one drug to another, and from one period of use to another.

Subgroup Estimates. An exploration of design effects for different subgroups in the sample for 1977 (and also the sample for 1976) revealed several systematic differences which have been incorporated into the tables of "effective Ns." Two sets of subgroups, males versus females, and those planning four years of college versus those planning less than four years of college, can be described as "cross-class" subgroups because each subgroup is represented in all of the different clusters in the sample. All (or virtually all) of the schools in the sample have both male and female students, as well as some students who plan for four years of college and other students who do not. Thus, each of these four subgroups is spread across the same number of clusters as is the total sample. Since each subgroup includes roughly half of the total sample, the average number of cases per cluster is about half as large as for the total sample, and this leads to a smaller design effect than is found for the total sample.

In the special case of comparisons between males and females, the design effects are still smaller. The same is true for comparisons between the two subgroups based on college plans. The technical explanation for this phenomenon is that there is a higher degree of covariance between such subgroup pairs than would be the case in a comparison of independent subgroups. For this reason the tables of "effective Ns" include additional entries which apply only for comparisons between males and females, and between the two college plans groups.

The other sets of subgroups examined in this report are four geographic regions and three levels of population density. These subgroups, unlike those discussed above, do not cut across all clusters (schools). Rather, they can be described as "segregated" subgroups, because each school falls into only one regional category and only one category of population density. For these segregated subgroups the average number of cases per cluster is about the same as is found in the total sample, and thus the design effects are not lower than those for the total sample. (In the case of the West, the design effects are consistently larger than for the other regions.)

Analyses of Trends. Thus far our discussion of design effects has dealt only with confidence intervals for groups and subgroups within a single year. But one of the central purposes of the present study is to monitor trends across years, and we have noted elsewhere in this report that procedures have been standardized across years insofar as possible in order to provide sensitive

measurement of change. One of the factors designed to produce an added degree of consistency from one year to the next is the use of each school for two data collections, which means that for any two successive years half of the sample of schools is the same. This, plus the fact that the other half of the school sample in a given year is from the same primary sampling units as the half sample it replaced, means that there is a good deal of consistency in the sampling and clustering of the sample from one year to the next. As a result, when cross year comparisons are made (say, between 1976 and 1977), the design effects are appreciably smaller (i.e., the efficiency is greater) than if completely independent samples of schools had been drawn each year. In other words, the 1976 and 1977 samples are not independent; on the contrary, there is a considerable degree of covariance between them. A similar level of covariance occurs between the 1975 and 1976 samples, because about half of the 1975 schools were also in the 1976 sample. The covariance between the 1975 and 1977 samples is smaller, however, because none of the schools in the 1975 sample were included in the 1977 sample.

In order to take account of these reduced design effects for various trend comparisons, the tables of "effective Ns" include entries specifically designated for trend analyses.

#### Procedures for Ascertaining Confidence Intervals

As indicated earlier, the fact that a number of different design effects have been estimated for this study rules out the use of a single set of confidence interval tables which have "built in" adjustments for the design effect. An alternative strategy is to apply the various design effects to the actual numbers of cases in the sample in order to estimate "effective Ns"--the number of cases in a simple random sample that would be needed to provide the same level of precision as our actual sample. Once an "effective N" has been provided, it is then a straightforward matter to use it in a simple random sampling table to find the confidence interval around an observed percentage, or around an observed difference between two percentages. (The "effective N" values can also be used in any standard statistical formulas that assume simple random sampling.)

Guide to Using the Tables. Table B-1 provides guidelines for determining and using "effective Ns." Tables B-2 through B-10 provide "effective N" values for virtually every percentage included in this report. Note that Tables B-2 through B-7 deal with prevalence of use estimates for the various drugs. Table B-8 deals with use prior to tenth grade (all drugs). Table B-9 deals with thirty-day prevalence of daily use of marihuana, alcohol, and cigarettes. Table B-10 deals with use of marihuana but no other illicit drug, use of any illicit drug(s) other than marihuana, attitudes and beliefs about drugs, and perceived availability of drugs.

Tables B-11 and B-12 present the statistical tables in which the "effective Ns" are then applied. Table B-11 presents confidence intervals for single percentages, and Table B-12 presents confidence intervals for the differences between two percentages. Finally, Tables B-13 and B-14 report the design effect estimates which were used to produce the "effective Ns" listed in Tables B-2 through B-9.

Some further description of Tables B-2 through B-9 may be helpful. Each of these tables provides separate columns for each year (1975, 1976, and 1977) and separate rows for each subgroup and for the total sample. Tables B-2, B-3, B-5, and B-7 also provide separate columns for each period of usage (lifetime, twelve months, thirty days). Most cells in each table have two entries, one marked "Standard" and the other marked "Trend." The "Standard" value is to be used for ascertaining the confidence interval around any single percentage, and also most comparisons of two different subgroup percentages. However, for comparisons between males and females (within the same year), or between the two college plans groups (within the same year), another cell entry is provided and labelled "Comparison." For analyses of one-year trends for the total sample or a particular subgroup (e.g., males in 1976 compared with males in 1977) the entry labelled "Trends" is used.

Table B-10 is different from the other "effective N" tables in that rather than providing actual numerical values, it provides instructions for obtaining the desired values.

TABLE B-1

Guidelines for Using "Effective N"  
and Confidence Limit Tables

<u>Step 1</u> Determine which of the confidence intervals below is desired:	<u>Step 2</u> Locate appropriate "Effective N" Table (B-2 through B-10); use the cell entry labeled:	<u>Step 3</u> Using the "Effective N," locate confidence limits (95% level) <sup>a</sup> in:
-- Single percentage value for a subgroup or total sample	→ Standard	→ Table B-11
-- Difference between two subgroups in the same year		
-- Comparison of males and females, or comparison of college plans groups (must involve same drug and period of usage)	→ Comparison	→ Table B-12
-- All other differences between two subgroups in the same year	→ Standard	→ Table B-12
-- Difference, or trend, between two years (comparison must involve same group or subgroup, drug, and period of usage)		
-- Comparison of classes: 1975 vs. 1976, or 1976 vs. 1977	→ Trend	→ Table B-12
-- Comparison of classes: 1975 vs. 1977	→ Standard <sup>b</sup>	→ Table B-12
-- Any other difference between two subgroups	→ Standard	→ Table B-12

<sup>a</sup>The confidence limits provided in Tables B-11 and B-12 are the 95% limits (two-tailed), 1.960 standard errors. Different confidence limits can be computed by multiplying by an appropriate constant. For example, the table values can be multiplied by 1.314 (i.e., 2.576/1.960) to yield the 99% confidence limits, or by 1.679 (i.e., 3.291/1.960) to yield the 99.9% confidence limits.

<sup>b</sup>The design effects for trends were computed for the 1976 and 1977 samples, for which about half of the participating schools were the same. For a comparison of classes more than one year apart, this overlapping of schools does not apply; therefore, the design effects are larger and the "effective Ns" are smaller. The use of the Standard values is no doubt somewhat conservative.

TABLE B-2

"Effective N" Values for Percent Using Heroin, or  
Percent Using Other Opiates

	<u>Class of 1975</u>			<u>Class of 1976</u>			<u>Class of 1977</u>		
	<u>Life</u>	<u>Year</u>	<u>Month</u>	<u>Life</u>	<u>Year</u>	<u>Month</u>	<u>Life</u>	<u>Year</u>	<u>Month</u>
All seniors									
Standard	4126	4932	6013	5450	6515	7942	6025	7202	8779
Trend	6013	6825	7843	7942	9015	10359	8779	9965	11451
Sex:									
Male									
Standard	2577	2959	3431	3555	4081	4733	3755	4311	4999
Trend	3431	3766	4172	4733	5194	5755	4999	5486	6078
Comparison	3717	4027	4393	5128	5555	6060	5416	5867	6401
Female									
Standard	2832	3251	3770	3522	4043	4689	4084	4688	5437
Trend	3770	4137	4583	4689	5145	5701	5437	5966	6610
Comparison	4084	4424	4827	5079	5503	6003	5890	6381	6961
College Plans:									
None or under 4 yrs									
Standard	NA	NA	NA	3191	3663	4248	3451	3961	4594
Trend	NA	NA	NA	4248	4662	5165	4594	5042	5586
Comparison	NA	NA	NA	4248	4662	5165	4594	5042	5586
Complete 4 yrs									
Standard	NA	NA	NA	3539	4063	4712	3970	4558	5286
Trend	NA	NA	NA	4712	5171	5729	5286	5801	6427
Comparison	NA	NA	NA	4712	5171	5729	5286	5801	6427
Region:									
Northeast									
Standard	985	1177	1435	1318	1576	1921	1556	1859	2267
Trend	1435	1629	1872	1921	2181	2506	2267	2573	2957
North Central									
Standard	1291	1543	1881	1666	1991	2428	1862	2225	2713
Trend	1881	2136	2454	2428	2756	3166	2713	3079	3539
South									
Standard	1100	1315	1603	1365	1632	1989	1604	1917	2337
Trend	1603	1819	2091	1989	2258	2594	2337	2653	3048
West									
Standard	650	794	981	954	1166	1440	870	1063	1312
Trend	1093	1241	1426	1604	1821	2093	1462	1660	1907
Population Density:									
Large SMSA									
Standard	1250	1495	1822	1686	2015	2456	1912	2286	2787
Trend	1822	2068	2376	2456	2788	3204	2787	3163	3635
Other SMSA									
Standard	1885	2253	2746	2443	2920	3560	2741	3276	3993
Trend	2746	3117	3582	3560	4041	4643	3993	4533	5209
Non-SMSA									
Standard	992	1185	1445	1322	1580	1926	1372	1640	1999
Trend	1445	1640	1884	1926	2186	2512	1999	2269	2607

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TABLE B-3

"Effective N" Values for Percent Using any of the  
Following Drugs: Hallucinogens, Cocaine, Seda-  
tives, Stimulants, Tranquilizers

	<u>Class of 1975</u>			<u>Class of 1976</u>			<u>Class of 1977</u>		
	<u>Life</u>	<u>Year</u>	<u>Month</u>	<u>Life</u>	<u>Year</u>	<u>Month</u>	<u>Life</u>	<u>Year</u>	<u>Month</u>
All seniors									
Standard	2231	2863	3769	2947	3782	4979	3257	4180	5503
Trend	3769	4575	5612	4979	6043	7412	5503	6680	8194
Sex:									
Male									
Standard	1643	2007	2478	2266	2768	3418	2393	2924	3611
Trend	2478	2871	3333	3418	3960	4597	3611	4183	4856
Comparison	2801	3186	3602	3864	4395	4968	4082	4642	5248
Female									
Standard	1805	2204	2723	2245	2742	3386	2603	3179	3927
Trend	2723	3154	3661	3386	3923	4554	3926	4549	5280
Comparison	3078	3501	3957	3828	4354	4922	4439	5048	5707
College Plans:									
None or under 4 yrs									
Standard	NA	NA	NA	2034	2484	3068	2199	2687	3318
Trend	NA	NA	NA	3068	3554	4126	3318	3844	4462
Comparison	NA	NA	NA	3068	3554	4126	3318	3844	4462
Complete 4 yrs									
Standard	NA	NA	NA	2256	2755	3403	2531	3091	3818
Trend	NA	NA	NA	3403	3942	4576	3818	4422	5134
Comparison	NA	NA	NA	3403	3942	4576	3818	4422	5134
Region:									
Northeast									
Standard	533	683	900	713	915	1204	841	1079	1421
Trend	900	1092	1340	1204	1462	1793	1421	1725	2116
North Central									
Standard	698	896	1179	901	1156	1522	1007	1292	1701
Trend	1179	1432	1756	1522	1847	2266	1701	2064	2532
South									
Standard	595	763	1005	738	947	1247	867	1113	1465
Trend	1005	1220	1496	1247	1513	1856	1465	1778	2181
West									
Standard	304	399	547	446	585	802	406	533	731
Trend	685	832	1020	1006	1221	1497	917	1113	1365
Population Density:									
Large SMSA									
Standard	676	868	1142	911	1170	1540	1034	1327	1747
Trend	1142	1386	1700	1540	1869	2292	1747	2120	2601
Other SMSA									
Standard	1019	1308	1721	1321	1695	2231	1482	1902	2503
Trend	1721	2089	2563	2231	2708	3322	2503	3038	3727
Non-SMSA									
Standard	536	688	906	715	917	1207	742	952	1253
Trend	906	1099	1348	1207	1466	1798	1253	1521	1866

"Effective N" Values for Percent Using Marihuana

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
All seniors			
Standard	1611	2127	2352
<i>Trend</i>	2916	3852	4258
Sex:			
Male			
Standard	1450	2000	2112
<i>Trend</i>	2265	3125	3300
Comparison	2577	3555	3755
Female			
Standard	1106	1376	1595
<i>Trend</i>	1879	2337	2710
Comparison	2204	2742	3179
College Plans:			
None or under 4 yrs			
Standard	NA	1795	1941
<i>Trend</i>	NA	2804	3033
Comparison	NA	2804	3033
Complete 4 yrs			
Standard	NA	1382	1551
<i>Trend</i>	NA	2349	2635
Comparison	NA	2349	2635
Region:			
Northeast			
Standard	446	597	704
<i>Trend</i>	785	1051	1240
North Central			
Standard	584	754	843
<i>Trend</i>	1029	1328	1484
South			
Standard	498	618	726
<i>Trend</i>	877	1088	1278
West			
Standard	119	174	159
<i>Trend</i>	598	877	800
Population Density:			
Large SMSA			
Standard	664	895	1016
<i>Trend</i>	1129	1522	1726
Other SMSA			
Standard	499	647	725
<i>Trend</i>	1701	2205	2474
Non-SMSA			
Standard	527	702	729
<i>Trend</i>	895	1193	1238



TABLE B-5

"Effective N" Values for Percent Using Inhalants

	Class of 1976			Class of 1977		
	Life	Year	Month	Life	Year	Month
All seniors						
Standard	4360	5212	6354	4820	5762	7023
<i>Trend</i>	6354	7212	8287	7023	7972	9161
Sex:						
Male						
Standard	2844	3265	3786	3004	3449	3999
<i>Trend</i>	3786	4155	4604	3999	4389	4862
Comparison	4102	4444	4848	4333	4694	5121
Female						
Standard	2818	3234	3751	3267	3750	4350
<i>Trend</i>	3751	4116	4561	4350	4773	5288
Comparison	4063	4402	4802	4712	5105	5569
College Plans:						
None or under 4 yrs						
Standard	2553	2930	3398	2761	3169	3675
<i>Trend</i>	3398	3730	4132	3675	4034	4469
Comparison	3398	3730	4132	3675	4034	4469
Complete 4 yrs						
Standard	2831	3250	3770	3176	3646	4229
<i>Trend</i>	3770	4137	4583	4229	4641	5142
Comparison	3770	4137	4583	4229	4641	5142
Region:						
Northeast						
Standard	1054	1261	1537	1245	1487	1814
<i>Trend</i>	1537	1745	2005	1814	2058	2366
North Central						
Standard	1333	1593	1942	1490	1780	2170
<i>Trend</i>	1942	2205	2533	2170	2463	2831
South						
Standard	1092	1306	1591	1283	1534	1870
<i>Trend</i>	1591	1806	2075	1870	2122	2438
West						
Standard	763	933	1152	696	850	1050
<i>Trend</i>	1283	1457	1674	1170	1328	1526
Population Density:						
Large SMSA						
Standard	1349	1612	1965	1530	1829	2230
<i>Trend</i>	1965	2230	2563	2230	2530	2908
Other SMSA						
Standard	1954	2336	2848	2193	2621	3194
<i>Trend</i>	2848	3233	3714	3194	3626	4167
Non-SMSA						
Standard	1057	1264	1541	1098	1312	1599
<i>Trend</i>	1541	1749	2010	1599	1815	2086

"Effective N" Values for Percent Using Alcohol

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
All seniors			
Standard	1160	1531	1693
<i>Trend</i>	2231	2947	3257
Sex:			
Male			
Standard	1096	1512	1597
<i>Trend</i>	1829	2523	2665
Comparison	2132	2941	3106
Female			
Standard	813	1011	1172
<i>Trend</i>	1471	1830	2122
Comparison	1765	2195	2545
College Plans:			
None or under 4 yrs			
Standard	NA	1357	1468
<i>Trend</i>	NA	2265	2449
Comparison	NA	2265	2449
Complete 4 yrs			
Standard	NA	1016	1139
<i>Trend</i>	NA	1839	2063
Comparison	NA	1839	2063
Region:			
Northeast			
Standard	384	515	607
<i>Trend</i>	696	932	1099
North Central			
Standard	504	650	727
<i>Trend</i>	912	1177	1316
South			
Standard	429	533	626
<i>Trend</i>	777	965	1133
West			
Standard	82	120	109
<i>Trend</i>	530	778	709
Population Density:			
Large SMSA			
Standard	488	658	746
<i>Trend</i>	884	1191	1352
Other SMSA			
Standard	421	546	613
<i>Trend</i>	1332	1726	1937
Non-SMSA			
Standard	387	516	535
<i>Trend</i>	701	934	970

"Effective N" Values for Percent Using Cigarettes

	<u>Class of 1975</u>		<u>Class of 1976</u>		<u>Class of 1977</u>	
	<u>Life</u>	<u>Month</u>	<u>Life</u>	<u>Month</u>	<u>Life</u>	<u>Month</u>
All seniors						
Standard	2231	2863	2947	3782	3257	4180
<i>Trend</i>	3769	4575	4979	6043	5503	6680
Sex:						
Male						
Standard	1643	2007	2266	2768	2393	2924
<i>Trend</i>	2478	2871	3418	3960	3611	4183
Comparison	2801	3186	3864	4395	4082	4642
Female						
Standard	1805	2204	2245	2742	2603	3179
<i>Trend</i>	2723	3154	3386	3923	3926	4549
Comparison	3078	3501	3828	4354	4439	5048
College Plans:						
None or under 4 yrs						
Standard	NA	NA	2034	2484	2199	2687
<i>Trend</i>	NA	NA	3068	3554	3318	3844
Comparison	NA	NA	3068	3554	3318	3844
Complete 4 yrs						
Standard	NA	NA	2256	2755	2531	3091
<i>Trend</i>	NA	NA	3403	3942	3818	4422
Comparison	NA	NA	3403	3942	3818	4422
Region:						
Northeast						
Standard	533	683	713	915	841	1079
<i>Trend</i>	900	1092	1204	1462	1421	1725
North Central						
Standard	698	896	901	1156	1007	1292
<i>Trend</i>	1179	1432	1522	1847	1701	2064
South						
Standard	595	763	738	947	867	1113
<i>Trend</i>	1005	1220	1247	1513	1465	1778
West						
Standard	304	399	446	585	406	533
<i>Trend</i>	685	832	1006	1221	917	1113
Population Density:						
Large SMSA						
Standard	676	868	911	1170	1034	1327
<i>Trend</i>	1142	1386	1540	1869	1747	2120
Other SMSA						
Standard	1019	1308	1321	1695	1482	1902
<i>Trend</i>	1721	2089	2231	2708	2503	3038
Non-SMSA						
Standard	536	688	715	917	742	952
<i>Trend</i>	906	1099	1207	1466	1253	1521

TABLE B-8

"Effective N" Values for Use Prior to Tenth Grade (All Drugs)

	<u>Alcohol and Marihuana</u>			<u>All Other Drugs</u>		
	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
All seniors						
Standard	1403	1483	3277	2304	2435	5382
<i>Trend</i>	1868	1974	4363	2609	2757	6094
Sex:						
Male						
Standard	644	711	1502	1058	1168	2467
<i>Trend</i>	858	947	2000	1198	1322	2793
Comparison	929	1026	2167	1218	1345	2840
Female						
Standard	708	704	1634	1163	1157	2683
<i>Trend</i>	943	938	2175	1317	1310	3038
Comparison	1021	1016	2356	1339	1332	3089
College Plans:						
None or under 4 yrs						
Standard	NA	638	1380	NA	1048	2267
<i>Trend</i>	NA	850	1838	NA	1187	2567
Comparison	NA	850	1838	NA	1187	2567
Complete 4 yrs						
Standard	NA	708	1588	NA	1163	2609
<i>Trend</i>	NA	943	2115	NA	1317	2954
Comparison	NA	943	2115	NA	1317	2954
Region:						
Northeast						
Standard	335	359	846	550	589	1390
<i>Trend</i>	446	478	1127	623	667	1574
North Central						
Standard	439	453	1012	721	745	1663
<i>Trend</i>	585	604	1348	817	843	1883
South						
Standard	374	371	873	615	609	1434
<i>Trend</i>	498	494	1162	696	690	1623
West						
Standard	171	201	367	324	381	694
<i>Trend</i>	255	300	546	399	468	853
Population Density:						
Large SMSA						
Standard	425	459	1040	698	753	1708
<i>Trend</i>	566	611	1385	790	853	1934
Other SMSA						
Standard	641	664	1491	1053	1091	2448
<i>Trend</i>	853	885	1985	1192	1236	2772
Non-SMSA						
Standard	337	360	747	553	591	1226
<i>Trend</i>	449	479	994	626	669	1388

TABLE B-9

"Effective N" Values for Thirty-Day Prevalence of Daily Use  
of Alcohol, Marihuana, and Cigarettes\*

	<u>Class of 1975</u>	<u>Class of 1976</u>	<u>Class of 1977</u>
All seniors			
Standard	3498	4620	5107
<i>Trend</i>	5328	7037	7779
Sex:			
Male			
Standard	2007	2768	2924
<i>Trend</i>	2871	3960	4183
Comparison	3186	4395	4642
Female			
Standard	2655	3302	3828
<i>Trend</i>	3599	4477	5191
Comparison	3501	4354	5048
College Plans:			
None or under 4 yrs			
Standard	NA	2484	2687
<i>Trend</i>	NA	3554	3844
Comparison	NA	3554	3844
Complete 4 yrs			
Standard	NA	3318	3722
<i>Trend</i>	NA	4499	5047
Comparison	NA	4499	5047
Region:			
Northeast			
Standard	835	1117	1319
<i>Trend</i>	1272	1702	2008
North Central			
Standard	1094	1412	1578
<i>Trend</i>	1667	2151	2404
South			
Standard	932	1157	1360
<i>Trend</i>	1420	1762	2071
West			
Standard	636	933	851
<i>Trend</i>	969	1422	1296
Population Density:			
Large SMSA			
Standard	1060	1429	1621
<i>Trend</i>	1614	2176	2469
Other SMSA			
Standard	1598	2071	2323
<i>Trend</i>	2433	3154	3538
Non-SMSA			
Standard	840	1120	1163
<i>Trend</i>	1280	1707	1771

\* Use of half-pack or more a day.

TABLE B-10

"Effective N" Values for Use of Marihuana but No Other Illicit Drug,  
Use of Any Illicit Drug(s) Other Than Marihuana,  
Attitudes and Beliefs about Drugs,  
and Perceived Availability of Drugs

<u>Measure</u>	<u>"Effective N"</u>
Use of Marihuana but No Other Illicit Drug	Use "Effective Ns" from Table B-4
Use of Any Illicit Drug(s) Other Than Marihuana	Use "Effective Ns" from Table B-3, column labelled "Life"
Attitudes and Beliefs About Drugs	Divide the actual Ns located in Tables 13-1, 13-2, and 13-3 by 2.0 for "Standard" values and by 1.56 for "Trend" values.
Perceived Availability of Drugs	Divide the actual Ns located in Table 14-1 by 2.0 for "Standard" values and by 1.56 for "Trend" values.

TABLE B-11  
Confidence Intervals (95% Confidence Level)  
Around Percentage Values

FOR OBSERVED PERCENTAGES FROM 1% TO 50%, READ <u>DOWN</u> THE APPROPRIATE COLUMN:																
1%		3%		5%		10%		15%		20%		30%		50%		
-	+	-	+	-	+	-	+	-	+	-	+	-	+	±		
"Effective N"--Obtain values from Tables B-2 through B-8	100	0.8	4.4	2.0	5.5	2.8	6.2	4.5	7.4	5.7	8.3	6.7	8.9	8.1	9.6	9.6
	200	0.7	2.6	1.6	3.4	2.3	4.0	3.4	4.9	4.3	5.6	5.0	6.1	5.9	6.7	6.9
	300	0.7	1.9	1.4	2.6	1.9	3.1	2.9	3.9	3.6	4.5	4.1	4.9	4.9	5.4	5.6
	400	0.6	1.5	1.3	2.2	1.7	2.6	2.6	3.3	3.2	3.8	3.6	4.2	4.3	4.7	4.9
	500	0.6	1.3	1.2	1.9	1.6	2.3	2.3	2.9	2.9	3.4	3.3	3.7	3.9	4.2	4.4
	700	0.5	1.0	1.0	1.5	1.4	1.9	2.0	2.4	2.5	2.8	2.8	3.1	3.3	3.5	3.7
	1000	0.5	0.8	0.9	1.3	1.2	1.5	1.7	2.0	2.1	2.3	2.4	2.6	2.8	2.9	3.1
	1500	0.4	0.6	0.8	1.0	1.0	1.2	1.4	1.6	1.7	1.9	1.9	2.1	2.3	2.4	2.5
	2000	0.4	0.5	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.6	1.7	1.8	2.0	2.0	2.2
	3000	0.3	0.4	0.6	0.7	0.7	0.8	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
	4000	0.3	0.4	0.5	0.6	0.6	0.7	0.9	1.0	1.1	1.1	1.2	1.3	1.4	1.4	1.5
5000	0.2	0.3	0.4	0.5	0.6	0.6	0.8	0.9	1.0	1.0	1.1	1.1	1.3	1.3	1.4	
7000	0.2	0.3	0.4	0.4	0.5	0.5	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.2	
10000	0.2	0.2	0.3	0.4	0.4	0.4	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	
		+	-	+	-	+	-	+	-	+	-	+	-	+	-	±
		99%		97%		95%		90%		85%		80%		70%		50%

FOR OBSERVED PERCENTAGES FROM 50% TO 99%, READ UP THE APPROPRIATE COLUMN:

NOTE: The values in this table, when added to and subtracted from an observed percentage, establish the 95% confidence interval, calculated as 1.960 standard errors assuming simple random sampling. Accordingly, the "Effective N" values from Tables B-2 through B-8, rather than the actual number of cases, must be used in entering this table. Table values were calculated using the following formulas:

$$p_L = p - 1.96\sqrt{(p_L(1-p_L) / N)}$$

$$p_U = p + 1.96\sqrt{(p_U(1-p_U) / N)}$$

where  $p_L$  is the lower limit of the confidence interval and  $p_U$  is the upper limit of the confidence interval.

TABLE B-12

Confidence Intervals (95% Confidence Level)  
for Differences Between Two Percentages

GUIDE TO USING THIS TABLE:

1. Locate the portion of the table with "p" value closest to the two percentage values being compared (e.g., for comparing a value of 29.2% with one of 33.4%, the "p" = 30% or 70% portion of the table would be correct).
2. Locate the specific entry closest to the "Effective N" values for the two percentages (e.g., if those values were about 3800 and 5200 for 29.2% and 33.4%, the correct table entry would be 1.9).
3. That table entry, when added to and subtracted from the difference between the two percentages, yields the 95% confidence interval for the difference. (In the above illustration that would be  $4.2 \pm 1.9\%$ , or an interval from 2.3% to 6.1%.)
4. Also, if the table entry is smaller than the difference between the two percentages (as is true for the above illustration), then the difference is statistically significant at the 95% level.

---

NOTES: The table entries have been computed using the following formula:

$$1.96\sqrt{p(1-p) \left( \frac{1}{N_1} + \frac{1}{N_2} \right)}$$

For the .01 confidence interval values, multiply the table entries by 1.314.

For the .001 confidence interval values, multiply the table by 1.679.

These computations assume simple random sampling; therefore, "Effective N" values must be used in entering the table.



TABLE B-12 (cont)

"Effective N"--Obtain values from Tables B-2 through B-10

	100	200	300	400	500	700	1000	1500	2000	3000	4000	5000	7000	10000
100	2.8													
200	2.4	2.0												
300	2.3	1.8	1.6											
400	2.2	1.7	1.5	1.4										
500	2.1	1.6	1.4	1.3	1.2									
700	2.1	1.6	1.3	1.2	1.1	1.0								
1000	2.0	1.5	1.3	1.2	1.1	1.0	0.9							
1500	2.0	1.5	1.2	1.1	1.0	0.9	0.8	0.7						
2000	2.0	1.4	1.2	1.1	1.0	0.9	0.8	0.7	0.6					
3000	2.0	1.4	1.2	1.0	0.9	0.8	0.7	0.6	0.6	0.5				
4000	2.0	1.4	1.2	1.0	0.9	0.8	0.7	0.6	0.5	0.5	0.4			
5000	2.0	1.4	1.2	1.0	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.4		
7000	2.0	1.4	1.1	1.0	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.3	
10000	2.0	1.4	1.1	1.0	0.9	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3

p = 1% or 99%

	100	200	300	400	500	700	1000	1500	2000	3000	4000	5000	7000	10000
100	4.7													
200	4.1	3.3												
300	3.9	3.1	2.7											
400	3.7	2.9	2.6	2.4										
500	3.7	2.8	2.4	2.2	2.1									
700	3.6	2.7	2.3	2.1	2.0	1.8								
1000	3.5	2.6	2.2	2.0	1.8	1.6	1.5							
1500	3.5	2.5	2.1	1.9	1.7	1.5	1.4	1.2						
2000	3.4	2.5	2.1	1.8	1.7	1.5	1.3	1.1	1.1					
3000	3.4	2.4	2.0	1.8	1.6	1.4	1.2	1.1	1.0	0.9				
4000	3.4	2.4	2.0	1.8	1.6	1.4	1.2	1.0	0.9	0.8	0.7			
5000	3.4	2.4	2.0	1.7	1.6	1.3	1.2	1.0	0.9	0.8	0.7	0.7		
7000	3.4	2.4	2.0	1.7	1.5	1.3	1.1	1.0	0.8	0.7	0.7	0.6	0.6	
10000	3.4	2.4	2.0	1.7	1.5	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.5	0.5

p = 3% or 97%

	100	200	300	400	500	700	1000	1500	2000	3000	4000	5000	7000	10000
100	6.0													
200	5.2	4.3												
300	4.9	3.9	3.5											
400	4.8	3.7	3.3	3.0										
500	4.7	3.6	3.1	2.9	2.7									
700	4.6	3.4	2.9	2.7	2.5	2.3								
1000	4.5	3.3	2.8	2.5	2.3	2.1	1.9							
1500	4.4	3.2	2.7	2.4	2.2	2.0	1.7	1.6						
2000	4.4	3.2	2.6	2.3	2.1	1.9	1.7	1.5	1.4					
3000	4.3	3.1	2.6	2.3	2.1	1.8	1.6	1.4	1.2	1.1				
4000	4.3	3.1	2.6	2.2	2.0	1.8	1.5	1.3	1.2	1.0	1.0			
5000	4.3	3.1	2.5	2.2	2.0	1.7	1.5	1.3	1.1	1.0	0.9	0.9		
7000	4.3	3.1	2.5	2.2	2.0	1.7	1.4	1.2	1.1	0.9	0.8	0.8	0.7	
10000	4.3	3.1	2.5	2.2	2.0	1.7	1.4	1.2	1.0	0.9	0.8	0.7	0.7	0.6

p = 5% or 95%

	100	200	300	400	500	700	1000	1500	2000	3000	4000	5000	7000	10000
100	8.3													
200	7.2	5.9												
300	6.8	5.4	4.8											
400	6.6	5.1	4.5	4.2										
500	6.4	4.9	4.3	3.9	3.7									
700	6.3	4.7	4.1	3.7	3.4	3.1								
1000	6.2	4.6	3.9	3.5	3.2	2.9	2.6							
1500	6.1	4.4	3.7	3.3	3.0	2.7	2.4	2.1						
2000	6.0	4.4	3.6	3.2	2.9	2.6	2.3	2.0	1.9					
3000	6.0	4.3	3.6	3.1	2.8	2.5	2.1	1.9	1.7	1.5				
4000	6.0	4.3	3.5	3.1	2.8	2.4	2.1	1.8	1.6	1.4	1.3			
5000	5.9	4.2	3.5	3.1	2.8	2.4	2.0	1.7	1.6	1.4	1.2	1.2		
7000	5.9	4.2	3.5	3.0	2.7	2.3	2.0	1.7	1.5	1.3	1.2	1.1	1.0	
10000	5.9	4.2	3.4	3.0	2.7	2.3	2.0	1.6	1.4	1.2	1.1	1.0	0.9	0.8

p = 10% or 90%

TABLE B-12 (cont)

"Effective N"--Obtain values from Tables B-2 through B-10

	100	200	300	400	500	700	1000	1500	2000	3000	4000	5000	7000	10000
"Effective N"	100	9.9												
	200	8.6	7.0											
	300	8.1	6.4	5.7										
	400	7.8	6.1	5.3	4.9									
	500	7.7	5.9	5.1	4.7	4.4								
	700	7.5	5.6	4.8	4.4	4.1	3.7							
	1000	7.3	5.4	4.6	4.1	3.8	3.4	3.1						
	1500	7.2	5.3	4.4	3.9	3.6	3.2	2.9	2.6					
	2000	7.2	5.2	4.3	3.8	3.5	3.1	2.7	2.4	2.2				
	3000	7.1	5.1	4.2	3.7	3.4	2.9	2.6	2.2	2.0	1.8			
4000	7.1	5.1	4.2	3.7	3.3	2.9	2.5	2.1	1.9	1.7	1.6			
5000	7.1	5.0	4.2	3.6	3.3	2.8	2.4	2.1	1.9	1.6	1.5	1.4		
7000	7.0	5.0	4.1	3.6	3.2	2.8	2.4	2.0	1.8	1.5	1.4	1.3	1.2	
10000	7.0	5.0	4.1	3.6	3.2	2.7	2.3	1.9	1.7	1.5	1.3	1.2	1.1	1.0
p = 15% or 85%														
	100	200	300	400	500	700	1000	1500	2000	3000	4000	5000	7000	10000
"Effective N"	100	11.1												
	200	9.6	7.8											
	300	9.1	7.2	6.4										
	400	8.8	6.8	6.0	5.5									
	500	8.6	6.6	5.7	5.3	5.0								
	700	8.4	6.3	5.4	4.9	4.6	4.2							
	1000	8.2	6.1	5.2	4.6	4.3	3.9	3.5						
	1500	8.1	5.9	5.0	4.4	4.0	3.6	3.2	2.9					
	2000	8.0	5.8	4.9	4.3	3.9	3.4	3.0	2.7	2.5				
	3000	8.0	5.7	4.7	4.2	3.8	3.3	2.9	2.5	2.3	2.0			
4000	7.9	5.7	4.7	4.1	3.7	3.2	2.8	2.4	2.1	1.9	1.8			
5000	7.9	5.7	4.7	4.1	3.7	3.2	2.7	2.3	2.1	1.8	1.7	1.6		
7000	7.9	5.6	4.6	4.0	3.6	3.1	2.7	2.2	2.0	1.7	1.6	1.5	1.3	
10000	7.9	5.6	4.6	4.0	3.6	3.1	2.6	2.2	1.9	1.6	1.5	1.4	1.2	1.1
p = 20% or 80%														
	100	200	300	400	500	700	1000	1500	2000	3000	4000	5000	7000	10000
"Effective N"	100	12.7												
	200	11.0	9.0											
	300	10.4	8.2	7.3										
	400	10.0	7.8	6.9	6.4									
	500	9.8	7.5	6.6	6.0	5.7								
	700	9.6	7.2	6.2	5.6	5.3	4.8							
	1000	9.4	7.0	5.9	5.3	4.9	4.4	4.0						
	1500	9.3	6.8	5.7	5.1	4.6	4.1	3.7	3.3					
	2000	9.2	6.7	5.6	4.9	4.5	3.9	3.5	3.1	2.8				
	3000	9.1	6.6	5.4	4.8	4.3	3.8	3.3	2.8	2.6	2.3			
4000	9.1	6.5	5.4	4.7	4.3	3.7	3.2	2.7	2.5	2.2	2.0			
5000	9.1	6.5	5.3	4.7	4.2	3.6	3.1	2.6	2.4	2.1	1.9	1.8		
7000	9.0	6.4	5.3	4.6	4.2	3.6	3.0	2.6	2.3	2.0	1.8	1.7	1.5	
10000	9.0	6.4	5.3	4.6	4.1	3.5	3.0	2.5	2.2	1.9	1.7	1.6	1.4	1.3
p = 30% or 70%														
	100	200	300	400	500	700	1000	1500	2000	3000	4000	5000	7000	10000
"Effective N"	100	13.9												
	200	12.0	9.8											
	300	11.3	8.9	8.0										
	400	11.0	8.5	7.5	6.9									
	500	10.7	8.2	7.2	6.6	6.2								
	700	10.5	7.9	6.8	6.1	5.7	5.2							
	1000	10.3	7.6	6.5	5.8	5.4	4.8	4.4						
	1500	10.1	7.4	6.2	5.5	5.1	4.5	4.0	3.6					
	2000	10.0	7.3	6.1	5.4	4.9	4.3	3.8	3.3	3.1				
	3000	10.0	7.2	5.9	5.2	4.7	4.1	3.6	3.1	2.8	2.5			
4000	9.9	7.1	5.9	5.1	4.6	4.0	3.5	3.0	2.7	2.4	2.2			
5000	9.9	7.1	5.8	5.1	4.6	4.0	3.4	2.9	2.6	2.3	2.1	2.0		
7000	9.9	7.0	5.8	5.0	4.5	3.9	3.3	2.8	2.5	2.1	1.9	1.8	1.7	
10000	9.8	7.0	5.7	5.0	4.5	3.8	3.3	2.7	2.4	2.0	1.8	1.7	1.5	1.4
p = 50%														

Design Effects Used to Compute "Effective N" Tables  
for Percent Using Drugs

	Alcohol	Marihuana	Hallucinogens Cocaine Stimulants Sedatives Tranquilizers Cigarettes*			Inhalants Heroin Other Opiates		
			Life	Year	Month	Life	Year	Month
All seniors								
Standard	10.89	7.84	5.66	4.41	3.35	3.06	2.56	2.10
<i>Trend</i>	5.66	4.33	3.35	2.76	2.25	2.10	1.85	1.61
Sex:								
Male								
Standard	5.29	4.00	3.53	2.89	2.34	2.25	1.96	1.69
<i>Trend</i>	3.17	2.56	2.34	2.02	1.74	1.69	1.54	1.39
Comparison	2.72	2.25	2.07	1.82	1.61	1.56	1.44	1.32
Female								
Standard	7.84	5.76	3.53	2.89	2.34	2.25	1.96	1.69
<i>Trend</i>	4.33	3.39	2.34	2.02	1.74	1.69	1.54	1.39
Comparison	3.61	2.89	2.07	1.82	1.61	1.56	1.44	1.32
College Plans:								
None or under 4 yrs								
Standard	5.29	4.00	3.53	2.89	2.34	2.25	1.96	1.69
<i>Trend</i>	3.17	2.56	2.34	2.02	1.74	1.69	1.54	1.39
Comparison	3.17	2.56	2.34	2.02	1.74	1.69	1.54	1.39
Complete 4 yrs								
Standard	7.84	5.76	3.53	2.89	2.34	2.25	1.96	1.69
<i>Trend</i>	4.33	3.39	2.34	2.02	1.74	1.69	1.54	1.39
Comparison	4.33	3.39	2.34	2.02	1.74	1.69	1.54	1.39
Region:								
Northeast								
North Central								
South								
Standard	7.84	6.76	5.66	4.41	3.35	3.06	2.56	2.10
<i>Trend</i>	4.33	3.84	3.35	2.76	2.25	2.10	1.85	1.61
West								
Standard	28.09	19.36	7.56	5.76	4.20	3.53	2.89	2.34
<i>Trend</i>	4.33	3.84	3.35	2.76	2.25	2.10	1.85	1.61
Population Density:								
Large SMSA								
Standard	7.84	5.76	5.66	4.41	3.35	3.06	2.56	2.10
<i>Trend</i>	4.33	3.39	3.35	2.76	2.25	2.10	1.85	1.61
Other SMSA								
Standard	13.69	11.56	5.66	4.41	3.35	3.06	2.56	2.10
<i>Trend</i>	4.33	3.39	3.35	2.76	2.25	2.10	1.85	1.61
Non-SMSA								
Standard	7.84	5.76	5.66	4.41	3.35	3.06	2.56	2.10
<i>Trend</i>	4.33	3.39	3.35	2.76	2.25	2.10	1.85	1.61

\* Use "year" column for monthly cigarette values.

TABLE B-14

Design Effects Used to Compute "Effective N" Tables for Use  
Prior to Tenth Grade and Thirty-Day Prevalence  
of Daily Use

	<u>Use Prior to Tenth Grade (1975, 1976, 1977)</u>		<u>Daily Prevalence in Last Thirty Days (1975, 1976, 1977)</u>
	<u>Marihuana Alcohol</u>	<u>All Other Drugs</u>	<u>Marihuana Alcohol Cigarettes</u>
All seniors			
Standard	2.25	1.37	3.61
Trend	1.69	1.21	2.37
Sex:			
Male			
Standard	2.25	1.37	2.89
Trend	1.69	1.21	2.02
Comparison	1.56	1.19	1.82
Female			
Standard	2.25	1.37	2.40
Trend	1.69	1.21	1.77
Comparison	1.56	1.19	1.64
College Plans:			
None or under 4 yrs			
Standard	2.25	1.37	2.89
Trend	1.69	1.21	2.02
Comparison	1.69	1.21	2.02
Complete 4 yrs			
Standard	2.25	1.37	2.40
Trend	1.69	1.21	1.77
Comparison	1.69	1.21	1.77
Region:			
Northeast			
Standard	2.25	1.37	3.61
Trend	1.69	1.21	2.37
North Central			
Standard	NA	NA	NA
Trend	NA	NA	NA
South			
Standard	NA	NA	NA
Trend	NA	NA	NA
West			
Standard	3.35	1.77	3.61
Trend	2.25	1.44	2.37
Population Density:			
Large SMSA			
Standard	2.25	1.37	3.61
Trend	1.69	1.21	2.37
Other SMSA			
Standard	2.25	1.37	3.61
Trend	1.69	1.21	2.37
Non-SMSA			
Standard	2.25	1.37	3.61
Trend	1.69	1.21	2.37

Appendix C

**GUIDELINES FOR READING AND INTERPRETING  
THE TABLES**

Definitions of Variables

- Operational definitions for all variables, including the actual questionnaire items used, are presented in Appendix D.

Percentages and Rounding Conventions

- All percentages reported in the data tables are based on weighted cases. The weighting was used for reasons outlined in the discussion of sampling procedures in the introduction to this report.
- All percentage values are reported to the nearest tenth of one percent.
- Some tables do not add to exactly 100.0 percent due to rounding.
- Because rounding conventions have been followed consistently, 0.0 is used for all cells having fewer than 0.05 percent respondents. Thus a table entry of 0.0 percent could represent anywhere from zero respondents to as many as seven (weighted) respondents.

Number of Cases Reported in Tables

- The number of cases (Ns) shown in the tables are the actual numbers of cases (unweighted). (In many tables, only the Ns for 1977 are shown.) Tables C-1 and C-2 below present total numbers of cases, both weighted and unweighted, for all three years for each of the subgroups as well as for the total samples.
- The actual numbers of cases vary from table to table in the report due to missing data.
- Because of missing data on the sex item and the college plans item, the numbers for the corresponding subgroups do not add to the total number of cases.
- The 1975 data in most cases are based on only four of the five forms; therefore, the numbers shown for that year tend to be lower than in 1976 and 1977 and represent only about 80 percent of the total sample in 1975.

Significance Tests and Confidence Intervals

- In the many tables which present trends across time, tests of the statistical significance of differences between the classes of 1976 and 1977 are included. Appendix B outlines the procedures which were followed in computing these significance tests.
- Appendix B also provides several general-purpose tables of confidence intervals and significant differences. These statistical tables are applicable to the data tables which appear in Chapters 1 through 14.

TABLE C-1

Sample Sizes (Unweighted and Weighted) in Subgroups by Year

	Number of cases					
	Class of 1975 <sup>a</sup>		Class of 1976		Class of 1977	
	<u>Unwtd.</u>	<u>Wtd.</u>	<u>Unwtd.</u>	<u>Wtd.</u>	<u>Unwtd.</u>	<u>Wtd.</u>
Total Sample	12627	12113	16678	15145	18436	15839
Sex:						
Male	5799	5573	7999	7244	8449	7362
Female	6371	6102	7924	7261	9188	7855
College Plans:						
None or under 4 yrs	b	b	7179	6880	7764	7052
Complete 4 yrs	b	b	7963	6997	8933	7411
Region:						
Northeast	3014	2697	4034	3572	4760	3961
North Central	3951	3834	5098	4689	5697	4761
South	3366	3858	4177	4599	4908	4822
West	2296	1725	3369	2286	3071	2295
Population Density:						
Large SMSA	3826	2874	5158	3939	5852	4263
Other SMSA	5767	4964	7475	5971	8386	6446
Non-SMSA	3034	4275	4045	5235	4198	5131

NOTE: See Appendix D for definition of variables in table.

<sup>a</sup>The number of cases in 1975 is lower than in subsequent years because the data from one of the five questionnaire forms are intentionally not included.

<sup>b</sup>Missing data problems were severe for college plans in 1975; accordingly, these data have been excluded from all tables in this report.

TABLE C-2

Sample Sizes (Unweighted and Weighted) in Subgroups by Year  
for Questions on a Single Form<sup>a</sup>

	Number of cases					
	Class of 1975		Class of 1976		Class of 1977	
	<u>Unwtd.</u>	<u>Wtd.</u>	<u>Unwtd.</u>	<u>Wtd.</u>	<u>Unwtd.</u>	<u>Wtd.</u>
Total Sample	3157	3028	3336	3029	3687	3168
Sex:						
Male	1450	1393	1600	1449	1690	1472
Female	1593	1526	1585	1452	1838	1571
College Plans:						
None or under 4 yrs	b	b	1436	1376	1553	1410
Complete 4 yrs	b	b	1593	1399	1787	1482
Region:						
Northeast	754	674	807	714	952	792
North Central	988	958	1020	938	1139	952
South	842	964	835	920	982	964
West	574	431	674	457	614	459
Population Density:						
Large SMSA	956	718	1032	788	1170	853
Other SMSA	1442	1241	1495	1194	1677	1289
Non-SMSA	758	1069	809	1047	840	1026

NOTE: See Appendix D for definition of variables in table.

<sup>a</sup>The N's given here are very close approximations of the N in the given subgroup for any of the five different questionnaire forms used in the year.

<sup>b</sup>Missing data problems were severe for college plans in 1975; accordingly, these data have been excluded from all tables in this report.



Appendix D

**QUESTIONNAIRE CONTENT AND VARIABLE DEFINITION**

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I. DRUG USAGE VARIABLES

Cigarettes

Lifetime Prevalence/Frequency\* . . . . .

**PART B**

**The following questions are about cigarette smoking.**

**1. Have you ever smoked cigarettes?**

- ① Never—GO TO QUESTION 3
- ② Once or twice
- ③ Occasionally but not regularly
- ④ Regularly in the past
- ⑤ Regularly now

Thirty-Day Prevalence/Frequency\* . . . . .

**2. How frequently have you smoked cigarettes during the past 30 days?**

- ① Not at all
- ② Less than one cigarette per day
- ③ One to five cigarettes per day
- ④ About one-half pack per day
- ⑤ About one pack per day
- ⑥ About one and one-half packs per day
- ⑦ Two packs or more per day

Prevalence/Recency . . . . .

This variable is derived from the two preceding questions. See Note 2 at the end of this appendix for details.

Prevalence of Daily Use . . . . .

This variable is derived by combining categories 3 through 7 on Q. 2 above.

Thirty-Day Prevalence of Half-Pack a Day or More . . . . .

This variable is derived by combining categories 4 through 7 on Q. 2 above.

\* For the distinction between prevalence and frequency see Note 1 at the end of this appendix.

Alcohol

- Lifetime Prevalence/Frequency\* . . .
- Annual Prevalence/Frequency\* . . .
- Thirty-Day Prevalence/Frequency\* . .
- Prevalence/Recency . . . . .
- Prevalence of Daily Use . . . . .

**3. Next we want to ask you about drinking alcoholic beverages, including beer, wine, and liquor.**

**Have you ever had any beer, wine, or liquor to drink?**

① No—GO TO THE **TOP OF THE NEXT COLUMN**  
 ② Yes

**4. On how many occasions have you had alcoholic beverages to drink. . .**  
 (Mark one circle for each line.)

a. ...in your lifetime? . . . . .	<table border="0"> <tr> <td style="text-align: center;">0 Occasions</td> <td style="text-align: center;">1-2 Occasions</td> <td style="text-align: center;">3-5 Occasions</td> <td style="text-align: center;">6-9 Occasions</td> <td style="text-align: center;">10-19 Occasions</td> <td style="text-align: center;">20-39 Occasions</td> <td style="text-align: center;">40 or More Occasions</td> </tr> <tr> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> </table>	0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40 or More Occasions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40 or More Occasions									
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>									
b. ...during the last 12 months? . . .	<table border="0"> <tr> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> </table>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>									
c. ...during the last 30 days? . . . . .	<table border="0"> <tr> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> </table>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>									

This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

This variable is derived by combining the percent answering "20 to 39 occasions" and the percent answering "40 or more occasions" on Q. 4c above.

\* For the distinction between prevalence and frequency see Note 1 at the end of this appendix.

The next major section of this questionnaire deals with various other drugs. There is a lot of talk these days about this subject, but very little accurate information. Therefore, we still have a lot to learn about the actual experiences and attitudes of people your age.

We hope that you can answer all questions; but if you find one which you feel you cannot answer honestly, we would prefer that you leave it blank.

Remember that your answers will be kept strictly confidential: they are never connected with your name or your class.

Marihuana/Hashish

Lifetime Prevalence/Frequency\* . . . . .

Annual Prevalence/Frequency\* . . . . .

Thirty-Day Prevalence/Frequency\* . . . . .

7. On how many occasions (if any) have you used marijuana (grass, pot) or hashish (hash, hash oil) . . . (Mark one circle for each line.)

		0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40 or More
a. ...in your lifetime? . . . . .		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...during the last 12 months? . . . . .		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. ...during the last 30 days? . . . . .		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Prevalence/Recency . . . . .

This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

Prevalence of Daily Use . . . . .

This variable is derived by combining the percent answering "20 to 39 occasions" and the percent answering "40 or more occasions" on Q. 7c above.

\*For the distinction between prevalence and frequency see Note 1 at the end of this appendix.

Hallucinogens

8. On how many occasions (if any) have you used LSD ("acid")...

a. ...in your lifetime? .....  0  1-2  3-5  6-9  10-19  20-39  40+

b. ...during the last 12 months? ...  0  1-2  3-5  6-9  10-19  20-39  40+

c. ...during the last 30 days? .....  0  1-2  3-5  6-9  10-19  20-39  40+

9. On how many occasions (if any) have you used psychedelics other than LSD (like mescaline, peyote, psilocybin, PCP)...

a. ...in your lifetime? .....  0  1-2  3-5  6-9  10-19  20-39  40+

b. ...during the last 12 months? ...  0  1-2  3-5  6-9  10-19  20-39  40+

c. ...during the last 30 days? .....  0  1-2  3-5  6-9  10-19  20-39  40+

Lifetime Prevalence/Frequency\*

Questions 8a and 9a combined. See Note 3 at the end of this appendix for details.

Annual Prevalence/Frequency\*

Questions 8b and 9b combined. See Note 3 at the end of this appendix for details.

Thirty-Day Prevalence/Frequency\*

Questions 8c and 9c combined. See Note 3 at the end of this appendix for details.

Prevalence/Recency

This variable is derived from the three preceding variables. See Note 2 at the end of this appendix for details.

Prevalence of Daily Use

This variable is derived by combining the percent answering 20 or more occasions on question 8c and/or 9c with the percent answering "10-19 occasions" on both 8c and 9c.

\*For the distinction between prevalence and frequency see Note 1 at the end of this appendix.

Cocaine

- Lifetime Prevalence/Frequency\* . . . . .
- Annual Prevalence/Frequency\* . . . . .
- Thirty-Day Prevalence/Frequency\* . . . . .

**10. On how many occasions (if any) have you used cocaine (sometimes called "coke"). . .**

	0	1-2	3-5	6-9	10-19	20-39	40 +
a. ...in your lifetime? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...during the last 12 months? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. ...during the last 30 days? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Prevalence/Recency . . . . .
- Prevalence of Daily Use . . . . .

This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

This variable is derived by combining the percent answering "20 to 39 occasions" and the percent answering "40 or more occasions" on Q. 10c above.

Stimulants

- Lifetime Prevalence/Frequency\* . . . . .
- Annual Prevalence/Frequency\* . . . . .
- Thirty-Day Prevalence/Frequency\* . . . . .

**11. Amphetamines are sometimes prescribed by doctors to help people lose weight or to give people more energy. They are sometimes called uppers, ups, speed, bennies, dexies, pep pills, and diet pills.**

**On how many occasions (if any) have you taken amphetamines on your own—that is, without a doctor telling you to take them. . .**

	0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40 or More
a. ...in your lifetime? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...during the last 12 months? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. ...during the last 30 days? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Prevalence/Recency . . . . .
- Prevalence of Daily Use . . . . .

This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

This variable is derived by combining the percent answering "20 to 39 occasions" and the percent answering "40 or more occasions" on Q. 11c above.

\*For the distinction between prevalence and frequency see Note 1 at the end of this appendix.

Sedatives

12. On how many occasions (if any) have you used quaaludes (quads, soapers, methaqualone) on your own—that is, without a doctor telling you to take them. . .

		0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...during the last 12 months? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. ...during the last 30 days? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Barbiturates are sometimes prescribed by doctors to help people relax or get to sleep. They are sometimes called downs, downers, goofballs, yellows, reds, blues, rainbows. On how many occasions (if any) have you taken barbiturates on your own—that is, without a doctor telling you to take them. . .

		0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...during the last 12 months? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. ...during the last 30 days? . . . . .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Lifetime Prevalence/Frequency*	Questions 12a and 13a combined. See Note 3 at the end of this appendix for details.
Annual Prevalence/Frequency*	Questions 12b and 13b combined. See Note 3 at the end of this appendix for details.
Thirty-Day Prevalence/Frequency*	Questions 12c and 13c combined. See Note 3 at the end of this appendix for details.
Prevalence/Recency	This variable is derived from the three preceding variables. See Note 2 at the end of this appendix for details.
Prevalence of Daily Use	This variable is derived by combining the percent answering 20 or more occasions on question 12c and/or 13c with the percent answering "10-19 occasions" on both 12c and 13c.

\*For the distinction between prevalence and frequency see Note 1 at the end of this appendix.

Tranquilizers

Lifetime Prevalence/Frequency\* . . .

Annual Prevalence/Frequency\* . . . .

Thirty-Day Prevalence/Frequency\* . .

Prevalence/Recency . . . . .

Prevalence of Daily Use . . . . .

14. Tranquilizers are sometimes prescribed by doctors to calm people down, quiet their nerves, or relax their muscles. Librium, Valium, and Miltown are all tranquilizers. On how many occasions (if any) have you taken tranquilizers on your own—that is, without a doctor telling you to take them. . .

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime? .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...during the last 12 months? .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. ...during the last 30 days? .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

This variable is derived by combining the percent answering "20 to 39 occasions" and the percent answering "40 or more occasions" on Q. 14c above.

Heroin

Lifetime Prevalence/Frequency\* . . .

Annual Prevalence/Frequency\* . . . .

Thirty-Day Prevalence/Frequency\* . .

Prevalence/Recency . . . . .

Prevalence of Daily Use . . . . .

15. On how many occasions (if any) have you used heroin (smack, horse, skag). . .

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime? .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...during the last 12 months? .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. ...during the last 30 days? .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

This variable is derived by combining the percent answering "20 to 39 occasions" and the percent answering "40 or more occasions" on Q. 15c above.

\* For the distinction between prevalence and frequency see Note 1 at the end of this appendix.



Other Opiates \*\*

- Lifetime Prevalence/Frequency \* . . . . .
- Annual Prevalence/Frequency \* . . . . .
- Thirty-Day Prevalence/Frequency \* . . . . .

16. There are a number of narcotics other than heroin, such as methadone, opium, morphine, codeine, demerol, paregoric, talwin, and laudanum. These are sometimes prescribed by doctors.

On how many occasions (if any) have you taken narcotics other than heroin on your own—that is, without a doctor telling you to take them. . .

		0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime? . . . . .		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...during the last 12 months? . . . . .		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. ...during the last 30 days? . . . . .		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Prevalence/Recency . . . . .

This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

Prevalence of Daily Use . . . . .

This variable is derived by combining the percent answering "20 to 39 occasions" and the percent answering "40 or more occasions" on Q. 16c above.

Inhalants

- Lifetime Prevalence/Frequency \* . . . . .
- Annual Prevalence/Frequency \* . . . . .
- Thirty-Day Prevalence/Frequency \* . . . . .

17. On how many occasions (if any) have you sniffed glue, or breathed the contents of aerosol spray cans, or inhaled any other gases or sprays in order to get high. . .

		0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime? . . . . .		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...during the last 12 months? . . . . .		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. ...during the last 30 days? . . . . .		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Prevalence/Recency . . . . .

This variable is derived from the three preceding questions. See Note 2 at the end of this appendix for details.

Prevalence of Daily Use . . . . .

This variable is derived by combining the percent answering "20 to 39 occasions" and the percent answering "40 or more occasions" on Q. 17c above.

\* For the distinction between prevalence and frequency see Note 1 at the end of this appendix.

\*\* A more complete description of this variable would be "other opiates and opiate-like substances," since synthetic drugs are contained among the examples given. The term "other opiates" was selected for brevity and consistency with the terminology used in NIDA's national household surveys.

Marihuana Only/Annual Prevalence . . . . . This variable is composed of positive responses to the question about annual use of marihuana and negative responses to all questions about other illicit drug use in the last twelve months.

Illicit Drug Use (Other than Marihuana)/Annual Prevalence . . . . . This variable is composed of any positive response(s) to the annual prevalence questions for: hallucinogens, cocaine, heroin, other opiates, stimulants, sedatives, or tranquilizers.



II. BACKGROUND AND DEMOGRAPHIC VARIABLES

Sex . . . . . 3. What is your sex? ① Male ② Female

College Plans . . . . . 21. How likely is it that you will do each of the following things after high school? (Mark one for each line.)

d. Graduate from college (four-year program) . . . . .

Definitely Won't  
Probably Won't  
Probably Will  
Definitely Will

① ② ③ ④

None or under 4 yrs . . . . . Categories 1 and 2 of Q. 21d above.  
Complete 4 yrs . . . . . Categories 3 and 4 of Q. 21d above.

Region

Northeast . . . . . States grouped as Northeast (Census classifications of New England and Middle Atlantic): Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey and Pennsylvania.

North Central . . . . . States grouped as North Central (Census classifications of East North Central and West North Central): Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska and Kansas.

South . . . . . States grouped as South (Census classifications of South Atlantic, East South Central and West South Central): Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma and Texas.

Region (cont.)

West . . . . .

States grouped as West (Census classifications of Mountain and Pacific): Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon and California.

Population Density

Large SMSAs . . . . .

Large SMSAs include the 12 largest Standard Metropolitan Statistical Areas (SMSA) as of the 1970 census: New York, Los Angeles, Chicago, Philadelphia, Detroit, San Francisco, Washington, Boston, Pittsburgh, St. Louis, Baltimore and Cleveland.

Other SMSAs . . . . .

Other SMSAs include all other Standard Metropolitan Statistical Areas excluding the 12 above. Except in the New England States, an SMSA is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In the New England States SMSAs consist of towns and cities instead of counties. Each SMSA must include at least one central city, and the complete title of an SMSA identifies the central city or cities. For the complete description of the criteria used in defining SMSAs, see the Bureau of the Budget publication, Standard Metropolitan Statistical Areas: 1967, U.S. Government Printing Office, Washington, D.C. 20402. The population living in SMSAs is designated as the metropolitan population.

Non-SMSAs . . . . .

Non-SMSAs include all areas not designated as Standard Metropolitan Statistical Areas. The population living outside SMSAs constitutes the nonmetropolitan population.

III. ATTITUDE AND BELIEF MEASURES

From questionnaire Form 5

Perceived Harmfulness of Drugs . . . .

23. The next questions ask for your opinions on the effects of using certain drugs and other substances. First, how much do you think people risk harming themselves (physically or in other ways), if they . . .

	No Risk	Slight Risk	Moderate Risk	Great Risk	Can't Say Drug Unfamiliar
a. Smoke one or more packs of cigarettes per day . . . . .	1	2	3	4	5
b. Try marijuana (pot, grass) once or twice . . . . .	1	2	3	4	5
c. Smoke marijuana occasionally . . . . .	1	2	3	4	5
d. Smoke marijuana regularly . . . . .	1	2	3	4	5
e. Try LSD once or twice . . . . .	1	2	3	4	5
f. Take LSD regularly . . . . .	1	2	3	4	5
g. Try heroin (smack, horse) once or twice . . . . .	1	2	3	4	5
h. Take heroin occasionally . . . . .	1	2	3	4	5
i. Take heroin regularly . . . . .	1	2	3	4	5
j. Try barbiturates (downers, goofballs, reds, yellows, etc.) once or twice . . . . .	1	2	3	4	5
k. Take barbiturates regularly . . . . .	1	2	3	4	5
l. Try amphetamines (uppers, pep pills, bennies, speed) once or twice . . . . .	1	2	3	4	5
m. Take amphetamines regularly . . . . .	1	2	3	4	5
n. Try cocaine once or twice . . . . .	1	2	3	4	5
o. Take cocaine regularly . . . . .	1	2	3	4	5
p. Try one or two drinks of an alcoholic beverage (beer, wine, liquor) . . . . .	1	2	3	4	5
q. Take one or two drinks nearly every day . . . . .	1	2	3	4	5
r. Take four or five drinks nearly every day . . . . .	1	2	3	4	5
s. Have five or more drinks once or twice each weekend . . . . .	1	2	3	4	5

From questionnaire Form 3

Disapproval of Drug Use . . . . .

28. Individuals differ in whether or not they disapprove of people doing certain things. Do YOU disapprove of people (who are 18 or older) doing each of the following? (Mark one circle for each line.)

- |   |   |
|---|---|
|   | Don't Disapprove<br>Disapprove<br>Strongly Disapprove                   |
| a. Smoking one or more packs of cigarettes per day . . . . .                          | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| b. Trying marijuana (pot, grass) once or twice . . . . .                              | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| c. Smoking marijuana occasionally . . . . .   | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| d. Smoking marijuana regularly . . . . .  | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| e. Trying LSD once or twice . . . . .   | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| f. Taking LSD regularly . . . . .   | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| g. Trying heroin (smack, horse) once or twice . . . . .                               | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| h. Taking heroin occasionally . . . . .   | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| i. Taking heroin regularly . . . . .  | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| j. Trying a barbiturate (downer, goofball, red, yellow, etc.) once or twice . . . . . | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| k. Taking barbiturates regularly . . . . .  | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| l. Trying an amphetamine (upper, pep pill, bennie, speed) once or twice . . . . .     | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| m. Taking amphetamines regularly . . . . .  | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| n. Trying cocaine once or twice . . . . .   | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| o. Taking cocaine regularly . . . . .   | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| p. Trying one or two drinks of an alcoholic beverage (beer, wine, liquor) . . . . .   | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| q. Taking one or two drinks nearly every day . . . . .                                | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| r. Taking four or five drinks nearly every day . . . . .                              | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |
| s. Having five or more drinks once or twice each weekend . . . . .                    | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |

(NOTE: In 1975 only, this question asked about people "who are 20. or older".)

From questionnaire Form 4

Attitudes Regarding Legality of . . . .  
Drug Use

	No	Not Sure	Yes
20. Do you think that people (who are 18 or older) should be prohibited by law from doing each of the following? (Mark one circle for each line.)			
a. Smoking marijuana (pot, grass) in private ...	①	②	③
b. Smoking marijuana in public places .....	①	②	③
c. Taking LSD in private .....	①	②	③
d. Taking LSD in public places .....	①	②	③
e. Taking amphetamines (uppers) or barbiturates (downers) in private .....	①	②	③
f. Taking amphetamines or barbiturates in public places .....	①	②	③
g. Taking heroin (smack, horse) in private .....	①	②	③
h. Taking heroin in public places .....	①	②	③
i. Getting drunk in private .....	①	②	③
j. Getting drunk in public places .....	①	②	③
k. Smoking tobacco in certain specified public places .....	①	②	③

(NOTE: In 1975 only, this question asked about people "who are 20 or older".)



*From questionnaire Form 4*

Attitudes Regarding . . . . .  
Marihuana Laws

21. In particular, there has been a great deal of public debate about whether marijuana use should be legal. Which of the following policies would you favor?

- ① Using marijuana should be entirely legal
- ② It should be a minor violation—like a parking ticket—but not a crime
- ③ It should be a crime
- ④ Don't know

22. If it were legal for people to USE marijuana, should it also be legal to SELL marijuana?

- ① No
- ② Yes, but only to adults
- ③ Yes, to anyone
- ④ Don't know

23. If marijuana were legal to use and legally available, which of the following would you be most likely to do?

- ① Not use it, even if it were legal and available
- ② Try it
- ③ Use it about as often as I do now
- ④ Use it more often than I do now
- ⑤ Use it less than I do now
- ⑥ Don't know

IV. PERCEIVED AVAILABILITY OF DRUGS

From questionnaire Form 2

Perceived Availability of Drugs . . . .

21. How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some? (Mark one circle for each line.)

	Probably Impossible	Very Difficult	Fairly Difficult	Fairly Easy	Very Easy
a. Marijuana (pot, grass) . . . . .	1	2	3	4	5
b. LSD . . . . .	1	2	3	4	5
c. Some other psychedelic (mescaline, peyote, psilocybin, PCP, etc.) . . . . .	1	2	3	4	5
d. Amphetamines (uppers, pep pills, bennies, speed) . . . . .	1	2	3	4	5
e. Barbiturates (downers, goofballs, reds, yellows, etc.) . . . . .	1	2	3	4	5
f. Tranquilizers . . . . .	1	2	3	4	5
g. Cocaine . . . . .	1	2	3	4	5
h. Heroin (smack, horse) . . . . .	1	2	3	4	5
i. Some other narcotic (methadone, opium, codeine, paregoric, etc.) . . . . .	1	2	3	4	5

Perceived Availability of Drugs as Reported by Users of Those Drugs . . . . .

These variables are derived from the answers to each of the above questions given by those who used each of the corresponding drugs once or more in the previous twelve months.

NOTES

NOTE 1: Prevalence/Frequency Measures

Prevalence refers to the presence or absence of drug use during the time period, while frequency refers to the number of occasions of use within the time period.

NOTE 2: Prevalence/Recency Measures

The answer categories are: (1) Used in the last 30 days; (2) Used in last 12 months but not in the last 30 days; (3) Used in lifetime but not in the last 12 months; and (4) Never used in lifetime.

NOTE 3: Combining Prevalence/Frequency Data from Two Questions

In order to report drug categories which closely match those reported from the national household interview surveys, we have combined certain drugs which had separate prevalence/frequency questions in the current study. Specifically, questions about "LSD" and "Other psychedelics" were combined into a single category called "hallucinogens."\*

Also, separate questions on "Barbiturates" and "Quaaludes" in this study were combined to form a "Sedatives" category. Because bracketed frequency categories are used on the original variables, some judgement must be exercised in deciding how to combine them to generate frequencies of use for the derivative variable. The table below indicates how the two original questions in each case were combined (recoded) to form a single variable.

Derived Answer Codes for Frequency of Use

(Note: Column headings, row headings, and cell entries all are stated in terms of answer codes. See key.)

Answer code given for one drug	Answer code given for the other drug									KEY	
	1	2	3	4	5	6	7	9	Answer code	Frequency of use	
1	1	2	3	4	5	6	7	1	1 =	0 occasions	
2	2	3	3	4	5	6	7	2	2 =	1-2 occasions	
3	3	3	4	5	5	6	7	3	3 =	3-5 occasions	
4	4	4	5	5	5	6	7	4	4 =	6-9 occasions	
5	5	5	5	5	6	7	7	5	5 =	10-19 occasions	
6	6	6	6	6	7	7	7	6	6 =	20-39 occasions	
7	7	7	7	7	7	7	7	7	7 =	40+ occasions	
9	1	2	3	4	5	6	7	9	9 =	missing data	

\*The term "hallucinogens" is used for purposes of consistency with the national household survey, as are the terms "sedatives," "other opiates," and "stimulants."



*Cover and Instructions  
to the Questionnaires*

## monitoring **the future**

a continuing study of the lifestyles and values of youth

This questionnaire is part of a nationwide study of high school seniors, conducted each year by the University of Michigan's Institute for Social Research. The questions ask your opinions about a number of things--the way things are now and the way you think they ought to be in the future. In a sense, many of your answers on this questionnaire will count as "votes" on a wide range of important issues.

If this study is to be helpful, it is important that you answer each question as thoughtfully and frankly as possible. All your answers will be kept strictly confidential, and will never be seen by anyone who knows you.

This study is completely voluntary. If there is any question that you or your parents would find objectionable for any reason, just leave it blank.

In a few months, we would like to mail each of you a summary of the nationwide results from this study. Also, in about a year we would like to mail another questionnaire to some of you, asking about how your plans have worked out and what's happening in your lives.

In order to include you in these mailings, we ask for your name and address on a special form at the end of this questionnaire. This form is to be torn out and handed in separately. Once the address form and the questionnaire have been separated, there is no way they can be matched again, except by using a special computer tape at the University of Michigan. The only purpose for that tape is to match a follow-up questionnaire with this one.

Other seniors have said that these questionnaires are very interesting and that they enjoy filling them out. We hope you will too. Be sure to read the instructions on the other side of this cover page before you begin to answer. Thank you very much for being an important part of this project.

1977

INSTITUTE FOR SOCIAL RESEARCH  
THE UNIVERSITY OF MICHIGAN  
ANN ARBOR, MICHIGAN

